

**From Telco to Techo – The product transformation of A2P in
Jazz Business**



By

Andleeb Aslam

(Registration No: 00000318574)

Department of Business and Marketing

School of Business

National University of Sciences & Technology (NUST)

Islamabad, Pakistan

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By

Andleeb Aslam

(Registration No: 00000318574)

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Supervisor: Dr. Fawad Khan

School of Business

National University of Sciences & Technology (NUST)

Islamabad, Pakistan

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BUSINESS PROJECT ACCEPTANCE CERTIFICATE

It is Certified that final copy of EMBA Business Project written by Andleeb Aslam Registration No 00000318574 of EMBA 2K19 has been vetted by undersigned, found complete in all aspects as per NUST Statutes/Regulations/MS Policy, is free of errors, and mistakes and is accepted as fulfillment for award of EMBA degree. It is further certified that necessary amendments as pointed out by GEC members of the scholar have also been incorporated in the said business project.

Signature of Supervisor with stamp: Dr. Muhammad Fawad Khan

Date: _____

Programme Head Signature with stamp: Dr. Muhammad Fawad Khan

Date: _____


Signature of HoD with stamp: Mr. Bilal Ahmed Chohan

Date: _____

Countersign by

Signature (Dean/Principal): _____
Principal & Dean
Dr. Naukhez Sarwar
NUST Business School

Date: _____


DR. M. FAWAD KHAN
Assistant Professor
Program Head (EMBA)
NUST Business School, H-12 Islamabad


DR. M. FAWAD KHAN
Assistant Professor
Program Head (EMBA)
NUST Business School, H-12 Islamabad


Bilal Ahmed Chohan
Assistant Professor, IB&M
NUST Business School, (NBS)
Sector H-12 Islamabad

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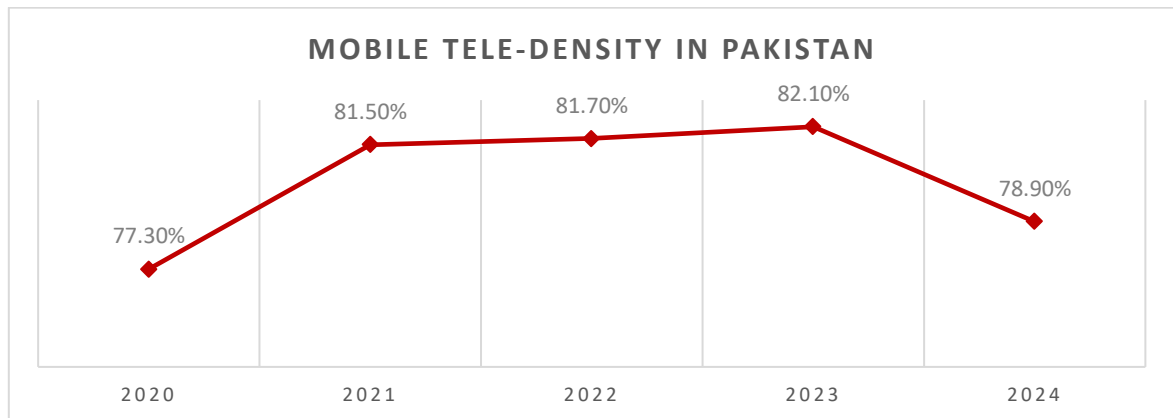
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CHAPTER 1: THE TELCO LANDSCAPE OF PAKISTAN:

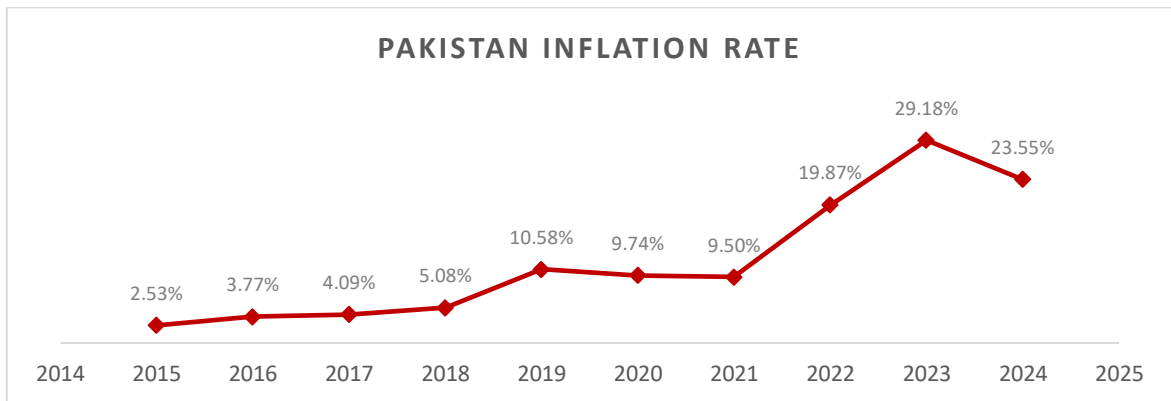
The Pakistan telecom market is distributed among four players: PMCL (Jazz), PTML (Ufone), CMPak (Zong), and Telenor Pakistan. The size of this market is estimated at USD 4.52 billion in 2024 and is expected to reach USD 5.32 billion by 2029, forecasted to grow at a Compounded Annual Growth Rate (CAGR) of 3.28% (2024-2029) (Anonymous, 2022). Despite this estimated growth, the trajectory of tele-density in Pakistan is declining trend (Fig.1.1). One indicator for this could have been the increase in population, However, the increase in population is not proportionate to the decrease in tele-density. Therefore, the culprits are assumed to be the volatility of economy and rising inflation (Fig. 1.2). The country's inability to sustain stability on the political front has led to an economic crisis, resulting in lesser Foreign Direct Investment (FDI), and depleting forex for an import heavy country can only mean increase in cost of doing business. Given the mise-en-scène, in pursuit of survival, businesses were forced to review and raise prices. In a third world country with increasing inflation on a yearly basis, rising prices means reduced basket size and affordability becomes more significant than luxury. Telecoms are thus, also suffering despite their DO1440 strategies¹.

Figure 1: Mobile Tele-density in Pakistan



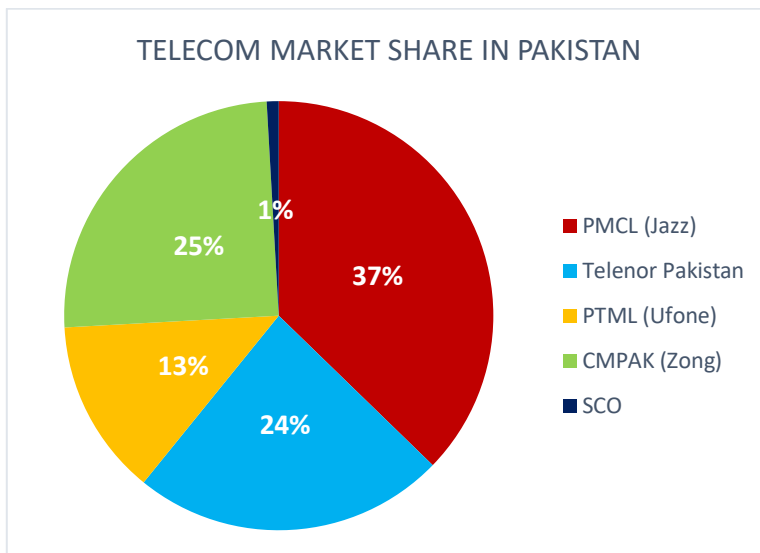
¹ DO vision and 1440 strategy changes the direction of telecommunication industry by combining their telco and OTT capabilities. DO stands for Digital Operator and 1440 comes from the 1440 minutes in a day. DO implies the vision of becoming a digital services provider AKA digital operator and interacting with the customer every single minute of the day AKA 1440. Thus, DO1440 strategy helps telecoms transform into Techco and provides enhanced experience to customers with its digital services.

Figure 2: Pakistan Inflation Rate



As per industry insight, three out of the four telecoms are reporting red bottom lines, Telenor has already declared exit from Asian market, and with the impending merger of ufone and Telenor Pakistan on 4G LTE B3 (1800 MHz) Band, the market will be consolidated to three players. This will threaten the market leader position of PMCL (Jazz) in the B2C arena (Fig. 1.3). However, economically, it makes sense to have three operating telecoms in the country to profitably operate and work towards digital and financial inclusion.

Figure 3: Telecom Market Share in Pakistan. (PTA, 2024)



While cost of operating is one factor that gravely affects the telecom industry, it is also up against the digital disruption. Time and again, the corporate world has seen the rise and fall of technologies due to paradigmatic shifts, however, while many perished at the

hands of advancements, some have sustained by investing in and adapting the right technologies.

CHAPTER 2: THE ‘FROM TELCO TO TECHCO’ PHILOSOPHY

In the past decade, telecom has been deemed as a basic necessity like electricity was less than a century ago. Despite rising costs, the usage and the revenues aren't declining as fast as some may think. Advancements have asserted the relevance of the sector even with the digital disruptions happening across the globe. Simple SMS and voice are now taken over by Rich Communication Services (RCS), Instant Messaging (IM) and Voice over IP (VoIP). And of course, the concurrent launches of next gen networks. 5G is just around the corner. Albeit the promise of speed was delivered with 4G, 5G and its applications will affect the B2B sector more than the consumers vis-à-vis, the need for transformation is also expected in the B2B side of telecom. As such B2B will remain the focus of this case study as well.

What it means to become a Techco is more than just an adoption of new trends in technology, its more to do with a philosophy that converges the Information Technology and Telecommunications. This suggests a change in the business, financial and organization's cultural models.

The idea is not just to remain a seller of connectivity, upon which systems and applications can be built, but to be the solution provider, end-to-end. The threat of that one kodak moment² drives this philosophy. While the revenues are still coming from the connectivity business, strategize to launch new solutions. The new solutions might not be profitable from the beginning, might even have negative business cases, but in the future, they will become more profitable and sustain the company when its previous bread winners (Connectivity) start making loss. Thus, maintaining overall profitability and sustaining business as usual. The start is cloud, IoT and Cyber Security, but it's just a start.

Over-the-Top (OTT) platforms are all the rage today. While it may seem to be a consumer offering, with the right content, data monetization and ad-tech strategy it can just as well

² Kodak, a camera company that had become a household name in the late 19000, with their slogan 'kodak moment', refused the idea of a digital camera put forth by Steve Sasson, an Eastman Kodak Employee, in 1976. In 2012, kodak went bankrupt. Kodak moment is now used to remember that moment when Sasson was refused to experiment and transform the industry.

become a B2B offering, totally agnostic of telecom legacy systems. Data monetization, per se, has the potential of a myriad of solutions to be derived from it. With the combined power of partners, vendors and alternate delivery channels, an ecosystem can be built and offered as a service – this would make way for consulting and Managed Services Provision (MSP). This is the way for telecoms to transform themselves, experiment fast, fail fast, recover fast and succeed faster to sustain profitability and relevance in the coming decade of digital disruption.

This project aims to explore one such solutions for the B2B division of Pakistan’s largest telecom PMCL (Jazz).

2.1 ABOUT PMCL (JAZZ)

Despite what it says on its Wikipedia page (Wikipedia, 2023), PMCL Jazz (formerly Mobiink) was founded in 1998 by Saif Group and Motorola Inc. It was however the first Global System for Mobile Communication (GSM) services provider, before which Paktel and Instafone were also providing Advanced Mobile Phone Systems (AMPS), which they continued with until the early 2000s. Later the two companies were subsumed by CMPak and PTML respectively.

In 2007, Orascom purchased 100% shares of PMCL under Saif group.

In 2010, VEON, a Russian operator, entered into a \$6.5 billion agreement to purchase the majority of Orascom's telecom assets, including Jazz, leading to the formation of the world's fifth-largest mobile network operator in terms of subscriber count. In November 2015, VEON revealed its acquisition of 100% ownership of Warid Telecom in Pakistan, a subsidiary of Abu Dhabi Group. Following the necessary approvals, this landmark acquisition was finalized in July 2016, resulting in a combined subscriber base of 50 million, marking the first-ever acquisition of a local telecom company.

After the integration of Mobilink and Warid Pakistan, Mobilink underwent an official rebranding to Jazz in 2017. The merger with Warid, allowed Jazz to capitalize on Warid's 4G/LTE license, enabling it to transition into a 4G network utilizing a 5 MHz block within the 1800 MHz band. In May 2017, Jazz emerged victorious in the 2017 NGMS auction hosted by PTA, securing a 10 MHz block within the 1800 MHz (FDD-LTE Band 3)

frequency for its 4G services. Additionally, Jazz received further 4G spectrum allocation from PTA on June 30, 2017.

In January 2020, Jazz announced successful completion of 5G trials, achieving speeds of 1.5Gbps. These trials were conducted utilizing the 2.6 GHz spectrum.

In March 2021, VEON finalized the purchase of a 15 percent stake previously owned by Abu Dhabi Group for a total of US\$273 million.

In July 2021, Jazz enhanced its LTE network to LTE-A Pro by introducing 256-QAM and Massive MIMO technologies. Presently, it stands as the sole network in Pakistan providing 3CA (Tri-band) carrier aggregation and 256-QAM on its LTE infrastructure.

In February 2022, Jazz implemented VoLTE across its entire network, offering compatibility with a range of supported devices such as Samsung, Huawei, Oppo, Vivo, ITEL, Xiaomi, Realme, Infinix, and Jazz Digit branded feature phones.

In July 2023, Jazz introduced Voice over WiFi (VoWiFi) capabilities under the branding 'JazzFi'. As of now, it remains the sole carrier in Pakistan providing VoWiFi services.

As of October 2023, Jazz boasts 70 million subscribers in Pakistan, with 43 million utilizing its 4G services. With a market share of 37%, it holds the top position among all mobile network operators.

2.2 ABOUT JAZZ BUSINESS

Jazz Business was founded in the late 2000s with the idea to serve corporations/businesses/government entities with GSM, Fixed and Wireless connectivity. For this purpose, a separate division was setup, new products developed, new pipelines and delivery channels established. This division started strong, and rapidly became the market leader. With its telco-driven product portfolio, Jazz Business became the only operator to service over 90% of PSX corporations, over 50% SECP registered businesses and held a majority share of pie among B2G (Business to Government) customers. To date, Jazz Business has held onto this position in the market.

What started as a portfolio of prized GSM products, Fixed Line Connectivity, Wholesale Interconnect, and International Roaming, grew within its initial years to make way to

technology that can be built upon the telecom layer. While the channels brought in the bread and butter with conventional offerings, the product teams ventured into partnerships to bring in the new tech. This is how the product lines of IoT, Digital Solutions, Partnered SaaS (MSO, Knox etc.) and other such services made way for new revenue streams. In terms of vision, Jazz Business was always on the track of digital transformation and growth mindset. Considering this trajectory, the division presented itself as the perfect candidate for Techco transformation. Thus began the journey of launching Telco agnostic platforms and portfolios.

In 2020, Jazz Business launched its own cloud platform, becoming the first telecom company in Pakistan to do so. This platform was launched as a Brand 'Garaj', which became the fastest growing cloud platform in the country in terms of revenue as well as market share. Garaj has two Tier-3 certified availability zones in the country launched in 2020, and 2021 respectively and a third is on its way to completion in 2024. Garaj also became a driver in the launch of the public Cloud-first Policy, owing to which, institutions (banks and government entities) which were historically restricted to host data on cloud, can now do so on a local cloud platform.

In 2022, Jazz Business launched another industry first platform based on Data Monetization. Quantica, a data analytics consulting service, that houses 12 product portfolios within its vertical and is now yielding a YoY growth rate of 89%.

In 2024, Jazz Business aims to launch Pakistan's first Ad-tech Platform in collaboration with its sister concern Veon Adtech, headquartered in Uzbekistan.

While the Telco to TechCo transformation had already started taking place in 2020 in Jazz Business with the launch for Garaj - Cloud platform, there are other legacy business areas that are expected to suffer due to digital disruption and usage decline. In this situation, telecoms are forced to review and decide which products to kill, and which to evolve. Application to People (A2P) messaging is one area that Jazz deems to evolve. And as such, in this project, I propose the evolution of SMS to a hybrid unified communication's platform, that Jazz's customers can adopt to create an omni experience for its customers.

CHAPTER 3: A2P – AN INTRODUCTION:

A2P messaging, also known as enterprise or business SMS, denotes a type of SMS communication wherein a software application managed by a company dispatches text messages to a user's device. This communication avenue allows consumers to interact with businesses through their personal cellular data connection in a one-way communication format. The surge in the digital and applications market has prompted operators and enterprises to explore revenue streams through A2P messaging services.

As Person-to-Person (P2P) messaging waned, enterprises swiftly pivoted towards A2P messaging to enhance their customer outreach strategies. Nonetheless, with the advent of Over-The-Top (OTT) services offering free voice and messaging applications, there emerged a noticeable change in customer preferences. To counter the growing influence of OTTs, current messaging service providers and mobile operators must devise tactics to safeguard their revenue streams from OTT competitors and prioritize the monetization of A2P messaging.

As it is, Jazz Business' A2P business comprises of the following two types

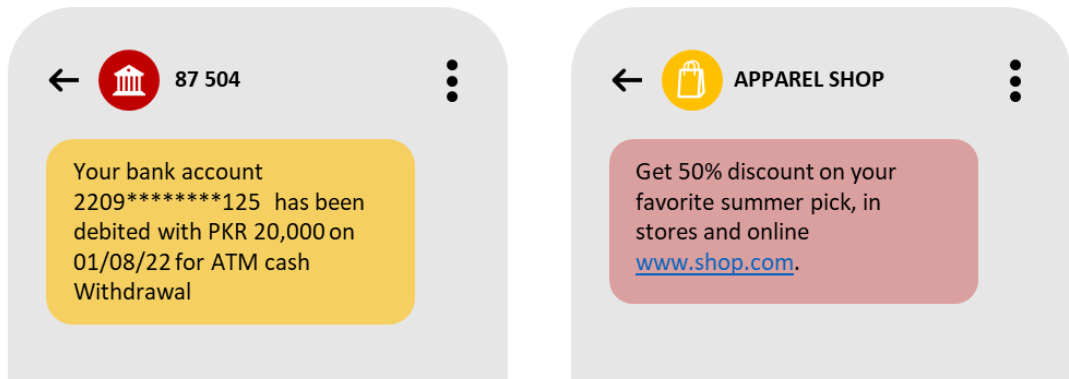
3.1 TRANSACTIONAL MESSAGES

A2P transactional messages, are automated notifications sent from an application or system to a person's mobile handset. These messages serve the purpose of conveying vital, time-critical information pertaining to a transaction or user interaction. Mostly, these are trigger based messages for specific events; including but not limited to, Bank account notification of various kinds, Order confirmation and shipping statuses, security alerts such as password breach or two-factor authentication, flight updates, package delivery notifications, and OTP (One-Time-Password) codes, appointment reminders etc.

3.2 PROMOTIONAL MESSAGES

Promotional messages are a part of the BTL activities of any business' marketing campaigns. These are used by businesses to advertise products, services, or special offers to customers.

Figure 4: Example of Transactional and Promotional Messages



CHAPTER 4: WAY FORWARD

While major changes are taking place in the telco market for the Techco transformation with adoption of Cloud, IoT, Cyber Security etc. The existing A2P portfolio acting as a cash cow that cannot be overlooked. Both, the local and international A2P portfolio combined is bringing 54% of the division's revenue. Jazz holds a majority market share and high ARPU (Average Revenue Per User) customers. Most banks like HBL, Standard Chartered, Allied Bank, UBL etc., FMCGs like Unilever, Nestle, Engro, Coke etc. are Jazz's customers Thus, making A2P business even more lucrative. The reason for this is that the CAPEX for the SMS had reached its breakeven over a decade ago, therefore, whatever they charge a customer for an On-net SMS is basically all construed as a profit, even off-net, the carrier charges are only about PKR 1.8 which is miniscule given that off-net SMS is charged at an average of PKR 5. Like other legacy telco businesses, traffic on A2P is expected to take on a declining trajectory in the next five years. So, Jazz Business team decided to take two strategic approaches.

4.1: PRICE STRATEGY

Record Price Hike in A2P messaging to ensure maximum revenues in the next five years to be milked from this cash cow.

The rise in prices was not just a Jazz strategy, it was an industry strategy. The price of On-net SMS was raised from a mere 30 paisa to PKR 2, and Off-net SMS was raised from 90 Paisa to PKR 4.5. This exponential increase increased the revenue in 2022 and 2023 by 116% and 57% respectively (Fig: 2.1). The price changes were implemented in three phases, and thus, in 2023 the traffic dropped by 23% as opposed to its rise in 2022 by 29% (Fig: 2.2).³

³ Note: all prices are reported are inflated to ensure confidentiality of telco data

Figure 5: Graph showing increase in revenue due to price hikes (in Mn)

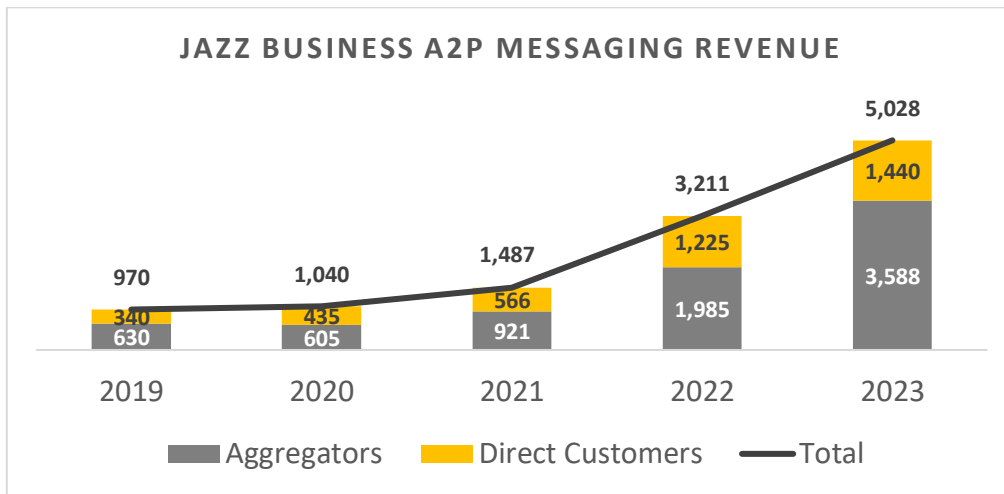
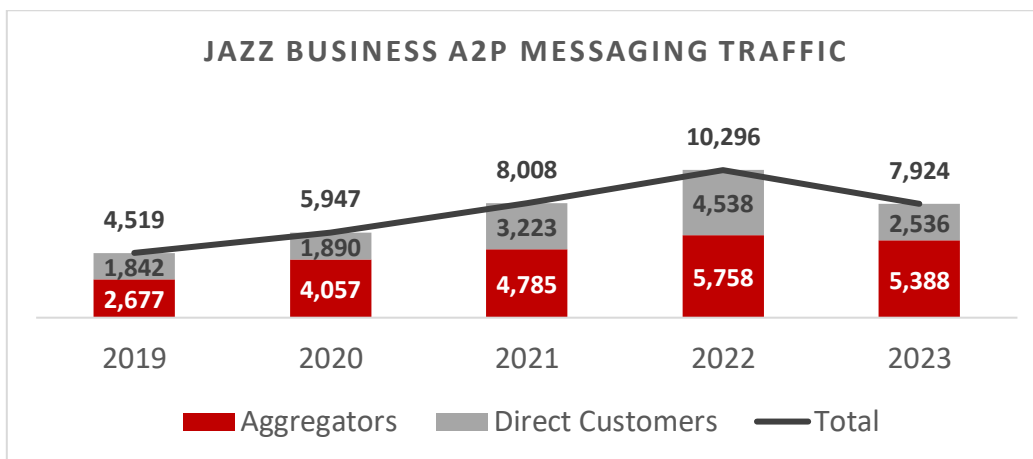


Figure 6: Graph showing decrease in Traffic due to price hikes (in Mn)



4.2 SYSTEMS EVOLUTION

Evolve the systems and platforms to cater for the new emerging technologies that threat to replace SMS in the future.

For the latter, I devised a strategy of a unified communications platform and a working product development model to help the organization cope with the rising competition of OTT messaging apps and the impending threat of A2P traffic decline.

CHAPTER 5: THREATS TO A2P MESSAGING

To evolve A2P into a hybrid omnichannel platform, it is important to understand what threats are faced by A2P today. We know that OTTs are ruling consumer messaging market today, but they are also penetrating the business market quite effectively. In some cases, it is more convenient to use OTTs for messaging for their several features and customization options that A2P fails to provide. Many provide a two-way communication that is more interactive and improves customer experience by a leap.

Here are some of the options out there today that the B2B customers can avail to improve their customer experience.

5.1 WHATSAPP:

WhatsApp has the potential to replace A2P messaging platforms for certain types of communications due to its widespread adoption. It has an extensive feature set such as **Rich Media Capability**, unlike SMS, WhatsApp can transfer files, documents, video, and audio. It offers **Two-Way Communication** to support real-time conversations, preset options menu for troubleshooting, thus, improving customer experience. Instead of just a Mast Head in A2P, WhatsApp offers **Verified Business Accounts** with opportunity to showcase portfolio which enhances credibility and trustworthiness. It also offers **High Engagement & Global Reach** as opposed to SMS where consumers hardly engage with on a regular basis. Lastly, it offers **Integration with Business Tools** by providing APIs and business tools for businesses to integrate WhatsApp messaging into their existing CRM systems and marketing automation tools. This enables seamless communication workflows and enhances operational efficiency for businesses.

5.2 SOCIAL MEDIA

Social media offers some similar benefits as WhatsApp, like **Rich Media Capability**, **Two-Way Communication**, **High Engagement & Global Reach**, and **Integration with Business Tools**. Moreover, it offers a great platform for **Community Building** through which businesses can cultivate stronger relationships with their audience and drive brand loyalty by fostering conversations, sharing content, and facilitating user-generated content. Social media also offers better **Analytics and Insights** into user behavior, engagement metrics, and campaign performance. Businesses can use these data-driven insights to optimize their messaging strategies, track ROI, and measure the impact of

their social media efforts in real-time. This is however an inbound way of communicating through earned media, it is often mistaken as an advertising management platform, which, I must point out, is a paid media activity.

5.3 TWO-FACTOR AUTHENTICATION (2FA) APPS

These apps are helpful particularly for authentication and verification purposes. A deep dive into Jazz's A2P traffic revealed that more than 50% of the traffic being routed is of the financial sector (Fig: 3.1). Of which, 69% is Debit Card transactions and OTPs, 14% is alerts and information, and 17% is promotional messaging (Fig: 3.2). Being a crucial part of a consumers dealing, as well as the most sensitive, two-factor authentication apps presents the biggest threat to A2P messaging traffic and revenue. 2FA apps are a real game changer in terms of the benefits they provide. With an additional layer of **Enhanced Security**, 2FA apps generate one-time passcodes (OTP) directly on the user's device, reducing the risk of unauthorized access to accounts. 2FA apps offer increased privacy compared to A2P messaging, as OTPs are generated and stored locally on the user's device without relying on external servers or telecommunications infrastructure. This mitigates the risk of OTP interception or eavesdropping during transmission. 2FA apps typically **Work Offline**, so OTPs can be generated without an internet connection or cellular service. In low coverage network areas, or during blackouts, this offline functionality is a life saver in comparison to A2P messaging. The **Multi-Device Synchronization** support of 2FA apps offers flexibility to access OTPs across any registered devices. Lastly, like social media and WhatsApp, 2FA apps can **integrate with a wide range of third-party services and platforms**, allowing users to use the same app for authentication across multiple accounts and services. This integration not only modernizes the authentication process but also diminishes the need or the reliance on only A2P messaging for sending OTP.

Figure 7: Jazz Business A2P Traffic by Industry

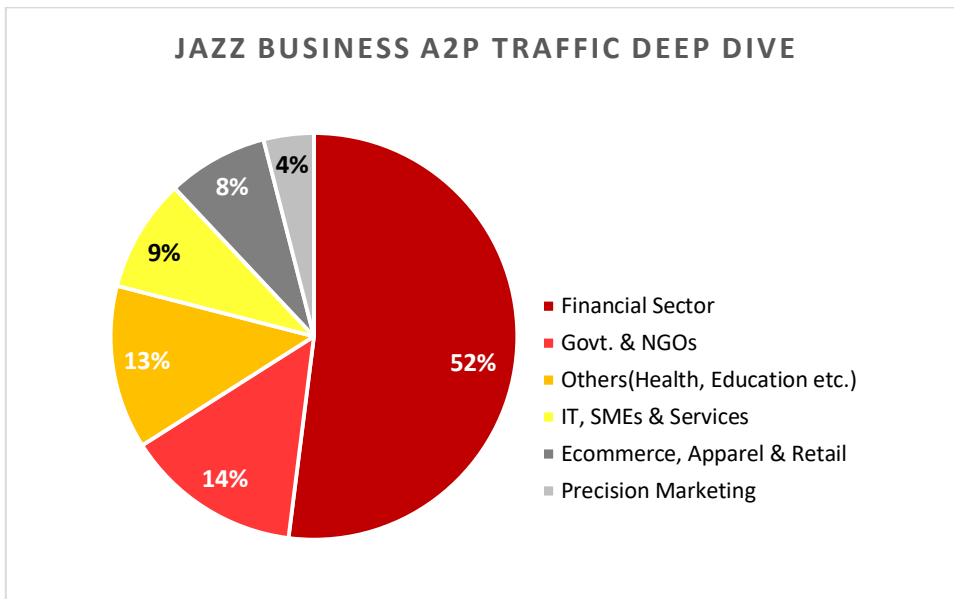
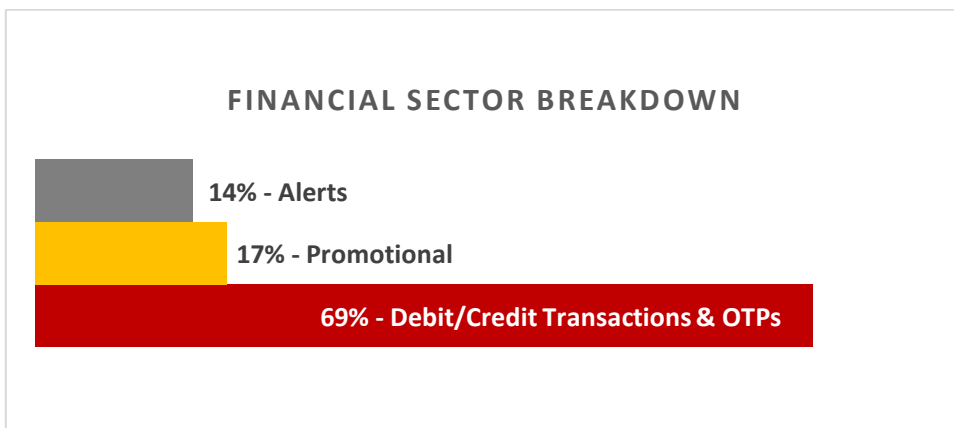


Figure 8: Jazz Business A2P Traffic – Financial Sector Breakdown



5.4 CHAT BOTS

Chatbots are automating conversations and interactions between businesses and users in real-time, all the time. As a result, they are trumping every means of communication with customers. They are fast, work 24/7, they can be trained on any number of perspectives, and they are scalable. The Instant Response feature is a life saver for a business in reducing customer frustration. Chatbots can deliver **Personalized Responses** and recommendations based on user preferences, behaviors, and past interactions. By leveraging data analytics and machine learning algorithms, chatbots can tailor conversations to individual users, increasing engagement and satisfaction. Chatbots can

be deployed across multiple messaging platforms and channels, including websites, mobile apps, social media, and messaging apps. This **Multichannel Support** enables businesses to reach users wherever they are, reducing reliance on A2P messaging for communication. Chatbots can facilitate **Automated Transactions** and purchases directly within the chat interface, eliminating the need for users to navigate to external websites or apps. Chatbots can handle a large volume of inquiries and interactions simultaneously, making them highly **scalable and cost-effective** compared to human agents or A2P messaging services.

5.5 MOBILE APP NOTIFICATIONS

Though limited, yet the scope of Mobile App push notifications is a growing trend for transactional as well as promotional messaging. It bypasses any need of a third-party intervention and makes direct contact with the person using the app. Despite its limitations, it is currently the most used method after A2P messaging because it is highly effective in its use. It offers **Personalized Content** based on user preferences, behaviors, and past interactions with the app. By leveraging user data and segmentation techniques, businesses can deliver highly targeted and relevant messages that resonate with individual users. Mobile app notifications are tightly integrated with mobile apps, allowing businesses to leverage app features and functionality to deliver seamless and contextually relevant messages. It also offers the **Offline Functionality** and **Enhanced User Engagement**

In addition to the aforementioned threats, Rich Communication Services (RCS) and Instant Messaging (IM) are also making strides in replacing A2P with overlapping features.

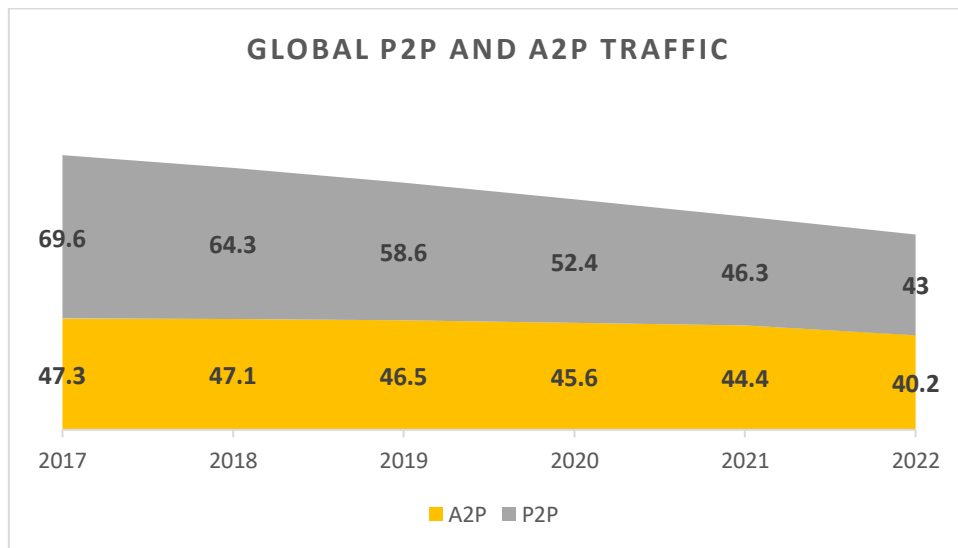
All in all, every platform has to offer something over and above A2P messaging. It is easy to say that the most in demand common factors are enhanced reporting and analytics, Enhanced User experience through two-way communication and API integrations with Third-party systems and applications.

One of the major contributors towards the adoption of new Over-The-Top (OTT)⁴ platforms for business communications is that the increase in audience present on these

⁴ OTT messaging platforms are applications through which, users can make voice and video calls, send and receive text, multimedia and voice messages over the internet. These apps bypass the traditional

applications and P2P usage in a constant downward spiral (Fig: 3.3). OTT usage has been on the increase since the early 2010s and is expected to continue growing. According to Juniper Research, the global volume of business messaging over OTT (Over-The-Top) platforms is projected to surge from 93 billion in 2023 to 254 billion by 2027. This anticipated growth of 172% is attributed to the expanded accessibility of open OTT messaging APIs and competitive pricing structures. These factors collectively establish a feasible alternative, particularly in rich media messaging, to traditional operator-led channels like SMS (Sharma, 2023).

Figure 9: Global declining trend in P2P messaging Revenue in (USD Bn) (Smozhanyk, 2023)

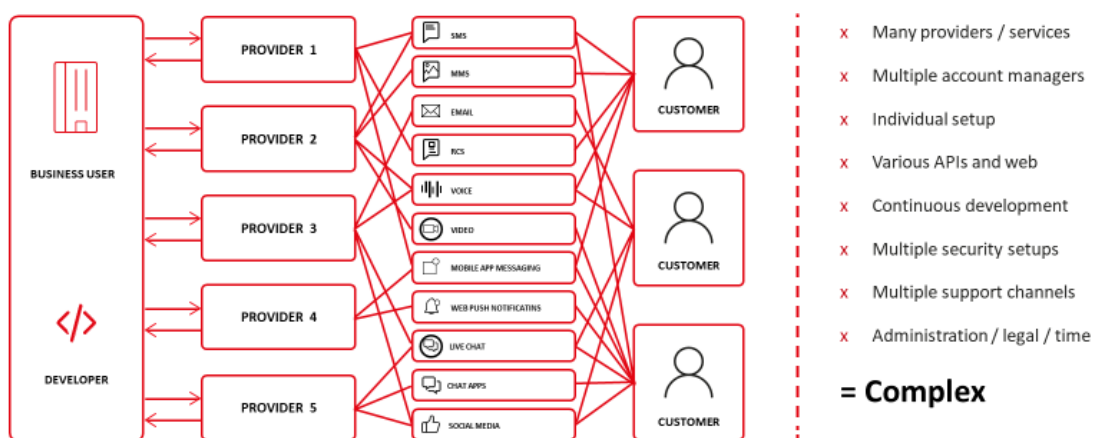


voice calling and SMS offered by mobile operators. These are the reason for the decline in use of Voice and SMS in the world. OTTs usually operate ad mobile apps like WhatsApp, Telegram, Signal, Viber etc.

CHAPTER 6: COMPLEXITY OF MULTIPLE OTTs

The rise in the use of OTT messaging services led to the adoption of few or many by enterprises, however, it became increasingly clear that this adoption created new challenges in customer experience. Too many touchpoints, too many partners, an entangled ecosystem, lack of centralization and loss of opportunities as well as deteriorating customer experience. The purpose of OTT adoption *is* to enrich customer experience, so complications in the ecosystem (*Fig: 3.4*) render the idea moot.

Figure 10: Example of ecosystem complication in the absence of an Omnichannel Solution



Research shows that following are the major challenges use of multiple OTT messaging services is posing.

6.1 FRAGMENTED COMMUNICATION:

Managing interactions across multiple OTT messaging platforms can lead to fragmented communication channels. This fragmentation makes it difficult for businesses to track and respond to customer inquiries consistently, potentially resulting in delays or missed messages.

6.2 RESOURCE ALLOCATION:

Managing multiple interfaces for multiple OTT messaging channels requires resources to track and respond to queries and concerns on multiple fronts. It also requires additional tech resources to ensure seamless transactions. Monitoring and responding to multiple

queries across multiple platforms can be cumbersome and time consuming, not to mention the lack of centralization can result into inefficiency and thus loss of lucrative leads.

6.3 CHANNEL PROLIFERATION:

Every few months, or years, a new tech emerges and becomes popular, resulting in users shifting or switching between one app to the other. Staying updated on the dynamic landscape of OTT platforms can be challenging, making businesses continuously evaluate and adapt their strategies for user communication.

6.4 INTEGRATION CHALLENGES:

Integrating multiple OTT messaging platforms with existing systems and processes can be complex and time-consuming. In the absence of a unified communications solution, it can be tedious to orchestrate and organize customer data, keep track of each interaction across multiple touchpoints and provide a harmonized experience the customer demands

6.5 TRAINING AND COMPLIANCE:

Generally, employees who work on customer support have a higher turnover ratio. With multiple endpoints and new emerging ever so often, it can be extremely draining to train employees on every platform every few months. Without standardized processes and guidelines, businesses may encounter difficulties in maintaining consistency and adherence to best practices across channels.

6.6 CUSTOMER EXPERIENCE:

The sole purpose of a business' presence on all available OTTs is to improve customer experience, however, inconsistencies in communication and service quality across multiple OTT messaging channels can lead to negative sentiments at the customer's end. Disjointed interactions, delayed responses, and repetitions in information can lead to frustration and confusion at the customer's end.

Overall, managing interactions with customers over multiple OTT messaging services can present significant challenges for businesses, particularly in the absence of an

omnichannel solution. Without a unified approach to communication management, businesses may struggle to effectively coordinate resources, maintain consistency, and deliver a seamless customer experience across all channels.

CHAPTER 7: FINDING THE RIGHT SOLUTION

In the extensive research given above, I conclude the following points:

1. P2P messaging is on a rapid decline trend.
2. A2P, albeit profitable today, is awaiting its doom within this decade.
3. OTT messaging services have a lot to offer, and they are the future of business messaging without a doubt.
4. Fragmented communication over multiple OTT messaging services presents an evil per se and as such needs a solution i.e., centralization.
5. Jazz Business in taking a leap of faith in an omnichannel approach.

The preamble I presented in the report in the beginning, was how Telco must transform into Techco, in order to sustain operations and remain profitable. In the entire discussion above, I created a link by explaining how markets are changing, how digital disruption is forcing our hands to continue adopting new trends and stay afloat. So to explain it simply, Jazz business is a B2B division of a Telco, where major transformation is taking place to reprioritize financially, and reengineer business models strategically to become a Techco. A cloud platform and infrastructure is already in place, IoT is already developed, and cybersecurity is being offered to customers. Now, in line with this vision and strategy, I present a solution to transform the A2P messaging services in a Telco agnostic fashion. And the answer is, at this time, a hybrid model, from which, the SMS section can be weaned off when necessary.

First and foremost, lets understand the idea behind the solution.

1. It aims to unify all platforms in one place so that all touchpoints, and kinds of communications and all sorts of transactions can take place in one, singular platform
2. It aims to ensure a closed loop approach – meaning, queries, leads, request, dismissals, etc. are processed, recorded, and reported in a similar format for interpretation.
3. It presents an opportunity for future improvement and growth through real-time reporting, insights into the consumer’s behaviors, identifies trends and patterns through deep analytics.

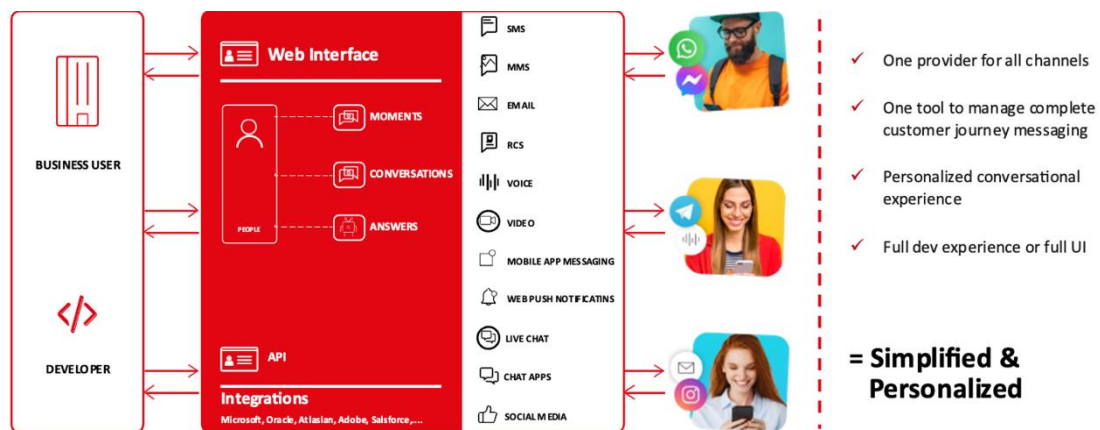
- It is in line with the Techco Philosophy - i.e., it helps businesses move towards a solution which reduces operational costs and increases revenues by presenting classified business opportunities.

7.1: THE SOLUTION: INTRODUCING OMNICHANNEL COMMUNICATION SERVICE

I propose an **Omnichannel Communications Service**, that unifies all touchpoints, conventional or contemporary (Cloud-based OTTs), under one platform (*Fig: 4.1*). One Ring to Rule Them All⁵. What it means is you get Telco systems (SMS, Voice, USSD, Calls) and all possible OTTs (Social Media, Chat Apps, Email, Web RTCs etc.) and build a SaaS layer on top, which hosts on your cloud platform (Lucky for Jazz Business, they already have a local cloud platform) and integrates everything with it (*Fig: 4.2*). Most OTT business messaging apps offer API integrations for seamless communication, so it makes it easier to integrate.

On most important factor to consider in this scenario is that Jazz Business is reprioritizing the financial model, however, with the country’s economic condition explained earlier, it is difficult to spare CAPEX for such a huge development. Therefore, a better idea would be to partner with a tech company, who is already building similar SaaS models and enter into a revenue sharing contract.

Figure 11: Example of an Omnichannel Communications Platform



⁵ Reference to the Trilogy of 'The Lord of the Rings' – where all rings' power was centralized into the ONE ring

Figure 12: Working prototype of an Omnichannel Platform



Jazz Business has an extensive partnership program to collaborate with tech-based enterprises – it helps Jazz Business bring in what's new and trendy without CAPEX, and it provides the partner enterprise the brand muscle and the customer base that they cannot afford to acquire. In case of an international partner, they get to penetrate a new market like Pakistan. It's a win-win strategy that saves both enterprises cost and maximizes profit margins.

7.2 OMNICHANNEL INTEGRATIONS

For a telecom company to acquire an omnichannel communication approach in A2P messaging, several integrations are necessary.

7.2.1 MESSAGING APIS:

Integrating messaging APIs allows the telecom to connect with various messaging platforms and channels, including SMS, MMS, OTT messaging apps (e.g., WhatsApp, Facebook Messenger, WeChat), and email. This enables businesses to send messages through multiple channels and reach customers on their preferred platforms.

7.2.2 CRM INTEGRATION:

It can be very important to know the customer even before interacting with them. Integrating with the Customer Relationship Management (CRM) systems can help centralize customer data across all touchpoints. This will give the business a unified view of previous customer correspondences, their preferences, or any other historical data that can help create a personalized and context-aware conversation.

7.2.3 CHATBOT INTEGRATION:

Chatbot integration can be optional, but more and more businesses are opting for it. Chatbots offer automated interactions, they can be significant in providing prompt responses and assist customers with basic queries. Chatbots can also be trained to manage repeat cascading conversations, freeing up human resources to handle complex complaints or situations.

7.2.4 VOICE INTEGRATION:

Integrating voice communication capabilities allows telecom companies to offer voice-based interactions as part of the omnichannel approach. This may include voice calls, interactive voice response (IVR) systems, and voice assistants, providing customers with additional options for communication.

7.2.5 ANALYTICS AND REPORTING INTEGRATION:

Integrating analytics and reporting tools enables telecom companies to track key metrics across all communication channels. This includes metrics such as message delivery rates, open rates, response times, conversion rates, and customer satisfaction scores, providing insights into the effectiveness of messaging campaigns and customer interactions.

7.2.6 SECURITY AND COMPLIANCE INTEGRATION:

Integrating security and compliance measures ensures that messaging activities comply with industry regulations and standards, such as GDPR (General Data Protection Regulation) and TCPA (Telephone Consumer Protection Act). This

includes features such as data encryption, consent management, and opt-out mechanisms to protect customer privacy and prevent spam or abuse.

7.3 OMNICHANNEL FEATURE SET

The Omnichannel that I propose based on a SaaS model must have the following capabilities.

7.3.1 CONVERSATIONS – A Cloud Based Contact Center Solution:

Functionally interact with customers through a variety of widely used industry channels, designed to improve customer and agent experience through seamless omnichannel interactions in a unified, easy-to-use workspace. This solution offers two options: either through a web interface or via HTTP API, providing the following features:

- a. Two-way Conversation
- b. Conversation threading to trail the previous messages
- c. Conversation management: queue and routing management, agent assignment, resolution management, and history overview.
- d. Template Settings, to save time on tedious and repeat queries
- e. Defined User Roles, for example a conversation supervisor and his agents will have rules and permissions of access, TATs and training.
- f. Inbound and Outbound conversation - receive inbound messages from customers, assign to agents, and reply with ease. Start a new conversation with a customer on any channel.
- g. Conversation Tagging – based on categories defined in enterprises' internal policies
- h. Develop automated bots to provide instant responses to frequently asked questions (FAQs), allowing agents to concentrate on resolving more intricate inquiries. Seamlessly transition customers from a bot to a live agent when needed.
- i. Monitor the effectiveness of contact center and adapt its configuration according to workload and specific subject matters. Evaluate how agents allocate their time using occupancy and engagement metrics. Assess agent productivity. Ensure customer satisfaction by employing automated sentiment analysis.

7.3.2 CONVERSATIONAL COMMERCE – A Conversion Funnel Specialist Ecosystem (Fig: 4.3)

Through this category, conversation specialists interact with customer at every stage of the sales disposition funnel. The features should allow the user to

- Create or import customer profiles,
- Tag profiles based on their position in the defined customer journey.
- Design or select collateral to share with customers relevant to their stage in the Sales Disposition funnel (Fig: 4.4)
- Generate reports on conversion success and learning.

Figure 13: An ecosystem of Conversational Commerce

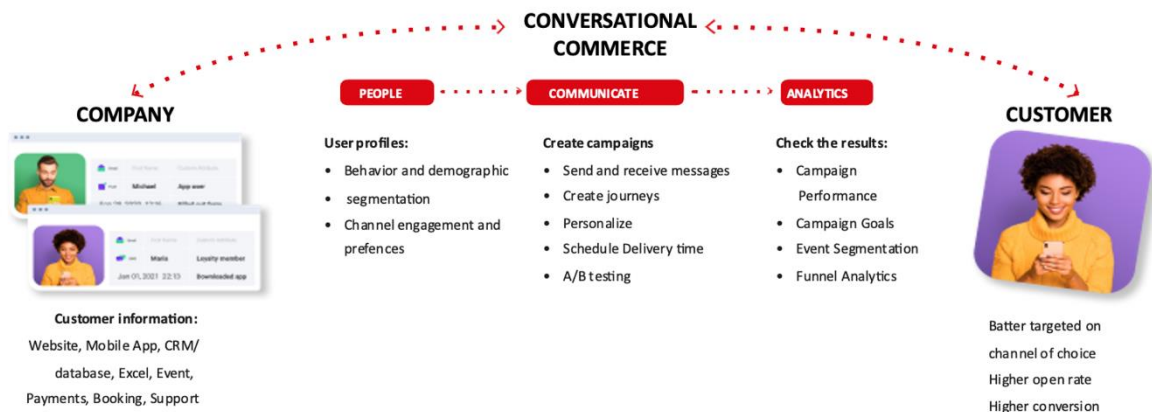
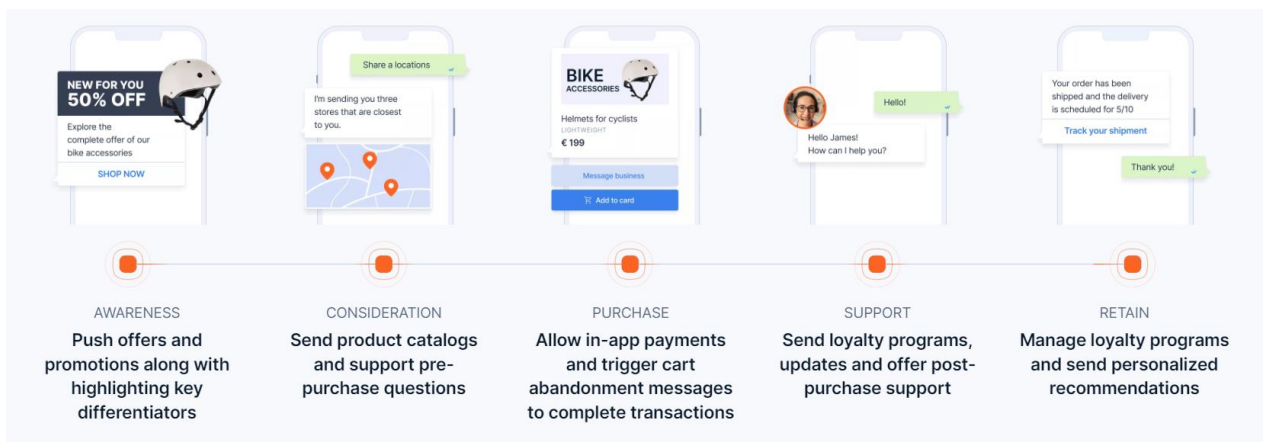


Figure 14: Example of Sales Disposition Funnel



7.3.3 AUTOMATED CONVERSATIONS – A Chatbot to be integrated with all Features

Automated chat bots are becoming popular by the day. Over time, developers have cracked the code of building efficient, smart and competent chatbot. Through Machine Learning (ML) and Artificial Intelligence (AI) chatbots are becoming more and more interpretive. Thus, the future of enterprise communications is becoming more robust and cost effective.

- a. Drag and drop code free interface – No coding required to build a chatbot
- b. Omnichannel deployment – Deployment of chatbots on as many preferred channels
- c. Contextual live-agent takeover - Transfer the conversation from chatbot to live agent.
- d. Extensive analytics - Dive deep into conversational, session and user-specific analytics to drive optimization

7.3.4 INTEGRATED DATA MANAGEMENT PLATFORM (DMP)

to furnish analytics and reports on the customers in the pipeline. This is one of the most important features of the Omni communication platform. The traditional A2P systems provide cursory reports which do not help businesses make informed decisions. With the help of the DMP, Customers should be able to customize reports as per, channel, time frame, conversion metrics and much more.

7.4 OMNICHANNEL COMMUNICATIONS PLATFORM IMPLEMENTATION PLAN

Now that we know the power of the channel, with the following simple steps, Jazz can implement an omnichannel platform.

1. Find a trusted partner – with the feature set explained above, the one name that pops in my head is Infobip.
2. Develop a business case to show the value to money estimated to be spent on SaaS platform development, API integrations and deployment

3. Productize the platform by developing a price strategy based on the number of users, number of customers being services, and number of queries being handled. Bundle cloud storage at a discount of Free of Charge (FOC), considering the business case positivity.
4. Develop collateral for each step of the sales disposition funnel to make sure no stone is left unturned
5. Develop a commission structure for the sales team
6. Train the sales team
7. Launch the product in the market with a digital campaign

It may sound easy on paper, however, launching a new product like this can take over six months, sometimes even more.

CHAPTER 8: CONCLUSION

It is evident from the earlier study that Jazz Business has already taken steps towards transforming into a Techco. with a Cloud Platform, a Cybersecurity practice area, an extensive IoT portfolio, and an Ad-Tech platform in the works, so the transition of A2P portfolio into a more diverse omnichannel approach is natural. Jazz Business already has the advantage of being the market leader in A2P, with digital integrations, and systems' enhancements, I am certain that Omni can be a success.

The most important thing is the data Jazz houses. Corporations who use A2P platforms for Promotional messaging request data filtering to target their right audience. Jazz is already at an advantage with the data 1/3rd of Pakistan's population as its customers. what it means is that most of the target audiences of any business are already jazz's customers and thus their data is already available for any kind of targeting a B2B customer may need in order to find their bull's eye, therefore, with the integration of OTT platforms, Jazz gets further data points to aid their customers in their campaigns.

Moreover, Omnichannel presents more cohesive, enriched and actionable analytics to improve upon the campaigns. This is an advantage traditional A2P cannot provide, as it has its limitations in reporting. With Omnichannel, a complete customer disposition funnel can be followed, and a customer journey can be completed from start to finish.

Omnichannel is also more secure than A2P messaging, through which several cases of pilferage of crucial and confidential data have been reported in the past. Omnichannel offers the security of multiple end-point-detection and firewalls that helps keep sensitive data secure.

Launching a SaaS based / Cloud based omnichannel communications platform is definitely a step in the right direction. It is aligned with the vision Jazz business has to become a Techco. and a solution like this is actually much in demand in the market given the trends towards usage of OTT services. If Jazz Implements this, I presume they will breakeven any CAPEX spent on this within the first three years, during this time, A2P will still be yielding profits.

Initiatives like these are crucial for teleco survival now. and Jazz, being the market leader, must adopt this to set an example for the other organizations.