**HIDAYAT** MOBILES

**Chandni Mobile Mall**

**talkshalk ichamp**
Rawalpindi

**SINGH** MOBILES
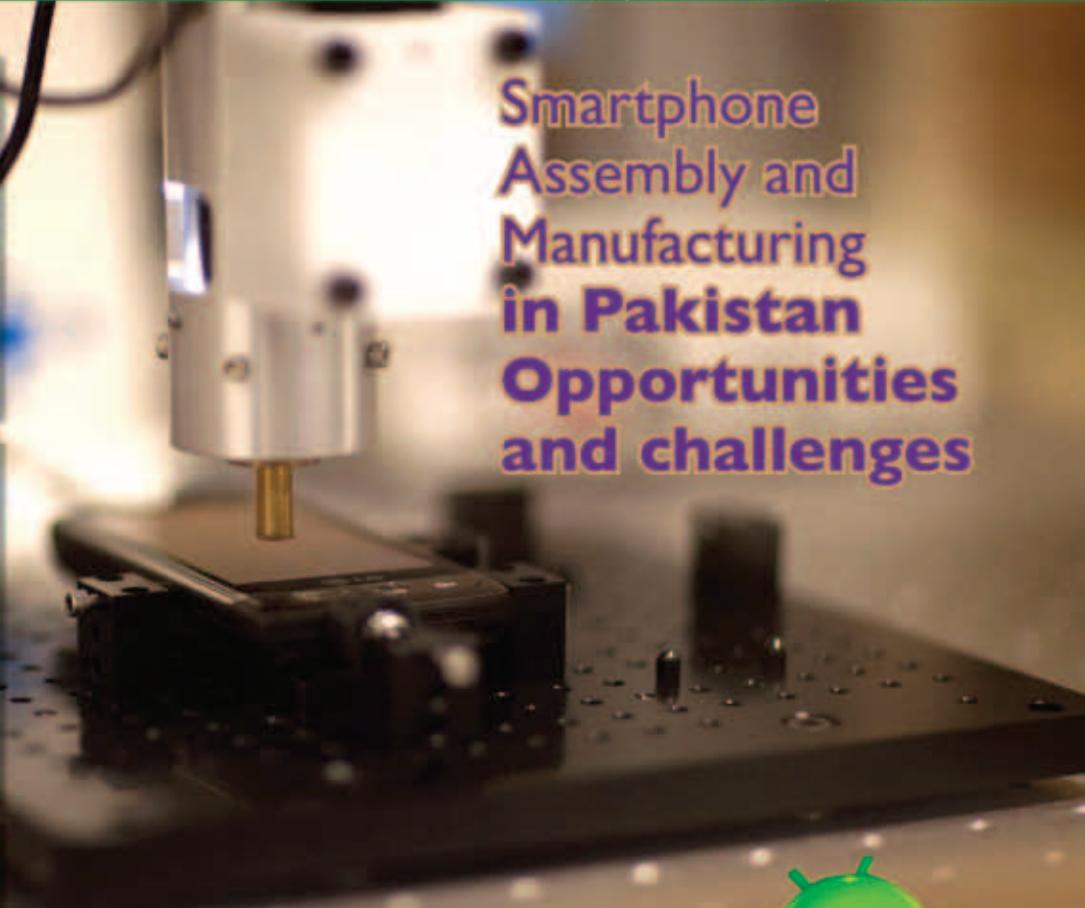
**Smartphone Assembly and Manufacturing in Pakistan Opportunities and challenges**

**Local Companies Into Smartphone Market**

**Best Android Application by Pakistani Developers**
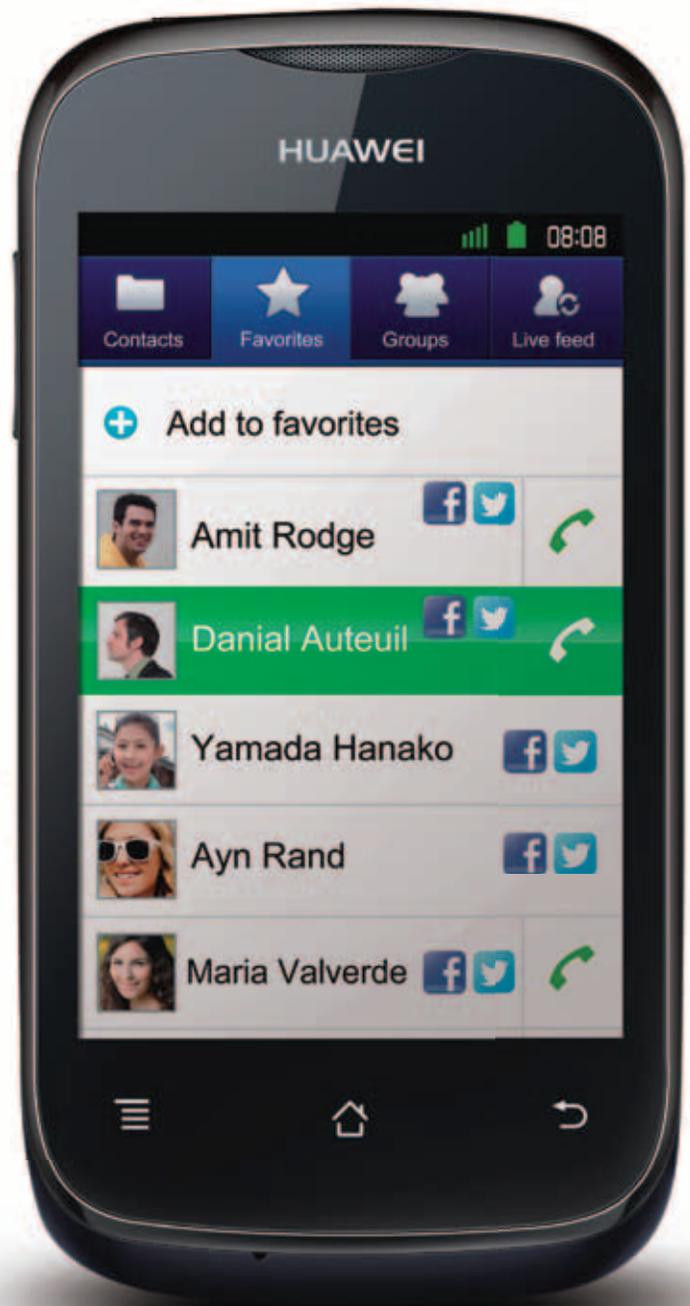
Ammar Shafiq
Managing Editor

Dear Readers,

There is good news for bathroom singers and those who are fond of music to an extent that they can't stop listening to it even under the shower! Gone are the days when iPod had to be kept on the sink or at a water safe area in order to enjoy music during a luxurious bath.

The water-resistant iShower is a waterproof speaker whose Bluetooth connection keeps your iPhone safely away from anything wet. Check out our water resistant iShower.

Technology is a blessing which makes things convenient and feasible for all those who use it in a proper way. Monsoon rains, I hope everyone loves it!!

For the first time the high-ups will be relying on smartphones to monitor troubles caused due to excessive rain. The Water and Sanitation Agency (Wasa) in Lahore has given smartphones to the Ministers of Provincial Assembly of Punjab province.

With the expected 3G licensing in Pakistan and network rollouts in the near future, the industry tends to benefit from the data growth and exciting applications and services on the 3G networks. See insight story on Mobile Development & local manufacturing in Pakistan.

We have exclusively added Operators and Regulatory section in our Magazine to keep you posted to all the Telco Activities going on.

Hyderabad Markets have been explored and added to our photo gallery along with Nokia Lumia ,Talkshawk and Warid activities!!

We are happy for your overwhelming response and contributions and warmly welcome your kind feedbacks to improve our part of services.

Thank you,

*Ammar Shafiq*

Managing Editor

Feedbacks
info@phoneworld.com.pk
www.phoneworld.com.pk

# Phone World **Content**

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## Apple iPhone 5

**44**

## HIDAYAT MOBILES

Head Office
**House 2, Street 23, F-7/2, Islamabad**
**Tel:051-2609324 Fax: 2652519**
**e-mail: info@phoneworld.com.pk**
**www.phoneworld.com.pk**

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# LOCKED PHONES
## A Business Monopoly

by Ammar Shafiq

A phone locking techniques are very well known mobile hardware feature for limiting any handset to certain parameters. A world wide used feature with number of implementation techniques and combinations. Mostly the phones sets are being locked with the network operator's (i.e. Ufone, Mobilink, Telenor etc) SIM cards e.g. Apple phone manufacturer has business policy of locking their iPhone brand with AT&T telecom operator. Such actions monopolises market with a sustainable venture of telecom operators with hardware manufacturers to restrict customers choice.

While trying to use a locked phone in different region, following notifications are commonly popped up:

- **Enter Subsidy Code**
- **Contact Service Provider**
- **Insert Correct SIM Card**
- **Wrong SIM Card**
- **Incorrect SIM Card**
- **Phone Restricted**
- **Carrier Not Supported**
- **Phone Locked Return For Service**
- **Invalid SIM Card**
- **Enter Special Code**

The International Mobile Subscriber Identities (IMSI¬) code, a unique number for every SIM card manufactured. All initial verifications are made through it starting from the time of
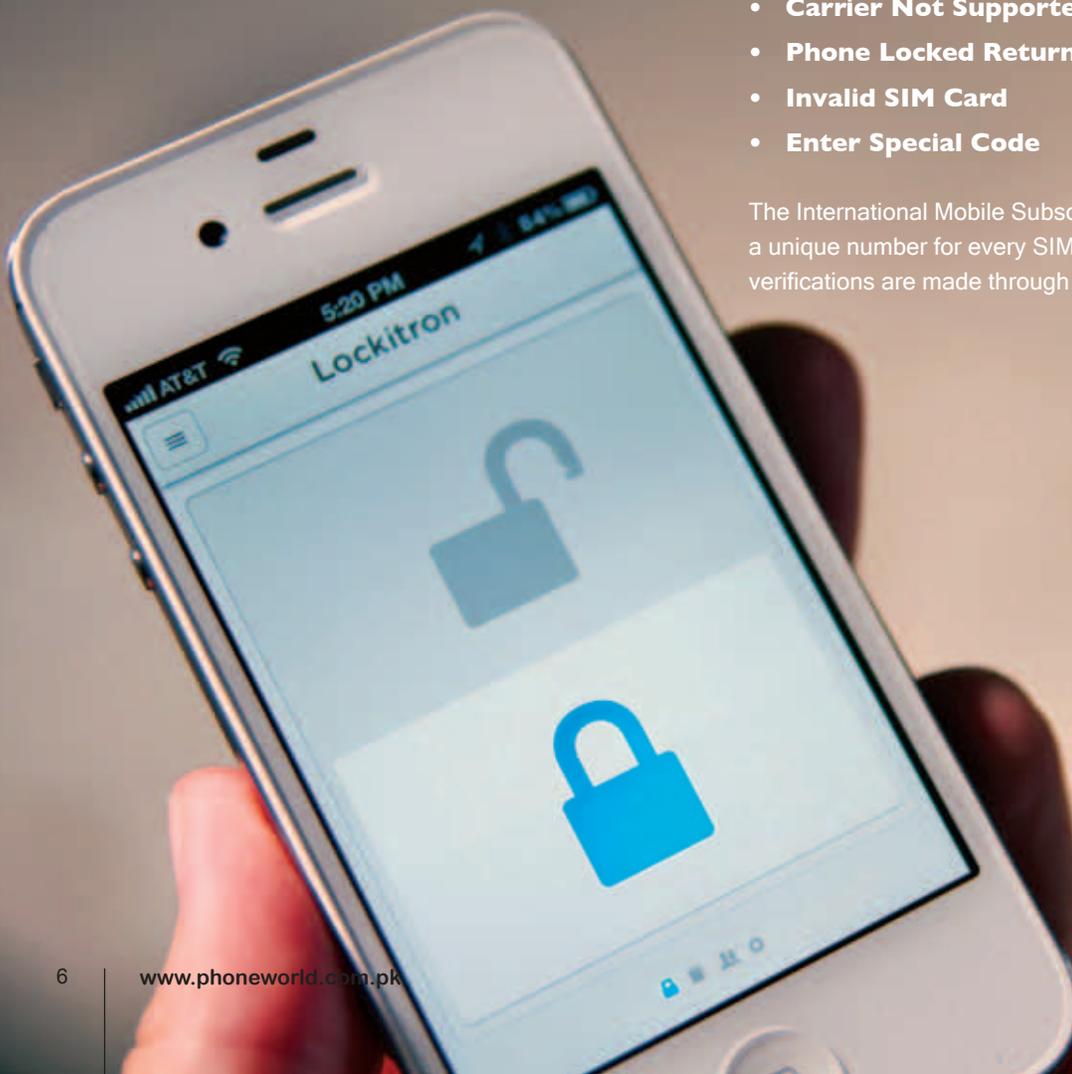
plugging SIM in to the phone set. This number consists of Mobile Country Code (MCC), Mobile Network Code (MNC) and Mobile Subscriber Identification Number (MSIN).

In most of the cases, the telecom operators are the custodian of unlocking codes but in some handset cases, software applications are used for the same unlocking purpose. These applications contain algorithms with combinations of region codes, services provider codes, carrier codes, etc. In case, even such applications don't work then firmware will be overwritten using some specialized application tools for direct memory interaction.

As Apple iPhone is one of its kinds and belongs to smart phones family precisely a mini computer, it can't be unlocked using normal unlocking procedures by entering codes or trying to guess solution in numbers. A software utility is used after installation on phone as well as it must be connected to its host application on the computer using data cables. Sometimes the procedure becomes more complex if the manufacturer has tailored codes for certain region or service provider. In such circumstances, the firmware will be over written by removing all types of memories a phone has about its branding, its unlocking combination, etc and made it available for normal use with new available carrier SIM card.

In Pakistan, unlocking handsets is a common practice and is considered as legal action. In actual, telecom operator is liable to provide unlocking code unless buyer has any agreement to retain handset with specific operator services and in return get subsidy on handset cost as well as on telecom services.

Today unlocking processes are going on in many regions but remained a question whether a legal action or illegal. In 2009, The US courts has placed a declaration in favour of consumers to buy phones without any locking code; however it was also privileged that operators can lock phones in special circumstances of having any exclusive agreement with the end user. On the other side, Apple still resists to implement as if they unlocked their phones, it would result in use of un-authorized or non-Apple branded applications on their manufactured handsets which will also cause huge loss to Apple application development and selling business.

An unlocked phone often posses higher value in terms of buying or selling due to below reasons precisely:

- **No roaming charges while on a go to different countries**
- **Switch freely between phones & providers/ SIM cards locally**
- **Switch to any service provide anywhere in  the world internationally**
- **Re-branding of phone as value for business**
- **No restriction on selling your phone rather then returning back to operator**

In Pakistan, phone unlocking become a valued business and is supported by numerous educational institutions for its proper training. A remarkable number of shops in mobile market are providing such services these days. A new upcoming shape of the same business is to "customize your mobile as you like". This will lead to endless limits as personalization of foreign gadget on your choice and use of mobile Add-ons will be an addition to make your business profitable in new direction.

by Khalid Khan

# Smartphones' Assembly and Manufacturing in Pakistan:
## Opportunities and Challenges!

### Introduction

With mobile data traffic worldwide now exceeding voice traffic for the first time ever, the demand for data is palpable. It's predicted that by 2014, we'll use as much wireless data in a month as we did in all of 2008.  These numbers point to exciting opportunities for all stakeholders in the mobile industry. The mobile phone has become the biggest platform available today with almost 5 billion wireless subscribers, of which there are more than 1.5 billion mobile broadband (MBB) subscribers in the world. The number of the MBB subscribers is expected to grow to 3 billion by 2014.

With the expected 3G licensing in Pakistan which the Government of Pakistan has announced to be concluded by End of the Current year and network rollouts in subsequent months to follow, the industry tends to benefit from the data growth and exciting applications and services on the 3G networks in Pakistan. Various full-featured mobile operating systems such as Android, Windows, Java, Brew MP, etc., continue to drive the proliferation of mass-market Smartphone's offering thousands of applications, services and mobile content. The mobile Operators have already started to educate their consumers for the coming Data packages.

The data applications catering to the local needs will be the key in bringing the benefits of MBB to the mass market. However, to be able to offer these services to a wide audience, there is a need for devices that provide the functionality of a Smartphone but at affordable price points. This will open up the addressable market in Pakistan for an extremely large percentage of the population.

Pakistan has been on the radar screen for being one of the most aggressive and expanding markets for the mobile sector adding up to two million subscribers per month in the past. With much awaited 3G mobile networks in the country, huge growth potential awaits all industry players including operators, 3G device manufacturers, application developers, distributors, and the consumers.  The market signs continue to show strong interest and promising growth for the 3G ecosystem with a large number of 3G devices being imported in the country every month indicating strong interest and demand in this market segment.

While on the one hand the consumer demand is an opportunity area on the other hand unhindered import of these devices is costing billions of dollars each year in negative trade balance. There is a dire need to promote local assembly and eventually local manufacturing of such mobile devices in the country.

### Local Devices Manufacturing: Current Status

While the use of wireless devices including mobile handsets and fixed terminals has been phenomenal, the local manufacturing and assembly opportunities have not yet been exploited by the local telecom industry in Pakistan.

A brief view of the current government/semi government telecommunication manufacturing facilities such as TIP, CTI, CTRL, presents a very dismal picture in terms of mobile phone manufacturing. The reason for such is:

• Current facilities are not completely equipped to manufacture mobile handsets of international standard,
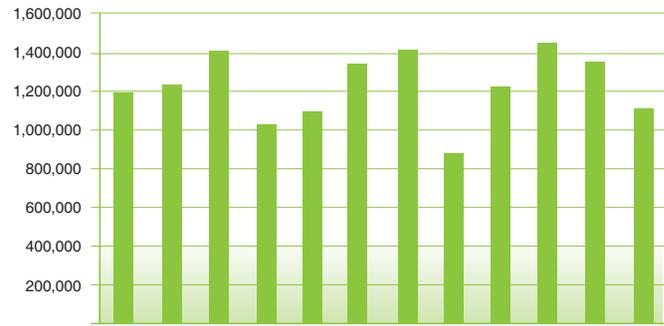
- There does not exist any protection or incentive for the industry to compete with imported devices

- High overheads and unviable cost structures specially lack of electricity.

- Lack of competent HR (both managerial and technical) that has a vision and competency to operate in such a competitive environment.

- A substantial number of mobile imports are attributed to the grey channel where a lot of smuggled devices are entering the country.

## The way Forward:

There have been some encouraging developments when it comes to private sector where on a small and unconventional level some assembly, packaging and servicing is being carried out. However the manufacturing & assembly value adds is very nominal. This if promoted in very systematic and cohesive manner can bring huge dividends in achieving the local assembly and manufacturing objectives of mobile handsets and smart phones in the country.

The Government of Pakistan needs to incentivize the local assembly/manufacturing through very aggressive policy, administrative and fiscal changes to encourage the same. Some of the recommendations that could be very encouraging for such venture is:

- The immediate requirement is to upgrade the plants/capabilities of the existing units such as TIP, Private Cottage Industry i.e. mobile workshops operating in Hall Road & Walton Road market, Lahore, Abdullah Haroon Road & Serena Market, Karachi, Singapore Plaza Rawalpindi and Falaksair Market Peshawar where they can at least be utilized for assembly and subsequently lay the groundwork for developing them to a level where they can manufacture smartphone and other devices and not only address Pakistan's Device requirements but also pave way for exporting terminals to neighboring countries.

- Retrain the existing Human Resource staff at TIP and the markets identified in 4 cities to ensure that we bring them to a level where they are aware of international best practices in the mobile manufacturing domain.

- Provide subsidization (though USF or ICT R&D Fund) or other such business Incentives such as tax holidays, interest free bank loans which will encourage local production and assist in competing with the imported device segment.

- Establish and formulate Policies that enables management of such entities to develop cohesive Strategy & future roadmap so the management will have a clear picture for the success of local manufacturing.

- Close liaisons for collaboration with the existing Pakistani private parties/brands such as Q-Mobile, United Mobiles, G-5, G-Tide, MegaGate, ND Telecom, Club Mobile, Airlink and other such entities to take them on board and facilitate local manufacturing initiatives.

### 2010 Pak Mobile Handset Imports



Source: CACF

- Promote foreign manufacturing entities such as ZTE, Huawei, LG which has presence in Pakistan and other International OEM's of repute who are major players to assist develop the Mobile Phone manufacturing by either having their own assembly/manufacturing entities or JV with local companies.

- Promote and Start encouraging dialogue with foreign companies such as QUALCOMM Inc., who are major players to assist develop the local industry on similar lines that Oracle & Microsoft has done with the IT Industry. They have in the past offered to assist with QUALCOMM Reference Design Program, which has been implemented for Chinese Manufacturers.

- Encourage development and deployment of local application for integrating with the local smartphone devices to make them more attractive. This will not only help manufacturing of smart phones but give boost to Software industry. Popular applications supporting devices includes like Gamming software, Mobile TV, m-health, e-commerce, video conferencing etc. that can be developed locally and cost effectively.

- To prevent expansion of the grey channel and low quality imports and bring them to zero level to protect local industry a two pronged policy needs to be implemented. First, essential monitoring at customs level. Secondly, at operators and sales outlet monitoring is also essential to ensure Quality and standardization. PTA to ensure swift standardization of local devices.

- Establish an Industry development Group comprising MoITT, PTA, EDB, Mobile Operators and also adequately represented by Private Producers/Manufacturers to recommend strategy and direction for this sector in an ongoing manner.

- Appropriate Budget/Seed funding needs to be provided to achieve the above mentioned tasks and objectives and consistency of polices.

We wish and hope that Government will lead the initiative through practical steps in this direction and put Pakistan on the world map where Smartphone are assembled and manufactured.

**BlackBerry** PlayBook.

# Blackberry Playbook
## In the world of tablets!
by Ammar Shafiq

I had the opportunity to visit some lucrative mobile shops of Islamabad for some personal business, but this very large BlackBerry box on display distracted me. I tried to calculate in my mind, what it was? Was it a Torch or another new BB model, No couldn't be? The box is too large, eventually I asked the shop owner what it was, and I was told that it was the new BlackBerry Playbook!

A BlackBerry Playbook is BlackBerry's version of a Tablet phone, such as Apple's iPad and Samsung's Galaxy Tab! The playbook is half the size of the iPad but larger than that of a Galaxy Tab. The device has a solid build and being a BlackBerry it runs on the latest RIM powered BlackBerry Tablet OS.

I had always admired a BlackBerry for its complete build and exquisite performance! Though regular smartphones from Samsung, HTC and Apple are way more powerful than BlackBerrys and have more features to them. Still today BlackBerry has always been interested towards the Business class, with its QWERTY type metallic keyboard; glossy display and chrome build which signifies a person's class. However! They are more preferred by the teenagers who find them more interesting for its BBM (BlackBerry Messaging) facility!

Having a Playbook right in front of me on the shelf I was shocked! I wanted to take a glimpse in the box and have my way fiddling with the device and what it had to offer, and almost unintentionally I must have thought out loud "I bet these are selling like crazy!" because the shopkeeper replied that "Are you kidding, these were the biggest mistake of my career!"

Although they are really good in design and performance the Playbook is not a successful Tablet device here in Pakistan due to several reasons,

1- The Tablet market is the iPad's monopoly, even the Galaxy Tab is having trouble in the market; BlackBerry simply has no chance in the market where 80-90% of the customers are biased!

2- People are not yet aware to the fact that there is a BlackBerry Tablet device out there, which kills the curiosity factor in the customers!

3- Apple and Android are head to head on a stiff competition regarding Application stores with Apple with its "App store" and Android with its "Play Store", BlackBerry is not even close in the Application development department to compel someone to buy the Playbook!

by Mizbah Zafar

# Steps to blocking your SIM card!

**A** person's home is his most sacred asset! , It is the place where he feels secure and mentally at-ease!

This might have been true back when there were no Phones, because now a day, it is rather the opposite, Today a person prioritizes his "Phone" over everything!

It is not wrong to say that almost every member of a household in Pakistan has at least one SIM registered to his/her name. And when it comes to SIM numbers one is really cautious, because in case of Phone theft or SIM misuse, it always means trouble!

Mobile phones is a massive growing industry in the country, and with the millions of imports, either from China or the Rest of the World it is a booming business. But there is always the issue of mobile theft that is a constant fear both for the shop owners and the public!

A person's phone number can be used today in crimes that can result in severe problems for the original owners, and one may think that by blocking the SIM all problems are solved, NO!

Even the Mobile phones it self can be traced back to its original owner through its IMEI (International Mobile Equipment Identity) number!

Here are steps for you to follow, in case you either lose or are robbed of your mobile:

**It is always advised that you know and keep record of your phone's IMEI number, which you can retrieve either by dialing \*#06# or by the IMEI sticker on the device's packaging material**

**Once the phone is stolen or misplaced it is important that you Call PTA at their toll-free number 0800-25625 to make your phone inoperative immediately.**

**For Karachi Only you should Call CPLC (Citizens-Police Liaison Committee) at 021-5682222 to make your phone inoperative**

**Once the above is done you should also consider calling the police at 15 to report your missing handset and place a recovery request, even if you think they won't do anything.**

Here are steps for you to follow, in case you either lose or are robbed of your mobile:

To get your SIM card blocked, you will have to call up your mobile network's call service helpline and get your number/SIM blocked right away before it gets misused.

You will need to provide the following information:

- **IMEI number**
- **Cell phone number**
- **Name**
- **National Identity Card number Address and contact number**

Many people never report and block their stolen/lost phone or SIM. It is always best to do so before anyone misuses it.

By Fakiha Hassan Rizvi

# The water resistant iShower

There is a good news for bathroom singers and those who are fond of music to an extent that they can't stop listening to it even under the shower! There were days when 'music freaks' were more worried about their devices getting wet while take a shower. Now, all they need is to make more space around their bath tubs.  Gone are the days when iPod had to be kept on the sink or at a water safe area in order to enjoy music during a luxurious bath.

The water-resistant iShower is a waterproof speaker whose Bluetooth connection keeps your iPhone safely away from anything wet. All Bluetooth remote controls are supported: volume up/down, play/pause and track skipping. Its Bluetooth connectivity has support for up to five paired devices.

The system has a built-in adhesive which doesn't allow you to open your tool kit and work hard for fixing it. The device can also be hung over the shower. The music system runs on three AA batteries and provides up to 15 hours of streaming audio and listening time. There's even a built-in clock, for those unfortunate mornings when you need to cut your favourite melodies short and reach the office in time.

iShower is a product of iDevices which started in 2010. It is the developer of one of the first truly app-enabled devices with the introduction of the iGrill Bluetooth meat thermometer. Following this successful product launch, iDevices has emerged as a premier development and consulting company in the app-enabled market. iDevices has integrated all required resources in-house to create and launch app-enabled products both independently and with partner companies. Consumer products companies and hard-good manufacturers seek out iDevices to provide strategic direction and development support for the incorporation of Wi-Fi and Bluetooth connectivity to mobile platforms for their products.

So, it's simple- Don't Damage your Phone - Keep Your Device Safe and Dry Away from the Water - iShower Speaker is Compatible to 200 Feet with Any Bluetooth Audio-Streaming Phone, Tablet or Computer - Including iPad, iPhone, iPod & Android. For those who are 'serious' podcast fans this is a 'must-have' accessory!

# Qualcomm S-4
# Processor

by Fareed Khan

COMPETITOR B    COMPETITOR A    QUALCOMM SNAPDRAGON™ S4 PROCESSOR

**Q**ualcomm recently introduced the world's most powerful processor for Tablet PC and Notepad, the Snapdragon S4 processor with Adreno 320 GPU. This is the second generation processor from Qualcomm which is also known as Krait processor. This processor is the first mobile processor to clock at 1.5 GHz with two cores that makes it even more powerful. The graphics are so stunning that it even challenges Play Station 3. Such powerful components will diminish the needs for consoles in the future.

Qualcomm's S4 processor is deployed in dual and quad-cores, with impressive features for power efficiency and clock speed. It takes the performances to a whole new level, and supports quality multimedia.

Smart-phones nowadays are equipped with cameras which are gradually replacing the conventional ways of taking snaps. Yeah I don't mean the reel films but the digital cameras. Considering the high resolutions and face recognition and other applications associated with the camera, industries are doing their best to improve every inch.

Just recently the S4 title has reached us via an S4 Camera, or to be precise an Image Signal Processor or ISP. Packing the sort of technology that will lend Smart-phones or Tablets the capabilities of a high-end digital camera. Considering the recently HTC handset, Titan-II is integrated with a massive 16 Megapixel camera by using the S2 processor. So it should be convenient to realize the power of S4.

Moreover Titan-II 16 megapixels will allow your mobile device to shoot in 20 Megapixel stills and the obligatory 1080p video. It also commands the use of Qualcomm's 3A technology, with Autofo-cus, Auto Exposure and Auto White Balance. Camera extras include smile degree, blink detection and gaze estimation.

Other supported applications come in the form of gesture control, which is becoming more and more popular. So with advances to S4 power reaching out to our mobile devices, surely we are stepping closer to the one device to control everything around us.

With the public release of S4, mobile performances will meet new boundaries enabling the developers to introduce new applications and better games

for end user conformance. As far as the launch of S4 processor itself is concerned it will be launched initially in Tablet PCs and notepad for the first half of 2012 and after that it will be available in smart-phones. Considering the time lines we should expect some handsets on its way. Yeah HTC One XI has S4 whose secondary camera has a 720p resolution.

A thermal test was conducted with equal levels of features on three smart phones, one of which had Qualcomm S4 and the other two were undisclosed. All the three were turned on with the same application for around 20 minutes by putting their processors to the limit. After some time a same proportion of butter cubes were placed on the phones with thermal scanners on. The butter started to melt on all the phones but the cube remained more consistent on the S4 and due to its better heat dissipation and cooling affect. Though, a thin plastic film was separating the butter and the devices. Checking the heat scanners one of the devices read about 55 degree Celsius. Which is way too hot to remain close to either ears or held in hands.

Source: http://www.phonesreview.co.uk
http://androidandme.com

# ALI MOBILE



**For How Long Have You Been In This Market?**
I am in the cellular business for the past five years.

**Why Did You Select This Market To Start Business?**
Few members of my family and some friends were already in this business. I was familiar with the 'do's and donts' of this business.

**Currently How You See The Situation Of Mobile Market?**
Business is a bit slow these days, profit margin has decreased immensely.

**What Are Barriers /Threats In Doing This Business?**
There is lot of competition in the market which has affected the profit margin.

**If You Move 4 Years Back What Major Diffrence You See In Todays Market And The Market Back Then?**
Few years back there wasn't much competition in the market. There were few cell phone brands. But today things have changed greatly. It has become very difficult to position yourself in the current market.

**What People Like The Most In Cell Phones?**
Wifi service has become a major factor in mobile phone selection these days.

**What Kind Of Phones You Are Dealing In?**

Mostly we deal in NOKIA, Q mobile, Chinese handsets with warranty and iPhone. All types of mobile accessories are also available in our shop. Mobile repairing services are also provided to the customers.

**What Kind Of Customers Do You Usually Come Across?**
We attract and retain our customers by offering low priced handsets. Sometimes we also offer small handset accessories on purchase of handsets. Customers are our first priority because at the end, they are the reason for the success of any business.

**What Are The Key Areas That You Focus On Relating To Mobile Business?**
When you are doing business it's important to focus on key success factors like customers, market structure, and information about latest trends of market. Strategies are than developed according to collected market data.

**For How Long Are You In This Market?**
We have almost 5 years experience of cellular business dealings.

**What Mostly Customers Compalint About Mobile Phones?**
Customers mostly complain that the China mobile batteries are not reliable.

# MOBILE POINT
## INAM MARWAT



**For How Long You Are In Cellular Business?**
It has been 4 YEARS since I started the mobile phones business.

**What Kind Of Phones You Are Dealing In?**
We deal in all local and international brands. Our product range mainly depends on our customers' demand. We also sell china phones. Due to latest trend of iPhone and android phones people want to buy these cell phones due to their smart designs and updated features.

**What Kind Of Customers Do You Come Across?**
Now there is more awareness in customers, they are not ready to compromise on quality of handsets; they want to have sets that are low in price but better in quality.

**What Would You Suggest For The Betterment Of Mobile Industry?**
I am keenly interested in progress of mobile industry; I am also a part of mobile phone association. Our basic aim is to set standard market prices for all mobile handsets to control the constant price changing issue.

**What Are Your Other Activities Beside Mobile Business?**
I am also doing a private job in morning.

by Fakiha Hassan Rizvi

# From e-learning to m-learning
# Trends in South Asia

E-learning is a way of learning by using the information technology trends. It enables people to learn any time and any where. It is a fast growing application in the world, it is widely used in universities, enterprises, communities as a typical technical-driven application, and the development of e-learning has close relationship with information technology such as computer network, cellular phone network, and multimedia technology. The use of cellular phone, in particular, for the purpose of education has led to the coinage of the term 'mobile learning or m-learning'. It is slightly different from e-learning, which aims to do the same but through the medium of laptops and computers. Hence, e-learning is location bound; while mobile learning allows one to attend lectures, read, and ask teachers questions from any where and at any time.

The use of mobile phones in education in South Asia has increased in the last few years. The time constraints, average or below average standards of living make 'education' the only option

for moving ahead in the competitive world for third world countries. The 'digital divide' is a very significant issue especially after the swift penetration of technology in our lives. The affluent North and the deprived South are incompatible with each other. Major difference between both the spheres of the globe lies in the  disparity among literacy rates and the access to technology. There are some parts of the globe where villages are equipped with an internet connection and there are other parts where there is no electricity even.

However, the South Asian region, residing in the Southern sphere of the globe is cognizant of the challenges that it has to face. It has embarked upon a plan to utilize cost effective technology for the purpose of education. The high rate of penetration of cellular phones is now being considered for broader visions and constructive aims by the less privileged countries. The South Asian Association for Regional Cooperation, which includes; Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal,

Pakistan and Sri Lanka is also utilizing the 'm-learning' mode.

According to the website of Afghan Institute of learning (AIL), despite all odds and after a decade of war, Afghanistan is tuning her communication capabilities. Begun in June 2011, AIL and Georgetown University's Afghan Women's council joined forces to pilot a new mobile literacy project. The goal is to reinforce literacy skills among newly literate women and girls in rural Afghanistan, and to provide them with the opportunity to use mobile phone technology, and thus communicate with their peers, mentors, and family. The program also has a social benefit enabling communication between young people and especially women who may be restricted in when and where they can go out from the home. More communication brings more sharing and support and helping each other this rebuilds the fabric of caring, supportive community which is crucial to healthy societal resurgence in Afghanistan.

Bangladesh is among those countries

in the world which has presented a model of 'mobile phone access' in rural areas. According to Sylhet Times (Digital), "mobile users in Bangladesh have accessed more than 1 million English lessons using a service called BBC Janala (Window) in the year 2010". In Bangladesh, the BBC Janala project used the internet and fast-growing mobile technology, which offers a wide range of people inexpensive access to English learning materials at any time and at any place. BBC Janala has transformed the cellular phone into a cost-effective education device by offering hundreds of 3 minutes audio lessons and SMS quizzes through people's handsets. The project is funded by the UK's Department of International Development (DFID) through English in action, a major educational initiative launched to raise the language skills of 25 million people in Bangladesh by  2017.

Bhutan is witnessing a poor IT infrastructure combined with cultural resistance. This is impeding the 'm-learning' mode of education over there. Bhutan has a stated policy of resisting 'inappropriate' westernisation. Given their existing system whereby the student travels to the appropriate college, there is less need to develop a truly distributed university. Introducing elements of resource-based and student-centred learning for campus students, however, may be the way forward to taking advantage of the best aspects of flexible learning.

The mother of democracy and by far the most technologically advanced country in the South Asian Region, India, is now one of the fastest growing markets for mobile phone services, with growing usage and increasing penetration. The Biju Patnaik University of Technology (India) started a service in collaboration with GupShup called the BPUTALERT, which distributes information, academic notices and calendars through SMS to students. Voice-tap is another service using which people can send their

queries through SMS, and the company messages back names of experts on the subject, and then users can connect to the right expert. Another initiative, mGurujee, allows users to download questions and take tests to evaluate themselves. The service also allows people to receive reference content even if they are outside and away from their books. Users just need to register at the mGurujee portal to access free content.

Maldives and Nepal have still a long way to go in order to achieve the aim of m-learning. Whereas in Sri Lanka, mobile phones are not too costly and easily available. The users are well acquainted with their functions, it is worth exploring the use of mobile phones for teaching and learning science. The penetration level of mobile phones in Sri Lanka is about 55% and it is much higher than that of computers. The Government of Sri Lanka has banned students from using mobile phones in schools after an unfortunate incident. However, a set of mobile phones belonging to schools which are on a private network. This will enable to harness the potentials of the mobile phones to make the teaching and learning process more effective.

In the homeland, Pakistan, UNESCO has collaborated with Nokia to launch Mobile Learning Project for Teacher's Professional Development in Pakistan. Through the project "Mobile Learning for Teachers" Nokia's Education Delivery application will help UNESCO to enable the delivery of high-quality educational materials to teachers who lack training and resources though mobile phones giving an opportunity to teachers to train themselves on the same level as professionally competent teachers.

At a micro level, I managed to conduct an online survey to know how cellular phones are influencing the learning behaviour of 'Pakistani students'. The respondents belonged to an age group of "18 to 25 years". The following

questions were put forward:

### Q 1: How often do you use internet through cellular phone?

44% of the respondents claimed that they do net surfing daily via cellular phones, 28% claimed that they browse via cellular phones weekly while another 28% claimed that they rarely use the internet via cellular phones.

### Q 2: Does cellular phone help you to increase your general knowledge?

57% percent of the respondents declared that cellular phones do increase their general knowledge while 43% negated this notion.

### Q 3: What is the proportion of forward text messages that you receive daily?

Around 50% of the respondents chose the option of satirical and funny texts particularly the ones' in which the politicians are ridiculed. 36% of them claimed that they receive quotations and texts with useful information. Only 14% claimed that they receive texts pertaining to religious knowledge.

### Q 4: How often have you used a cellular phone to make an assignment or to prepare for a surprise quiz?

57% of the respondents revealed that they use the cellular phone for the academic purposes mentioned in the question 'sometimes'. 29% of them 'rarely' use it in the mentioned circumstances and only 14% of them use a cellular phone every now and then for accomplishment the academic requirements.

This succinct survey has its limitations, but it clearly depicts that 'm-learning' mode is gaining momentum among the educated youth of Pakistan. The challenge for Pakistan is to ensure the uniformity of this 'technological learning pathway'.

# BOLTI TASVERIN

Interior and poster related to Samsung's product exhibition.

Image captured from mobile shop, retailer selling and doing business of mobile phones.

Boy checking out new features of nokia's handset.

People are keenly interested to gain information related to the new features and mobile phones.

Building strong customer relationship by successful transaction between buyer and seller related to mobile business

Guy checking out the new cellular phone.

Image of street ,banners are there to advertise new mobile phones of different companies.

by Ammar shafiq

# **Ufone** Safeguards Flood Affectees



*Ufone recently set up tent villages & distributed relief goods to flood affectees in Dera Ghazi Khan & Rajanpur.*
*In this picture: Ufone Volunteer Group along with members of Rescue 1122*

Ufone continuing with its tradition of being there for Pakistanis needing help, recently distributed a consignment of relief items worth hundreds of thousands of rupees in the flood hit areas of Dera Ghazi Khan and Rajanpur. The purpose of the activity was to reach out to the plight of the flood affectees in the area.

The relief goods contained 500 tents and hygiene kits to cater to 1500 families which were distributed equally in both the districts. Alongside, a number of Mobile PCO's have also been set up in both areas so that flood affectees can make free calls to their loved ones and remain in touch through this testing time. This activity shall help give relief to the bereaved flood victims by providing shelter and save thousands of flood affectees from various health hazards. The distribution of relief goods was done in collaboration with Rescue 1122 in DG Khan and RDPI in Rajanpur.

Abdul Aziz, President and CEO Ufone in his message said "Ufone is committed to help the flood hit people of Dera Ghazi Khan and Rajanpur and wanted to convey to them that Ufone is fully aware of the difficulties the people of DG Khan and Rajanpur are going through. Ufone would like to assure them that it will always be there for them, whenever need be."He reiterated the commitment of his company and employees to utilize all available resources for rehabilitation of the flood victims.

During the campaign, Ufone set up an IVR service which gives easy access to information for floods simply by dialing 3733, alongside Ufone in collaboration with Plan Pakistan distributed communication material in the form of booklets and posters in all 7 districts as part of the awareness drive to help spread messages on health and hygiene, child protection, evacuations to safe places and linkages with key stakeholders like district government functionaries, humanitarian organizations, local philanthropists' etc.

**Djuice Mobile Internet Activation at Cinipex**

djuice, CINIPEX RAWALPINDI

Crowd Participation

Winners

Participants

Cutouts

Winners

djuice

# Warid Tape Ball Championship

*Sukkur*

# What's so Special About
# Windows Phone 8

by Rizwana Khan

**S**oftware giant has unveiled Windows Phone 8, the new version of its Smartphone operating system. Windows 8 introduces significant changes to the operating system's graphical user interface and platform; such as a new interface design incorporating a new design language used by other Microsoft products, a new Start screen to replace the Start menu used by previous versions of Windows, a new online store that can be used to obtain new applications, along with a new platform for apps that can provide what developers described as a "fast and fluid" experience with emphasis on touch screen input. The new OS looks impressive on several levels:

WP8, which will support multi-core chipsets, a range of screen resolutions and removable MicroSD, also includes better support for native near-field communication (NFC) between phones, laptops, tablets, and PCs, meaning we could soon see more usable applications for NFC and a real mobile wallet.

It borrows much of its code base from Windows 8. The result is an integrated ecosystem wherein developers can easily create apps and drivers that can be used on phones, tablets, and desktops.

WP8 will get Internet Explorer 10 , complete with malware blocking, from Windows 8. IE10 provides significantly faster JavaScript performance and full HTML5 support.

Nokia's turn-by-turn navigation and offline maps is built into WP8, which means all phones running the OS, not just Nokia Lumia handsets, will have access to these very popular features.

Microsoft also talked about its renewed focus on its business users . The updated OS, which includes Office apps, will support BitLocker encryption, a secure boot mode, and deployment of Line-of-Business apps such as point-of-sale apps, product catalogs, dashboards, in-field or sales apps, workflow management apps, and monitoring and response

Admins will like features that let them manage WP8 devices using the same tools they use to manage the desktop, as well as the ability they'll have to set up apps for users without having to go through the Marketplace.

## ADVANTAGE FOR BUSINESS USERS:

Apple and android phones filled the gaps like bring your own device BYOD, in which employees are increasingly bringing their own mobile devices to work and using them to access company resources like email, file servers, and databases-continues. But what about Windows Phone?

Unlike the iPhone and Android phones which show you screens and screens of small app icons, the Metro UI in Windows Phone features bright and colorful "live" tiles that morph as your phone is synced with real time information.

The People Hub, one of the main tiles on the home screen, can be particularly useful for business users. You can pin an individual, such as a manager or important client, to your start screen in a separate tile. This lets you see new emails, text messages, missed calls, and comments via social media from that person right on your start screen.

You can also organize your contacts into Groups so you can email, text, or chat with a whole group at once. By pinning a group to the home screen, you'll see missed calls, new messages, and social networking updates from members of the group anytime you launch your phone.

You can also pin documents and spreadsheets to your start screen so as to easily view and edit them. For instance, while at a conference you could pin the event itinerary so as to quickly see what's coming up next or where you need to go.

## APP BY WINDOWS PHONE

One complaint people sometimes lodge against the Windows Phone ecosystem is that it doesn't have anywhere near the number of apps that Apple or Android have in their app stores. That's true, but Microsoft is working hard to get

developers more invested in coding for the platform. In fact, the company gives developers free phones and promises to prominently locate them in its app store and advertising spots. It also generously finances the creation of apps that are popular on the other two platforms.

As such, many of the most useful apps you can get on the other two platforms are available from the Windows Phone Marketplace, such as Skype, Evernote, Amazon Kindle, Facebook, Twitter, and more even these features are much better than the other two at counterpart.

### Example:

LINKEDIN makes good use of the Metro design in its Windows Phone app and updates its stream in real time with posts from connections, news affecting particular industries and updates from professional groups. It also lets you search for jobs and follow news from your favorite companies.

MICROSOFT'S SKYDRIVE APP: which is available in the Windows Phone Marketplace and lets you create and edit various kinds of file types-documents, presentations, spreadsheets, and more-right inside a Web browser, share them with others, and access them from your phone or other device.

## MEDIA AND GAMING:

Audio, graphics and media playback all work more like their Windows equivalents, which should make for more powerful games and entertainment apps.

However, this means that current games will need to be re-tooled to take advantage of the new platform – the likes of Rovio can leave their games as Windows Phone 7 versions, but they'll likely want to re-release a more powerful version of the game too.

## MICROSOFT WALLET:

The new Microsoft Wallet app will allow you to make payments by tapping your phone on a credit card reader the way Google Wallet does, and store credit card and membership details securely and tap your phone to send them the way iOS 6 will.

## WINDOWS PHONE OPTION:

Nokia, HTC, and Samsung make Windows Phone handsets that are available through AT&T, Verizon, Sprint, and T-Mobile for anywhere from free to $200 with a new two-year contract.

# Jhooley Laal electronics



Changing course from branded to Chinese handsets Jhooley Laal electronics believes that there is high demand for Chinese brands. Mr. Naseer while interacting with the Phone World team told that he he is in the mobile business for the past 12 years. He holds the opinion that requires a great deal of courage to be a part of mobile unions due to the ongoing politics in such bodies. However, he works for the maintenance of the market.

Mr. Naseer said that given a chance he would definitely like to launch his brand. According to him, customers are more brand conscious in Karachi. He claimed that there is more profit margin while dealing with Chinese mobiles. He recommended that without advertising no one can excel in mobile business.

**He told the team that he likes to roam around during weekends, but now the markets are open during weekends and he cannot manage to spare time for recreational activities.**

# SS Technology
## gleaming in star city mall

Bilal from SS technology is working in the mobile business for the past 8 years. He deals with branded mobiles only. According to him, customers consider the cost and brand name while purchasing a handset. He is satisfied with his mobile business and doesn't face any obstacle while importing handsets.

# Sakrani Mobile
## all the way from Hyderabad

Catering the needs of the Hyderabadi mobile users , Sakarani Mobiles is owned by a seasoned mobile dealer 'Imran'. He is working in the mobile market for the past 10 years. He deals with both the branded and the Chinese mobiles. Imran said that he would launch a brand of his own by the name of 'Sakrani' if he could bag an opportunity to do so.

Imran was of the view that cutomers prefer the brands instead of of their    cost. Among the top brands he named Nokia, HTC and Huwaie. He said that profit margin was greater while dealing with branded mobiles and the Chinese handsets had a higher 'running'. Imran said that sales in the holy month of Ramadan were less then average, but they boost up after this month. He suggested that it was mandatory to have a customer care center along with shops.

In his leisure time, Imran goes out with his family for the sake of relaxation.

# Sheikh Communication
## Center – Chandni Mobile Mall

Communicating the needs and demands of its' customers, Sheikh Communications is established in the mobile market of Hyderabad since 2006. Ayyaz while interacting with the Phone World Magazine team told that people make a rational decision after considering cost and brand name.

He said that he was completely satisfied with his mobile business. As per his rough estimate, in the holy month of Ramadan the sales don't fluctuate to a great extent.

Ayaaz said that he sleeps during the holiday and goes out for dinner in his favourite restaurant.

# BEST ANDROID

by Kanwal Ayub

nformation Technology (IT) and telecommunication have witnessed a boom in Pakistan in last decade up till now. IT is the current choice of many developing and developed countries to upgrade their economy and to compete in the global market. One of the revolutionary advancement of IT is the rate of broadband penetration in cities across Pakistan has increased very rapidly giving a large portion of the Pakistani population access to broadband internet. The total percentage of the Pakistani population is not as high as that of countries in the Europe or the Americas but the development in the field of IT, internet businesses, and other such avenues has been remarkable.

Pakistani companies and developers are now more interested in developing Android applications. Following are the Best Android Applications Developed by Pakistani Developers on Google Play Store (Android Market) are :

This app falls in the category of games and is a product of a Pakistani company 'Pepper.pk'. The basic objective is to save the tiny bird by running, sliding and gliding. The bird will have to run fast or else it will freeze. The faster you go, the better it will be.

'Pepper.pk' has designed various interesting levels which can keep you busy for hours. 'Tiny Birds' is Kiip enabled, which means that you will be rewarded with an actual prize by unlocking the achievement in the game. The reward can be like free packet of crisps or it can be a discount coupon from the retail store of your choice.

'Angry Imran' is a very marvelous product of a Pakistani Android development company BrainFreeze. This app has gained immense popularity in the Pakistani community especially in the youth. We all know that currently almost the whole country is supporting Imran Khan so this game is released at the perfect time. 'Angry Imran' is totally inspired from Angry Birds. But instead of the birds there is face of Imran Khan which is used to shoot and destroy the faces of other politicians. The levels are Lahore, Peshawar and some other cities of Pakistan.

It looks like that the brilliant developers of this game are themselves supporting Imran Khan in the upcoming elections. This game will surely help Imran Khan in his election campaign.
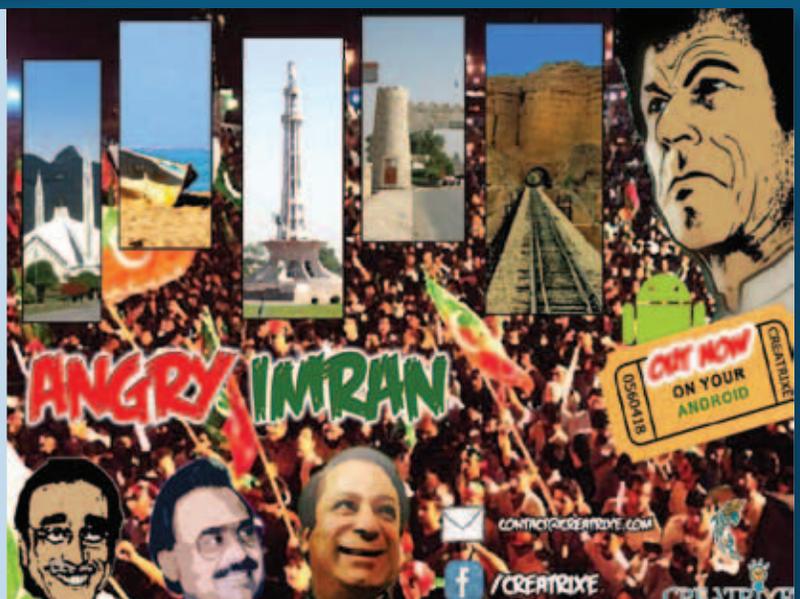
# APPLICATIONS
## BY PAKISTANI DEVELOPERS

Mindstorm Studios has stepped into the Android development. The latest product of this company on the Google Play Store i.e. "Whacksy Taxi". The basic objective of the game is to hit the accelerator and score as much as you can by collecting coins and other power ups will boost your speed and performance.

Moreover, the music tracks played in the background will keep you energetic and up for the game all the time.
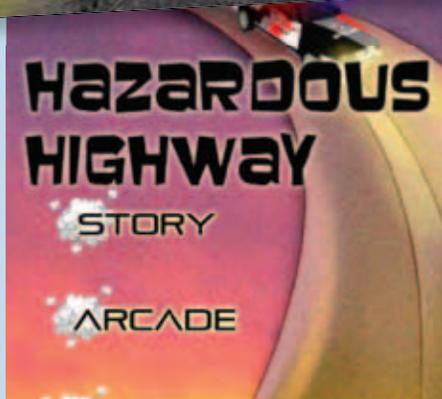
"Hazardous Highway" is one of the most popular games by 'Pepper.pk'. If you are a fan of "Racing Moto" then you will simply love it. the basic concept of the game is the same as that of racing moto but there is a car in place of bike. You have to cover the maximum distance for getting a high score.

Hurdles will come in your way in shape of traffic. Fuel consumption must be kept in mind while playing and your eyes must be open to look for fuel bonuses. If the car gets damaged, it will burst into flames and the game will be over.

If your car is slightly damaged then you can repair it by collecting repair tools on the road. Overall it is a very interesting and addictive game.

Mindstorm Studios has stepped into the Android development. The latest product of this company on the Google Play Store i.e. "Whacksy Taxi". The basic objective of the game is to hit the accelerator and score as much as you can by collecting coins and other power ups will boost your speed and performance.

Moreover, the music tracks played in the background will keep you energetic and up for the game all the time.

# how to save a wet phone!

by Kanwal Ayub

**W**ashing machines, toilets, cups of tea, foggy weather…these are a few of our favorite things. That is, until they fill the lungs of our cherished cell phone, leaving us weeping over a soggy, lifeless metal carcass.

Dropped your handset in the bath? Fumbled your phone and plopped it in the loo? Don't panic – just follow these steps and you'll have a good chance of breathing life back into your drowned smartphone. Just be sure to check out our list below of what not to do for some useful mythbusting.

## What to do

While dismantling your phone completely would help it to dry out more effectively, doing so will void your warranty. It usually requires specialist tools and may jeopardize your phone if you're not careful, so I don't recommend it. Instead, follow these steps:

**1** Firstly, retrieve your handset from the drink right away. A prolonged plunge will increase the risk of damage.

**2** Resist the urge to check if it still works or press any buttons, since putting pressure on the keys could shift liquid further into the device.

**3** In all cases, the best thing to do is immediately pull out the battery, thus minimizing power to the device that may cause it to short circuit.

**4** If you own a handset with a non-replaceable battery, like an iPhone or Nokia Lumia, then pulling the battery isn't an option. You'll have to risk pressing a few buttons to check if it's still on and to swiftly turn it off if it is. Take care when handling the phone in this case.

**5** Remove any peripherals and attachments on your phone, such as cases.

**6** Extract the SIM card and any SD cards it carries, leaving ports or covers on your handset open to aid ventilation.

**7** Dry off everything with a towel, including the exterior of your handset, being careful not to let any water drain into openings on the phone.

**8** Even when everything's dry, it's very likely there's latent moisture within the device that you'll want to get out before turning it on. The most oft-reported fix for a sodden phone is to bury the handset in a bowl of dry rice. Desiccant materials, such as rice, have hygroscopic properties that can attract and absorb moisture. You can also use silica gel packs – the kind used in shoeboxes – to greater effect. If you don't have any lying around, uncooked rice will do nicely.

**9** When you're confident it's dried out, replace the battery and try switching it on. Good luck!

## What not to do

A purported fast-track method of drying out a wet phone is to use a hairdryer, or applying heat to the device in other ways. While this would successfully evaporate all the moisture still sitting within the handset, it risks becoming too hot and causing damage to the components.

# AWAM
## MOBILES

# Riaz Butt
# explains the
# launch of Huawei





A l Hafeez Mobiles is operating since 1998, initially, items were imported from other countries by this shop. Then, other shops were made for mutual benefit of wholesaler and retailer and to increase employment opportunities.

In an exclusive interview with the Phone World team, Riaz Butt, the seasoned wholesaler and retailer of Lahore discussed the launch of Huawei.

**Explain the launch of Huawei?**
Airlink granted the task of exclusively dealing with Huawei to me. It is growing slowly as it is an expensive Chinese phone.

**What are the sales statistics' of Huawei?**
The sales are high and the on the first day of it's launch I scattered around two hundred models of the first handset in the shops of Lahore. The top sales on all my shops are being grabbed by Huawei.

**How is the other set-up going other than Huawei?**
The progress of the market is chequered and there are ups and downs in any business, but generally my set-up is running smoothly.

**Tell us about the charity hospital that you are running?**
It was my ancestral home, located near Lahore, which I converted into a charity trust. I have christened it with my mother's name. Moreover, it is equipped with latest apparatuses and there are large wavers over 'dengue detection tests'. On daily basis, 80 to100 patients benefit from this hospital with satisfaction.



S hops at Walton enjoy low rent, according to Sanaullah, the owner of Awam Mobiles. He tagged Nokia as the best with Asha series as its latest success story. Sanaullah said that G-TIDE was in the lead among Chinese brands.

During a discussion with the Phone World team, he shared his experience of repair in which Nokia repair problems of Nokia are high. In his opinion, heavy handsets are not more prone to damage.

# Smart Mobiles



Smart while selling cellular phones, smart mobiles is located at Walton road, Lahore. Muhammad Sajid, is working in the mobile market since 2003. He declared Nokia as the top selling brand. Among the Chinese brands, he labelled Q- Mobile as the best. Sajid was of the view that customers in posh areas are more inclined towards high-end handsets. Talking about repairing issues, he said that Nokia has more repair problems as compared to other brands. Smart Mobiles also has its own repairing centre.



# Sony Mobiles

Located in the area of Lahore, Sony Mobiles is catering to the needs of the customers belonging to Walton. Aftab Ahmed, the owner of this shop is serving the mobile market for the past 10 years. He believes that his shop has an edge over those located in Hafeez Center as he immediately fufils the demand of people belonging to a posh area of Lahore (Walton).

According to Aftab, Nokia enjoys high sales. Among the Chinese brands, he ranked Q- Mobile as the best. He said that there were no issues like parking at Walton and customers trust the shopkeepers.
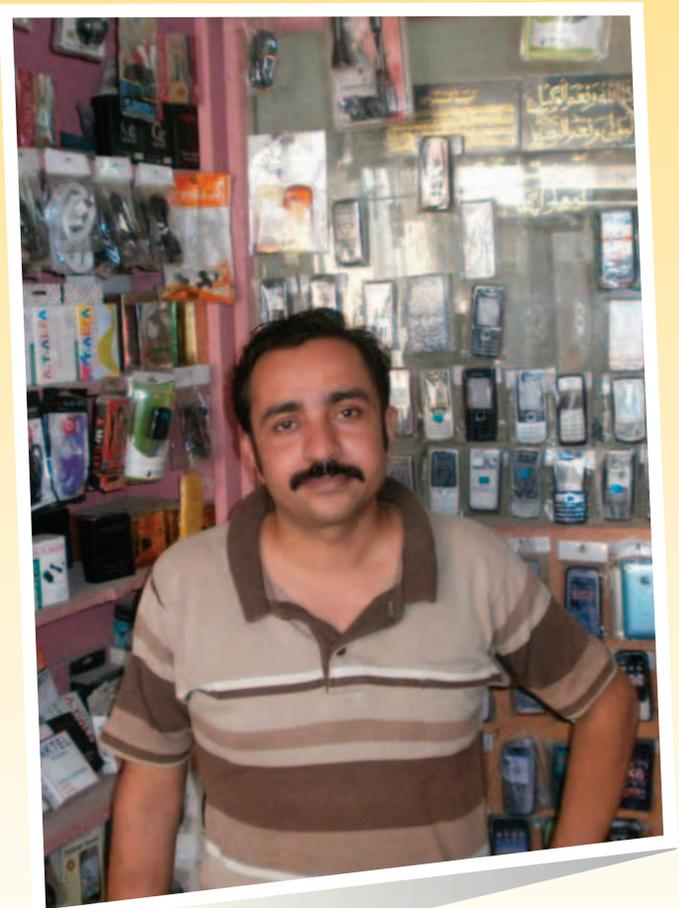
**talkshalk ichamp** RAWALPINDI

### I-champ at GGHSS Bagh Sardaran

Telenor Pakistan has launched a nationwide project that will help empower a new digital generation in Pakistan. Telenor Talkshawk I-Champ is a knowledge-based initiative that aims to provide learning and training to young people to enable them to become future proponents in the Digital Age.

**Challenge your smartphone against NOKIA Lumia at Dolmen Mall Clifton**

# NOKIA LUMIA CHALLENGE
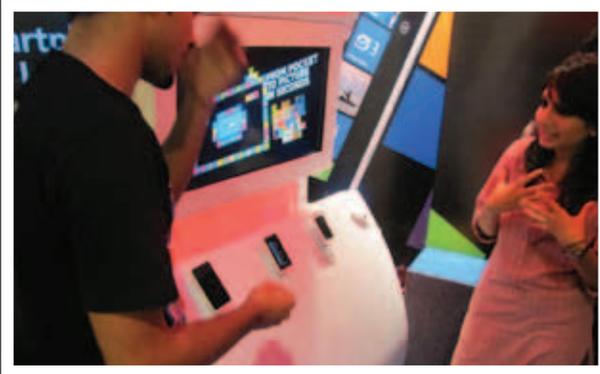
# Local Companies Into Smartphone Market

by Kanwal Ayub

**S**martPhone market is Spreading Faster than any other Technology in Human History. Today's technology scene seems overheated to some. Apple / Samsung / Nokia / BlackBerry are considered the most valuable company in mobile market but this doesn't end here. Smartphones are taken serious by local companies too and now the emergence of local companies iin smartphone market of Pakistan has started.

**Some of the Local Smartphones in Pakistan are:**
While selecting mobile phones today, calling and messaging is not only function to select phone in fact many other factors are there to select phone like features, shape, color, smartness, touch screen, music and video players, camera results, captive touch e.g. In Pakistan QMobile / Gfive / Voice are liked by the people because of its new and different features. Second the most important factor is prize they are cheaper than others mobiles.

## Voice V850
Rs. 7,200

If you want to go in to the roots of Android in low price than Grab some piece of Voice V850, Voice V850 combines arresting design with ease of use, the photos you take on Voice V850 3.2MP camera will be a beauty to behold, Voice V850 – An Android phone which will to Blow you away for sure.

# Qmobile Noir A2
## Rs. 8,800

# GFIVE A68 Rs. 8499

GFive Eshare A68 is a smart phone with longer battery life and enjoy hours of long calls, with WiFi of GFive Eshare A68 you can use Internet with high speed, you can also download wide range of applications and enjoy them with high speed 650 MHz processor, GFive Eshare A68 is full of entertainment including FM Radio, SNS integration, MP3, Games and much more.

# GFive A57 Rs. 5499

With the integrated functions of GFive Fanse A57, the number of mobile applications and services continue to grow. GFive Fanse A57 has launched its own mobile phone G-Cloud strategy, Demand of consumers is the core strategic direction, With Android platform, GFive Fanse A57 achieves "Cloud Control, Cloud Sharing, Cloud Storage", a trinity integration of multi-resources, GFive Fanse A57come with Wifi and provides high-speed web browsing.

# Qmobile Noir A100
## Rs. 6900

QMobile NOIR A100 is a bigger screen touch phone, with Android operating system which provides wide range of applications; QMobile NOIR A100 has higher speed with 416 MHz processer. QMobile NOIR A100 is ultra slim mobile & has better battery life, QMobile NOIR A100 has Stereo FM Radio, MP3, video player, Google map and much more, all you need!

**Second Life**
Educators can reach a broad audience here by offering online classes, presentations, debates and more.

**4 Ways Augmented Reality is Changing Education**

**Driver's Ed**
Saatchi & Saatchi and Toyota have teamed up to create an AR test drive, "the cleanest test drive ever."

**Field Trips**
Students and self-learners can explore AR museums that are centered around a specific theme.

**Project Glass**
Google's AR project allows students to experience extreme sports and snap photos by simply wearing special glasses.

by Ammar Shafiq

# 20 Coolest Augmented Reality Experiments in Education So Far

**A**ugmented reality is exactly what the name implies – a medium through which the known world fuses with current technology to create a uniquely blended interactive experience. While still more or less a nascent entity in the frequently Luddite education industry, more and more teachers, researchers, and developers contribute their ideas and inventions towards the cause of more interactive learning environments. Many of these result in some of the most creative, engaging experiences imaginable, and as adherence grows, so too will students of all ages.

**Second Life:**
Because it involves a Stephenson-esque reality where anything can happen, Second Life proved an incredibly valuable tool for educators hoping to reach a broad audience – or offering even more ways to learn for their own bands of students. Listing the numerous ways in which they utilized the virtual world means an entire article on its own, but a quick search will dredge up the online classes, demonstrations, discussions, lectures, presentations, debates, and other educational benefits.

**Augmented Reality Development Lab:**
Affiliated with such itty-bitty, insignificant companies as Google, Microsoft, and Logitech, the Augmented Reality Development Lab run by Digital Tech Frontier seeks to draw up projects that entertain as well as educate. The very core goal of the ARDL – which classrooms can purchase in kits at various price levels – involves creating interactive, three-dimensional objects for studying purposes.

**Reliving the Revolution:**
Karen Schrier harnessed GPS and Pocket PCs to bring the Battle of Lexington to her students through the Reliving the Revolution game, an AR experiment exploring some of the mysteries still shrouding the event – like who shot first! Players assume different historical roles and walk through everything on a real-life map of the Massachusetts city.

**PhysicsPlayground:**
One of the many, many engines behind PC games received a second life as an engaging strategy for illustrating the intricate ins and outs of physics, in a project known as PhysicsPlayground. It offers up an immersive, three-dimensional environment for experimenting, offering up a safer, more diverse space to better understand how the universe drives itself.

## MITAR Games:

Developed by MIT's Teacher Education Program and The Education Arcade, MITAR Games blend real-life locations with virtual individuals and scenarios for an educational experience that research proves entirely valid. Environmental Detectives, its first offering, sends users off on a mystery to discover the source of a devastating toxic spill.

## New Horizon:

Some Japanese students and adults learning and reviewing English lessons enjoy the first generation of augmented reality textbooks, courtesy of publisher Tokyo Shoseki, for the New Horizon class. As a smartphone app, it takes advantage of built-in cameras to present animated character conversations when aligned with certain sections of pages.

## Occupational Safety Scaffolding:

Professor Ron Dotson's Construction Safety students receive a thorough education in establishing safe scaffolding space through three-dimensional demonstrations incorporating the real and the digital alike. A simple application of AR, to be certain, but one undoubtedly possessing the potential to save lives and limbs alike.

## FETCH! Lunch Rush:

Education-conscious parents who want L'il Muffin and Junior to learn outside the classroom might want to consider downloading PBS Kids' intriguing iPhone and iPod Touch app. Keep them entertained in the car or on the couch with a fun little game for ages six through eight meant to help them build basic math skills visually.

## Field trips:

Augmented reality museums guide students and self-learners of all ages through interactive digital media centered around a specific theme — maybe even challenge them to play games along the way. HistoriQuest, for example, started life as the Civil War Augmented Reality Project and presented a heady blend of mystery gaming and very real stories.

## School in the Park Augmented Reality Experience:

Third graders participating in the 12-year-old School in the Park program engage with AR via smartphones as they explore Balboa Park, the San Diego History Center, and the world-class San Diego Zoo. Not only do they receive exposure to numerous educational digital media resources, teachers also train them in creating their very own augmented reality experiences!

## QR Code scavenger hunts:

Smartphones equipped with a QR code reader make for optimal tools when sending students on scavenger hunts across the classroom or school. The Daring Librarian, Gwyneth Anne Bronwynn, sends kids on an augmented reality, animated voyage through the library to figure out where to find everything and whom to ask for assistance.

## Mentira:

Mentira takes place in Albuquerque and fuses fact and fiction, fantasy characters and real people, for the world's first AR Spanish language learning game. It intentionally mimics the structure of a historical murder mystery novel and allows for far deeper, more effective engagement with native speakers than many classroom lessons.

## Driver's ed:

Toyota teamed up with Saatchi & Saatchi to deliver the world's cleanest and safest test-drive via augmented reality. While the method has yet to catch on in the majority of driver's education classes, it definitely makes for an impressive, effective alternative to keeping and maintaining a fleet of cars.

## Geotagging:

Classrooms with smartphone access blend Google Earth and web albums such as Picasa or Instagram for a firsthand experience in geotagging and receiving a visual education about the world around them. More collaborative classrooms — like those hked together with Skype or another VOIP client - could use this as a way to nurture cross-cultural, geopolitical understanding.

## Dow Day:

Jim Mathews' augmented reality documentary and smartphone app brought University of Madison-Wisconsin students, faculty, staff, and visitors to the year 1967. As they traveled campus, participants' smartphones called up actual footage of Vietnam War protests corresponding with their current locations.

## SciMorph:

Using a webcam and printed target, young kids in need of some science (although, really, everyone is in need of some science) interact with the cute critter SciMorph, who teaches them about gravity, sound, and microbial structures. Each lesson involves exploring a specific zone within the game and opens users up to questions, quizzes, and talks.

## Imaginary Worlds:

With PSPs in hand, Mansel Primary School students embarked on an artistic voyage, where downloaded images and QR codes merge and provide challenges to draw up personalized environments. The journey also pits them against monsters and requires a final write-up about how the immersive experience left an educational impact.

## Sky Map and Star Walk:

Available on Android and iWhatever devices, these deceptively simple applications pack a megaton punch of education via an innovative augmented reality approach. Both involve pointing the gadget to the sky and seeing the names of the currently visible stars, planets, and constellations pop up, along with additional astronomical information.

## Handheld Augmented Reality Project:

Harvard, MIT, and University of Wisconsin at Madison teamed up with a grant from the U.S. Department of Education and nurtured science and math skills to junior high kids using GPS navigators and Dell Axims. Moving through the school meant moving through a synched virtual environment, with each area presenting new challenges they must tackle before pressing forward.

### Project Glass:

One of the most ambitious augmented reality initiatives comes straight from Google, who believes its Project Glass holds potential far beyond the classroom. Notoriously, it requires a pair of glasses versus the usual smartphones and laptops, and current experiments involve placing users in first-person extreme athletic experiences, snapping photos, and more.

# Technology in action in **monsoon season**

By Fakiha Hassan Rizvi

A dvancement, evolution and innovation has all been combined to make human life easier. Technology is a blessing which makes things convenient and feasible for all those who use it in a proper way. The damp monsoon season has arrived in Pakistan and for the first time the high-ups will be relying on smartphones to monitor troubles caused due to excessive rain. The Water and Sanitation Agency (WASA) in Lahore has given smartphones to the Ministers of Provincial Assembly of Punjab province.

The gadgets will be used by the ministers of the most densely populated province of Pakistan for detecting water stagnation and puddles. Moreover, the notorious 'dengue larvae' growth will also be examined through the smartphones. According to the  managing director of the Water and Sanitation Agency, these phones can only be used for relaying images of the troubled spots and not for conversing. The smartphones will have to be returned back to WASA after the end of the rainy season.

It's interesting to note that how the device will be used to achieve the monitoring aims mentioned above. The Android OS based Huawai handsets will be given to each supervisory officer working under the government. Along with recording indicators like non-functional equipment,absent staff, troubled localities and 'dengue' zones the

supervisors will take a self-photo that will be

submitted along with the data. The submitted data will automatically pop up on a map in real-time with GPS accuracy of five meters. This data can be monitored by senior officials and back-end auditors.

The mobile based 'data-entry' has several benefits over the conventional paper entries. One screen, one application, is able to handle a form with as many pages/ screens as required.  Electronic information entry is more reliable. Dependencies of information transfer are reduced thereby reducing chances for errors. Mobile phones with touch-screens provide the simplest user interface possible. GPS-enabled phones allow monitors/ inspectors to verify their physical location at time of report. Built-in digital cameras allow photographs of report-submitting personnel to aid authenticity of

reporting. A robust mobile data network existing in rural Punjab allows for much more reliable connectivity of remote locations to central servers and information seekers.

This 'technological dive' for the sake of improvement in governance is a healthy sign and a laudable initiative. In addition to this, it throws light on yet another utility of cellular phones. According to renowned academic activist, Jeffry Sachs - "cellular phone is the single most transformative technology for development". A cost-effective smartphone with GPS and camera can make the data transmission task convenient for the government- more than any laptop or computer.

Bill board advertising new cell phone .club mobile with all features ans accessories are shown in this bill board.

Hall Road Lahore ☎ Ph: 042-37215527-28
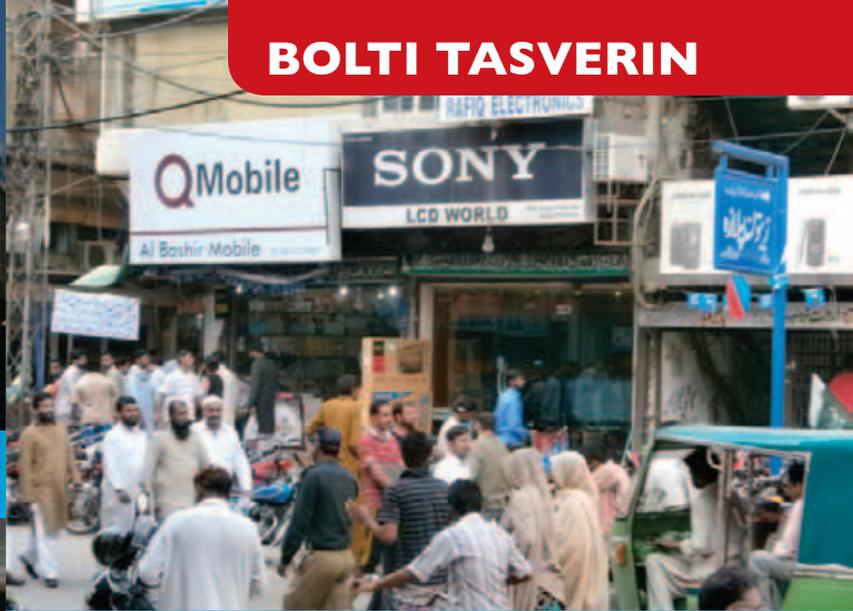


People came across different brands like sony and qmobile, which helps to make their mind to buy these products.



Companies hanging their posters and bill boards to advertise their company. To tell about their existence in that particular market.



People came across different brands like sony and qmobile, which helps to make their mind to buy these products.



Banners showing different and new attributes of mobiles in the market to capture buying mind of consumers.



A Ufone Volunteer distributing relief goods in a village in Dera Ghazi Khan
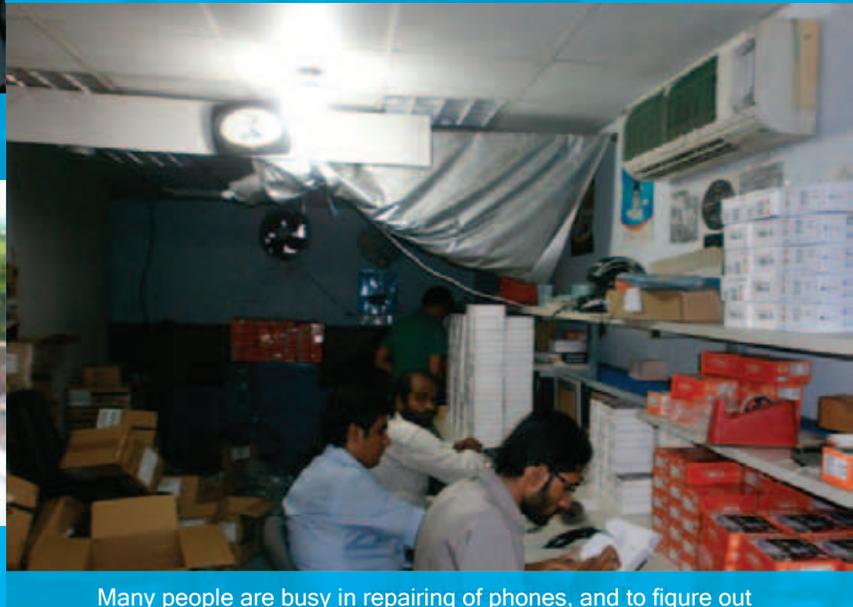


Many people are busy in repairing of phones, and to figure out the problems in mobile phones.

# Smartphone Apps
## For Free Communication

by Kanwal Ayub



One of the best things you can do with your smartphone is to communicate with other smartphone users without having to pay your mobile operator. Smsing can be free, video chats can be free; chats can be free, provided you have the internet, 3g or Wifi. You still need to pay for your internet usage definitely, but at least, you don't need to pay for EVERY single sms sent. For this, you should know what app to use for which purpose.

Now-a-days developers are building applications targeted at broadening communication of millions of users. Many applications have been designed to allow smartphone users to communicate using video, voice and text for free. Some examples are: WhatsApp, Viber, Tango, PingChat!, Fring, MSN, AIM, BeejiveIM, Facebook Chat and Google Talk.



WhatsApp Messenger is a cross-platform mobile messaging app which allows you to exchange messages without having to pay for SMS. It is an app for instant messaging of text, images, video and audio messages. It runs on the Android, Apple, Nokia and BlackBerry operating systems. WhatsApp is free for Android and Blackberry, but costs a dollar for iPhone and Nokia systems. The cool thing about Whatsapp is it allows group chat.

# Viber
### Connect. Freely.

## Free calls & Free texts

Viber is another must have in my app list. It lets everyone in the world connect. Freely! This application uses the same address book in your smart phone and shows a tag against contacts if they are registered Viber users. Viber users could be anywhere in the world if they are connected to internet. Viber and all its basic features are completely free. Get it. You'll like it.

# Tango
### Be there

## Free mobile video calls wherever you are

Download Tango on **iPhone**

Download Tango on **Android**
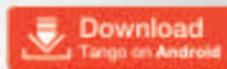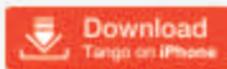
LEARN MORE ABOUT TANGO
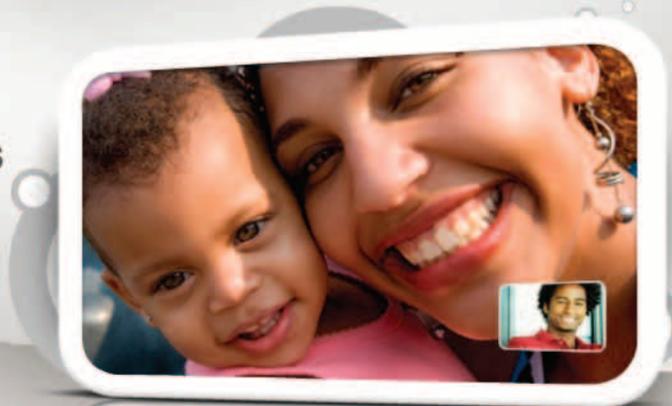
▶ SEE WHY PEOPLE TANGO

Tango is awesome and is the alternative to FaceTime, as Facetime doesn't work on 3g. Like the previous two apps, you don't need to sign in to Tango to work. When someone calls, it will automatically ring. With Tango you can opt for voice only or video call. Video call from tango is really clear, even on 3G. One good thing in this application is, instead of going through long registration, it uses your mobile number as username and registers automatically.

# SINGH MOBILES
## GULCHARAN SINGH



### What Kind Of Phones You Are Dealing In?
Previously, I was dealing in Chinese phones. I am wholesale dealer and now we sell phones with our own warranty. But now we also deal in used mobile phones especially HTC, NOKIA, SAMSUNG, iPhone, BLACKBERRY.

### Why Did You Select This Market To Start Business?
Because technology is coming day by day so demand is also expanding in the market. So, it is not that much difficult to run business with already existing demand. It is a profitable business.

### What Are Strengths Of This Industry?
Technology and upgraded technology for example 3G which is creating demand for new products and smart phones. This way industry is at its boom stage to generate profits.

### What Are The Barriers / Threats In Doing This Business?
Due to security situation of Pakistan and crime rate, many people come to sell stolen phones. Which later becomes a problem for us so it's risky from this perspective.

### If You Move 4 Years Back What Major Diffrence You See In Today's Market And The Market Back Then?
Now there are more opportunities in this market, in past there was less development in this cellular business, but now there is more chance to earn and people are also having more options when it comes to getting established in the market.

### What People Like Most About Their Cell Phones?
Now people are more aware due to media, they know why this phone is different from that one, they are more concerned about the features of phone.

### What Do Customers Want? What Is The Major Factor That Satisfies Them When It Comes To Mobile Phone?
Now they ask for wifi, Bluetooth they know very well sometimes better than us. Even children with age(18-22) have more knowledge about upcoming technology in mobile phones.

### Do Customers Have Information About The Latest 3G Technology?
Yes they are demanding for such phones and concerned about phones like iPhone etc.

### What Kind Of Customers Do You Usually Come Across?
Most of our customers are brand conscious rather than price conscious. Majority of those customers are local.

# SHARJAH 2
## MAMOOR KHAN
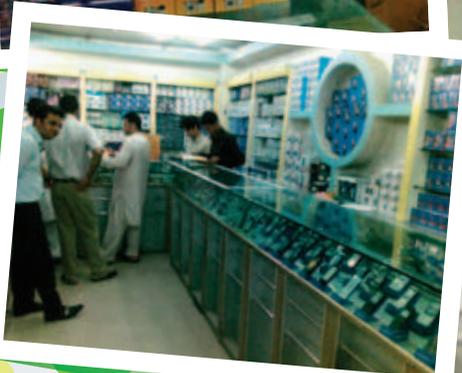
**For How Long You Are In Cellular Business?**
I am in this business for the past 15 years.

**Q: What Kind Of Phones You Are Dealing In?**
We are whole sellers and retailers of mobile phones. We mainly distribute mobile devices to KPK and Afghanistan. Major brands that we deal in are Samsung, Hawaii and Nokia.

**How Do You Rank Awarness Of Customers Related To Mobile Pohones?**
Customers today are very well-aware about cell phones. They have information about all the brands and functions of mobile phones.

**How Important Is The Design Or Style (Look And Feel) Of A Mobile Phone To Customers As Opposed To Functionality?**
Mostly customers give priority to the design and look of mobile phones rather functionality.

**How You Spend Your Wekend?**
Sundays are usually spent with the family.

# HIDAYAT MOBILES
## HAYAT-ULLAH



**Q: HOW LONG HAVE YOU BEEN IN THIS MARKET?**

We are in this market for past 9 YEARS.

**Q: WHAT KIND OF PHONES ARE YOU DEALING WITH?**

We deal in Chinese and branded mobile phones. We use to sell different Chinese models as well, but any more as the demand of these mobiles was very low.

**WHY YOU SELECT THIS MARKET TO START BUSINESS?**

Due to my interest because other people around me is also doing this business so I thought to start the same because I am having some know how about this business.

**CURRENTLY, HOW YOU SEE THE SITUATION OF MOBILE INDUSTRY?**

Currently, market is very slow because everyone is doing this without knowing anything about the market.

**WHAT ARE THE STRENGTHS OF THIS INDUSTRY?**

If you work hard and focus then it results into profitability, like wholesale business. Sometimes we buy in fewer prices, but after selling handset there is high margin.

**WHAT ARE BARRIERS /THREATS IN DOING THIS BUSINESS?**

We deal with Chinese sets as well so our customers complain about their battery  life because after sometime it does not work. Therefore, we have to cope up with that situation.

**IF YOU MOVE 4 YEARS BACK WHAT MAJOR DIFFRENCE YOU SEE IN TODAYS MARKET AND THE MARKET BACK THEN?**

Previously situation is much better because theirs is less completion in the market and profit margin is there about 700 per cell phone, today it is round about 25-30 rupees.

**WHAT ACTULLY CUSTOMER WANTS? WHAT IS THE MAJOR FACTOR THAT SATISFT THEM**

WHEN IT COMES TO MOBILE PHONE?

They want better features in cell phone like wifi, Bluetooth.

WHAT DO THEY COMPALIN ABOUT?

They complain about the speakers of Chinese phone.

HOW WILL YOU RANK AWARNESS OF CUSTOMERS RELATED TO MOBILE PHONES?

Now even teenagers are more aware about the upcoming brands and mobile phones .they know each n everything in past people come and say that we need phone in this range they even don't know about the name of brand.

GIVE FEW TIPS WHEN IT COMES TO SELECT MOBILE PHONE?

Collect as much info as you can about the hand set you want to buy. Check the mobile properly in case of buying a used hand set.

WHICH MOBILE PHONE IS

FAVOURITE AMONG CUSTOMERS WHEN IT COMES TO PRICE AND BRAND?

Price matters because majority of the people belong to middle class so they are concerned about prices.

HOW IMPORTANT IS THE DESIGN OR STYLE (LOOK AND FEEL) OF A MOBILE PHONE TO CUSTOMERS AS OPPOSED TO FUNCTIONALITY?

They want updated and new design more than other features in cell phones.

DO CUSTOMERS HAVE INFORMATION ABOUT THE LATEST 3G TECHNOLOGY? 3G SERVICES ARE PERCEIVED TO BE FOR THE RICH, WHAT DO YOU THINK ABOUT THIS NOTION?

Yes! there is high demand for the 3G technology in Pakistan and people want to buy, situation is same like when mobile phones were started in Pakistan person earning 8000 per month is having phone which cost above 50000 so demand and willingness is there in

the market, but need has to be the focal point of this business.

Q: SO WHAT IS YOUR TARGET MARKET?

We also deal in distributions of cellular phones in Afghanistan. Although, I have just done Matric, but I am able to understand English very well so I traveled across the border to China and U.A.E for mobile business.

Q: WHAT KIND OF CUSTOMERS DO YOU USUALLY COME ACROSS?

We cater different types of customers; some of them are brand conscious they don't want to compromise on brand whereas others are price conscious.

Q: HOW YOU SPEND YOUR WEKEND?

I interact with my customers on weekends. It's a good way to build strong relationships with them. I try to sort out their problems related to cell phones. I also visit 'namak mandi' to enjoy delicious food beside my work activities.

# AHMED MOBILES
## FAZIL AMAN BANGASH



**What Kind Of Phones You Are Dealing In?**
We deal in all local and international brands. Our product range mainly depends on our customers' demand.

**For How Long You Are In Cellular Business?**
I am dealing with mobile phones, since 2005 (when Nokia launched 3310), it has been so long being part of this market.

**So Hows You're Business Going?**
Really well, because we have both, experience and strong customer relation. So it's going quite well.

**Which Segment Of Mobile Phones Business You Are Operatinging?**
I am working as authorized mobile dealer. I am dealing only with new phones. From China we buy first copy of iPhone.

**What Kind Of Problems Are You Facing?**
Now days we are highly concerned about security problems. We have to cope up with security issues.

**How You Spend Your Weekend?**
On Sunday, mostly I am with my family. I preferably spend time with my children.

**What People Like Most About Their Cell Phones?**
In Peshawar people are neither concerned with the quality nor the features, they don't even know the name of mobile brands. They just demand for mobile within specific range which is about 1200-1500 PKR.

**What Complaints Do You Receive About Mobile Phones?**
Mostly complaints are related to Chinese handset because they are not having warranty and after sometime they create problem for users.

**How Important Is The Design Or Style (Look And Feel) Of A Mobile Phone To Customers As Opposed To Functionality?**
They want mobile with dual sim. This is the reason Q-Mobile is very successful in Pakistan.

**What Kind Of Customers Do You Came Across?**
Mostly our customers are price conscious; they prefer those gadgets which are low in price.

# MARKET INSIGHT ON SMARTPHONE AD ONS,
## PESHAWAR!!

by Fareed Khan

Peshawar is always famous for its hospitality and same is reflected at mobile markets of Bilour Plaza and Falak Sair. The objective of survey was to meet the retailers and distributors to research about the supplements to smart phones like Samsugn Galaxy SIII, iPhone 4S, HTC and other high end models. That whether the people in Peshawar are aware of any available add-ons to such smart phones. And if they are will the retailers and shopkeepers do business in them. The first question was to know about any available solution to a dual SIM in such heavy handsets. And the second question was about the power issues and the use of Power Skin. Power Skin literally supplements the default battery and adds some extra hours to your activity before you plug in your phone for charging. (You can read about them in other pages of this issue)

I met around 10 shopkeepers with the names of shops namely HKS Communication, Digi-Fone, S.G Fones, V Mobiles, Star Linker, Singh Mobiles, Phone 4 U Communi, Cell Choice, Marhaba Mobile Palace And Adnan Mobiles. These shopkeepers were happy to know about the innovative ideas and were interested to know more about them. But taking the first step barred them. Like, according to me they invest where the items or devices have proven to be successful, in their knowledge. May be it is their business model or the procedure which they follow. But they should have been more optimistic in promoting new technologies and gadgets. Considering the outbreak if social applications in all the smart phones. This will definitely improve their business. Considering the fact if a user can afford to buy an iPhone or SIII or any other high end handset that ranges more than 50K in Pak currency they would certainly love to buy the add-ons to enhance their battery lives.

The market of Peshawar is very vibrant and the way users are around here it looks evident that consumers always look forward to try or at least a new feature or item. Yes students and teenagers mostly buy such items to impress their friends. Keeping in mind the social applications which if used via EDGE/GPRS is not cost effective, so they use the Wi-Fi which eventually drain their batteries, so the power skins or the dual SIM if made available will improve the business of the retailers or shopkeepers. Moreover the markets of other regions of Pakistan should work on it and as mobile phone reviewer with the market penetration we are optimist with the business returns.

The survey was conducted by Fareed Khan and the report has been compiled accoridng to his findings and debriefing after the

by Adnan Khan

# Ufone Hajj Offer

U Fone takes care of all your communication needs with utmost care, great quality service and innovative products, so that U can focus on the other more important things. Just like Ufone's Hajj Offer!

This year with when U go for Hajj ufone will make sure that U are well connected with your loved ones back home. So when U land in Saudi Arabia, just opt for Mobily (Etisalat) and make as many calls as U want to your family back home in Pakistan or in Saudi Arabia for just Rs.1/sec and receive calls from anywhere in



# Huawei Ascend Y201 Pro
# Now, everyone's on the list!

R emember when Huawei Devices launched amazing and affordable Android Smart Phone in Pakistan a few months ago? Well, this time around they have gone one step further by introducing the affordable and smart Huawei Ascend Y201 Pro – a smart phone that has a Qualcomm Processor with 3D Graphic Performance, runs on Android ICS 4.0 operating system and is available for an amazing price of PKR 11,999. It comes with a 3.5 inch IPS LCD Screen and a 3.2 MP Camera. It also has 512 MB RAM, 4 GB ROM and Micro SD memory card slot (up to 32 GB). The smart phone features a powerful 1400mAh/ 1250mAh Li-Ion Battery.

by Adnan Khan

# Ufone users geared up to use iPhone 5 with Pakistan's first Nano SIM



*Picture shows Abdul Aziz, President & CEO Ufone along with Senior Management at the Launch of Nano SIM. In Pakistan, Ufone is the pioneer in introducing the Nano SIM to its valued customers.i*

Ufone has become the first Pakistani cellular company to cater to the needs of ambitious iPhone 5 enthusiasts, the much awaited iPhone 5 is expected to take over the smartphone scene in Pakistan in the near future.

Following its tradition of introducing innovative technologies for the very first time in Pakistan for its valued customers, Ufone is the only operator to launch the Nano SIM yet. Unlike the micro SIM which was used for the iPhone 4 and 4s the iPhone 5 works on a special sized Nano SIM which cannot be adapted from a regular SIM.  Nano SIM's will be available in selected customer service centers in Islamabad, Lahore & Karachi.

The specification of the Nano SIM is quite different. Not only is it smaller, it's 12 percent thinner from 0.76 mm to 0.67 mm. iPhone lovers in Pakistan are already anticipating the arrival of the new product from Apple and Ufone is determined to cater to every need of its valued customers.

Akbar Khan, Chief Marketing Officer said,"Ufone takes pride in introducing the latest and most unique value added services and the new SIM adaptation is the right move for the company's growth strategy," adding, "iPhone 5 will give a clear advantage to Ufone customers as they will be the privileged ones in Pakistan to enjoy iPhone way ahead of others."

Ufone is an Etisalat Group Company with its presence in all the major cities of Pakistan along with a comprehensive coverage across all major towns, villages and tehsil headquarters of the country. The company employs more than 3,850 people and operates with a network of more than 375 franchises and 22 company-owned customer service centers along with a distribution network of 150,000 outlets nationwide.

by Adnan Khan

# LG ELECTRONICS SPONSORS
# ICC TWENTY20 WORLD CUP

The company's sponsorship aims to build on the excitement for South Asian audiences in the Gulf Region through fan zones and lucky draw promotions



L G Electronics (LG), a global leader and technology innovator in consumer electronics, has announced its sponsorship of the ICC Twenty20 World Cup, to be held in Sri Lanka from September 18 to October 7, 2012.

LG Electronics intends to build on the excitement and anticipation of the tournament by hosting dedicated fan zones in the region, where supporters can watch the matches through LG's Cinema 3D Smart TV.LG's best-in-class 3D Smart Cinema TV allows viewers to watch thousands of movies and videos streamed directly from the Internet, surf the web and connect with social networks, while watching live matches in perfect 3D quality.

The ICC T20 World Cup 2012 in Sri Lanka will be the fourth ICC World Twenty20 competition, and will be the first T20 cricket World Cup tournament to be held in an Asian country. The T20 World Cup was previously hosted in South Africa, England and the West Indies.

by Adnan Khan

# Ufone readies for 3G whilst it waits for license

**U**fone, the wireless arm of Pakistan Telecommunications Company Ltd (PTCL), has installed a fiber-optic backhaul solution for its base transceiver stations (BTS) in ten major cities in readiness for a future 3G network deployment. Pakistan's cellcos have been waiting to launch 3G services since the government first drafted plans to launch a tender for 3G spectrum.

# PTA Seeks for Communication Agency as 3G Auction Nears

**P**akistan Telecommunication Authority is looking for services of a communication agency for the publicity and promotion of 3G license auction that it is planning later this year. An advert published in various newspaper asked communication agencies, of international repute, to submit their proposals with the PTA by October 15th, a time by when PTA is likely to have hired the consultant for the 3G auction. PTA in its advert said that agency will have to assist the authority in making the 3G auction a success. PTA will require the communication agency to publicize, market, handle public relations and digital communication to maximize the profits that PTA can earn from 3G auction. Chairman PTA in a senate standing committee held this week reaffirmed that authority will be able to conduct 3G auction by December 2012.

# PTCL launches 3G cloud bundles

**P**akistan Telecommunications Company (PTCL) has introduced a 3G Evo WI-Fi Cloud and a 3G Evo Nitro Cloud bundle offer. The bundle is priced at PKR 8,000 upfront and includes a 3G Evo WI-Fi Cloud device and four months of unlimited downloads. Monthly charges of PKR 2,100 will apply from month five. The 3G Nitro Cloud bundle costs PKR 12,000 upfront and comes with a 3G Nitro Cloud device and four months of unlimited downloads. Monthly charges of PKR 3,000 apply from month five.

by Mohsin Rehman

## Apple iPhone 5

| | |
|---|---|
| OS: | iOS 6 |
| Chipset: | Apple A6 |
| CPU: | Dual-core 1.2 GHz |
| Camera: | Primary 8 MP, 3264x2448 pixels, autofocus, LED flash |
| Memory: | 16/32/64 GB storage, 1 GB RAM |
| RAM: | 16/32/64 GB storage, 1 GB RAM |

## Nokia Lumia 920

*Powered by* **snapdragon** by Qualcomm

| | |
|---|---|
| OS: | Microsoft Windows Phone 8 |
| Chipset: | Qualcomm MSM8960 Snapdragon |
| CPU: | Dual-core 1.5 GHz Krait |
| Camera: | 8 MP, 3264 x 2448 pixels, Carl Zeiss optics, optical image stabilization, autofocus, dual-LED flash |
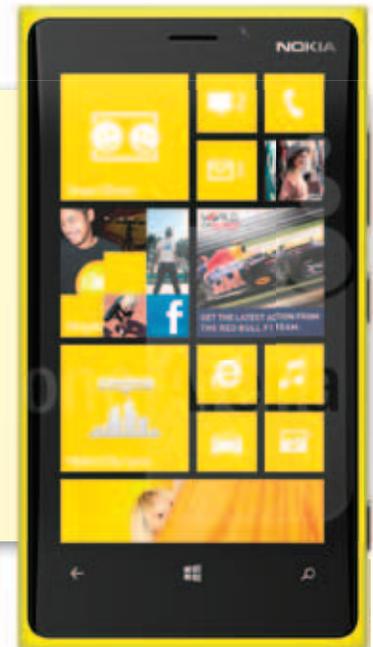
## HTC Windows Phone 8X

| | |
|---|---|
| OS: | Microsoft Windows Phone 8 |
| Chipset: | Qualcomm MSM8960 Snapdragon |
| CPU: | Dual-core 1.5 GHz Krait |
| GPU: | Adreno 225 |
| Camera: | 8 MP, 3264 x 2448 pixels, autofocus, LED flash |
| Memory: | 16 GB storage, 1 GB RAM |

*Powered by* **snapdragon** by Qualcomm

by Mohsin Rehman

# LG Optimus G E973

*Powered by* **snapdragon** *by* **Qualcomm**

| | |
|---|---|
| OS: | Android OS, v4.0.4 (Ice Cream Sandwich), planned upgrade to v4.1.1 |
| Chipset: | Qualcomm MDM9615/APQ8064 |
| CPU: | Quad-core 1.5 GHz Krait |
| Camera: | 13 MP/8 MP (market dependent), autofocus, LED flash |
| Memory: | 32 GB, 2 GB RAM |

# Huawei Ascend P1

| | |
|---|---|
| OS: | Android OS, v4.0 (Ice Cream Sandwich) |
| Chipset: | TI OMAP 4460 |
| CPU: | Dual-core 1.5 GHz Cortext-A9 |
| Memory: | microSD, up to 32 GB |
| Camera: | |

# Sony Xperia V

| | |
|---|---|
| OS: | Android OS, v4.0.4 (Ice Cream Sandwich), upgradable to v4.1 |
| Chipset: | Qualcomm MSM8960 Snapdragon |
| CPU: | Dual-core 1.5 GHz Krait |
| GPU: | Adreno 225 |
| Camera: | 13 MP, 4128x3096 pixels, autofocus, LED flash |
| Memory: | microSD, up to 32 GBRAM: 1GB |

*Powered by* **snapdragon** *by* **Qualcomm**

by Ammar Shafiq

# 1st dual-core NOIR A8 by QMobile



T he Noir A8 is equipped with a 1 GHz core processor – the same as an Apple Iphone 4 – instead of the previous 650 Mhz processor.

The 4.3-inch capacitive touch screen and is powered by the operating on Android OS, v4.0 (Ice Cream Sandwich). The device has a 5 megapixel camera and a front-facing VGA camera for video conference using Skype. This is one of the cheapest smartphones that lets you video chat.

The phone priced between 14,000 – 16,000Rs. QMobile is the second largest brand in terms of market share in the Pakistani mobile phone market.

The launch of Noir series shows our seriousness about entering the smartphone market, our commitment to providing consumers with the latest mobile technologies at the most affordable prices.

*QMobile CEO Zeeshan Akhter*



**CAMERA**

Primary:       **5.0 Mega Pixel AF Camera**

Video:          **Yes**

Secondary:   **Smart Front Camera**

**FEATURES**

Operating System ,OS:  **Android OS, v4.0, Ice Cream Sandwich**

Processor:    **1 Ghz Dual Core Processor**

# ePad 1 Tablet PC

## 9.7" High Resolution

16GB

One touch to explore the Universe

**Android 4.0.3**
Ice Cream Sandwich Version

## orange