Going Digital with "JAZZ HEARTBEAT"

Supervisor: Kashir Asghar

ACKNOWLEDGEMENT

 I would like to express special thanks and gratitude to my supervisor Sir Kashir Asghar as well as to my Management in providing me the golden opportunity to do this wonderful project of Launching Smart App by name of Jazz Heartbeat, This App is aligned with companies focus on going innovative & digital. This project helped me in learning immensely by undertaking research, brainstorming, coordinating and analyzing. It provided me with an opportunity to make new friends as I interacted with multiple teams and individuals across the organization.

Overall it was a great learning, satisfying and rewarding experience as I could positively contribute towards the improvement of Customer Experience while providing a comprehensive appraisal of the customer complaints and their experience to the Higher Management for future planning of Network.

I would also like to thank my Manager, Colleagues and my Family who helped me a lot in finalizing this project within the limited time frame.

Contents

Launching of Smart APP of Customers Experience in JAZZ

Project Background

The Project was assigned by the management keeping in view the need of smart app for monitoring customer's experience. Basically this is a Global project of VEON , So vendor selection is done by initiating Request for proposal (RFP) at group level and then screening of suitable vendor on basis of Quality and Price for making digital App for automatic capturing of customers experience . So after all long process of screening via presentations, price, quality, after sale services etc "**Metricell**" was selected as successful bidder.

As Vimplecom/VEON is global provider of telecom services and has 18 countries under its global umbrella. So the contract they made with Metricell includes country wise local customization of App, free software upgrades for 1 year and 3 years support services.

For rolling out this project group has selected **Jazz** to be first operator under its umbrella for implementing it and after that driving other subsidiaries as well by sharing experience and feedback.

Smart App purchased by Vimplecom:

Vimplecom purchased "Metricell's Live Network" App which is a powerful Business Intelligence and visualization tool designed specifically for mobile operators. It combines a Geographic Information System (GIS) data warehouse with dashboards for displaying key network and customer performance data. It is used by a wide variety of departments within a mobile network to support strategic goals, technical troubleshooting and operational tasks, with typical examples including:

- Project information management (coordination with vendors and other stakeholders)
- Enterprise resource planning
- Performance monitoring
- Service Quality Management
- Roll-out tracking (including prioritization and activity monitoring)
- Problem-solving (back-up sites in area, cost and configuration data)
- Infrastructure sharing and merging
- Site scoring and investment prioritization
- Strategic marketing planning
- Customer relationship management
- Site maintenance planning

Live Network provides vital network information at a micro (individual sites/cells) and a macro (part/all of the network) including KPIs, planned maintenance works, trouble ticket information, coverage and other relevant data.

The Live Network module is also capable of displaying the operators site details, ongoing maintenance and trouble ticket data which is updated as often as necessary to meet the operator's demands.

Live Network integrates seamlessly with the Site Maintenance Viewer module to identify requested maintenance work for sites.
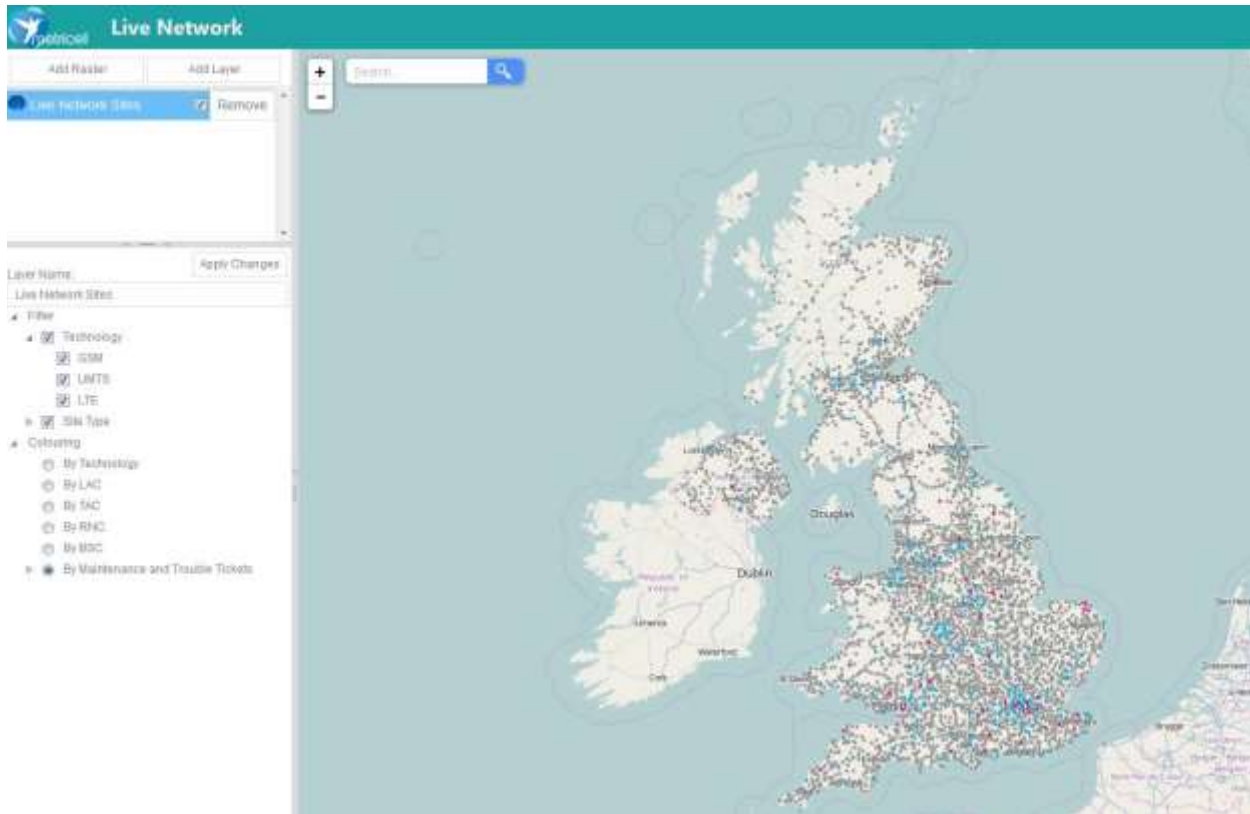
Picture 2.1: Metricell Global Project Snap

Local Modification in App:

My first task was to ensure local modification of Metricell Smart App, for which I has to do coordination with management regarding what should be local name of this App. For that I also coordinated with Marketing Team to propose name so that I can share it with Management for shortlisting. After seeing name provided by Marketing, management agreed on name "**Jazz HeartBeat**" saying customers are heart of company and this App will monitor their heartbeat.

Initial list of names provided by marketing:

1. **Jazz Heartbeat**

2. Jazz Network Vitals or Jazz Vitals

3. Jazz Test

4. Jazz Network Test

5. Jazz Stats

6. Jazz Frequency

7. Jazz Track

8. Jazz Performance

9. Jazz Amplitude

10. Jazz Magnitude

My Second task was to involve vendor to make changes in interface of App, during this period we also had structural changes in Jazz, as we shifted from Mobilink to Jazz. Therefore at interface level had to do double job, for example at first phase Metricell logo was changed first to Mobilink after that it was changed to Jazz.

Picture 3.1: Screen Change from Metricell to Jazz

Thirdly Marketing team was interested in adding Jazz official video **" Dunya ko Bataa du**" in YouTube testing button, for which we made sure with help of vendor that instead of playing some dynamic video on YouTube it should play Jazz official video on testing.
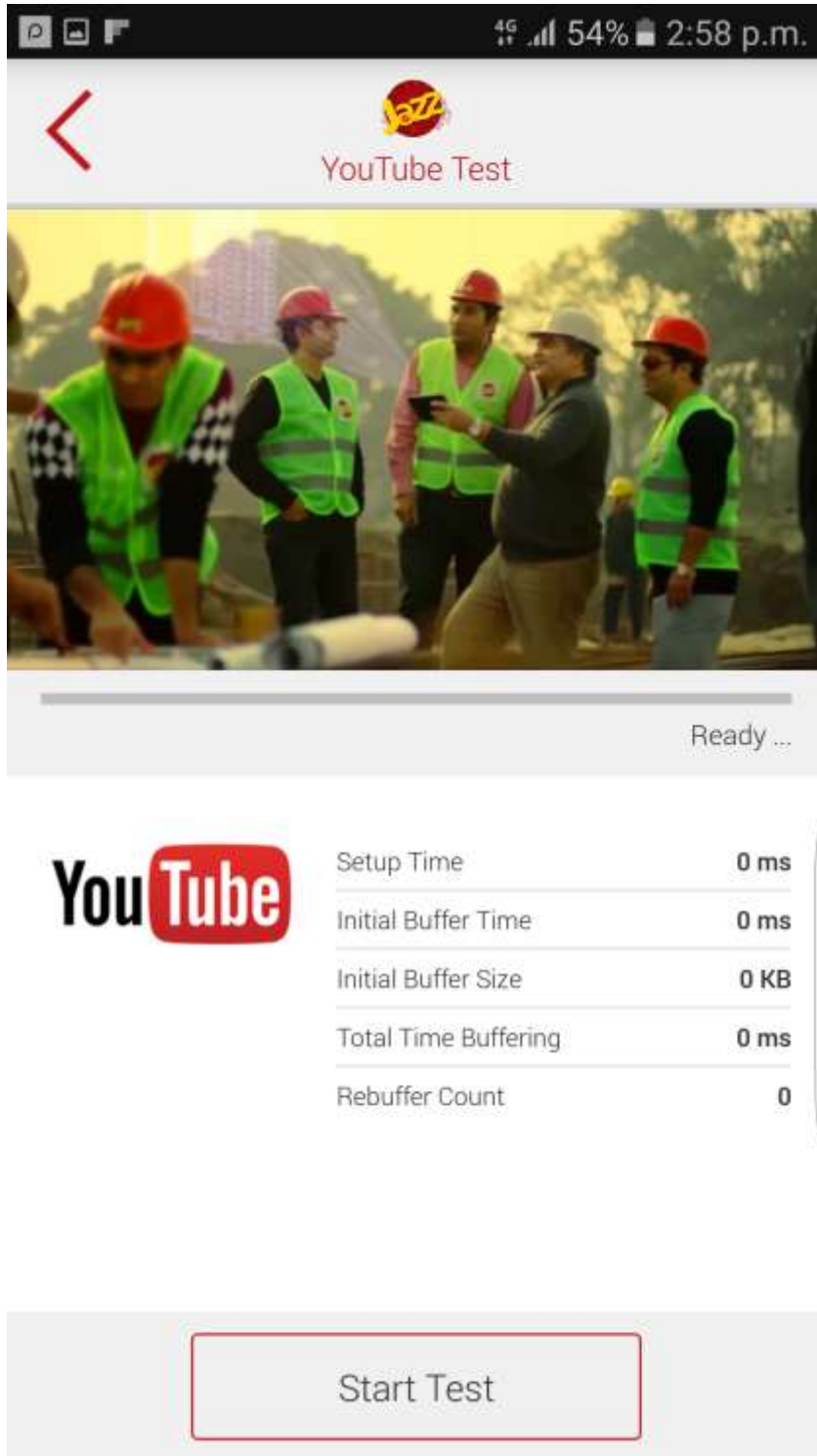

Picture 3.2: Jazz Official Video on YouTube

Lastly on monitoring interface page we changed UK based picture with high definition picture of Faysal Mosque.
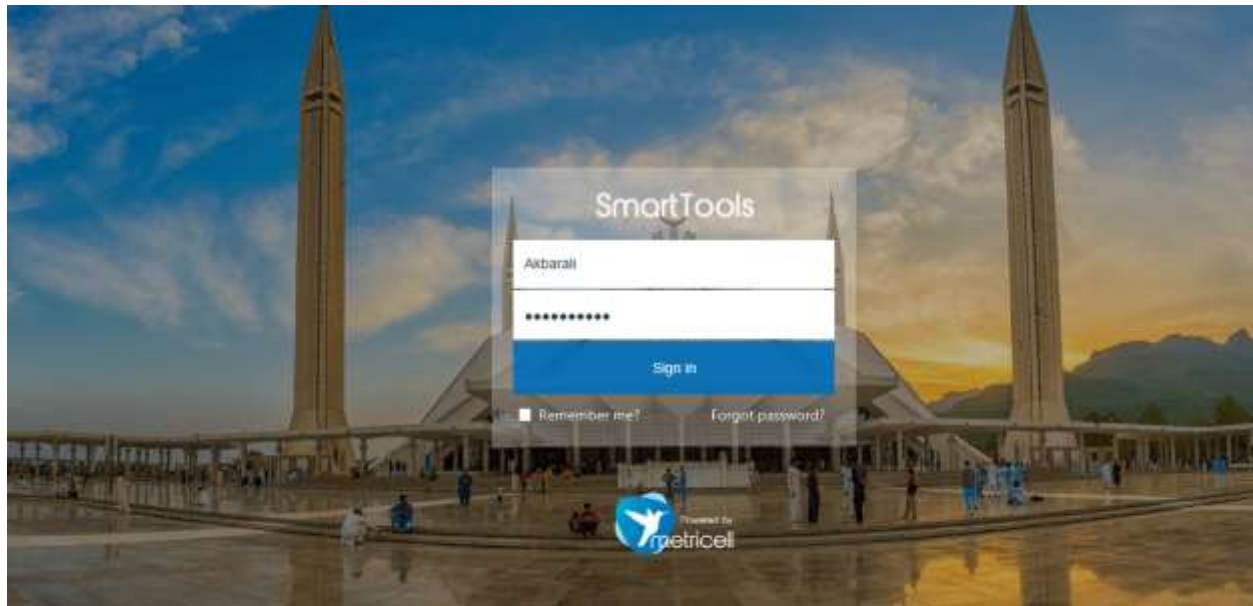

Picture 3.3: Metricell Monitoring Interface

After that we coordinated with planning team to provide us with predicted outdoor coverage heat maps of Pakistan. These heat map will be visible to monitoring team as well as customers so that we being truthful can tell customer how our outdoor coverage is in their areas and also these maps will help technical teams to plan network more efficiently by co relating coverage map with actual user experience. This will help us in identifying areas where our coverage seems good as per our predicted map but on actual there are issues which resulted in bad customer experience.
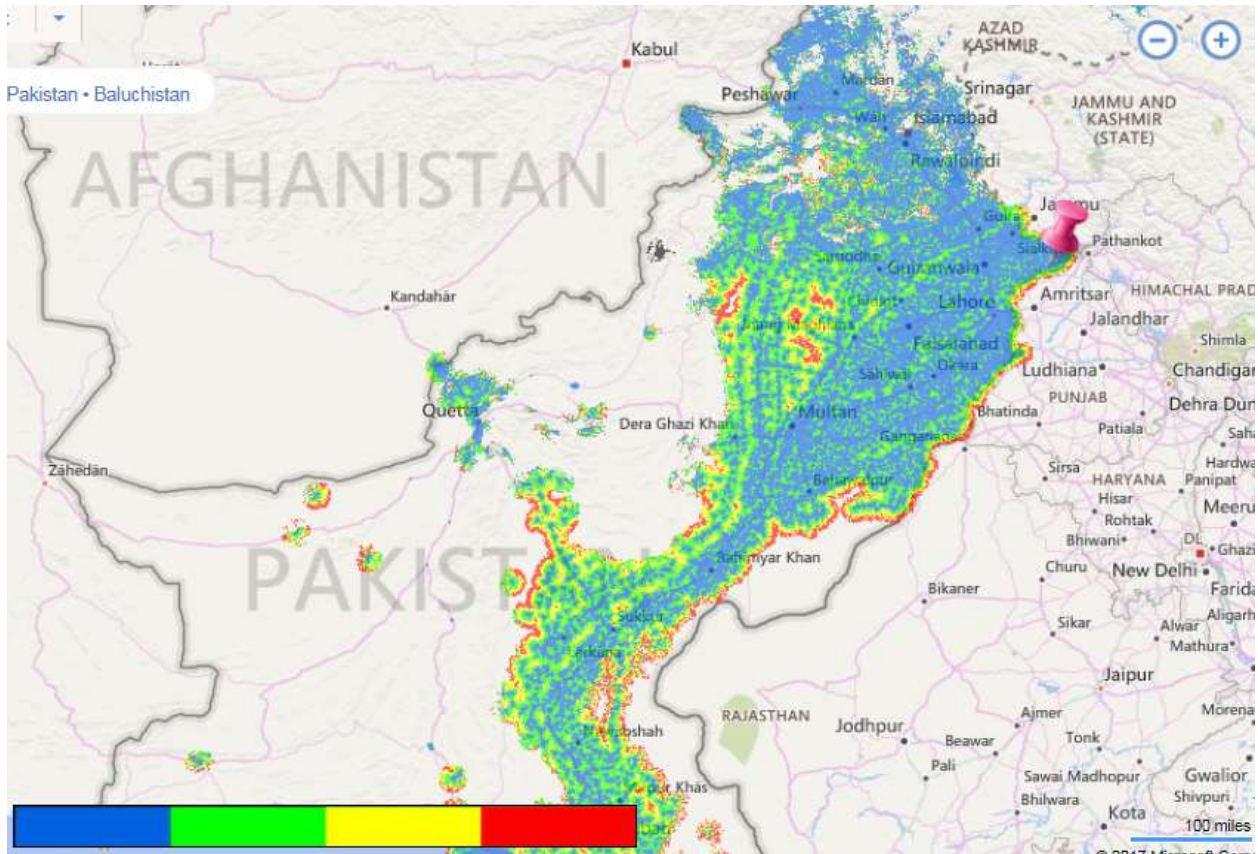
Picture 3.4: Predicted coverage heat map of Pakistan by Jazz Planning
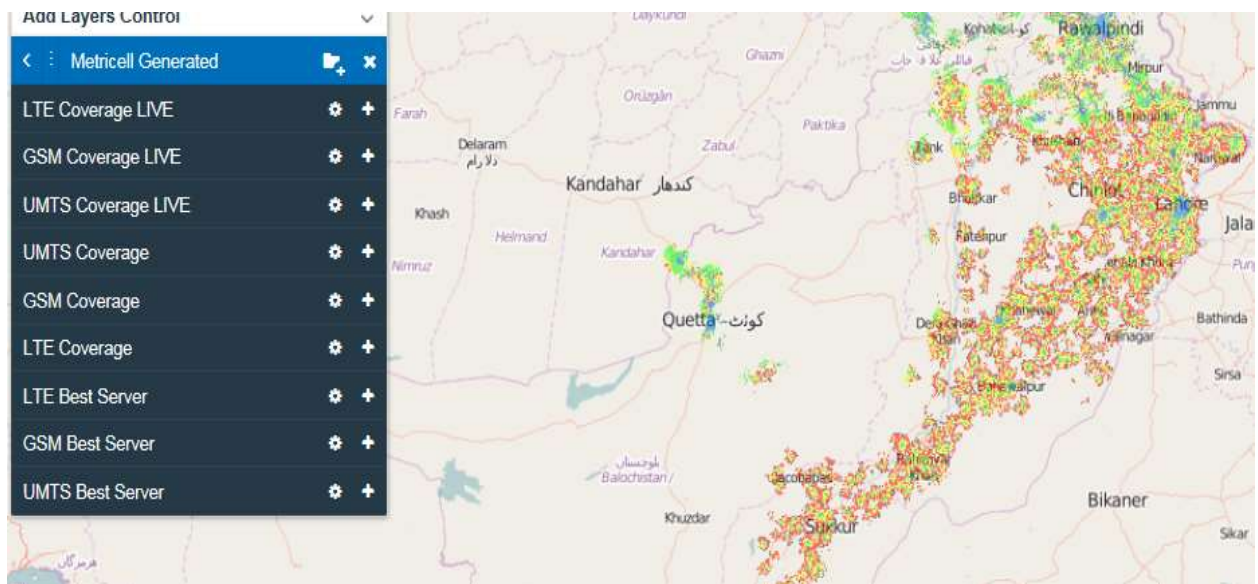
Picture 3.5: Predicted coverage 3G heat map Generated by Metricell

Soft Launch for Employees- Planning:

- We want to initially launch this App for targeted set of customers like corporate and VIP but as per PTA's guideline that data repository should be here in Pakistan & no data of users should be hosted outside Pakistan. Currently Jazz Heartbeat App is hosted on Metricell server in UK therefore we are bounded not to soft launch it unless we have server over here in Pakistan, so we have ordered hosting server which will come by end of May. After that we can market this App commercially and share it with your corporate customer's aswell.

- In meanwhile we decided to do stress testing of this App via soft launch only for employee base of JAZZ to see how App behave under workload in real time to identify if there are any glitches/issues or not ,which might not been observed by group during acceptance testing.

Uploading App on Play store for ease in downloading:

- First it was decided to give download link of App (www.metricell.link/mobilinkpk) to employee base via SMS so that end customers don't download it. However this downloading activity was too complex for mobile users as it involves multiple steps.
  1. Download App from Link
  2. Open Download folder on Phone
  3. Go to Setting & Allow Installation of App on phone from Unknown Source.

Due to these steps it was difficult to teach everyone how to install and also it was not possible to go to every employee and put App in their mobile phone manually.

So we finally decided to make it hassle free and upload App on Play Store so people can download it easily without any issue. So we requested vendor for APK file and got it upload via our Marketing Team on Playstore.

Hello Sean,

Please share all the details and requirement of Play Store for publication of App, so that we can get it publish via our Marketing team.

Ps: Please check for IOS as well.

Picture 4.1: Email correspondence for Playstore Publishing

**Sent:** Monday, February 06, 2017 3:02 PM
To: Akbar Ali Syed/TEC/ISB
Cc: Luke Scarratt; Taimur Hasan/TEC/LHR
Subject: RE: Jazz Weekly Call Update

Store Listing

Title	Jazz Heartbeat
Short Description	Jazz Heartbeat is Monitoring App designed to capture the user experience.
Full Description	Jazz Heartbeat is Mobile Experience Monitoring App designed to capture the user experience of Jazz Network. This will help Jazz to improve customers experience of voice and data services by automatically measuring and reporting network performance.
Screenshots	**All screenshots attached:** Jazz Homepage Jazz overage Jazz YouTube Jazz Network Page Jazz Speed Test
Hi-res Icon	Hi-res Icon attachment

Picture 4.2: Email correspondence for Playstore Publishing-2
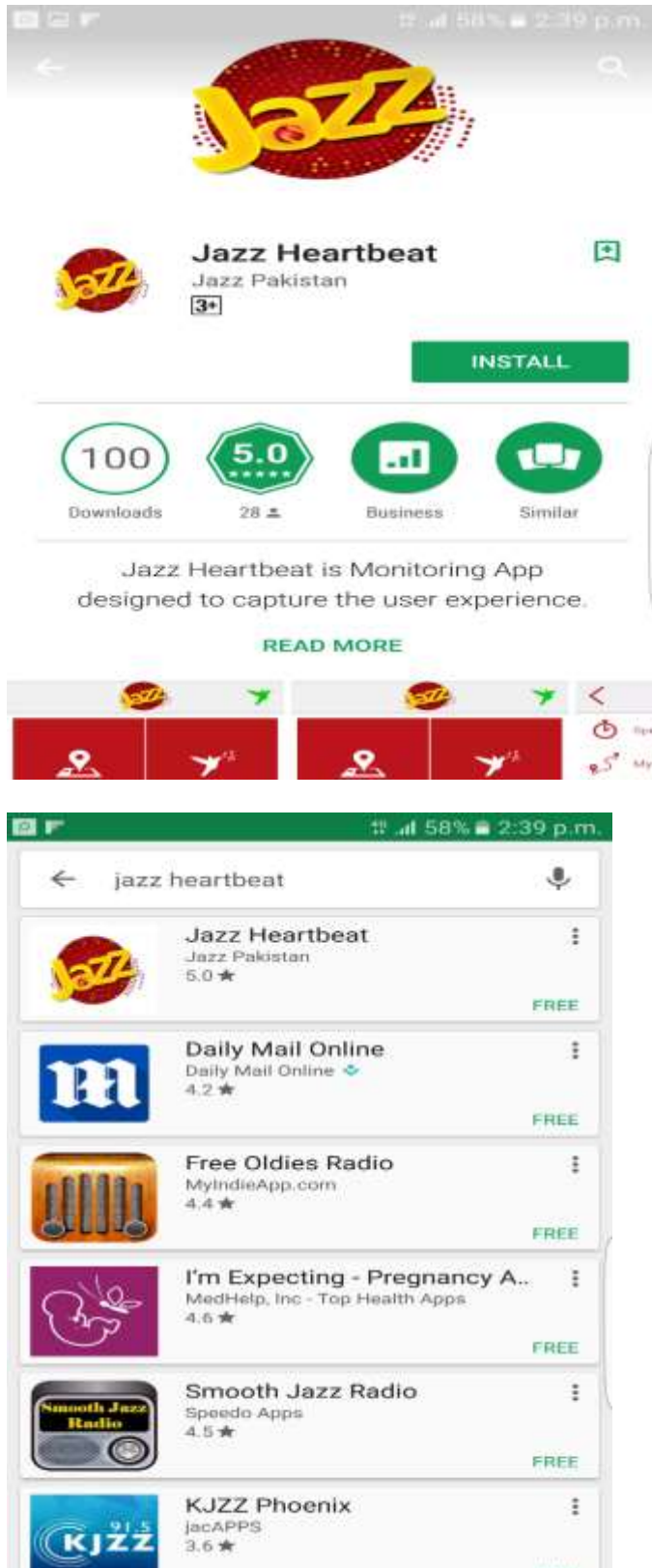
Picture 4.3: Jazz Heartbeat Snap from Playstore

Marketing of Jazz Heartbeat:

1. Making Official Video

We first had brain storming session with management team regarding how to do marketing internally, first thing came in mind was to make video telling important features of this App so that employee get to know what this App is about & how to use it.
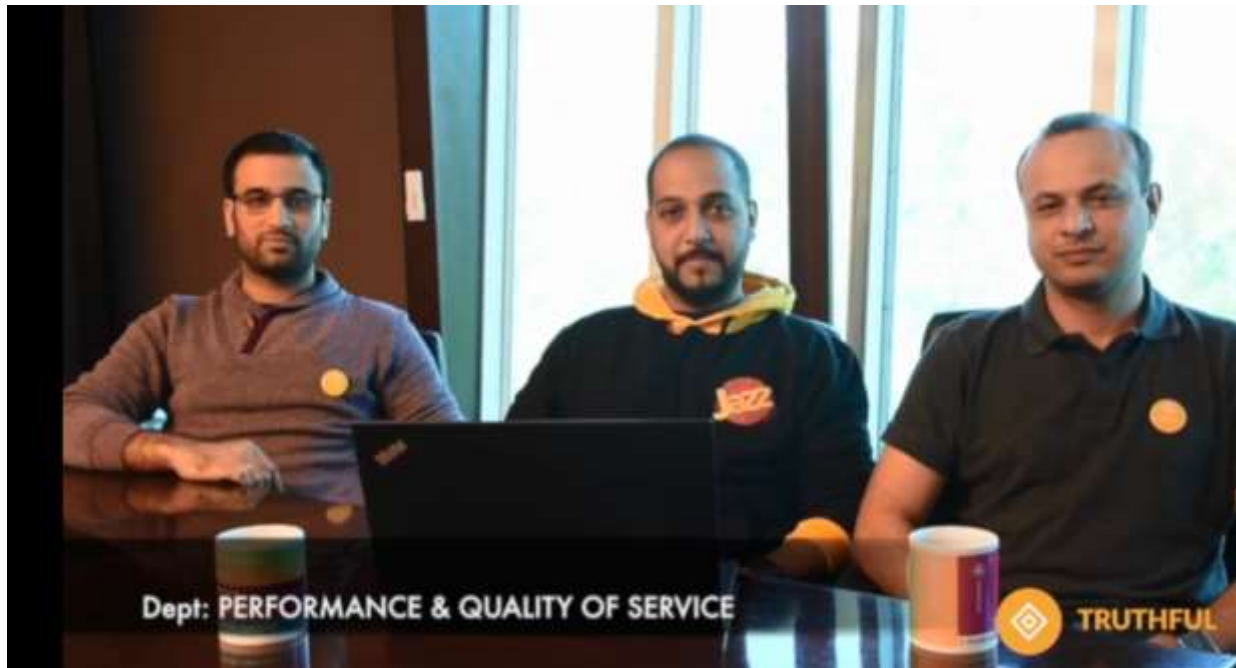
Picture 5.1: Jazz Heartbeat Internal Video Snap-1

Picture 5.2: Jazz Heartbeat Internal Video Snap-2

Picture 5.3: Jazz Heartbeat Internal Video Snap-3

2. Creating Hype on Social Media/ Internal Email:

With help of our Digital and Corporate Communication team we have drafted internal email and Facebook message for all employee base which highlight benefits of this App so that one can understand what this App is all about.

As part of Truthful week, the technical team have come up with an amazing app called "Jazz Heartbeat". This app lets users rate our services and report issues related to it in real time.

Click on the image above to watch the team behind the app give you their inputs!

Benefits of the app include:

- Users can easily see the **true picture/experience** of our network via multiple tests available in the app
- **No need to call the helpline** as the app automatically reports problems to the concerned team
- Users can instantly **check** whether their **coverage** is 2G/3G/4G
- In **three clicks** users can share their unique feedback on quality issues with network engineers

So help Jazz be a Truthful network! Download the app and enable us to get a true picture of our network!

You can download the app (for both Android and iOS) on www.metricell.link/mobilinkpk

Be truthful. Be Jazz!

Picture 5.4: Internal Email First Draft for Promotion

Also we promoted promotional competition on Facebook at work and encouraged employees to use this App more & more if they want to Win a Handset.

Picture 5.5: Facebook Promotional Message

For customers engagement we proactively Monitored & replied to queries by employees on social media, keeping in view case study I read during my course work " **Qantas Twitter Nose Dive**" where lack of monitoring resulted in PR disaster. So we made sure we replied to all queries keeping in check the wording as we don't want it to fire back on us.
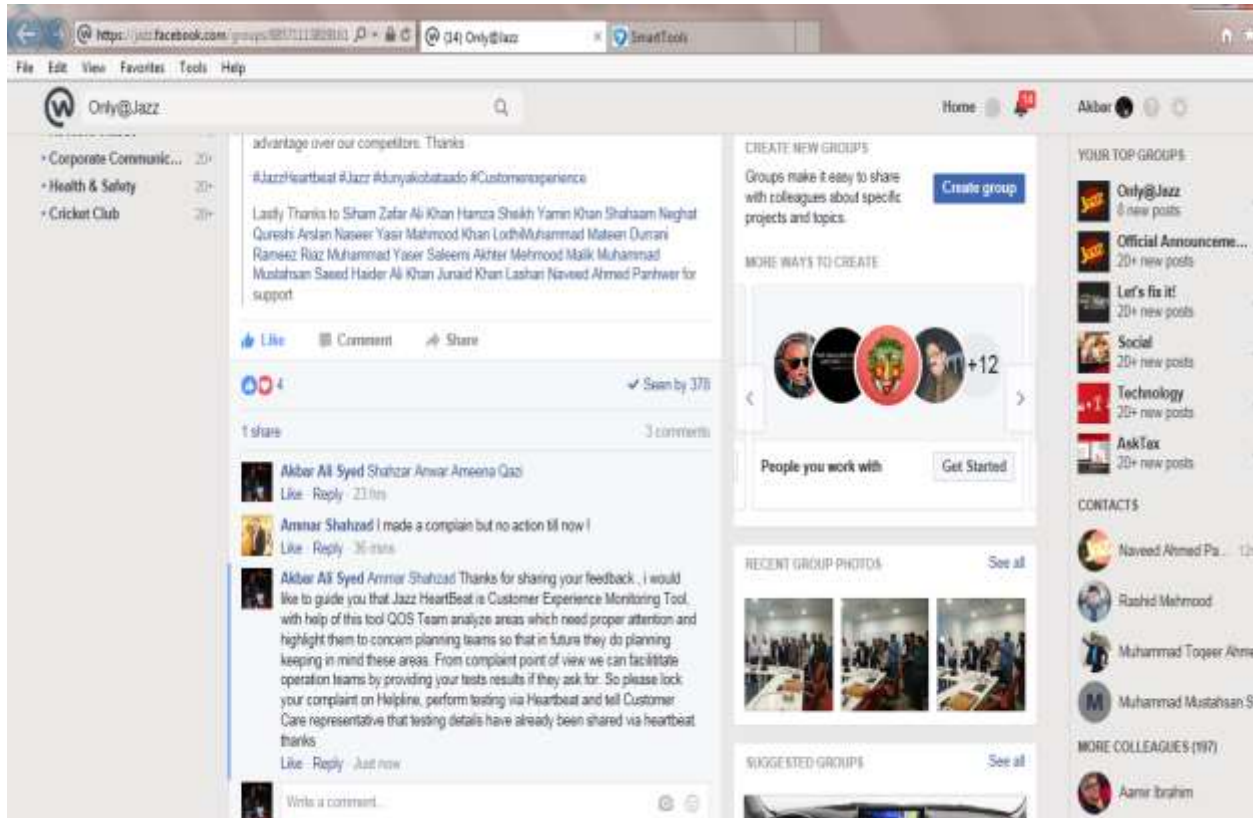
Picture 5.6: Facebook Customers Queries

We also engaged users of App by showing them how they are contributing to help us out for future planning by doing testing's using Jazz Heartbeat App. With this we transferred sense of ownership to users so that they realize that they are doing something worthy for their company.
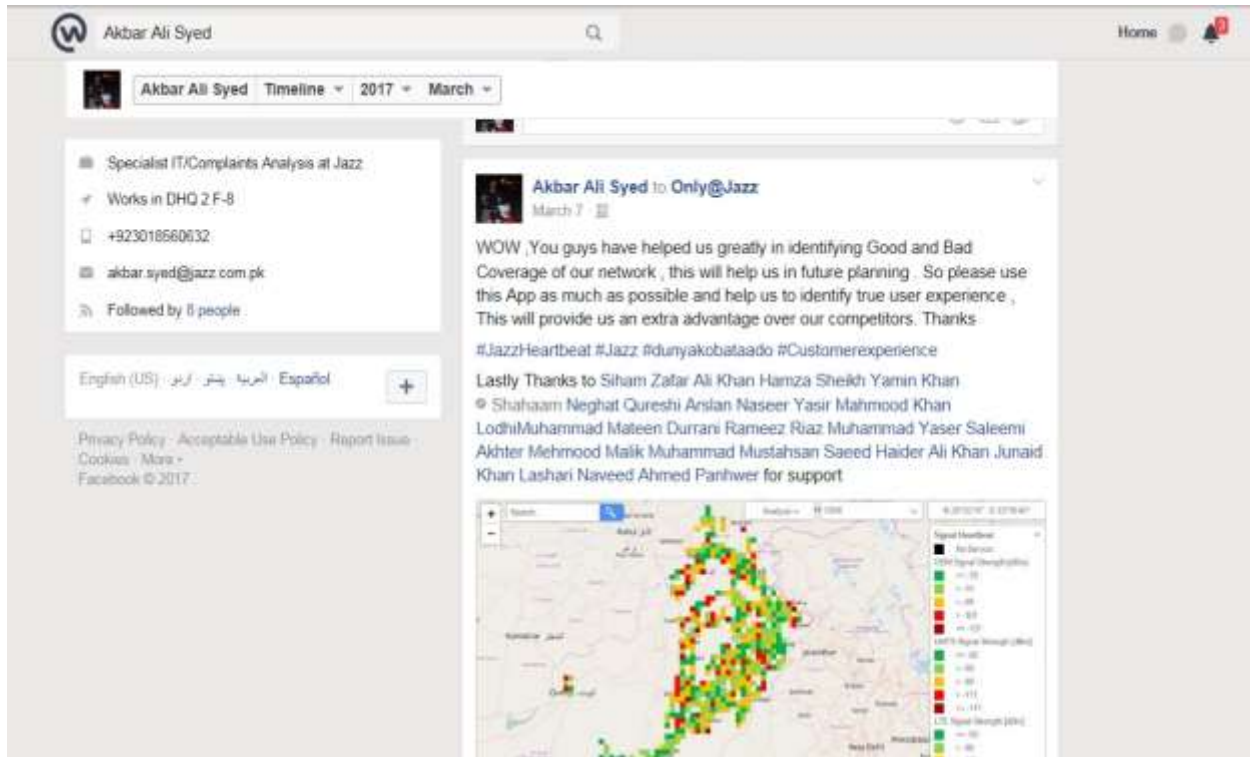
Picture 5.7: Facebook Appreciation Post for encouragement

3. Promoting via Incentives:

In order to promote App more so that we can achieve target of 800 plus employee base continuously using this APP for period of 5 weeks so that it can stress test effectively. We launched campaign with budget of 100 Thousand Only.

In this budget first we wanted to give IPhone to person with maximum usage, however with our budget we can only purchase 1 IPhone. But as we want to do this stress testing for minimum 1 month so looking at past records of internal competitions/ marketing campaign we got to know that most of people usually forget about ongoing competition after a maximum week time.

So keeping in view all this we decided that it's better to split this month long competition in weekly competition and give 2 small budgeted phone's every week for 5 weeks. This will engage employees more as compare to month long competition.

From: Akbar Ali Syed/TEC/ISB
Sent: Tuesday, February 14, 2017 12:17 PM
To: Mateen Durrani/TEC/ISB <mateen.durrani@jazz.com.pk>
Subject: FW: Handsets Required
Importance: High

Dear Mateen bhai,

We need Ramiz sb approval of giveaways for promotion of **Jazz Heartbeat**.

- 5 JS-2 required for 2nd Prize every week.
- 5 JS-10 required for 1st Prize every week.

Picture 5.8: Handset Approval for competition

5-Weeks Promotional Competition:

We have acquired **10 Jazz-X** handsets from marketing team via our budget. Purpose was to give employees good incentive to use this App so that we can do proper stress testing. Our Target was **800+** employee base.

Promotional Plan was to give 2 handsets every week so that people gets hope that if not first they can get 2nd prize. Moreover in competition we had clearly stated that person who win won't be eligible for participating in other weeks, this gave people sense of hope as after first 2 weeks everyone started thinking high users already won so their chances are high. However best thing was that in first week winners did 551 and 471 tests , and in last week winners did 1810 and 1141 tests to win the competition.

Picture 5.9: Week 2 Winner
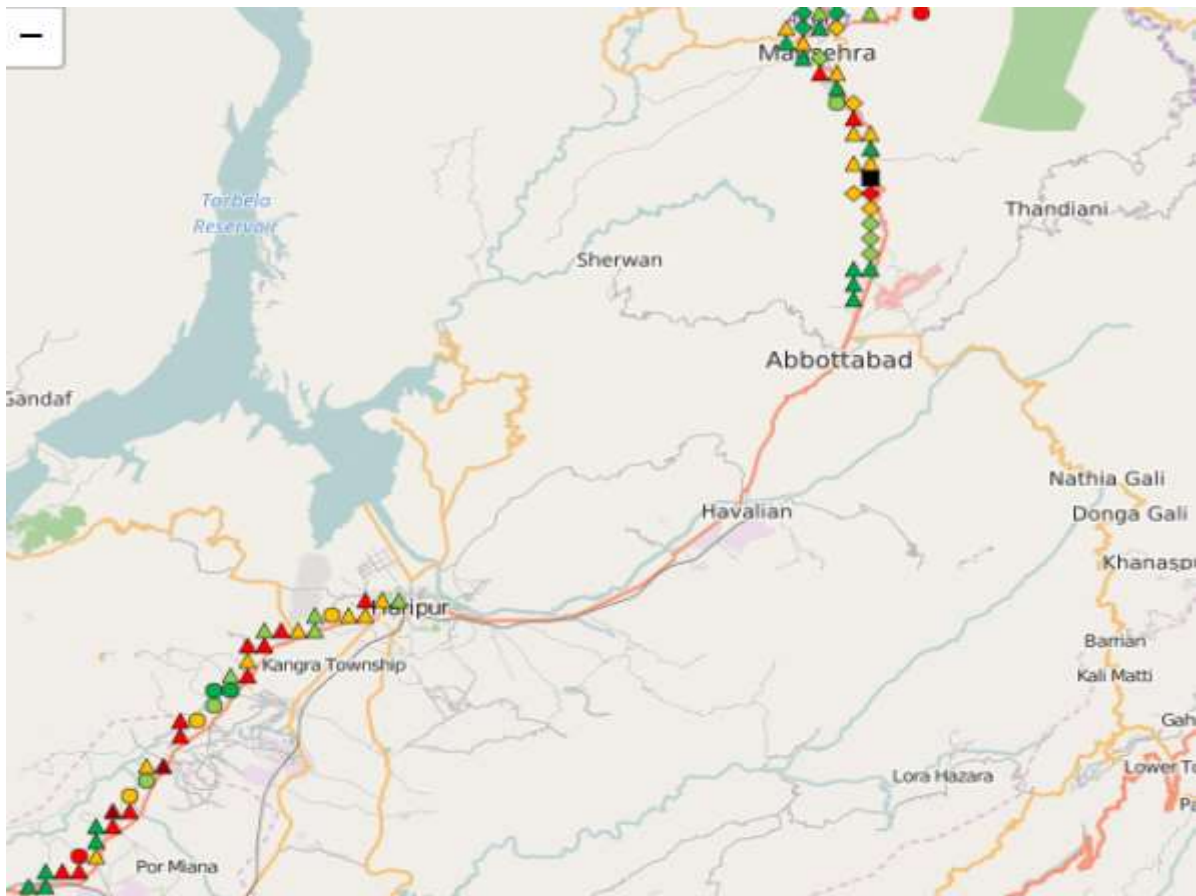
Picture 5.10: Week 2 Winner Testing Locations

Picture 5.11: Week 4 Winner

Picture 5.12: Week 1 Winner

4. Kiosks & Standee

Lastly for Marketing we have ordered Kiosk and Banners so that we can place in on entrance of all floors of main buildings so that employee's get it see it every day which will remind them of this App and ongoing competition.

Moreover we personally went to every individual and ask them to add this App so that it can help us in identifying issues and future planning. In Kiosks we distributed time between each team members so one of us should be there all time to handle customer queries regarding how to use this App and how this app will help us & them.

On Kiosk we are asked many questions but 2 most frequent were

1) Whether this App will capture their call records & locations? Answer we gave them is that this App will only capture issues along with location where they were faced Like Call Drops, Call Failed, and No network at F11 or G10, of blue area etc

2) 2nd most frequent question was that whether their issue will be resolved if they install this App? For this question we educated them that this App is for future planning and we will analyze their experience and share it with planning team so that in future they plan their network keeping in view customer's experience.

Picture 5.13: CEO at Jazz Heartbeat Kiosk

Picture 5.14: Jazz Heartbeat Standee

Picture 5.15: Jazz Heartbeat Chinese Kiosk

5. Achievement of Marketing:

We have successfully able to maintain **800+** active users for 5 continuous weeks with help of marketing plan. Marketing Plan helped us to control uninstallation of App by users as we were providing them with incentives to use this App more and more in order to increase their chance of winning a handset. So by this we were able to limit uninstallation impact especially due to battery draining and app logo running issue.

As of 28th March (After 5 Weeks of Competition)	
Target Number of Users for Stress Testing	800
Total Installed	1850
Active	897
Uninstalled	953

Issues Identified During Testing & Resolution:

1) Issue's identified in App:

- Battery Drainage up to 5%
- App Logo Running on top

During competition we have observed customers are getting annoyed due to continuously running of App Logo on home screen, which was giving everyone feeling that this App is draining their battery badly and it resulted in lot of users deactivating this App. We have get it tested and it was draining 5% of battery due to hourly sending of data to server by App.
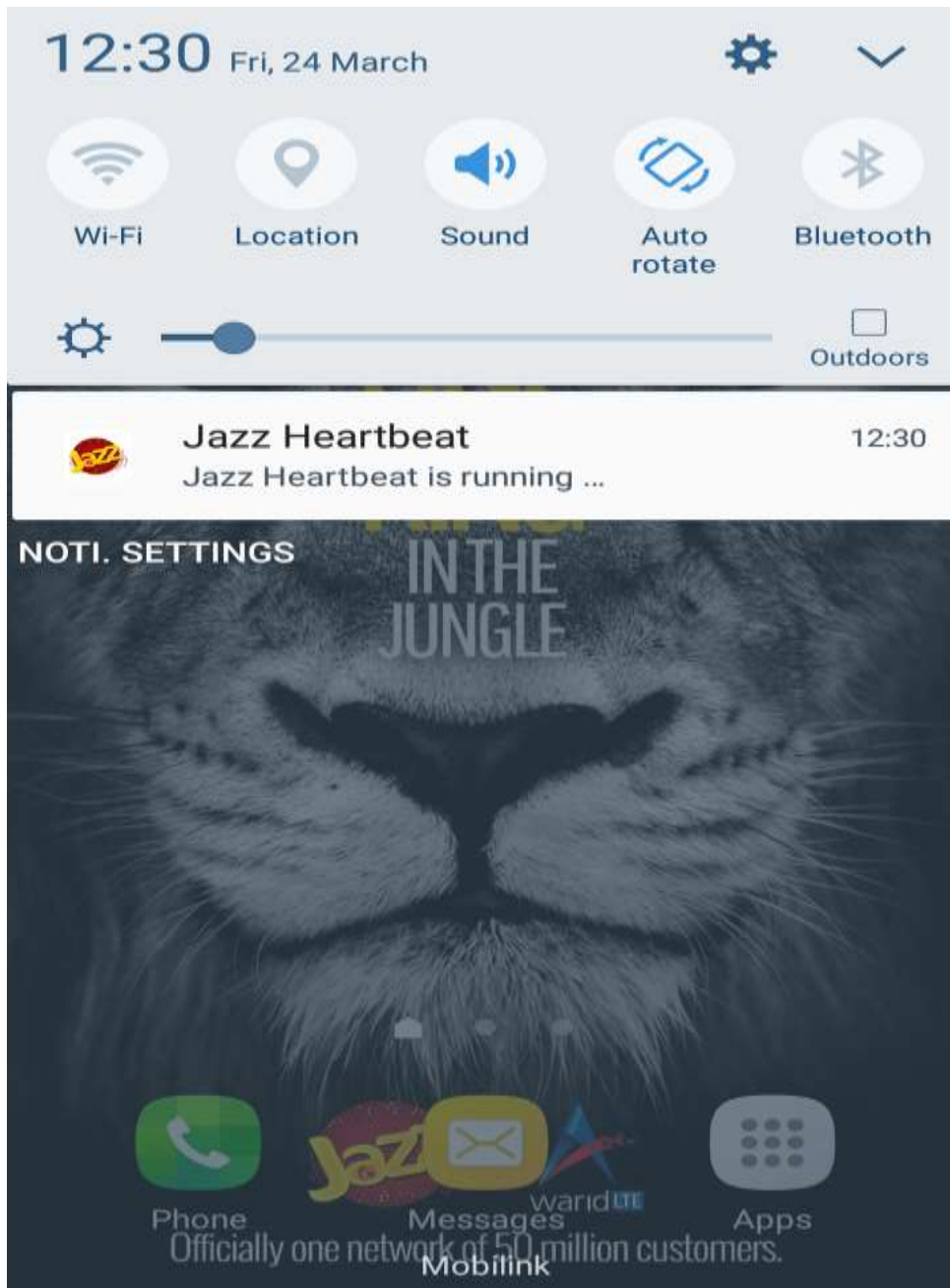
Picture 6.1: Jazz Heartbeat Running in Background Issue

Resolution of Issues in App:

We have taken it up with vendor to resolve this issue, however removing App Logo from home screen was not an easy task as Android kills app after 3 dayz if it remain inactive, so if App is killed it won't be able to capture customer's experience like call drop, call failed etc so all our efforts to capture customer experience will remain fruitless.

Hi Both,

Here are the point I have taken away from the meeting today:

Metricell Action Points:
- Investigate Battery Saving impact on collecting App Experience – Potential to only use this for a couple of hours a day to still save battery and collect data (Busy Hour)
- Investigate possibility of changing the Top Right icon (Speed Test) to Local Franchise
- Investigate possibility rebooting the App once every 24hours if the application is killed by subscriber

Jazz Action Points
- Jazz to upload new apk file onto the Play Store. This will remove the LTE Notification and also remove the Jazz icon from the top of the screen. I will upload it with new version ,after we get any solid answer on rebooting thing in order to remove Jazz App running notification)

Picture 6.2: Snap of Email to Vendor to Resolve Logo Running Issue in App

However vendor discussed it with his R&D team and came up with proposal that two things can be done first is limit the App so that instead of sending data to server after every hour it will send data twice a day which will result in less battery drainage. For App Logo Removal vendor has done some changes that App reboot itself after every 24 hours so Android OS don't kill it.

Dear Khawar,

We have updated our App after getting feedback from users regarding different things. So please find below link for update.

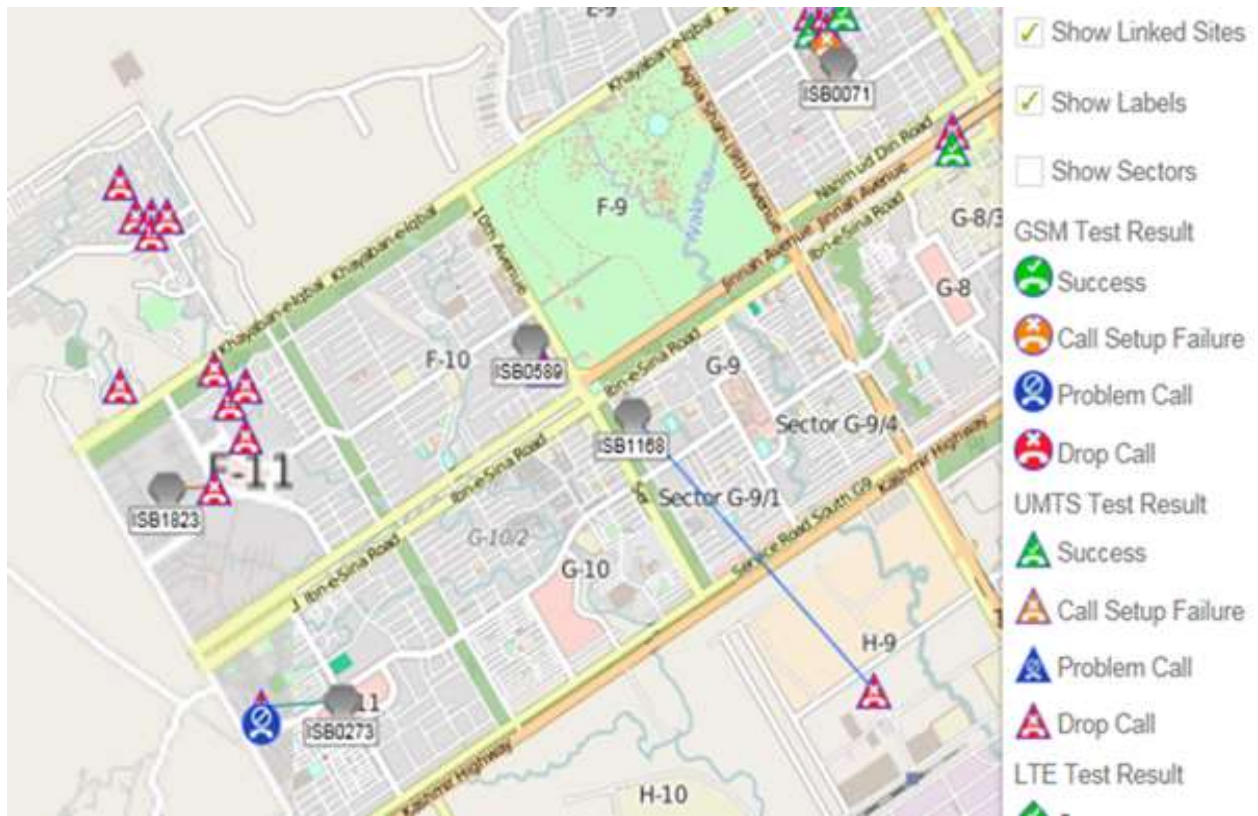(www.metricell.link/jazzpk/dev) v9.3.24

Please upload version **v9.3.24 - 09/03/2017**.   Due to size exceeding 9MB I cannot send apk via email.
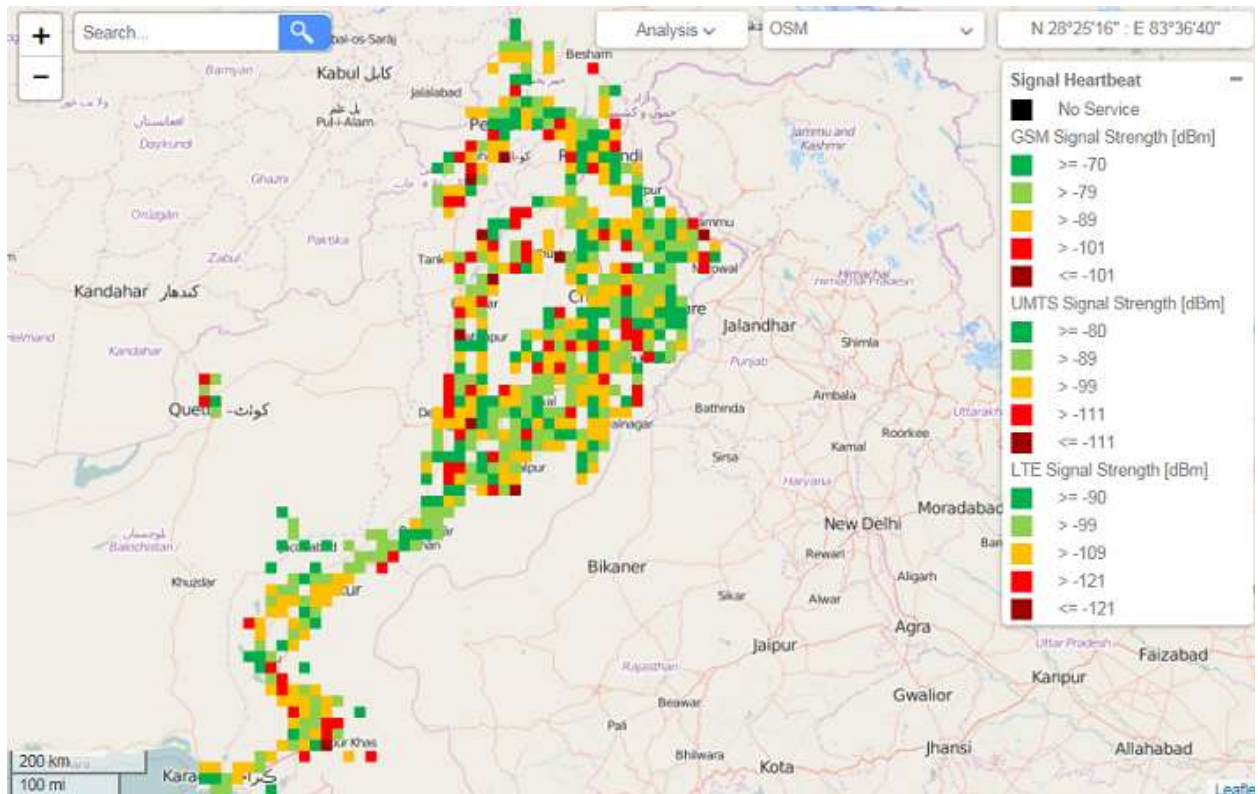
Thanks

Picture 6.3: Snap of Email to Marketing team for Uploading new Version of App

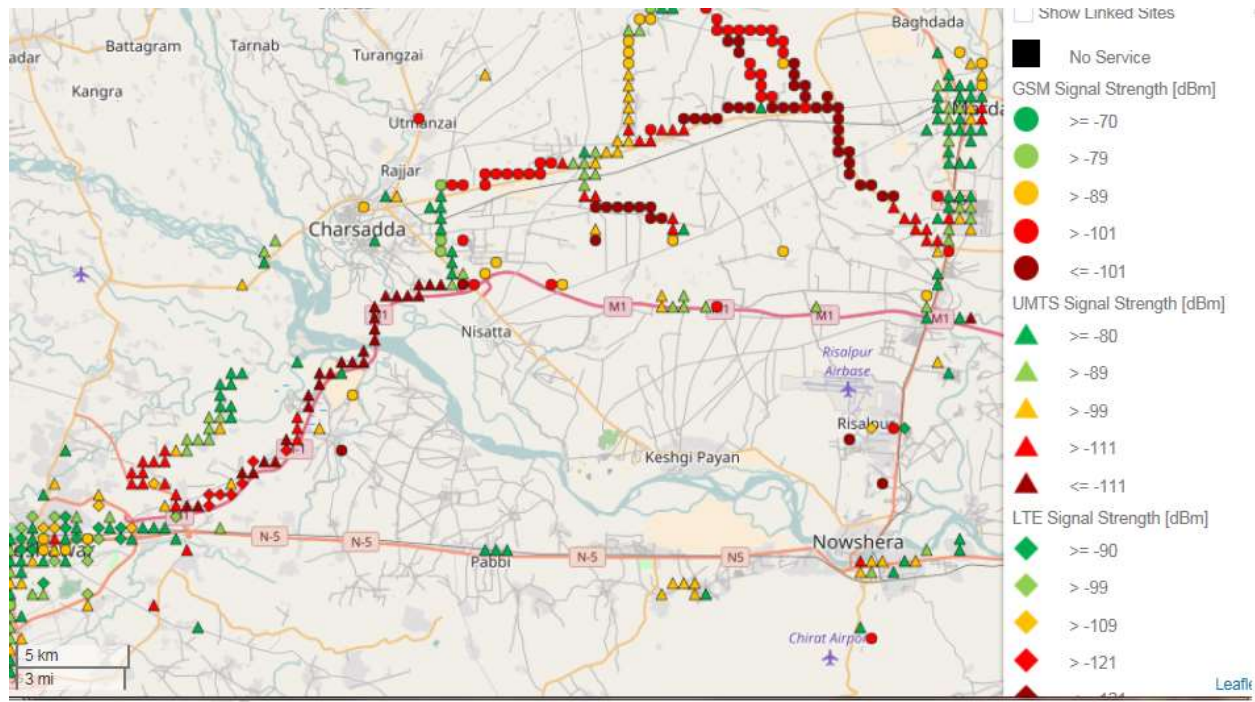## 2) Issue's identified in live Network

Also Jazz Heartbeat has helped us in identifying issues in our network which was previously not visible to us.

Picture 6.4: Call Drop Issue's in F11

Picture 6.5: Snap of Signal Strength across Pakistan

Picture 6.6: Weak Signal Patches from Charsadda to Mardan

Future planning to address network issues:

This information shared above will help us in future planning our network, as we can use this information to find out where are loop holes in our network, where is weak coverage, where customers are complaining the most, where our data speed is worst etc.
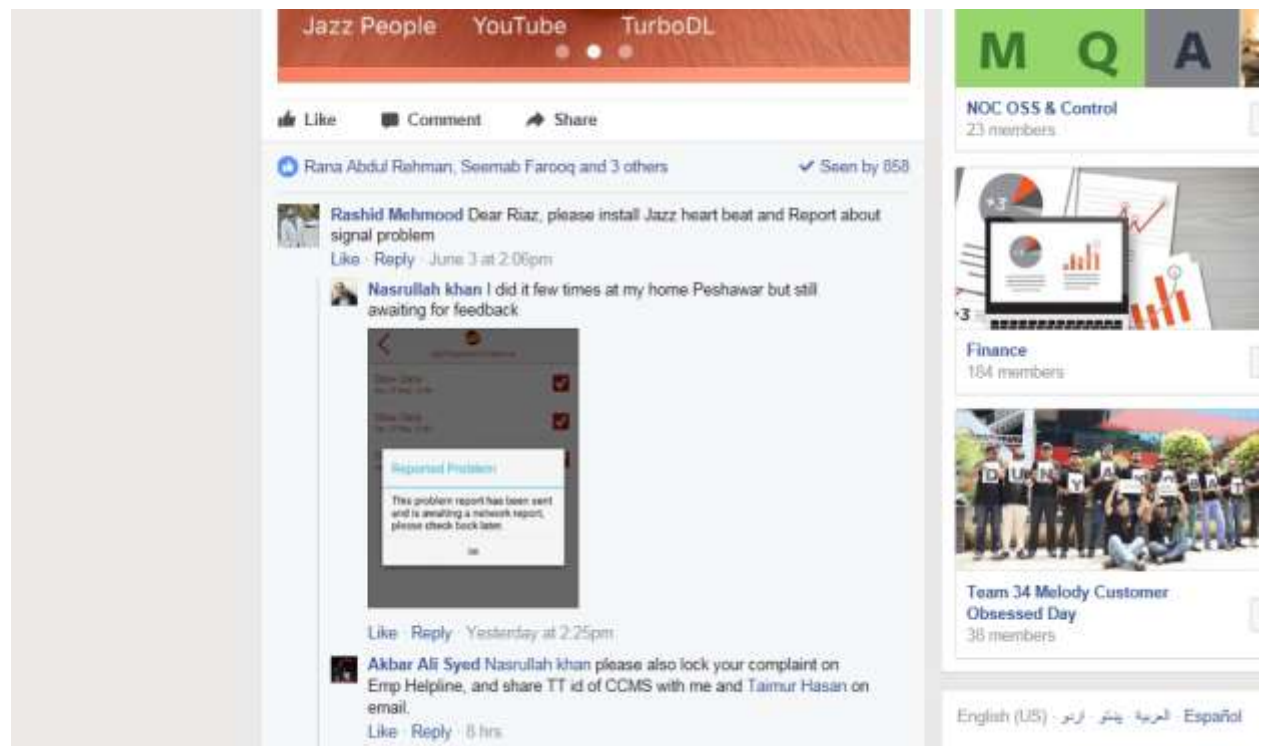
How we handled Customers Expectations:

We did faced have many questions on email and on social media that whether by installing this App customer issue will automatically be fixed. However reality is that this tool is to gauge customers experience and plan our future network keeping in view our customers. For example if there is some weak coverage area identified by this App so in future we plan our network by adding some site there to cater needs of customers of that area.

So we tried to educate them on how this App works, and also we went out of the way by handling individual's complaints so that customers don't get feeling that no one is listening to them and providing solution to customers where possible. This was solely done to promote this App and build customers trust on Jazz technical team.
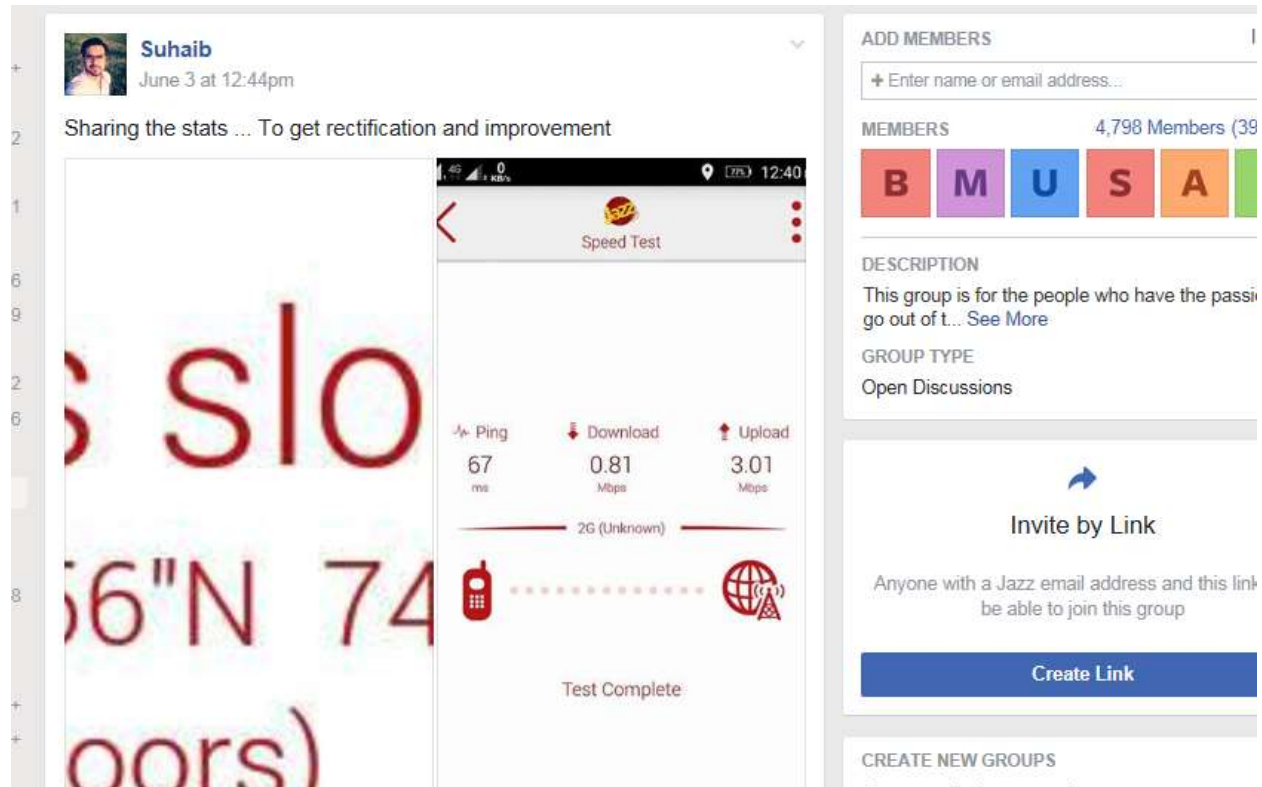
Picture 7.1: Customers Expectations

Picture 7.2: Customers Expectations

Picture 7.3: Technical Response on Individual Issue's

Picture 7.4: Issue Resolution in Margalla Town

Bibliography:

1. **Vimplecom (VEON):**

    VEON (formerly VimpelCom Ltd.) is a global provider of telecommunication services founded in 2009, incorporated in Bermuda and headquartered in Amsterdam. It is the sixth largest mobile network operator in the world by subscribers (as of April 2012) with 214 million customers (as per December 31, 2012) in 18 countries

    VEON's brands include Beeline (in Russia and CIS), Kyivstar (in Ukraine), Wind in Italy and Greece, Djezzy (in Algeria), Jazz (in Pakistan), Banglalink (in Bangladesh), and others.

    https://www.vimpelcom.com/spash/veon.html

2. **Metricell:**
    Metricell is UK based company responsible for delivering technology-leading solutions to network operators.
    https://www.metricell.com/about

3. **Coverage**

    Customer is unable to avail any service provided by Mobilink due to Signals Issue.

4. **Data Service Issue:**

    Customer is unable to avail Data Service at all Locations or any particular location.

5. **Voice:**

In this category all voice related complaints like incoming/outgoing, call drop, distortion will be locked.

Call Drop

Signals Fluctuaiton

Mute Call/CrossTalk/Echo

Voice distortion/Voice Break

Network Busy/Call Failed Issue