EMBA Project

Ufone - Strategizing 3G/2G Network Rollout for Success in Resource Constraint Environment

By

Jawad Zaheer

Registration No: NUST201361765MNBS75113F

Supervised By

Mommin Durrani

Department of Human Resource Management, NBS

NUST, Islamabad

Acknowledgement

To start with I am thankful to Allah without His will, not a single leaf moves. I am indebted to Sir Mommin Durrani for his unfathomable support without whose guidance I couldn't accomplish the task in a befitting manner.

I am humbled and want to convey my gratitude to my family for their support and encouragement throughout the EMBA Program.

TABLE OF CONTENTS

1. ABSTRACT

After the successful auction of Next Generation Mobile Service Spectrum in April 2014, the telecom industry in Pakistan is going through a transition from 2G mobile service to Next Generation Mobile Services (3G/4G). Telecom firms are spending heavily on the rollout of NGN services to capture the new market segment. As competition intensifies, it is imperative for companies to formulate strategies that ensure a good return on investment and profitable growth keeping in view the strategic environment.

I have selected Ufone, one of leading telecom operators in Pakistan as project organization for my business project. Ufone (PTML) is a 100% subsidiary of PTCL. As a result of PTCL's privatization, Ufone became a part of the Emirates Telecommunication Corporation Group (Etisalat) in 2006.

The project aims to analyze the competitive landscape in which Ufone is operating, the organizational strengths & weaknesses, the resource constraint put in by its Board of Directors as a result of declining performance and proposes strategic alternatives for Ufone so it can strategize its 3G/2G Rollout to increase its profitability, market share and meet customer needs.

2. LITERATURE REVIEW:

2.1. Defining Strategy:

"The determination of long-term goals and objectives of an organization, and adaptation of course of action and the allocation of resources necessary for carrying out these goals"

M. Teagarden

Henry Mintzberg, in his 1994 book, The Rise and Fall of Strategic Planning, points out that people use "strategy" in several different ways, the most common being these four:

1. Strategy is a plan, a "how," a means of getting from here to there.
2. Strategy is a pattern in actions over time; for example, a company that regularly markets very expensive products is using a "high end" strategy.
3. Strategy is position; that is, it reflects decisions to offer particular products or services in particular markets.
4. Strategy is perspective, that is, vision and direction.

Henry Mintzberg

Strategy may also be defined as "The action managers take to attain the goals of the firm".

Undoubtedly, strategy is one of the most significant and important concepts to have emerged on the subject of any organization. Its practicality, relevance potential and relevance have been put to severe test. It has emerged as a critical input to organizational success and has come in handy tool to deal with the uncertainties that organizations face. It has helped to reduce ambiguity and provided a solid foundation as important pillar to conduct business; a convenient way to structure the many variables that operate in the organizational context and to understand their relationship.

2.2. Components of strategy

A well-developed strategy contains five components:

- **Scope**. The scope of an organization refers to the breadth of its strategic domain, the number and types of industries, product lines, and market segments it competes in or plans to enter. Decisions about an organization's strategic scope should reflect management's view of the firm's purpose or mission. This common thread among its various activities and product-markets defines the essential nature of what its business is and what it should be.

- **Goals and objectives**. Strategies should also detail desired levels of accomplishment on one or more dimensions of performance – such as volume growth, profit contribution, or return on investment – over specified time periods for each of those businesses and product-markets and for the organization as a whole.

- **Resource deployments.** Every organization has limited financial and human resources. Formulating a strategy also involves deciding how those resources are to be obtained and allocated, across businesses, product-markets, functional departments, and activities within each business or product market.

- **Identification of a sustainable competitive advantage**. One important part of any strategy is a specification of how the organization will compete in each business and product-market within its domain. How can it position itself to develop and sustain a differential advantage over current and potential competitors? To answer such questions, managers must examine the market opportunities in each business and product-market and the company's distinctive competencies or strengths relative to its competitors.
- **Synergy.** Synergy exists when the firm's businesses, product-markets, resource deployments, and competencies complement and reinforce one another. Synergy enables the total performance of the related businesses to be greater than it would otherwise be: The whole becomes greater than the sum of its parts.

2.3. Strategic Planning:

Strategic planning is an organizational management activity that is used to set priorities, focus energy and resources, strengthen operations, ensure that employees and other stakeholders are working toward common goals, establish agreement around intended outcomes/results, and assess and adjust the organization's direction in response to a changing environment. It is a disciplined effort that produces fundamental decisions and actions that shape and guide what an organization is, who it serves, what it does, and why it does it, with a focus on the future. Effective strategic planning articulates not only where an organization is going and the actions needed to make progress, but also how it will know if it is successful.

2.4. Strategic Management:

Strategic management is the comprehensive collection of ongoing activities and processes that organizations use to systematically coordinate and align resources and actions with mission, vision and strategy throughout an organization. Strategic management activities transform the static plan into a system that provides strategic performance feedback to decision making and enables the plan to evolve and grow as requirements and other circumstances change. Strategy Execution is basically synonymous with Strategy Management and amounts to the systematic implementation of a strategy. Continual orchestration of strategies is called strategic management.
Strategic Management is an iterative process and involves continuous evaluation of strategic plan with respect to changing environment.

Organizations operate in their own specific environment. Ideally, the gap between environment and strategy should be minimal. This minimal gap ensures maximum exploitation of resources. It is imperative to understand that the external environment for any organization may not remain the same throughout the life of any organization. To remain effective and successful, an organization may be required to re-assess the changes in environment and change its strategic direction accordingly. Few organizations have more turbulent environment than others.

The common proverb “a stitch in time, saves nine” holds true in this case as well. When an organization is able to detect minor changes in the environment, it can adapt to the changes quickly with minimal effort. Failure to detect the shifts in environment will increase the gap between strategy and environment. This increase in gap is defined as strategic drift. As the strategic drift increases, major actions may be required to put organization on the right track. Bridging the gap between strategy and environment is the real test of leadership.

2.5. Patterns of Strategic Change:

Continuity:

It is a scenario in which an organization continues to operate in a similar pattern as in the past. It is unable to detect the shifts in environment and focusses on the strengths that worked well in the past.

As a result of this strategy, the gap between strategy and environment increases. This strategic drift if not catered for in the earlier stages will require difficult decisions at a later stage.

Example: Nokia is a classic example of this strategy. Nokia enjoyed the market leader position in feature phone market. However, it was unable to sense a major shift in its environment, the launch of Android and IOS platforms. It focused on its own platform and Ovi store. This failure to sense the environment change eventually resulted in downfall of Nokia.

Incremental:

In this situation, the organization detects a shift in environment and makes changes accordingly to reduce the strategic drift. These changes are usually small in size and incremental in nature. Due to small changes the change management in the organization is easy.

Flux:

In a situation when the strategic drift is significant, an organization starts to observe the symptoms of decline i.e. decline in sales, decrease in profitability etc. The management

makes various attempts to reduce the gap with the environment. This can be done through new product launches, new market entry etc. The management, in this case, believes that they are in control but the performance does not support it. An organization is said to be in flux phase if the gap with the environment is not reducing despite the management efforts. In fact, the gap is alternating.

It is a real test of management to get out of this phase.

Transformational:

An organization is said to be in transformational phase when an organization is successfully reducing the gap with the environment. This requires visionary leadership and is quite a rare sight. This can be achieved by modifying the environment to your advantage. The launch of iPhone by Apple in 2007 is a classic example. The iPhone redefined the mobile phone market and was a huge success.

3. INTRODUCTION

Pakistan Telecom Mobile Ltd, operating under the brand name of 'Ufone', a wholly-owned subsidiary of PTCL commenced its operations on 29th January 2001 as a GSM service provider. Since the outset, it has expanded its coverage and customer base at a rapid pace and established itself as one of the leading cellular service providers in Pakistan.

In April 2006, Emirates Telecommunication Corporation, commonly known as Etisalat, assumed management control of Pakistan Telecommunication Corporation Ltd – part of the $2.6bn deal to buy a 26% stake.

Ufone has a subscriber base of nearly 20 million and a market share of nearly 16%. Ufone has network coverage in 10,000 locations and across all major highways of Pakistan. Ufone currently caters for International Roaming to more than 288 live operators in more than 160 countries. Ufone also provides 3G network service. Ufone has also become a focused and intensive leader in VAS, constantly introducing innovative services, which have been the first of their kind in the Pakistani cellular industry.

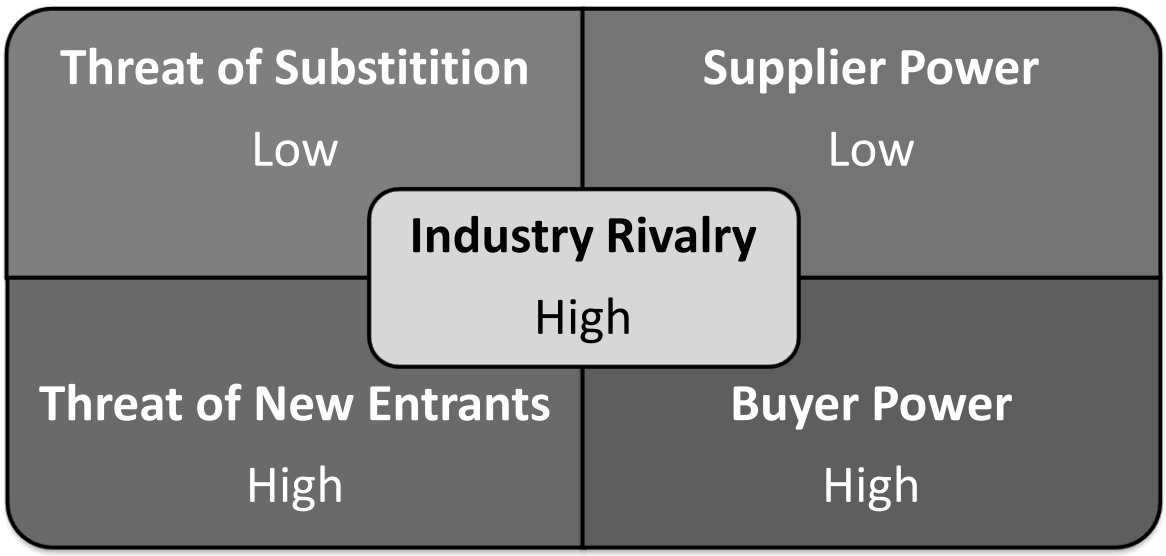
4. MISSION STATEMENT

"To be the best cellular option for U".

5. INDUSTRY ANALYSIS

The Cellular Mobile Industry in Pakistan is a multi-million-dollar industry with approximately 125 Million customers. There are a total of 5 Mobile Operators in Pakistan namely, Mobilink, Telenor, Zong, Ufone and Warid. Information regarding market share can be seen in the annexure (Exhibit 2).

In order to analyze the performance of any organization. It is imperative to analyze the industry dynamics in which it operators. Porter 5 Force model provides us with the platform to look at the industry from five different aspects. Based on favorability of these forces one can classify an industry as 5-star or 4-star industry.



Threat of Substitution:

The threat of substitution for the telecommunications industry is low. Mobile Communication provides the foundation for the fast-paced modern life. Going back to fixed line is not an option anymore.

Supplier Power:

The supplier power in the telecommunications sector is not significant and can be characterized as low. Chinese based vendors are primarily competing on low price and attempting to kick out the European competitors. The mobile providers hence have an upper hand in this context.

Threat of New Entrants:

The threat of new entrants is quite low; as huge CAPEX is involved for entering a well-developed market. The CAPEX includes the Spectrum License fee, Network Infrastructure Rollout etc. During the Next Generation Mobile Service (NGMS) Spectrum auction in 2014, the Government of Pakistan also failed to attract new Cellular Operators for startup in Pakistan. The main hurdles were huge CAPEX and law and order situation for foreign investors.

Industry Rivalry:

The industry rivalry in telecommunication service providers is quite high. A total of 5 Operators operate in Pakistan. The competition is quite intense as all are providing similar services. The industry is operating at quite lower margins when compared with rest of the world.

Buyer Power:

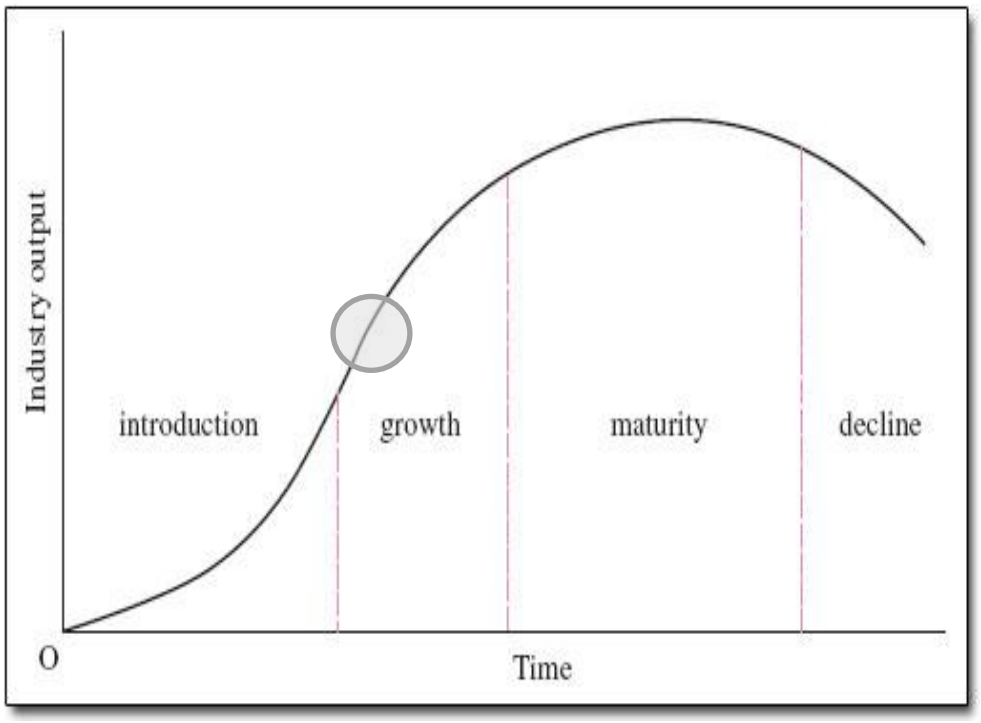
The Buyer power is quite high as expected from high industry rivalry and low exit barriers. The introduction of Number Portability Service by PTA further increased the buyer power. The customers have the option to switch their service provider without changing their mobile number.

Keeping in view the above considerations, we can safely conclude that the cellular service provider industry is favorable and classify as a 3-Star Industry. Michael Porter emphasized that the 5 Force Model can be used to analyze the industry dynamics at any phase of business. In case of new change such as a change in regulations, or new

market entrant etc. Porter 5 force model can be used to re-assess how the change affects the five forces and hence industry's favorability.

Industry Life Cycle

Industry Life Cycle analysis provides information regarding the stage at which the industry operates.



The Cellular industry is currently operating at 65% Tele-density. Since the NGMS Auction in 2014, the Mobile Service Operators are in process of upgrading their networks to provide the latest cellular services to consumers. The industry is in growth phase as adoption of Mobile Broadband is in progress. This is a transition from traditional voice to data services.

6. COMPETITOR ANALYSIS

Mobilink:

Mobilink started operations in 1990 as the first GSM cellular mobile service in Pakistan with a joint venture by Saif Group and Motorola Inc., who later sold it to Orascom Telecom, an Egypt-based multinational company and then they also further sold it to Vimpelcom Group, a Russian Company. Mobilink is the biggest operator in Pakistan with over 35 Million Customers. It has a market share of 29% subscribers in 2G and 31% Market share in 3G. Mobilink won 10MHz spectrum for 3G during the NGMS Spectrum Auction in 2014. Mobilink has also launched mobile financial service namely Mobi-cash.

Telenor:

Telenor Pakistan is owned by the Norwegian Telenor Group, which is an international provider of voice, data, content and mobile communication services in 13 markets across Europe and Asia and an additional 17 markets through its ownership in VimpelCom Ltd. Telenor Group is among the largest mobile operators in the world, with over 166 million mobile subscriptions (Q4 2011) and a workforce of 33,000. Telenor acquired a license for providing GSM services in Pakistan in April 2004 and launched its services commercially on 15 March 2005. Telenor Pakistan has a total subscriber base of 34 million with over 28% 2G market share. It has a market share of 29% in 3G. Telenor won 5MHz spectrum for 3G during the NGMS Spectrum Auction in 2014. Telenor has also launched mobile financial service by the name of Easy Paisa in 2009. Easy Paisa is Pakistan's first and largest mobile money service, and third largest in the world, catering to 6 million customers every month.

Zong:

Zong or China Mobile Pakistan is a pan Pakistan mobile network operator headquartered in Islamabad, which offers voice and data services ranging from postpaid and prepaid plans, 2G, 3G and 4G services and mobile banking. It is the first oversea setup of China Mobile through acquisition of a license from Millicom to operate a GSM network in Pakistan in 2008. Zong is a 100% subsidiary of China Mobile. Zong is currently the 3rd largest operator in

Pakistan with a total of 24 Million subscribers. It has a market share of 19% and 21% in 2G and 3G respectively. During the NGMS Spectrum Auction in 2014, Zong invested heavily in licenses and won 10 MHz of 3G spectrum and 10 MHz of 4G spectrum. Zong is the market leader in 4G. Timepey is the mobile banking service offered by Zong in association with Askari Bank Limited.

Warid:

Warid commenced commercial operations on May 23, 2005. Warid is owned by Abu Dhabi Group, which is a business conglomerate in the Middle East and a major investor in Pakistan. Warid is Pakistan's fifth largest mobile service in terms of subscriber base of over 10 million. It has a market share of 9% among cellular operators. Warid did not participate in Next Generation Spectrum Auction in 2014 and instead launched 4G service on its existing licensed band.

7. CROSS-FUNCTIONAL ANALYSIS

Ufone is departmentalized into 10 functional departments. Detail of the organogram and management levels can be seen in the annexure (Exhibit 3). Marketing is a sub-department in Commercial department. In view of the strong industry competition, which areas to target for network rollout is an important consideration. Ufone Marketing team is leading the new sites rollout process from Ufone. Upon Management Approval, Ufone marketing team initiates the process with the identification of high potential areas. This involves feedback from sales teams, competitor analysis, market assessment etc. The marketing high potential list is then forwarded to technical team for their respective working. The Technical team then evaluates these locations based on technical feasibility. The feedback is then shared with Marketing Team for rollout plan. Upon reconciliation with Marketing Team and subsequent management approval, the technical team initiates the new site rollout project.

The new site rollout works in cycle with interactions among various functions/departments at same time. Ufone is process oriented organization where SOPs for all matters are implemented and followed. Sometimes these processes become lethargic while giving relief to customers. However, today's environment is so challenging that any business organization should make its strategies more customer-centric.

Ufone requires very high level of coordination between functions to operate smoothly. It was observed that departments are working in Silos and have their own paradigm of viewing the things.

8. UFONE - SWOT ANALYSIS

SWOT Analysis for an organization helps to understand the internal and external environment. A purpose of this exercise is to identify the strengths of the organization and compare with the opportunities in the environment. It helps in analyzing if the organization has the right skills required to exploit the opportunities to their full potential. This analysis is called the Live SWOT. Similarly, the organization should be fully aware of its weaknesses and the potential threats in the external environment. Purpose of the exercise is to make sure that all threats are protected to avoid exploitation by the threats in environment. This is called the Dead SWOT.

8.1. Internal Analysis: (Strengths & Weaknesses)

Ufone has a very strong Holding Company, PTCL. PTCL has extensive network infrastructure across the country. It has a diverse portfolio of products including Fixed-line telephony, broadband services such as DSL, Evo & Charji, and Smart TV. PTCL is also hosting backhaul connectivity to the internet gateway from Pakistan. Ufone has maintained a consistent image of funny and humorous ads since its inception. The TV commercials have put a smile on millions of Pakistani's throughout the years. Ufone has won numerous awards for its innovative marketing advertisements. After the recent 2G Spectrum license renewal in 2015, Ufone existing 2G Spectrum was declared Technology Neutral. It means that the Spectrum can now also be used for 2G / 3G / 4G Services.

Ufone started its operator in 2001 while Telenor, Warid and Zong all started operations after 2005. Ufone concentrated its Network Expansion in Urban areas as compared to its competition. It generally enjoys strong position in Metros. Over the years, less emphasis was laid on the Rural Coverage Footprint and especially on the connecting roads. The competition, Telenor & Zong identified it as a potential competitive advantage over Ufone and invested heavily in their rural coverage footprint. As a result, all competitors with the exception of Warid have a bigger Rural Coverage Footprint than Ufone. Lack of focus on expansion resulted in losing its 2^{nd} market position to its competitors. Currently, Ufone sits at 4^{th} position in the market.

Ufone faced a major setback in 2013 when customers developed an image of excessive billing from Ufone. This image was further fueled by competition's advertising campaigns. This hampered Ufone's image in eyes of customers. Ufone attempted to rectify this image through launch of Hisaab SMS in 2014. Hisaab SMS is a free service provided to all prepaid customers which informed a customer about their billing details on daily basis.

Slow Internet Browsing Speed is an issue that needs to be addressed. Since most 3G subscribers are concentrated in major cities. The 5 MHz spectrum is becoming a bottleneck. Ufone has the highest number of 3G subscribers per site in the industry. This is quite encouraging from return on investment (ROI) perspective. However, it results in lower throughput per user. The slow internet speed is going to hurt Ufone in case timely

measures are not taken. Initiatives need to be taken to address this issue and improve customer experience.

High Churn Rate is another area of concern for Ufone. The regulatory requirement of Biometric verification of all Mobile subscribers was enforced in April 2015 by Pakistan Telecommunications Regulatory Authority (PTA). Owing to the limitation of a maximum of 5 Sims per person, the Telecom industry lost 18% of its total registered subscribers. Ufone was most severely affected by it and lost 27% of its listed subscribers. Initiatives need to be taken to address this issue on priority basis.

Ufone has failed to think out of the box and provide innovative services in general with the exception of Super Card Offer. Emphasis has been on the traditional streams of business. Ufone was also quite late in launching its Mobile Financial Services (MFS) despite successful venture by Telenor & Mobilink. Telenor is the Market leader in MFS with its Easy Paisa launching in 2009, whereas Ufone launched its U-Paisa in 2013. The Myopic vision further added to the troubles faced by Ufone.

Owing to the declining customer base and profit margins, Ufone started to lose its Board of Directors support. The Board had better alternatives for investment with higher ROIs. PTCL's broadband became a major success and enjoyed the Board's patronage. This lack of patronage resulted in Ufone winning only 5MHZ of 3G Spectrum. The board did not see potential for additional 5Mhz or 4G Spectrum for Ufone. PTCL, on the other hand, launched its wireless broadband internet services Charji in Jun 2014.

8.2. External Analysis: (Opportunities & Threats)

The launch of 3G /4G services in Pakistan has opened a new avenue in mobile broadband services. There is enormous potential of MBB in Pakistan. The Internet is becoming more of a necessity for the urban life. Wireless Internet is providing the basis to reduce the digital divide between the urban and rural areas. Conventionally, all fixed-line broadband services are focused in urban areas due to concentration of users. The rural areas pose a greater challenge for deployment of conventional wired broadband

services as users are scattered over a wide geographical area and hence the cost to serve these customers increases significantly. Wireless broadband is the solution to this problem. Huge potential for wireless broadband exists in areas that do not have conventional broadband service. It is to be noted that PTCL is by far the most dominant player in the fixed line / conventional broadband service market.

Mobile Financial Services is another avenue for growth in Pakistan. For a country with 68% rural population and mobile density of 65%, Mobile financial services are becoming a preferred option for financial transactions. The usage will further increase as people are using mobile phone for browsing online stores. Telenor Easy Paisa is the market leader in this segment. Ufone launched U-Paisa in 2013.

The Mobile Broadband (MBB) resolution also facilitates the machine communication also known as the Internet of Things (IoT). This is a concept in which real-time data from machines can be monitored on mobile devices. This is only possible because of advancement in mobile communication. Increased data rates for communication services facilitate the concept of Smart Homes, where people can control home appliances through their mobile handset. IoT has huge potential globally, both for business and consumers. IoT has significant growth potential for business sector. It can result in better fleet management, inventory management, pro-active maintenance of machines, potential fault identification etc. Investment in this segment will significantly increase data revenues for cellular operators in the long run.

The Cellular industry faces multiple threats. Industry rivalry is high in the industry. As a result of the competition, the industry is operating at relatively lower margins. The market is price sensitive due to intense competition and higher buyer power. The cost of switching is low as a result of number portability system offered by PTA. Lack of differentiation strategy also resulted in lower margins. The operators are merely competing on price, which is a loose – loose strategy for all operators.

High taxation by the government is another threat to the industry. It includes 19.5% Federal Excise Duty and 15% Withholding Tax with a total of 34.5% Tax. The government recently announced a new tax on internet.

Energy crisis and law and order situation further hamper the environment for telecom operators.

9. UFONE SITUATION ANALYSIS

After reviewing the industry dynamics and the contextual situation in which Ufone is operating. We address the current problem, how to “Strategize 3G/2G Rollout for Success in Resource Constraint Environment”. Ufone started to work on its Network readiness for 3G in 2011, well before the NGMS spectrum auction in 2014. Ufone Marketing and technical teams worked out the details for prioritized rollout of 3G services. As a result of this homework, Ufone was the first operator to launch 400 sites for 3G immediately after getting 3G license. Pakistan Telecommunications Authority laid down the contractual obligations for all operators regarding coverage and quality of service for each successive year after the NGN license award.

In order to promote the 3G usage in Pakistan, Ufone was the first company to launch free trial of 3G services so the consumers can experience the 3G services free of cost. With the biggest 3G network at the launch stage, Ufone provided one-month free trial of its 3G services for each launched city. Other mobile operators also followed the same strategy.

Ufone's first mover advantage, in this case, did not work well. The Pakistani Telecom Market is operating at a lower ARPU (average revenue per user) compared to rest of the world. As soon as the Ufone Trial period expired, other mobile operators also launched their free trial period. As a result, consumers switched to other mobile operators to enjoy the free trial. This behavior was a result of price sensitive market. Hence the initial momentum of a quick 3G launch and free trial could not be capitalized.

The first 400 sites were launched in partnership with Ufone’s vendor Huawei. Ufone started its 3G service immediately after getting the license. The 400 site plan was chalked before

the spectrum award which was a big risk at that time. The entire investment had a risk of going down the drain in the event if Ufone did not get the 3G license. Recognizing the level of trust by Huawei, Huawei was declared as a strategic partner for Ufone.

Ufone initially bid for 15 MHz of 3G Spectrum and 10 MHz of 4G Spectrum (LTE) and was considered a major player in the spectrum bid. However, Ufone won only 5MHz of 3G spectrum. Ufone lost momentum as its BoD did not show enough confidence in market to bid for additional 10MHz or LTE spectrum. On the other hand, Ufone's initial aggressive rollout forced its competition to speed-up their 3G / 4G rollout.

Single Carrier for 3G and aggressive rollout from competition forced Ufone to change its 3G rollout plan. In an attempt to keep up with the competition, Ufone added several new city launches in the updated year-1 plan. These cities were planned initially by Ufone to be launched in year-2 or year-3 of its 3G rollout. It is to be noted that these new cities were also beyond the contractual obligation set by PTA.

Contrary to rollout strategy by competition, Ufone marketing team believed in upgrading all the 2G sites to 3G in 3G launched cities. This approach ensured good user experience in new 3G launched cities but resulted in slow city launch progress. The competition especially Telenor and Mobilink followed a strategy in which only a few sites in each city will be 3G enabled. Hence more emphasis was on launching new 3G enabled cities rather than on carpet coverage.

Initial 400 sites for Ufone were dimensioned with 2 carriers (10 MHz). Launching 3G services on 5MHz had its limitations. As Ufone and Telenor operated only on 5MHz bandwidth, hence the user experience was degraded compared to 10MHz operated operators i.e.

Mobilink & Zong. A single carrier meant lower throughput and lower capacity. As a result, Ufone faced capacity limitations. Ufone technical team attempted to overcome its capacity constraints through addition of new capacity sites. But keeping in view the increasing mobile broadband demand, additional spectrum is inevitable. The same is also visible in PTA Quality of Service benchmarks in which the 10MHz operators have dominated in performance. (Annexure - Exhibit 10).

Telenor also faced similar issue with lower throughput due to single carrier. But Telenor major strength was rural footprint. Additional capacity sites were added in urban areas to improve user experience. Technically, a site with 2 carriers (10MHz) provides double the capacity compared to single carrier site. So additional sites must be placed to provide the same capacity of dual-carrier site. This is the main concept of capacity sites.

The biometric verification process was initiated by the federal government of Pakistan in 2015 to stop the illegal use of mobile SIMs. Illegal use of mobile SIMs was resulting in deteriorating law and order situation. In order to control the issue, Government of Pakistan instructed all mobile operators to block all un-verified SIMs. The government put a cap of a maximum of 5 x Sims per user. Each SIM was required to be biometrically verified. As a result, all SIMs in Pakistan were verified. This resulted in additional cost for all mobile operators. The sales were adversely affected. The industry saw a drop of 18% in its listed consumers. The mobile revenues were also affected. Ufone lost the highest number of subscribers in the industry. (approximately 27% of its customers) (Annexure – Exhibit 2)

Ufone requires rollout budget and additional spectrum to ensure long-term stability in its market. The aggressive 3G rollout by competition coupled with the lost subscribers due to biometric verification put additional pressure on Ufone. PTCL on the other end experienced

profitable growth in broadband sector. Consequently, Ufone experienced less support from its Board of Directors. Keeping in view the existing situation, it is imperative that Ufone strategizes its rollout keeping in view its specific circumstances.

After analyzing the Ufone progress over the last few years, we believe that Ufone is in flux phase on the strategic change continuum. The strategic drift has increased significantly, and radical measures are required to bring the organization on its right track.

10. STRATEGIC ALTERNATIVES

After performing a comprehensive industry analysis, cross-functional analysis, SWOT analysis and situational analysis, the following Strategic alternatives are proposed. These alternatives will help in strategizing the 3G/2G Network Rollout based on Ufone strengths and available opportunities.

10.1. Focused Strategy for 3G Rollout in Rural Areas:

Immediately after the launch of 3G / 4G, Mobile Operators have invested heavily in upgrading network infrastructure. Ufone was forced to change its rollout plan as a result of aggressive rollout by competition. Contrary to rollout strategy by competition, Ufone marketing team believed in upgrading all the 2G sites to 3G in 3G launched cities. This approach ensured good user experience in new 3G launched cities but resulted in slow city launch progress. The competition especially Telenor and Mobilink followed a strategy in which only a few sites in each city will be 3G enabled. Hence more emphasis was on launching new 3G enabled cities. Zong, on the other hand, followed carpet coverage approach due to abundance of resources and long-term plan to stay in the market. It is to be noted that Ufone is an urban-centric mobile company. It has stronghold in metros as compared to rural. On the other hand, Telenor and Zong had strongholds in the rural. Telenor attempted to offset the 5MHz spectrum through very aggressive 3G Rollout. Telenor currently has the largest 3G Network in Pakistan.

Keeping in view the specific constraints for Ufone. Blindly following the competition into their strongholds is not a feasible option. Ufone cannot win 3G market share with the limited rollout budget and 5MHz spectrum. Hence, Ufone Marketing team needs to carefully plan the rural network rollout. Giving up the rural 3G footprint all together will hurt Ufone's image in the long run. For this purpose, Ufone can utilize its site revenues to identify it's profitable sites in the rural areas. Launching 3G services on its profitable sites (high revenue) will not only ensure quick return on investment but also improve the customer experience. It is important to realize that

all mobile services are essentially provided on a single SIM card. The user may use the same SIM for 4G / 3G or 2G service (which-ever is provided by the operator). Hence it makes perfect sense to have a higher number of 3G users in a city where that operator has stronghold in 2G. Focusing on 3G launch in Ufone's stronghold rural areas will provide quick returns. This focused strategy will eventually help Ufone to win-back its Board support.

10.2. Deploying 2nd Carrier for 3G Services:

As a result of Ufone 2G Spectrum License renewal in 2015, the existing spectrum in use by Ufone for its 2G services has been declared technology neutral. Details for allocated spectrum for all Operators are provided in Annexure (Exhibit 5). Ufone has 7.6MHz spectrum in 900 MHz band and 6MHz spectrum in 1800. Ufone can now utilize this band for launching 3G / 4G Services. It is to be noted that Warid has already launched 4G services on its 2G Spectrum (1800Mhz Band).

Launching 4G services is not considered as an option for Ufone as PTCL (the holding company of Ufone) is already providing 4G services under brand name of CharJi. Ufone's 4G launch might result in cannibalization of PTCL 4G sales. Keeping in view the entire portfolio, 4G Launch on existing band is not recommended.

3G was launched by Ufone in the first quarter of 2014 with major cities launched in initial launch. Since then, many more cities have been launched across the Network. With the increasing demand of 3G and stiff competition with other mobile operators (OMO), it is very important to expand the 3G Coverage and also improve user perception of 3G network in order to stay in the competition with OMO.

Ufone has a smaller 3G Spectrum as compared to Mobilink and Zong. Both mobile operators have 10MHz spectrum for 3G services. Ufone is facing capacity issues due to limited 5MHz spectrum for 3G services. Resolution of capacity constraints is necessary to keep market share and ensure good user perception. Resolution of capacity constraints will largely necessitate deployment of news sites.

A single carrier for 3G services poses serious challenges for Ufone. User perception is degraded when the load on the network is high. Throughput is compromised by a high number of users and high utilization of network resources. As the number of users on single-carrier increases, the network resources are shared among the users resulting in lower throughput per user.

It is to be noted that Ufone has already deployed capacity relief techniques such as sector splits and new capacity sites. In order to fix the capacity constraint and keep-up with the increasing mobile broadband demand especially in Urban areas, Ufone requires additional spectrum for 3G services. Ufone can choose one of below options for additional spectrum.

Option 1: Buy 2nd Carrier in 2100 MHz Band

- Like Zong & Mobilink, Ufone can choose to purchase additional spectrum in the 2100 Band.
- It depends on external factors such as auction of new spectrum by PTA. The spectrum auction will be open to all operators.
- New spectrum auction in 2100MHz band is unlikely in near future.
- It also requires board of director approval which will be difficult to obtain under current circumstances.

Option 2: Buy 2nd Carrier in 850 MHz Band

- Ufone can choose to participate in the bid for 850MHz spectrum.
- The base price for spectrum is set to 395 Million USD.
- Not all handsets in the market support the 850 MHz band for 3G services.
- It also requires board of director approval which will be difficult to obtain under current circumstances.

Option 3: Extract 2nd Carrier for 3G from Ufone's existing GSM 900 MHz Spectrum:

- Utilizing the 900MHz technology neutral spectrum for 3G services is the 3rd option.
- It is a growing trend for rural coverage and improving in-building customer experience all over the world.
- It is a complex project which requires extensive 2G network re-engineering.
- No additional spectrum fee is required to pursue this option.
- A fewer number of sites are required to provide coverage in rural area with 900 MHz Spectrum as compared to 2100 MHz spectrum. It is due to propagation characteristics of different bands. Lower frequency bands are more feasible for rural coverage.
- 86% handsets in the market support 3G on 900MHz band.

Out of the three options, we recommend proceeding with the option 3 due to following technical and situational advantages:

Technical Advantages of deploying 3G in 900 MHz band.

- 3G Coverage in 900 band is around 2.5 ~ 3 times larger than in conventional 2100 MHz band for 3G band.
- Indoor coverage on 900 MHz band (U900) is significantly better than U2100.
- UMTS spectral efficiency is much higher than GSM.
- 86% of Smart Phones in the Market support U900 Band.
- 30% ~ 50% sites can be saved to cover the same area with U900 compared with U2100 band sites.

Strategy based on Ufone specific spectrum allocation

Ufone has 7.6 MHz of frequency spectrum in 900 MHz band. In order to launch 3G on 900 MHz band, a minimum of 4.2 MHz band is required for 3G. It is to be noted that extensive re-engineering is required to vacate this (4.2MHz) band and shift 2G traffic on 1800 MHz band.

The only other operator with a single 3G carrier, Telenor, cannot replicate similar strategy for 3G launch on 900 MHz as it only has 4.8 MHz spectrum allocation. If Telenor utilizes 4.2 MHz out of allocated 4.8 MHz band, it will not be able to operate existing 2G services without seriously degrading user experience.
Hence, current technology neutral spectrum for Ufone provides a unique opportunity which is difficult to be replicated by Telenor.

Mobilink and Zong also have similar 7.6 MHz in 900 band but they currently do not require additional carrier for 3G service. Both operators are already operating with 10 MHz band (2 carriers).

This additional carrier in 3G will help Ufone in addressing its current capacity constraints as well as reducing the number of sites required for rural 3G rollout. In urban areas, 3G on 900 MHz band will significantly improve indoor coverage, especially in dense urban areas.

11. RECOMMENDATIONS

After going through an in-depth analysis of Ufone's current situation in the telecom market, I have proposed that Ufone needs to compete in the market based on its own strengths. Blindly following the competition into their strongholds will not provide the desired objectives. The declining performance of Ufone over last few years due to aggressive competition especially after biometric verification of SIMs forced Ufone's board of directors to reconsider biding for additional 3G spectrum. As a result, Ufone got only single carrier for 3G.

I have discussed at length in the report how a single carrier is insufficient to cater for increasing customer demand for data. Unfortunately, this increase in customer demand is not proportional to increase in revenue for mobile operators. The Telecom Market in Pakistan is operating at quite lower margins in comparison to the rest of the world. The reason for such lower margins is that operators have not differentiated their products and are competing mostly on price.

Keeping in view Ufone's current position, it is imperative to win back Ufone's BOD support. It can only be achieved through good financial results. We have proposed that Ufone strategizes on rural footprint by identifying and targeting its strongholds in rural area. Prioritized 3G rollout for these areas will result in better ROI. These results can then be used to seek subsequent budget approvals for rollout.

We have also proposed that Ufone should take advantage of its newly declared Technology Neutral Band in 900 MHz to launch 2nd carrier for 3G. Pakistan Telecommunications Authority leased spectrum to Ufone for 15 years for 2G services. Upon license renewal in 2016, the spectrum was declared technology neutral. Launching 3G services in 900 MHz band does not require any additional spectrum license fee. Technically launching 3G in 900 MHz band has several advantages such as increased coverage in rural areas and better indoor coverage in urban areas. The proposal for 2nd carrier launch is unique to Ufone's spectrum

allocation as Telenor which is also operating with single 3G carrier cannot replicate the same solution without seriously hampering existing 2G customer experience.

Both above recommendations will help in strengthening Ufone's position in the market and win back its BOD support.

12. ANNEXURE

Exhibit 1: Literature Review References

The Rise and Fall of Strategic Planning (1994). Henry Mintzberg.

"What is Strategy?" Michael Porter. Harvard Business Review (Nov-Dec 1996).

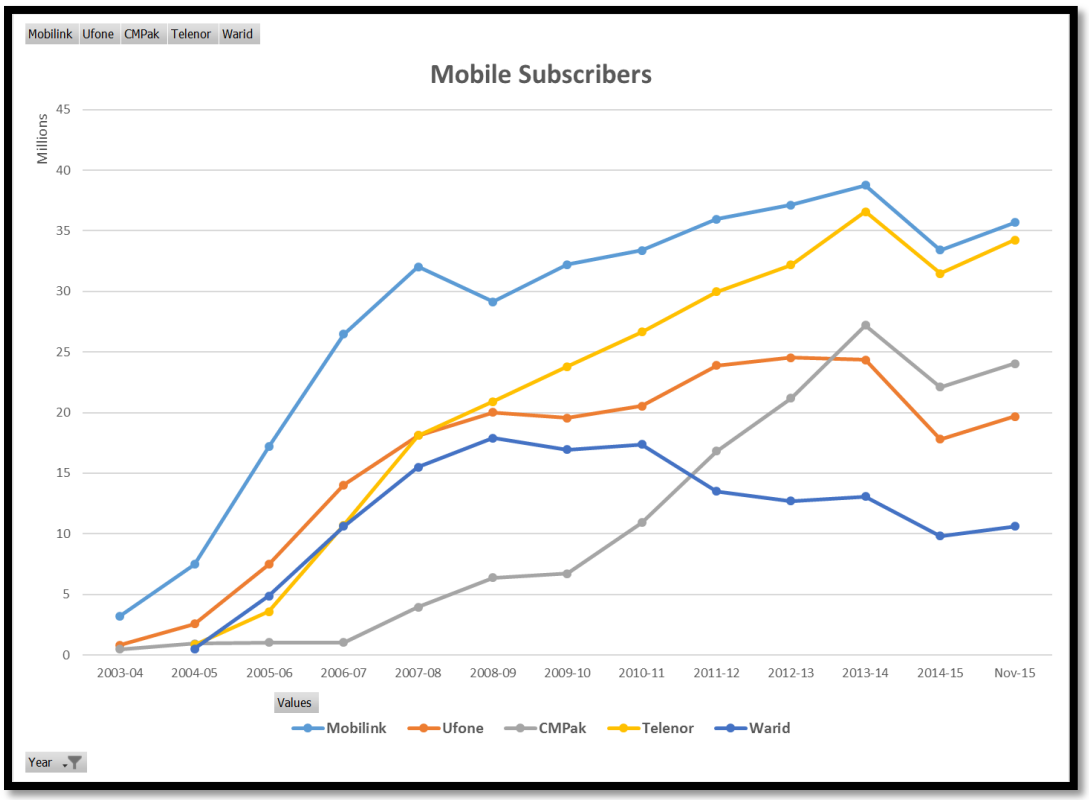
How manager's everyday decisions create or destroy your company's strategy by Joseph L. Bower ad Clark G. Gilbert. Harvard Business Review (Feb 2007)

http://www.nickols.us/strategy_definitions.pdf

http://www.brecorder.com/taxation/181:pakistan/1186123:high-rates-of-taxes-impeding-mobile-service-growth-gsma/?date=2015-05-14

http://www.tech2fetch.com/pakistani-government-imposed-additional-tax-on-telecom-services/

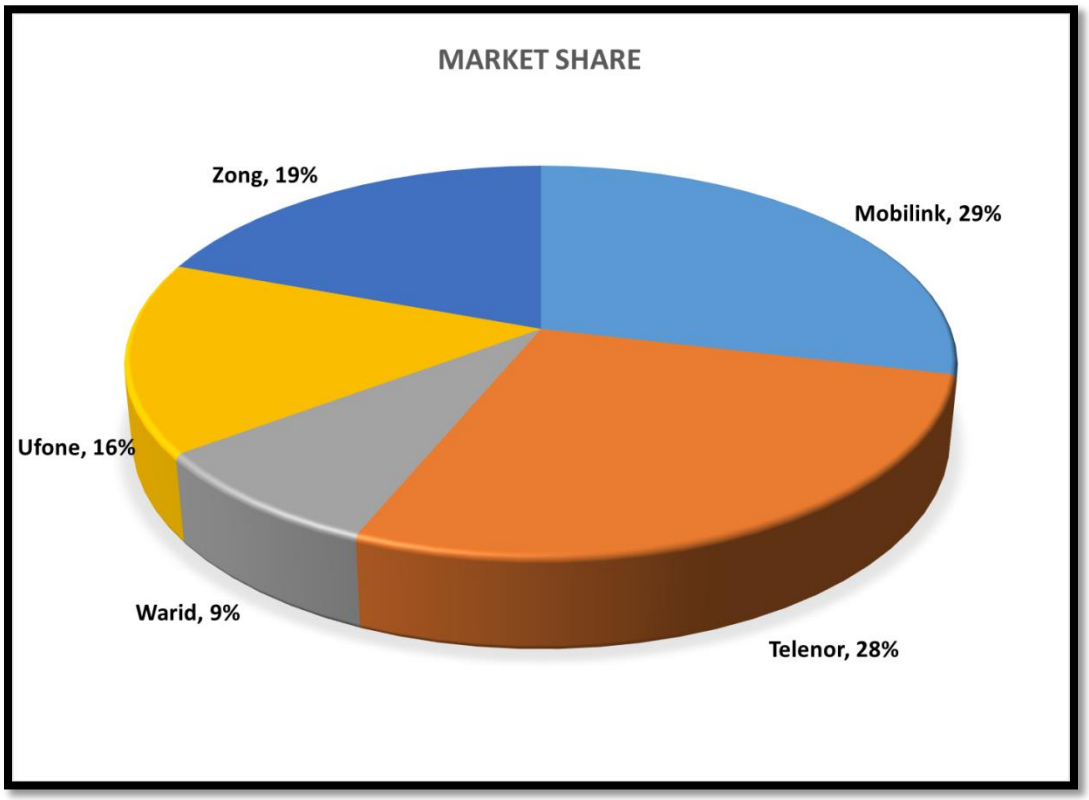
Exhibit 2: Industry Statistics (Source PTA Website - http://www.pta.gov.pk//en/telecom-indicators)



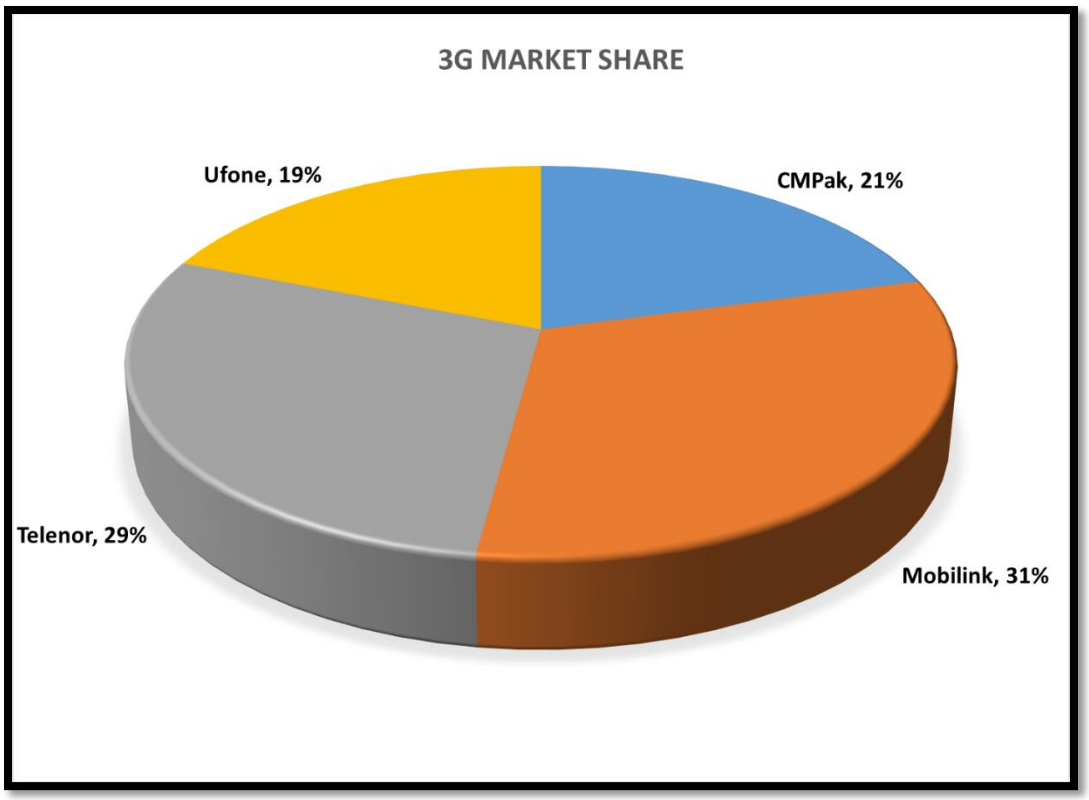
Biometric Verification of Sims.

Impact of BVS on Telecom Industry						
	Mobilink	Ufone	CMPak	Telenor	Warid	Total
2013-14	38,768,346	24,352,717	27,197,048	36,571,820	13,084,823	139,974,754
2014-15	33,424,268	17,809,315	22,102,968	31,491,263	9,830,620	114,658,434
Decrease in Subs	(5,344,078)	(6,543,402)	(5,094,080)	(5,080,557)	(3,254,203)	(25,316,320)
Proportional Decrease in Subs / Industry	21%	26%	20%	20%	13%	100%
Proportional Decrease in Subs / Operator	-14%	-27%	-19%	-14%	-25%	-18%

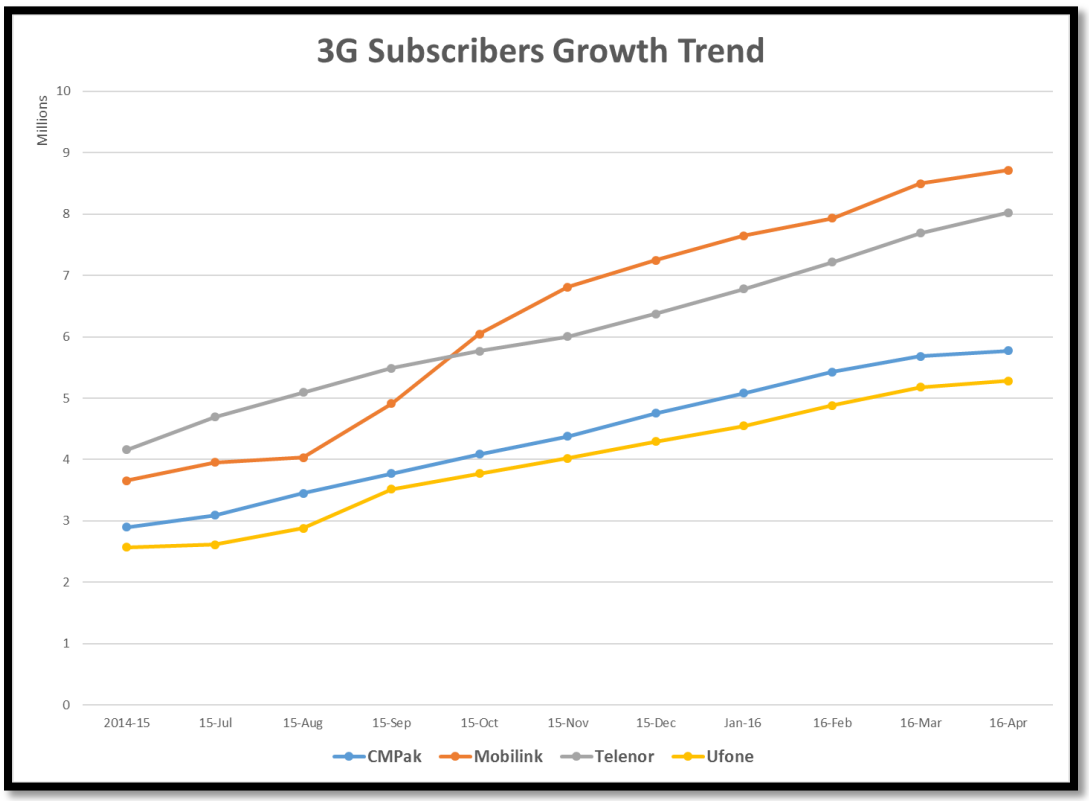
2G Market Share based on Subscribers:



3G Market Share based on Subscribers:



3G Subscriber Growth Trend:



3G Market Share:

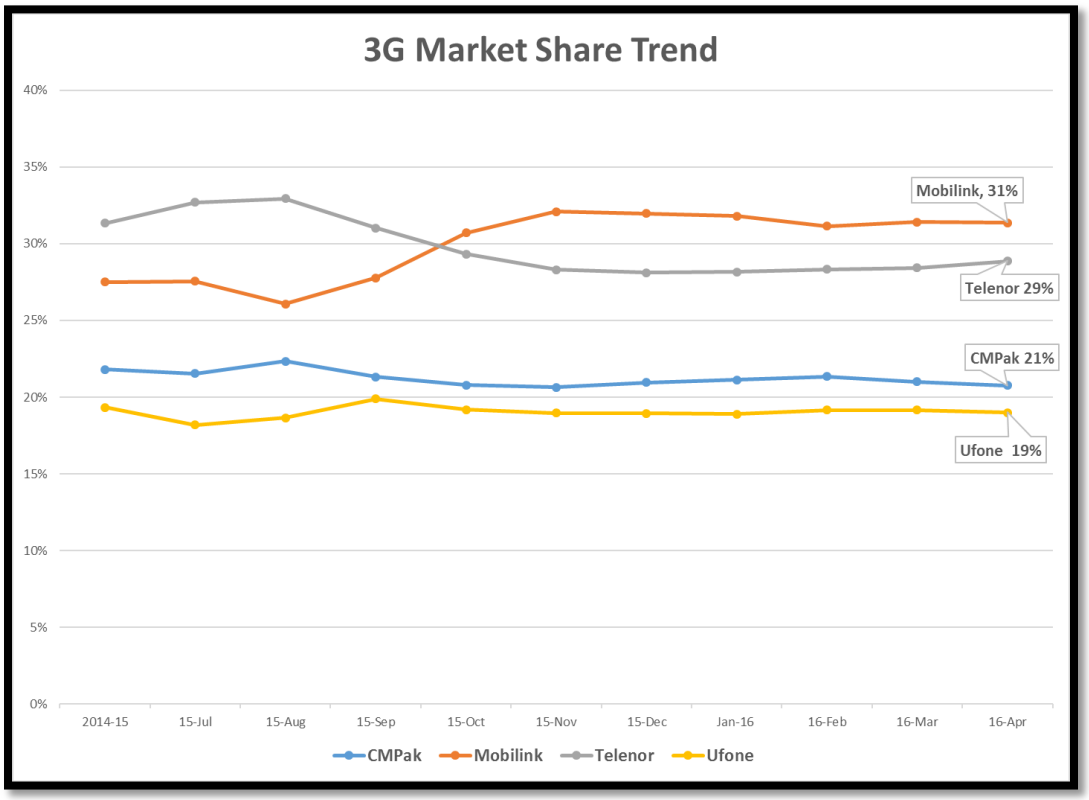
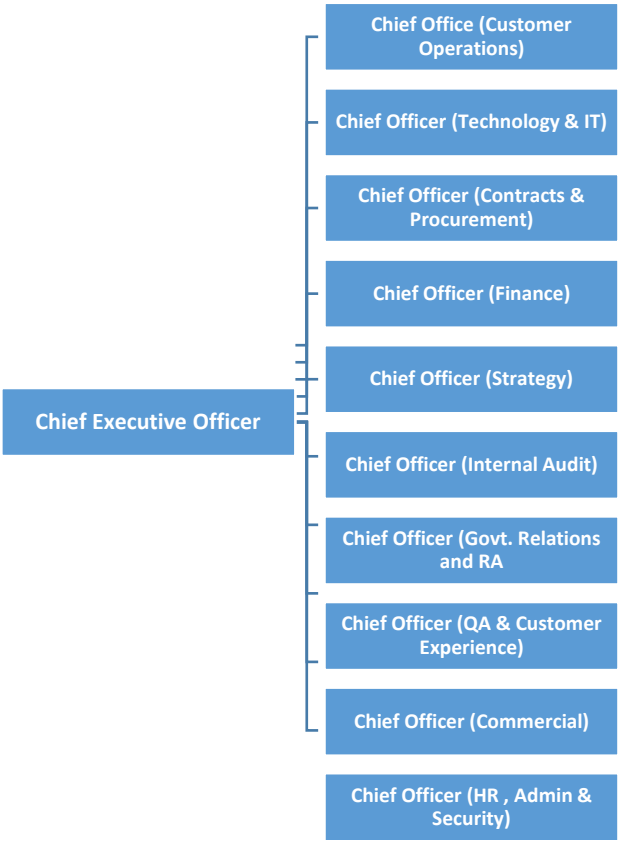


Exhibit 3: Organizational Structure and Management Levels

Organogram:



Management Levels:

Exhibit 5: Operator Spectrum Allocations per Technology:

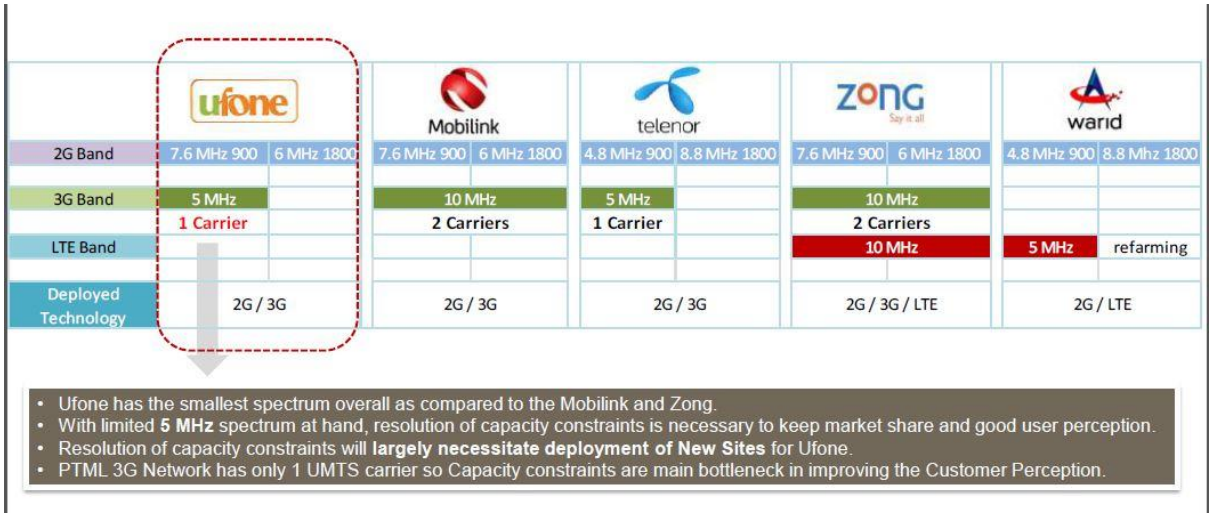
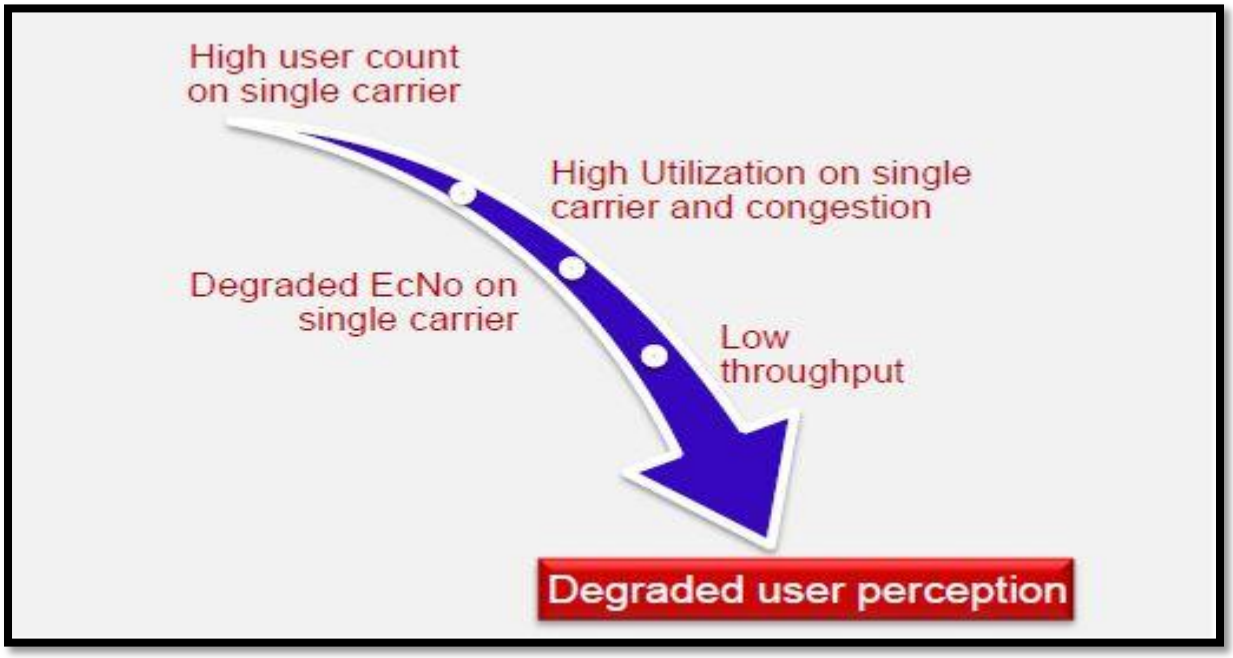


Exhibit 6: Limitations of Single Carrier for 3G



2nd Carrier Requirement for 3G (Based on Internal Ufone Study)

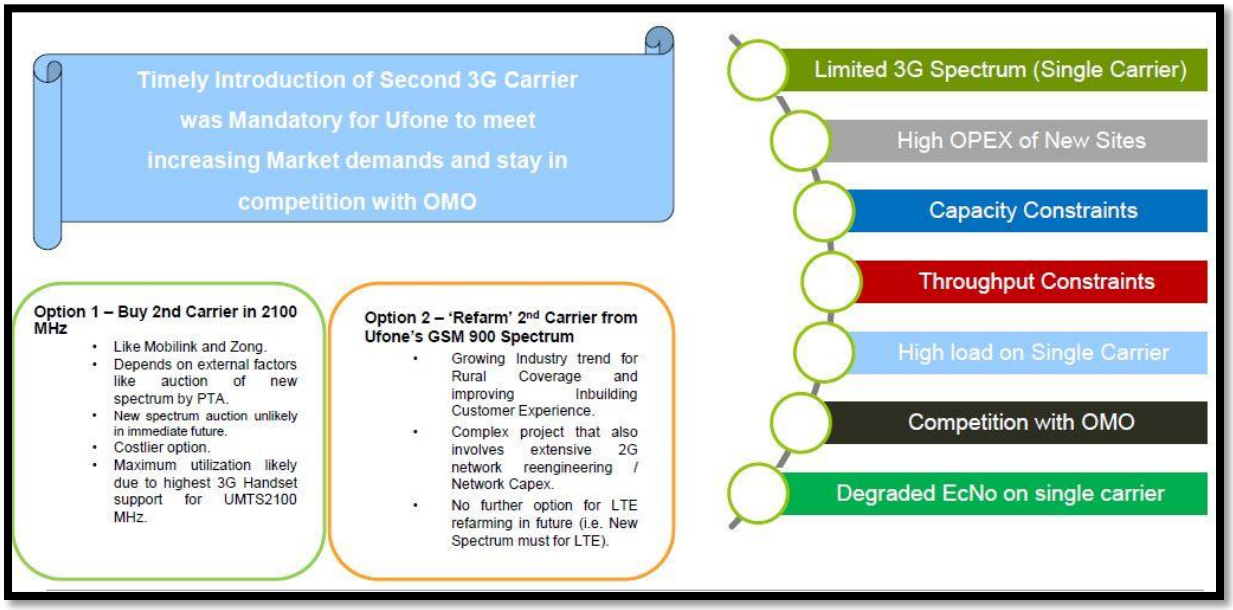


Exhibit 7: Existing Market Mobile Handset Capability Analysis (Based on Internal Ufone Study)

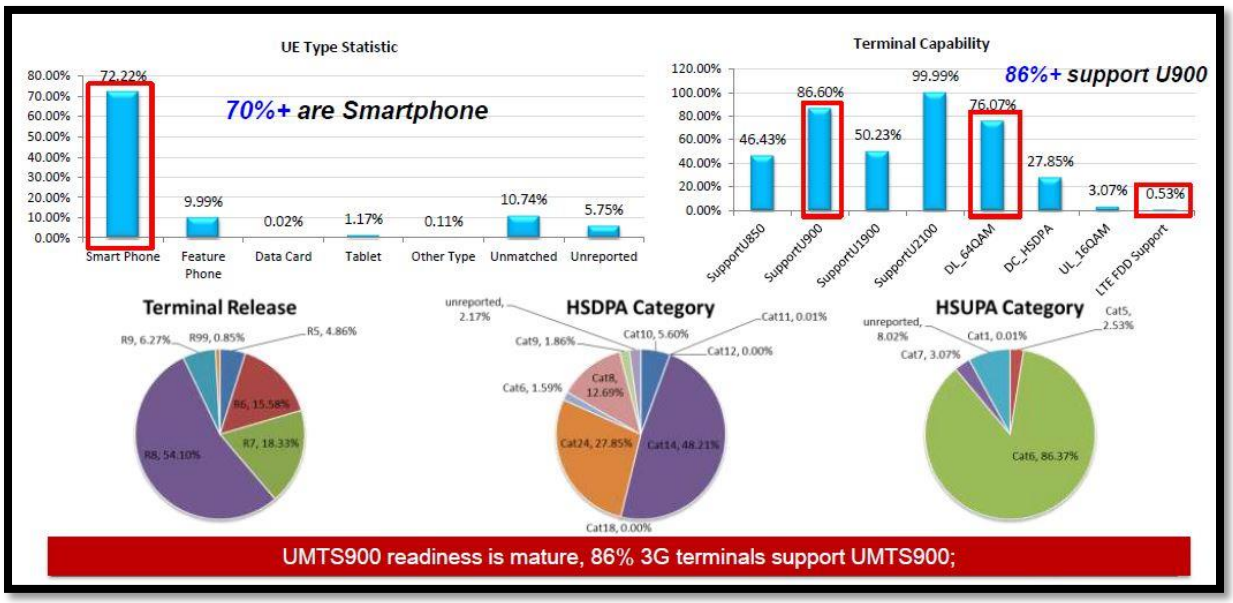
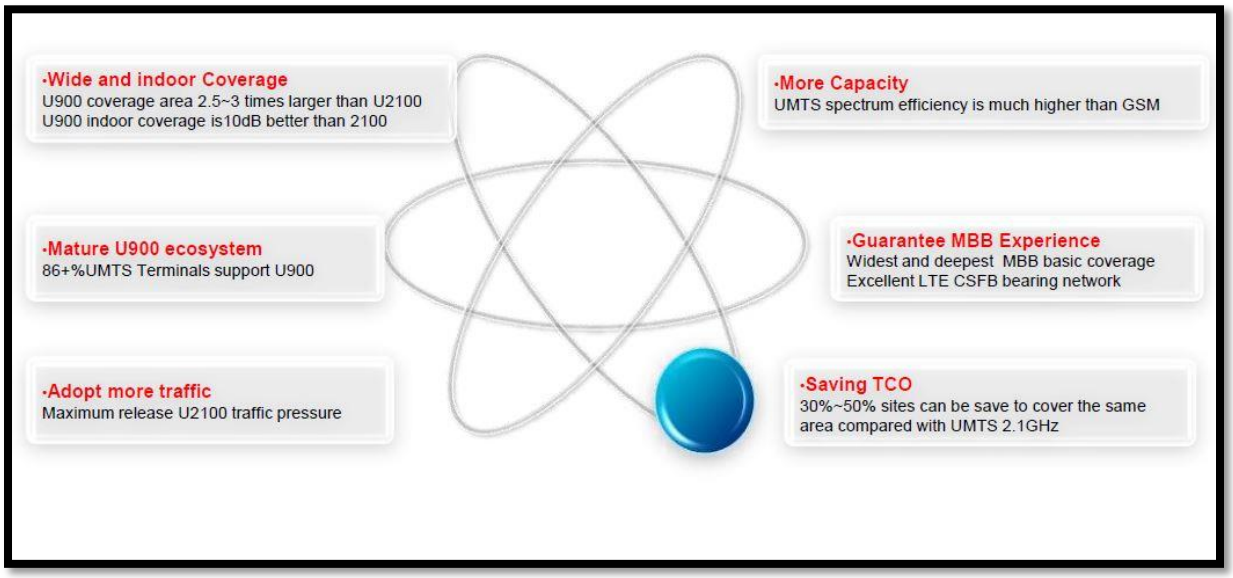


Exhibit 8: Advantages of Using 900MHz Spectrum for 3G:



Coverage Comparison of Different Bands of 3G: (2100MHz vs 900MHz)

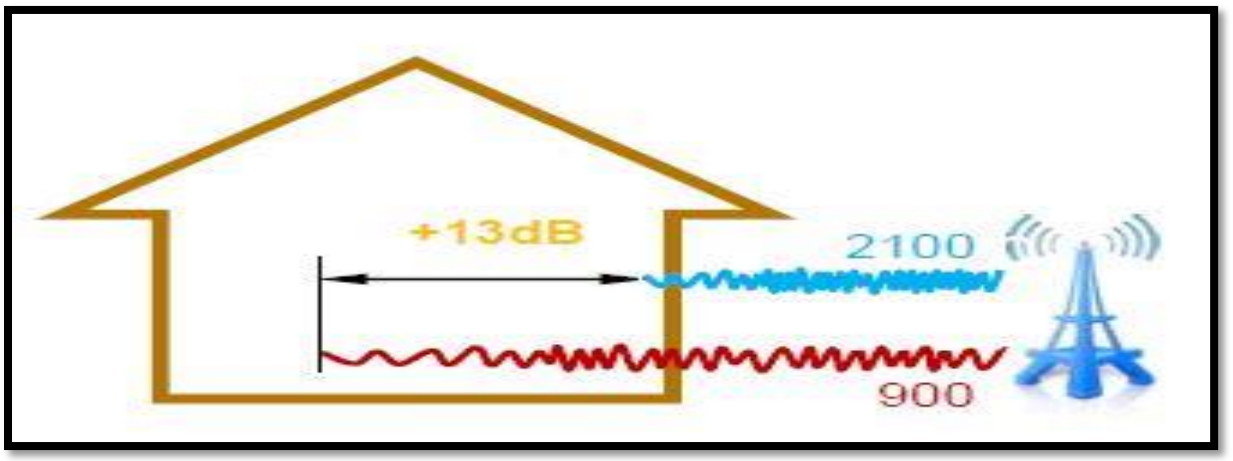


Exhibit 9: PTA QOS Survey

http://pta.gov.pk/en/media-center/single-media/pta-starts-cellular-mobile-quality-of-service-qos-survey

https://www.phoneworld.com.pk/cellular-mobile-operators-qos-survey-results-of-2016-pta-report/

https://propakistani.pk/2015/10/10/pta-outs-3g-4g-qos-survey-results-for-2015/

http://propakistani.pk/2016/04/26/moit-sets-usd-395-million-as-base-price-for-850mhz-spectrum/