

# TOWARDS TOMORROWS

ISSUE 1, VOLUME 1

HOW ANALYTICS  
**BOOSTS**  
A COMPANY'S  
CXM INITIATIVES

AFRICAN  
CONTENT  
STORY

**DATA** IS THE  
NEXT CURRENCY!

The **DIGITAL**  
CONTENT SPACE  
and the Problem  
of Plenty

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# EDITORIAL

It would indeed be a bit of an understatement to say that the telecom sector is on a roll. As per data released by GSMA Intelligence, as of October 2016, the total number of mobile connections (including Machine-To- Machine) stood at 7.8 million, while the number of unique subscribers stood at 4.8 million (and counting).

This is merely the tip of the iceberg. Every industry analyst (worth paying heed to) is of the opinion that the best is yet to come. Several megatrends are waiting in the wings, as per GSMA Intelligence's Global Mobile Trends report. For starters, the current age of digitization will, eventually, move towards automation. This, as per the bigwig, will take place primarily on the back of the "big seven" - i.e. -artificial intelligence, analytics, the cloud, smartphones and smart devices, software, computing power and connectivity.

For us, this information is (or at least ought to be) more than mere data. Examined closely, a plethora of potential business opportunities may just be lurking under the surface. This is where our stance, The Business of Tomorrows comes into play. After all, the idea is to position ourselves as a company capable (and prepared) to tap these opportunities-not just to boost bottomlines but also to be challenged by what the "tomorrows" of each of these verticals may unearth.

This, in a nutshell, is the premise of the Towards Tomorrows digital magazine. To examine what was; what is likely to be and, essentially, being in the right place at the right time. Our debut issue brings to you a collection of the key trends likely to make a splash this year in each industry, select blogs and infographics, case studies, and analyst mentions.

**The Business of Tomorrows** is upon us. Are we ready?

# HOW ANALYTICS BOOSTS A COMPANY'S CXM INITIATIVES



AMIT SANYAL

There's no escaping it-customer experience management (CXM) is what makes or breaks a brand. This is especially true today, since telecom operators live in precarious times, with falling average revenue per user and wafer-thin profit margins. To top it all, customers are just itching to jump ship at the first sight of trouble-i.e.-bad customer service. Let's look at a few analyst statistics in this regard:



By 2020, customer experience will overtake price and product as the key brand differentiator

- WALKER

68 per cent of customers say that they've switched service providers owing to poor customer experience

- ACCENTURE

95 per cent of dissatisfied customers tell others about their bad experience

- ZENDESK

Customers who experience a positive social customer care experiences are nearly three times more likely to recommend a brand

- HARVARD BUSINESS REVIEW



In other words, operators, please sit up and take notice! A sound CXM roadmap is the secret ingredient that gives your business extra bite. And here are a few more statistics to prove it:



- According to American Express, one happy customer can equal as many as nine referrals for your business.
- Maximizing satisfaction with customer journeys has the potential not only to increase customer satisfaction by 20 per cent but also to lift revenue by up to 15 per cent while lowering the cost of serving customers by as much as 20 per cent -McKinsey
- Customer experience leaders have more than a 16 per cent advantage over competitors in willingness to buy, reluctance to switch brands, and likelihood to recommend - Temkin Group



Now the tricky bit-where do operators start? Well, it's a two-fold step, really, that begins with proactively tracking down what customers (actually) want. This, in turn, will (hopefully) throw up actionable insights into the challenges related to ensuring customer satisfaction. Chalking out a CXM strategy is merely the most obvious result of the above plan.

So, what makes a customer tick? While there is no single appropriate response to this question, I would

like to offer up analytics as a viable option. Here's why—the age of data is upon us. We collect copious amounts (some analysts say an estimated 2.5 quintillion bytes) about individuals, places, processes, et al, every day. This data comes from multiple sources, such as sensors used to gather climate-related information, posts on social media sites, digital pictures and videos, purchase transaction records, cell phone GPS signals, the list is endless.

Here's the catch, though. While there is little doubt that the intelligence of our systems is responsible for facilitating this growth, the volume of structured and unstructured data being collected isn't necessarily valuable on its own. To gain actionable insights, an operator ought to know what to do with this data, how to leverage it to the fullest.

This is where analytics steps in. Before jumping the gun, however, operators ought to be aware of the essential elements of using analytics successfully:

### Aggregate data from multiple sources.

Let's face it, a multi-tiered approach is essential to gain a 360 degree view of the customer journey. Operators, think Facebook, think Twitter and all the social media platforms out there today. The customer uses these mediums to broadcast their views on every brand. The trick, therefore, is to integrate analytical tools from CEM into social media monitoring to identify customer behavioural patterns. The result? Proactive engagement at every stage of the customer lifecycle!

### Utilize existing CRM system data:

This essentially ensures that data is centralized, accessible and can be used to gain a holistic picture of the customer. Operators need not waste precious time in collecting the same data over and over again.

### Examine unstructured data:

Going forward, data volumes are only going to increase substantially. The idea, therefore, is to adopt an all-encompassing approach, which may have to include complex data mining practises. If carried out proactively, companies can gain a competitive edge and unearth previous unevaluated customer data links.

There's another catch—operators, please note, analytics isn't a "one size fits all" strategy. Choose your best fit. Interestingly, the evolution of analytics itself took place over multiple stages. According to industry analysts, in the past, all available data was scrutinized using descriptive analytics, which looks at the reasons behind past success or failure. An example is the results a business gets from the web server through Google Analytics tools. The outcomes help understand what actually happened in the past and validate if a promotional campaign was successful or not based on basic parameters like page views.

The next step (and with the advent of big data) is predictive analytics, which focuses on the question: "What is probably going to happen in the future?" An interesting example of an application is in producing the credit score. Credit score helps financial institutions decide the probability of a customer paying credit bills on time.

Next up is prescriptive analytics, which goes beyond future outcomes to answer the question: "What is the able action?" Interestingly, analytics are taken a step further, with the advent of highly intelligent cognitive systems. Instead of needing to be programmed, they use natural language processing and machine learning algorithms to help make key decisions using huge volumes of fast-moving big data.

Please note dear readers that these four categories of analytics should ideally co-exist. There is no question of one outweighing the other, in terms of benefits, etc; they're all different, with their own merits. Do remember, though, that all are equally necessary to obtain a complete and clear picture of what a customer actually wants by using all of the available information and data.

I'd like to conclude with a caveat which is that analytics is only as good or as bad as the implementation of the requisite action plan. For analytics to be successfully leveraged, the operator ought to be guided to the actionable tasks which can be implemented. If not, the company runs the risk of "analysis paralysis", which doesn't leave any room for any quantifiable outcome. In the end, the numbers say it all!



It would be a bit of an understatement to say that the digital content market has grown by leaps and bounds over the years. Indeed, it may be more fitting to say that the digital content landscape has evolved over a period of time.

Now, let's examine both statements—first, a few hard facts and figures. According to the good folks over at Juniper Research, the digital content market was pegged at just under \$99 billion in 2014 and will increase to nearly \$155 billion in 2019, an average annual increase of 9.4 per cent. This magic number, according to the research firm, will be largely achieved by the gaming segment, although the content sector with the strongest growth over the forecast period will be e-publishing.

Now, moving onto the oldest and arguably, the best loved component of the digital content space—music. As per Juniper, revenue generated from streamed services will

be partially offset by a significant decline in ringback tone revenues, particularly in the Far East and China.

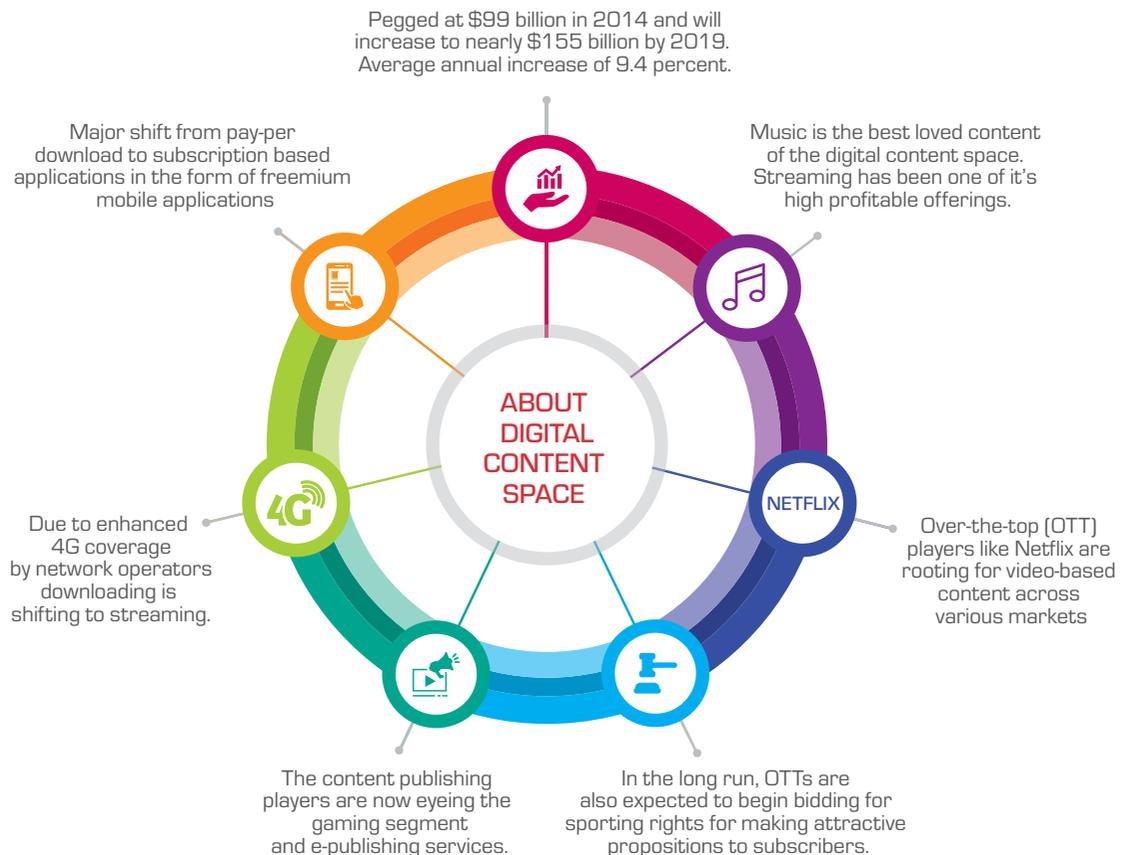
Next, Over-The-Top (OTT) players are expected to root for and push video-based content. In other words, players like Netflix will continue to expand their footprint across various markets. And, needless to say, these players will focus on enhancing the amount of original content they offer to end users. Going a step further, OTTs are also expected to begin to bid for sporting rights in the longer term, thereby making them even more attractive propositions to customers.

Now to tackle the other bit—in so far, we've established the fact that the progress made by the digital content industry is nothing short of magnificent. But how has this industry evolved? Well, two major trends come to mind immediately. First, across the digital arena, there has been a gradual transition from the pay-per-download model to

# THE DIGITAL CONTENT SPACE AND THE PROBLEM OF PLENTY



ATUL MADAN



subscription. The best example of this shift is in the mobile space, where the overwhelming majority of applications (99 per cent, in fact!) are now free at the point of download.

Therefore, the majority of application-based revenues (pegged at 88 per cent in 2014) can be traced back to freemium applications, via a combination of one-off purchases for additional items made in-application or through subscriptions. Moreover, there is also a shift from “downloading” to “streaming”, which will continue to become more significant, as network operators enhance the coverage of their 4G networks.

In other words (and I cannot overemphasise this), we are living in a world of 24/7 connectivity, where every customer accesses content on their own terms and on the device of their choice. In a nutshell, the way that content is accessed, monetised and delivered has changed significantly. Naturally, this has implications for all stakeholders of this industry and these players are scrambling to ensure they don't get taken by surprise.



So, what are the challenges facing these stakeholders? Well, first and foremost, content monetization and payments. Of course, this issue is as old as the hills, but one not likely to dissipate anytime soon. In a nutshell, monetisation and payments are a key focus for companies. The issue is compounded by the fact that a considerable proportion of the world's population is 'unbanked', which implies that service providers ought to find alternative methods for consumers to make payments. Now, a number of options, such as carrier billing, subscriptions and pay-per-video or pay-per-download have been closely examined, but, while all three have their merits, my guess is, this debate will continue for some time to come.

Next up is content discovery and distribution, another oft-debated subject. Now, there is little doubt that there is a surfeit of content up for grabs today. But, the question is (and remains), how does one ensure the subscriber is able to easily discover these offerings? Of course, let's not forget that the content market is very fragmented, which makes it harder for distribution channels to access the right content. Consider the disparity-leading players in

the content industry can afford to create dedicated channels for content distribution, but it isn't that simple for small-time artists and independent content creators. How do these players ensure their offerings find their way to the right audience? How do they make money from this? Needless to say, this, in turn, cascades into the age-old issue of piracy.

So, while I have outlined the evolution, trends and the various challenges facing the digital content market, the intention wasn't to paint a bleak picture. I would like to conclude by providing an idea of what can be done. And here it is-net, net, the need of the hour is to create a “marketplace” or a platform to cross the chasm between content publishers and customers. This platform should ideally permit publishers to push all kinds of digital content directly to the customer. In other words, a holistic platform to address a customer's every digital-related need, whilst eliminating (or at least mitigating) the issue of content discovery and delivery can go a long way in simplifying the overall ecosystem. Well, we hope so.

# KICK-STARTING THE MOBILE WALLET REVOLUTION IN THE GCC REGION



SRINIVAS NIDUGONDI

Over the past few years, the mobile payments industry has certainly made its presence felt on the global stage.

As per data released by Statista, in 2011, the number of global mobile payment customers stood at 160.4 million. A mere four years later (in 2015), this number jumped to 384 million.

However, while this growth is impressive, it varies across regions. In 2015, a majority of these customers hailed from the Asia-Pacific region (141.4 million), as per the firm. Meanwhile, a stark contrast was the Middle East, which had 4.7 million to its credit.

Moving on, let's zoom closer into the Middle East and North Africa (MENA) region. Sample this-according to a report released by the Arab Financial Services Company, the financial landscape in the region is characterized by variations in financial inclusion. On one hand, over 65 per cent of adults in the GCC region (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates) have an account at a financial institution. On the other, however, this figure stands at less than 20 per cent in countries like Egypt, Sudan, Iraq and Yemen. Naturally, as a result, the development and uptake of mobile payment solutions in the region has been patchy at best. In fact, there is a wide gap between the kinds of solutions the customers are demanding as well. In this context, the report states that in the less developed countries, particularly North Africa,

mobile money solutions have been the main growth vehicle for financial inclusion. Needless to say, the GCC region has a different story to tell. Here, developing mobile payment solutions such as mobile banking, mobile wallet, etc, is the norm.

Now let's put the GCC region under the microscope. First off, there is little doubt that the business case for mobile payments in this region is strong, to say the least. How? Well, for starters, the average mobile penetration is very high-190 per cent. No mean number, this!

Needless to say, operators and third party providers didn't let the grass grow under their feet before jumping onto the mobile payments bandwagon. As a result, the space saw a flurry of activity. Several examples can be cited in this regards but, for the sake of remaining crisp and concise, let's cite a few.

It all started in 2013. Boloro, in collaboration with Zain, launched the GCC region's first ever mobile payments service on buses in Kuwait. Customers could securely and conveniently pay their fares by simply tapping their mobile phone when boarding the vehicle. In fact, all the bigwig operators in Kuwait and Qatar, Zain, Ooredoo and Viva currently offer this service.

On the other hand, there are entities which have been a bit slow on the uptake. I allude to banks, which have preferred to adopt a "wait-and-watch" stance with regard to mobile payments. In my opinion, banks ought to flex their muscles



on this stage. And why not? These players can easily leverage their already-established relationships with merchants, not to mention the treasure trove of customer data they're sitting on.

So, what's stopping them? Well, the biggest barrier is the fact that these entities still consider the mobile handset and all applications concerned as a value added service. As a result, non-banking players have ventured far ahead of them in the mobile payments game. Allow me to add my two cents-it is time that these players straighten up and chalk out a strategy to at least finish neck-to-neck with the competition. The first step? Start considering the mobile channel as an integral part of the business!

Of course, these entities must have a war chest in place before meeting the competition head-on. Enter the prepaid wallet. Now, the advantages of the prepaid wallet have been discussed ad nauseam, which is why I won't wax eloquent on the same. I would like to point out, though, that the most important reason (arguably) why banks ought to take prepaid wallets seriously is two-fold. First, their merchants are empowered and second, this service reduces the high "card not present" rate during a transaction. A prepaid wallet is typically built around a stored value account. Customers can transfer the money from their bank account or card to the prepaid wallet. Since payments are not made directly through cards, the high "card not present" charges do not apply. As a brief side-note, permit me to point out that the very enthusiastic uptake of smartphones in the region can play a crucial role in the uptake of this service.

**After all, 68 per cent of all handsets in the region belong to this category!**

**So, why shouldn't such applications flourish?**

Now let's turn our focus to another interesting trend that is rearing its head up in the region. Enabling seamless payments through contactless cards is the new kid on the block. In fact, a few banks have already launched their offerings in this regard. The revolution was sparked off in 2015 by Boubyan Bank, the first entity to launch Tap & Pay



credit cards in Kuwait. Later that year, Riyad Bank and NCB (supported by AFS) followed to introduce Saudi Arabia's first contactless credit card. Also, with mobile payments foraying into the game, expect the contactless card to be replaced by the mobile handset.

Let's take a quick look at the secret sauce behind mobile-based contactless payments-namely, the technology. Several can be used for this service, for instance, Near Field Communications (NFC), QR Codes and sound-based technologies. Of these, NFC is emerging as the forerunner in this race. The reason is simple-Host Card Emulation (an NFC variant) lets banks launch contactless payments rapidly without changing the existing SIM card and involving a trusted service manager (TSM). Little wonder, then, that NFC is the technology of choice for banks and financial institutions alike.

Adding another dimension to this, banks may consider investing in developing their own HCE platform, as opposed to opting for OEM pays like Apple Pay and Samsung Pay. Here's why - a bank-owned HCE platform works on any NFC-enabled device, unlike the Apple Pay and Samsung Pay, which function only on the Apple iPhone 6 and the Samsung S6 devices respectively. Moreover, with their own HCE platform, banks will have complete control over the tokenization platform as well as the token lifecycle. Banks will have the ability to monetize the token platform to enhance tokens for other use cases, like token based ATM cash out, P2P using tokens, etc.

Net, net, it is only a question of time before prepaid wallets and contactless payments are in the spotlight in the GCC region. The revolution is well and truly underway. What remains to be seen is the direction it takes, in terms of uptake, technologies and services. After all, the Middle East market is an inherently contradictory one. A customised stance is thus needed to succeed. Remember, there is no "one size fits all" approach to mobile payments!

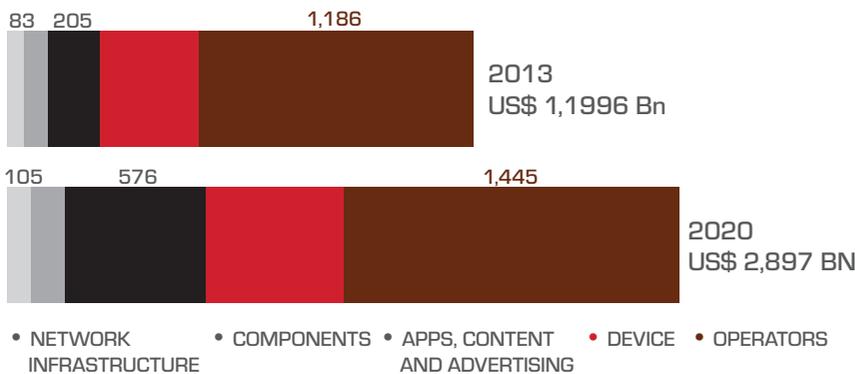
# DATA IS THE NEXT CURRENCY!

ADITYA DHRUVA

Telecom Operators worldwide are facing increasing heat due to gradual erosion in their core infrastructure revenues. P2P Messaging is going down affected by OTT traffic. Net Neutrality concerns are affecting service differentiation and segmented monetization. As the world moves towards all IP for every mobile service, Operators need to quickly turn around a corner and find newer ways to monetize their data infrastructure and be ahead of the game Operators form the backbone of the mobile economy and have the highest contribution to the mobile ecosystem. The Mobile ecosystem revenue is forecasted to grow to nearly \$3 Trillion by 2020, as per GSMA.

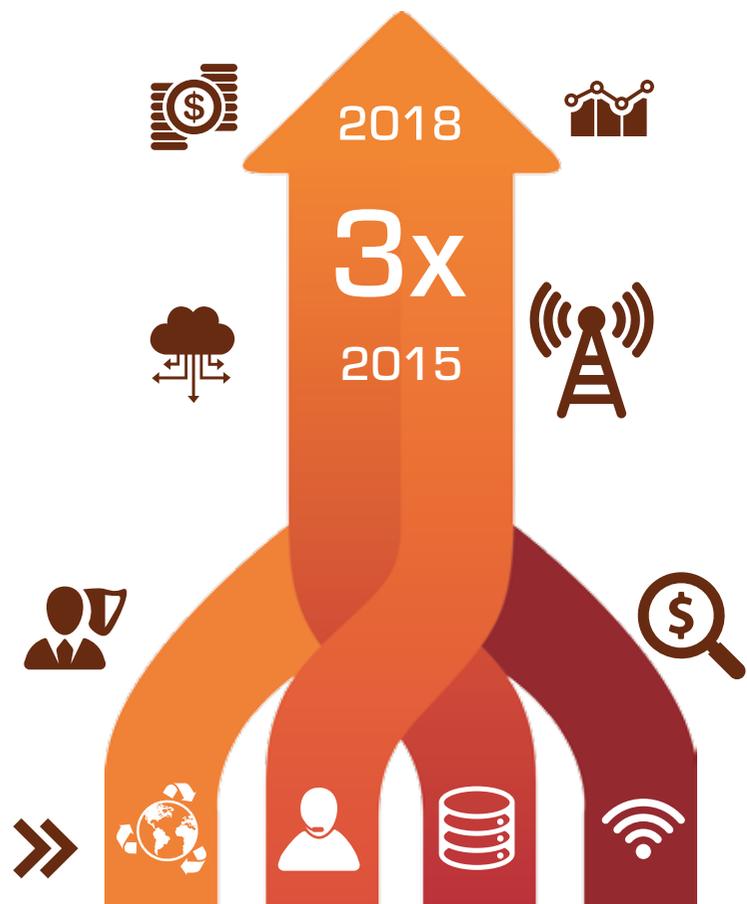
Sources GSMA Intelligence

Mobile ecosystem total revenue forecasts (US\$Bn)



At the same time, the share of the operators in the pie is reducing. Think about this – Telecom Operators have invested zillions of dollars in setting up the infrastructure that is enabling us to communicate the way we want today, anytime, anywhere. The digital transformation of the industry has caught out the operators, and they are finding it increasingly difficult to sustain their revenues and grow. Voice revenues are on the decline, P2P messaging traffic decline is faster, owing to the proliferation of OTT services. Traditional core-infrastructure services cannot sustain them for long. Everything is going to IP, everything is data. The big question in front of operators today is how to effectively monetize data traffic.

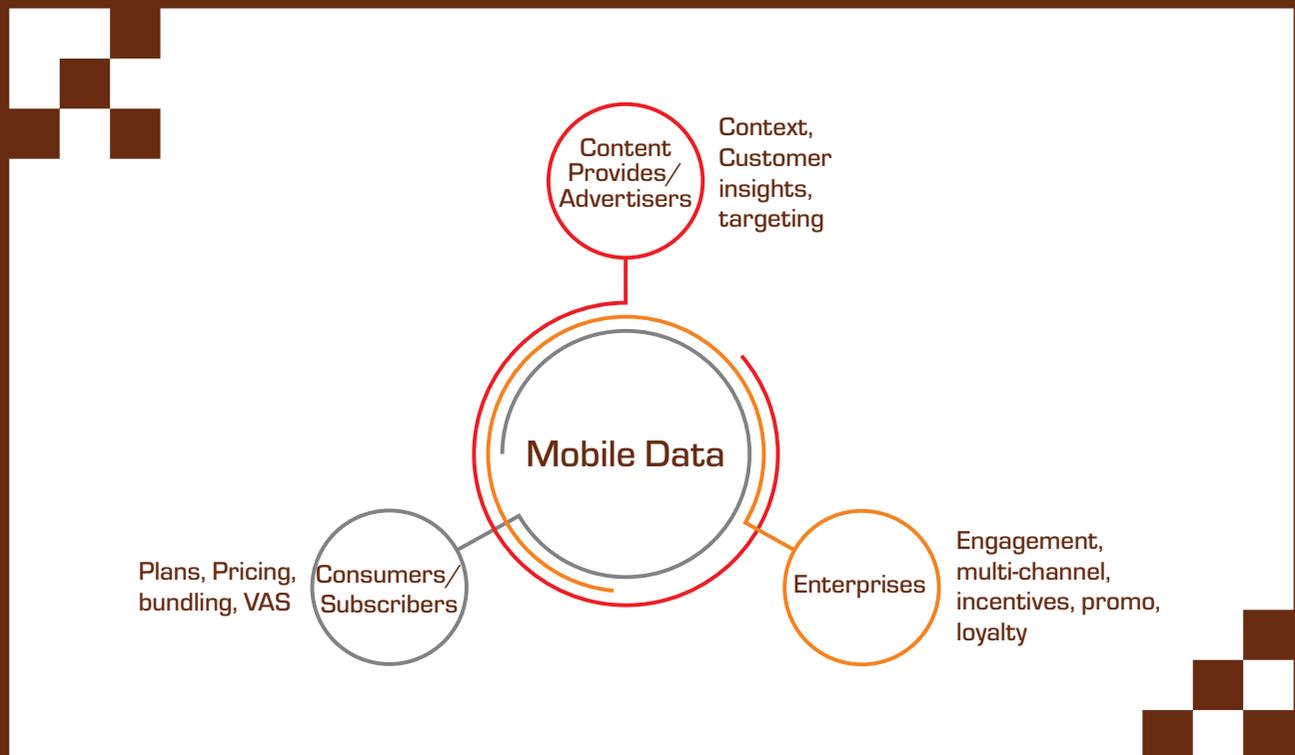
Gartner predicts that by 2018, worldwide mobile data traffic will increase 3x from its current levels



However the operator data revenues are not increasing by a similar proportion. Ability to monetize that insatiable appetite for more data holds the key to their long term success

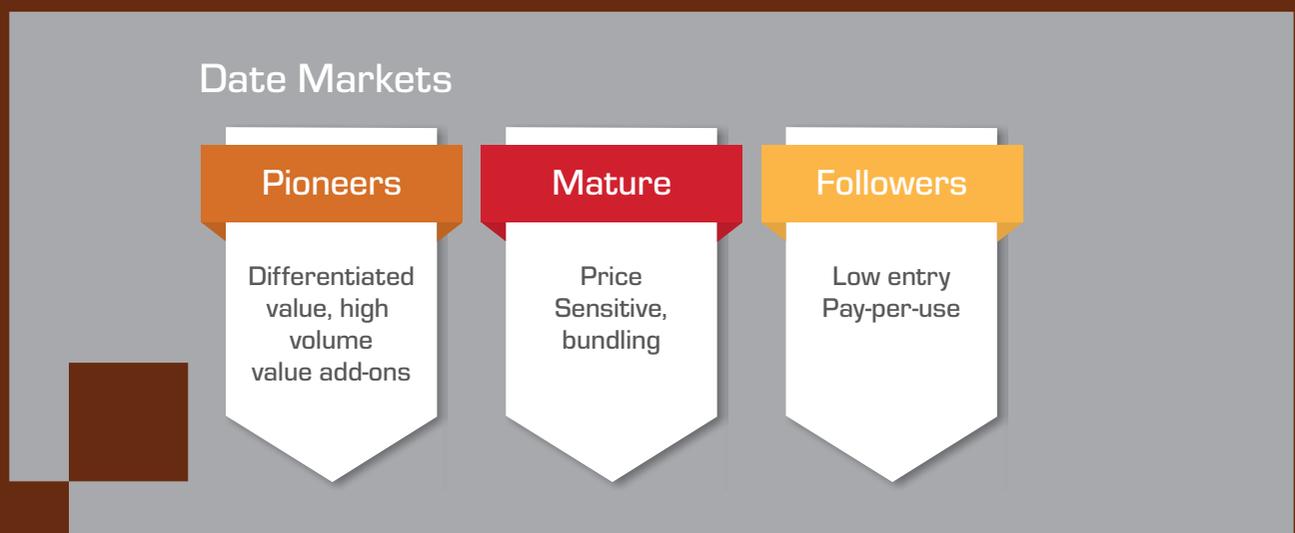
### Mobile Data Revenue eco-system

Broadly, the mobile eco-system is enabled by three main drivers – Consumers, Advertisers and Enterprises



### Consumers / Subscribers

Depending on the general consumer consumption pattern, the global consumer / subscriber market for data can be broadly classified into Pioneers, Mature and Followers segments.



Operators need to evolve differentiated strategies to individually address these segments. These could range from offering higher data volume limits in data-hungry markets, competitive pricing, pay-per-use models for driving data usage, to even data VAS like data sharing options for friends / families for common apps.

### Content Suppliers / Advertisers

Advertisers provide the means for businesses to reach their customers. Their main value comes from being able to offer a higher conversion rate through better targeting.

The captive customer base of subscribers is a huge asset that operators have to make use of. Usage patterns, location information, demographics, interests and what not; all are key data that the services out there are dying to get hold of for driving custom intelligence and targeted sales.

The \$500Bn Content / Advertising market is desperate to get these insights that will help them generate higher conversion rates, with more contextual and targeted advertising. Operators are also in the best position to keep the data anonymous given their long-term experience in dealing with user privacy concerns.

### Enterprise / Sponsored Data

Enterprises are the businesses that want to get connected with their customers anytime anywhere. They are looking for newer channels for engagement for retaining customers, promoting new services and improving service quality.

The big opportunity that is today untapped to a fairly large extent is Data Sponsorship. It has been making the rounds for a while now, but net neutrality debates have curtailed its success. A top Tier 1 operator in North America introduced a service named Sponsored Data in 2014, where customers can browse, stream and enjoy content from data sponsors without impact-

ing their monthly data plan allowance. Some limited use-cases are possible with zero-rating, but still there is the search for those killer use-cases, that can help realize the true potential of this business.

This requires a paradigm shift in how operators are thinking about data. There is need for operators to start to treat data as something that could be used for trade. Enable enterprises to use data as a means to incentivize, reward and promote services towards subscribers. Enterprises are looking at ways that go beyond just offering discounts or distributing gift coupons. What if operators created the environment for enterprises to use data flexibly as part of their marketing campaigns and customer retention schemes? What if an enterprise could deploy data-led loyalty programs? What if they could manage real-time campaigns that use a mix of customer / network intelligence that the operator brings in, and incentives based on data packs? The growing use of smartphones and launch of an ocean of apps and services for the consumers has put a premium on the data pipe of operators. Operators should look to take advantage of this by making it convenient for businesses to connect with their customers using data as an engagement channel.

Data monetization is critical for the long-term success of operators in this age of digital transformation. It is quite probable, in the very near future that data might just become a newform of currency, with a healthy contribution to the mobile economy.

ANURAG SRIVASTAVA



# MANAGED SERVICES FOR THE CLOUD COMPUTING GENERATION

Fire-fighting on several fronts simultaneously is the norm for today's telecom operators. On one hand, the traditional voice business has all but declined. On the other, data-centric services are in the spotlight. While operators have jumped onto the data bandwagon, a degree of caution still remains. Why? Well, analysts emphasise that revenue generated from data traffic could compensate for the monies voice-based services were supposed to bring in. The catch, however, is that the networks required to support such services are expensive to build and maintain. To make matters worse, the mobile broadband market is, doubtless, flourishing, but operators aren't laughing all the way to the bank. Instead, they're contending with strains on network capacity which ultimately adversely impact their bottomlines.

Understandably, then, rooting out new revenue streams is at the top of every operator's to-do list. After all, shutting shop isn't an option, especially in a sector where the competition is cut-throat and the profit margins are razor-thin. This is why operators are turning their attention elsewhere.

## Shifting Focus

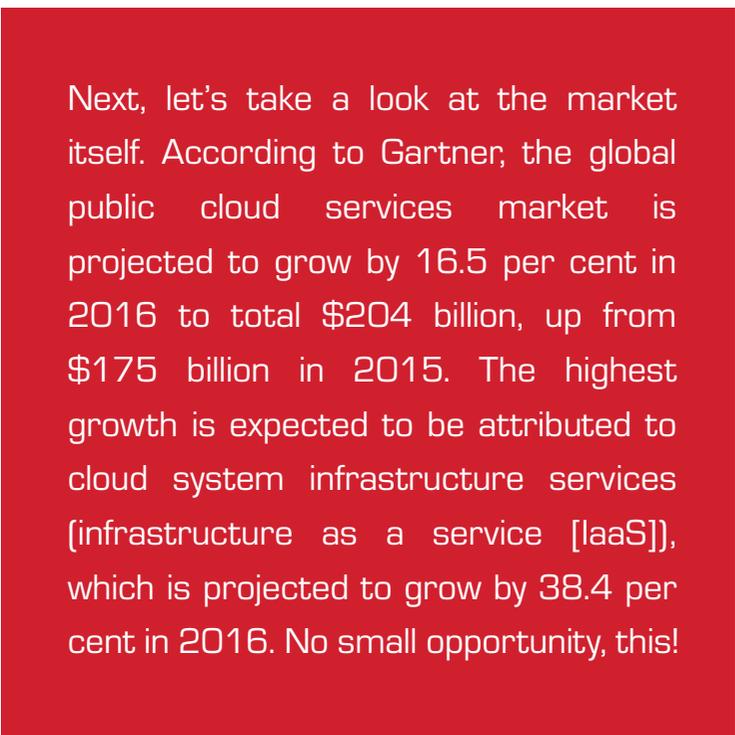
The crux of the argument is this-telecom operators are beginning to wake up to the potential of enterprise information and communications technology (ICT) solutions to give their flailing profit a shot in the arm. To be more precise, operators are betting all their money on cloud computing. Of course, the degree and purpose of





deployment differs vastly for tier one operators and their smaller counterparts. For the former, cloud computing provides a golden opportunity to tier one operators to monetize their existing network assets more efficiently. How? Simply by synergizing their resource and capacity utilizations across multiple enterprise and/or residential customers spread across different geographical locations. At the same time, the cloud helps tier 2 and 3 operators to scale their capex and opex spends, along with the growth of their business.

So, why is the cloud in the spotlight? First off, today's digitally converged marketplace has ensured that the lines between telecom operators and IT have blurred. In this context, placing technologies like cloud computing at the centre of one's strategy makes sense. Why? Well, because not only will it help improve bottomlines but will also ensure that operators move out of their comfort zone of providing simple connectivity solutions.



Next, let's take a look at the market itself. According to Gartner, the global public cloud services market is projected to grow by 16.5 per cent in 2016 to total \$204 billion, up from \$175 billion in 2015. The highest growth is expected to be attributed to cloud system infrastructure services (infrastructure as a service [IaaS]), which is projected to grow by 38.4 per cent in 2016. No small opportunity, this!



Besides, as per industry analysts, this segment actually plays up a telecom operator's key strengths. Here's how-businesses like telecom and cloud IT typically deploy a highly-centralised delivery model. This implies the entire show requires scalable core infrastructure and wide-reaching networks to run. Luckily though, operating in asset-heavy and centralised delivery businesses is what these players have been doing since time immemorial. Thus, telecom operators are very well positioned to compete in the cloud space, as compared to other premise-based IT markets.

So, what approach have telecom operators been adopting so far? In terms of services, the operator's repertoire typically comprises of the basic flavours, i.e.-software-as-a-service, platform-as-a-service and infrastructure-as-a-service. It isn't confined to that, of course. Other offerings include unified communications, managed services for fixed and mobile networks, security services and business applications. These are usually offered as bundled services or in collaboration with a third party-i.e.-a managed service provider (MSP).

## How an MSP can Help

Now, where does the MSP fit into this scenario? To start, permit me to state that the role played by an MSP is purely complimentary to any operator's cloud strategy. How? Here's a short laundry list of what an MSP can do to ensure cloud-based services work in favour of the operator:

- Operators can retain control over the infrastructure and application services. The MSP permits operators to outsource a select few or all enterprise IT operations. On their part, the MSP brings to the table their best practices and processes. Of course, strict adherence to stringent service level agreements for applications hosted on the cloud is an added bonus.
- MSPs offer a management layer between the operator and the public cloud. This creates a three-layer architecture (the operator, the MSP and the public cloud) which is easy to maintain. In addition, th

MSP functions as a single point of contact to manage all these applications. Additional services like security and backup management are a part of the package as well.

- Last but not the least, apart from technical operations, an MSP can also provide support for business operations. This entails offering premium services, such as examining the customer's data for irregularities or inconsistencies. They then take appropriate action without getting the operator involved. The latter is thus free to focus on their core business.

## The Challenges and Benefits of Cloud Services

There is very little doubt that the pro's the cloud platform offers outweighs the cons substantially. Nevertheless, for the sake of presenting a balanced view, let's quickly take a look at both:

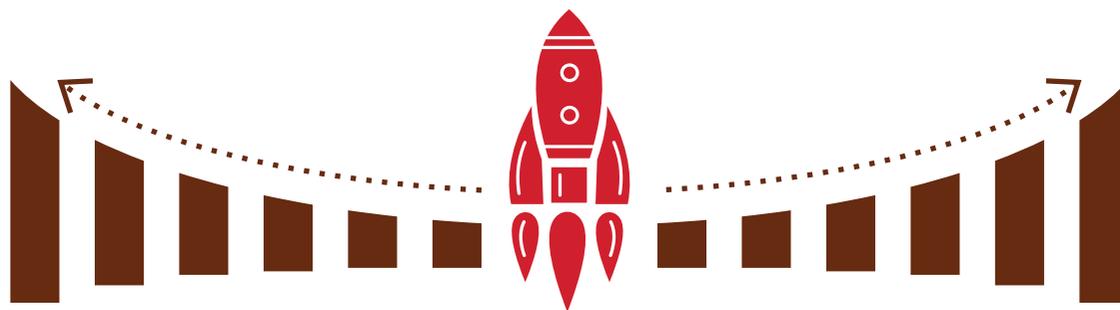
### The Challenges

- Operators ought to know where they stand in the value chain.
- A clear go-to-market strategy needs to be implemented.
- An optimal product portfolio mix needs to be identified.

### The Benefits

- **Greater cost agility, especially with IaaS**
- **Reduced opportunity costs**
- **Increased retained cash as cloud/on-demand services ensure that the operator doesn't have to invest upfront in IT infrastructure.**

Net, net, challenges notwithstanding, cloud computing may finally have its moment in the spotlight. There is a catch, though-to leverage this technology to the fullest, operators require overcoming their fears about security or lack of cohesiveness with their current infrastructure. And this is where an MSP can help. After all, the role an MSP can play in this scenario isn't an either/or, it's for sure!



# TOMORROWS' TRACKER

## MANAGED SERVICES

To grow from \$107.17B in 2014 to \$193.34B by 2019,

A compound annual growth rate of 12.5%

Source: [www.marketsandmarkets.com](http://www.marketsandmarkets.com)



## MOBILE FINANCIAL SOLUTIONS

Global mobile payment revenue in 2015 was \$450B.

Expected to surpass \$1T in 2019.

Source: [www.statista.com](http://www.statista.com)

## MOBILE LIFESTYLE SOLUTIONS

Global mobile content market expected to reach \$37.4B in 2019.

Source: [www.statista.com](http://www.statista.com)



## MESSAGING

Will generate \$1.279T in revenue until 2018

Source: [www.researchandmarkets.com](http://www.researchandmarkets.com)

## INTERNET & BROADBAND SOLUTIONS

Annual global IP traffic to pass the zettabyte threshold by end-2016.

To reach 2.3 ZB per year by 2020.

Source: [www.cisco.com/c/en/us/solutions/service-provider/visual-networking-index-vni/index.html](http://www.cisco.com/c/en/us/solutions/service-provider/visual-networking-index-vni/index.html)



## CUSTOMER VALUE MANAGEMENT

To be worth \$10.77B by 2020

Source: [www.marketsandmarkets.com](http://www.marketsandmarkets.com)

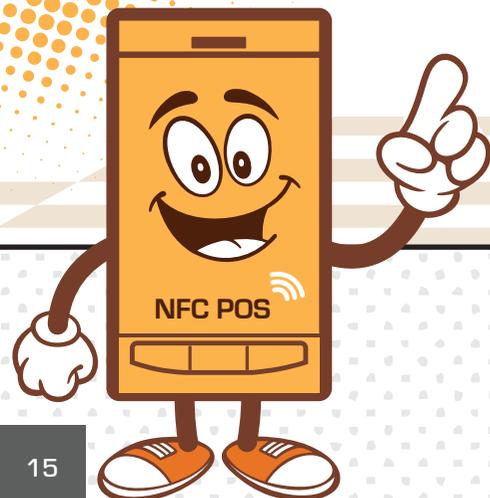
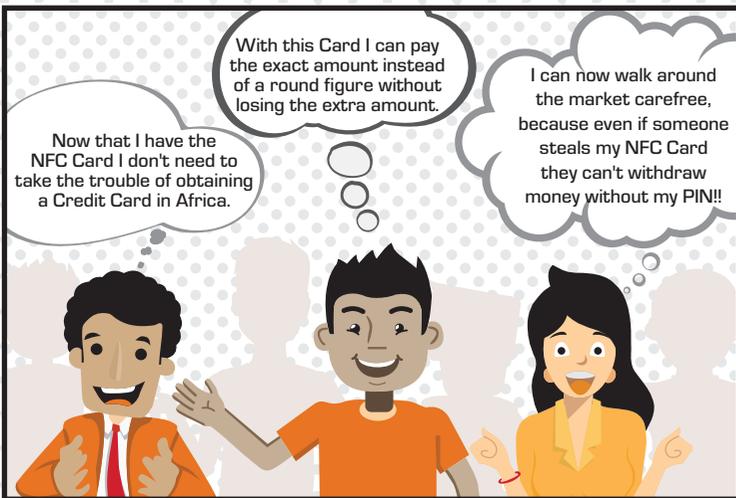
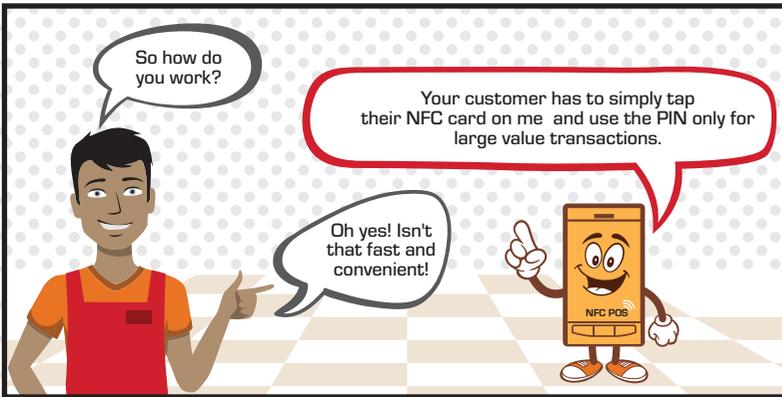
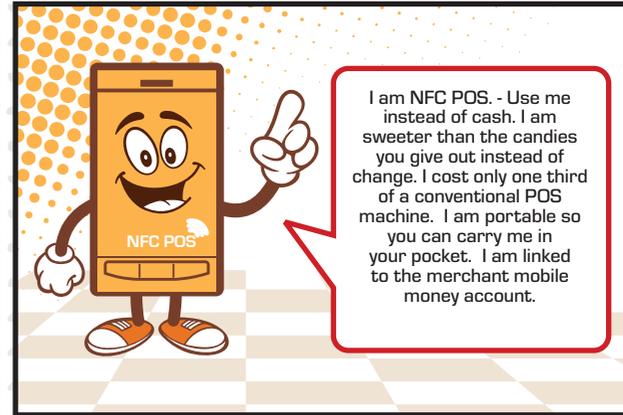
# INTRODUCING NFC PAYMENT SYSTEM



Abasis Kabuye

## A CUSTOMER STORY

Abasis Kabuye spends his days selling spices in the central market of Arusha.



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[www.mahindracomviva.com](http://www.mahindracomviva.com)

# MENTIONS

## ANALYST



**REPORT TITLE:** Hype Cycles

**PUBLISHER:** Gartner

**PUBLICATION DATE:** July 2016

Mahindra Comviva has been mentioned in 5 Gartner Hype cycles for Mobile Money and Direct Carrier Billing

**REPORT TITLE:** Digital Banking, the Roadmap to 2020

**PUBLISHER:** Juniper Research

**PUBLICATION DATE:** July 2016

Our chief executive officer, Manoranjan (Mao) Mohapatra, had been included amongst the top 6 “Movers and Shakers” in the global payments industry



**REPORT TITLE:** CSP platforms for mobile financial services: Vendor strategies in a challenging market

**PUBLISHER:** Analysis Mason

**PUBLICATION DATE:** April 2016

Mahindra Comviva has been covered as a part of selected key vendors' approaches to mobile wallet platforms in detail.



# MEDIA

**“UPI is a win-win for both consumers and banks”**

Srinivas Nidugondi in an interview with The Financial Express

<http://www.financialexpress.com/personal-finance/unified-payment-interface-upi-challenges-it-could-face-going-forward/374493/>

**“MobiLytix realizes the philosophy of investing in continuous innovation”**

Amit Sanyal's in conversation with CIO Review

<http://www.cioreviewindia.com/magazines/bigdata-special-september-2016/>

**“Payments become more secure and easy on QR Code”**

Reyad Hasnain shares his views with The Financial Express

<http://www.mahindracomviva.com/wp-content/uploads/2016/09/Interview-%E2%80%93-93-Reyad-Hasnain-Country-Manager-Bangladesh-%E2%80%93-Financial-Express-Bangladesh.pdf>

**“Mobility would become a key part of any enterprise's strategy in two or three years”**

Aditya Dhruva in an interview with Telecom Live

<http://www.mahindracomviva.com/wp-content/uploads/2016/09/Interview-with-Mahindra-Comviva-Enterprise->



# Mahindra COMVIVA

THE BUSINESS OF TOMORROWS

Mahindra Comviva Regd. Office  
A-26, Info City, Sector 34, Gurgaon-122001, Haryana, India.  
Tel: +91 124 481 9000, Fax: +91 124 481 9777  
Web: [www.mahindracomviva.com](http://www.mahindracomviva.com)  
Blog: [blog.mahindracomviva.com](http://blog.mahindracomviva.com)

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