THE FUTURIST

NEWSLETTER

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INTRODUCTION

It goes without saying that digital disruption is the norm, not an exception, for the communications space today. This paradigm shift can well be attributed to several factors in the overall ecosystem. The rise (and rise) of over-the-top players, the advent of digital startups and last (but certainly not the least) fickle and “always-on” customers.

It doesn’t end there, of course. From a business perspective, every stakeholder in the space has to contend with investing large amounts in their network, the slow (but sure) slowdown in subscriber acquisition and unrelenting pressure from regulators.

To survive, it thus becomes paramount for every player to focus on (or a combination of) two aspects: transforming into digital services providers and digital service enablers. Herein lies the catch, though. Change does not equal disruption. In fact, the latter takes place when a fundamental shift occurs in a system or environment-say, cloud computing or analytics, for that matter.

In short, at the end of the day, companies that stay ahead of the curve are those which chalks out digital-centric strategies that are tightly integrated with their businesses. And remain nimble and responsive to changing business requirements. Not to forget, of course, eliminate data silos and leverage customer data to their benefit.

Is your organization prepared to compete in the era of digital disruption?

STRAIGHT TALK

“MOST PEOPLE ARE DISRUPTING FOR THE FUTURE, NOT TO MEET TODAY’S CHALLENGES”

To stay ahead of the curve, every organization today is pulling out all the stops to “digitally disrupt” the marketplace. In this process, however, the finer nuances are often lost, leaving these players flailing. In a conversation with **Mark Newman,** Chief Analyst, TM Forum, **Manoranjan ‘Mao’ Mohapatra,** Chief Executive Officer, Comviva shares his views on whether companies are merely jumping onto the digital disruption bandwagon or are they prepared to leverage data to its fullest potential? **Excerpts...**

TMF On a scale of 1 to 10 where is the telecoms industry today in its digital transformation?

MAO My personal view is that the industry is at a four or five. This isn't because the industry isn't doing it correctly. It's because most people today still think that the need for transformation is one- time. If one goes back 20 years, one knew that any change in IT systems would have a life of ten years. Now, a lot of people are being myopic and thinking that the transformation would serve them for three to four years. But, in truth, one needs to accept that one has to live with transformation on a daily basis.

To cite an example pertaining to software and agility, when I started in my career, major software builds were being carried out per year. Five years ago, a software build was being carried out per quarter. Now, a major software build is being carried out twice a year through agile. In fact, I read that Amazon is doing a software build every 11 minutes!

TMF How are most Chief Information Officers (CIOs) approaching transformation?

MAO A. There is a whole spectrum of views and approaches. One section of chief information officers (CIOs) believes that one either transforms lock, stock, and barrel or not at all. Others are happy doing bits and pieces. I would say that most CIOs are taking a middle path. The reality is that there are a number of constraints for the CIOs. They have hundreds of services running that are generating revenues and these are paying their employees' salaries.

Most people are disrupting for the future, not to meet today's challenges. To do this, one needs to adopt a leap-frogging approach. The need to leverage data is growing by the day. This is increasing demand for computing power and bandwidth for communication. If one has not prepared oneself for this growth, one is building up potential challenges for the future, when this explosion happens.

TMF Is there an element of fear from some communication service providers (CSPs) about transformation?

MAO I certainly think there is sense of insecurity in many communication service providers (CSPs). They fear they may be opening their internal data too much. In many cases, this is because of national laws, with regulators concerned about data being stored outside their country.

TMF What impact does it have whether your customers use your cloud or their own private cloud?

MAO Today, most CSPs are using their own private cloud to host services such as those provided by Comviva. They ask us to bring our application to them, which is fine, except that they can't then leverage our central expertise in data modelling and data analysis. We have a data science practice within Comviva with 15-20 experts based in Bangalore. Maybe we send one or two individuals to a customer location, but they are not availing our full competency set. Furthermore, it can be expensive for them because they are paying for dedicated resources.

We have come across certain CSPs who are open, for example, to the idea of our caching their data. This is, however, rare, as most ask us to deliver our capabilities within their firewall.

TMF Is the relationship between CSPs and their vendors changing as a result of digital transformation?

MAO I'm not sure that the various aspects of this relationship are really changing yet. Customers are still trying to manage the transformation, which means that it is not really a partnership. They are still taking a "laundry list"-centric approach to how we work with them, rather than building a holistic view centred on a collaborative effort.

TMF You've talked a lot about operators leveraging their data. Do you believe that they can make money from their data?

MAO Yes, we do believe in data monetization. Consider the example of how a telecom operator can help a bank sign up customers. An operator's mobile customers may only be generating one cent per kilobyte. However, if the bank is able to leverage customer data, it creates value that goes well beyond connectivity. If a bank's subscriber acquisition cost is, let's say, $1 per customer, then they may be prepared to give $0.10 or $0.20 to the operator.

One of the reasons why this data-as-a-service business has been slow to take off is because the business-to-business (B2B) function in many operators is very underdeveloped, often generating less than 10 per cent of the total revenue. Furthermore, there may be tension between the consumer and the enterprise lines of business, as they feel that they are competing for business. The relationship aspects of transformation aren't fully developed yet. Customers are still trying to manage, which indicates the absence of the "true essence" of a partnership.

EXPERT SPEAK

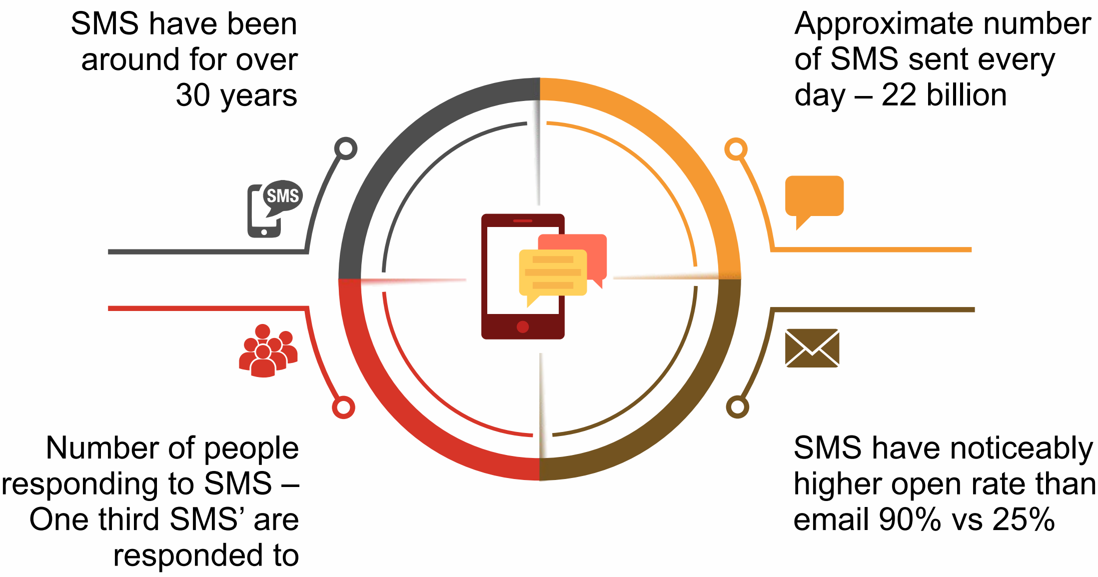
Deshbandhu Bansal
Business head, Messaging and Broadband Solutions, Comviva

RICH COMMUNICATION SERVICES:
No Longer Waiting in the Wings

In a fragmented communications landscape, companies have to fight hard for consumer attention. From a marketing and customer engagement perspective, this can be exhausting.

SMS has, of course, been around for nearly three decades. During that time, it's evolved to become one of the most valuable go-to-marketing channels available. Marketers choose to keep using SMS to interact with their customers because it's reliable, cost-effective, and easy to use. In fact, SMS has a noticeably higher open rate than email.

Why SMS is still in the running

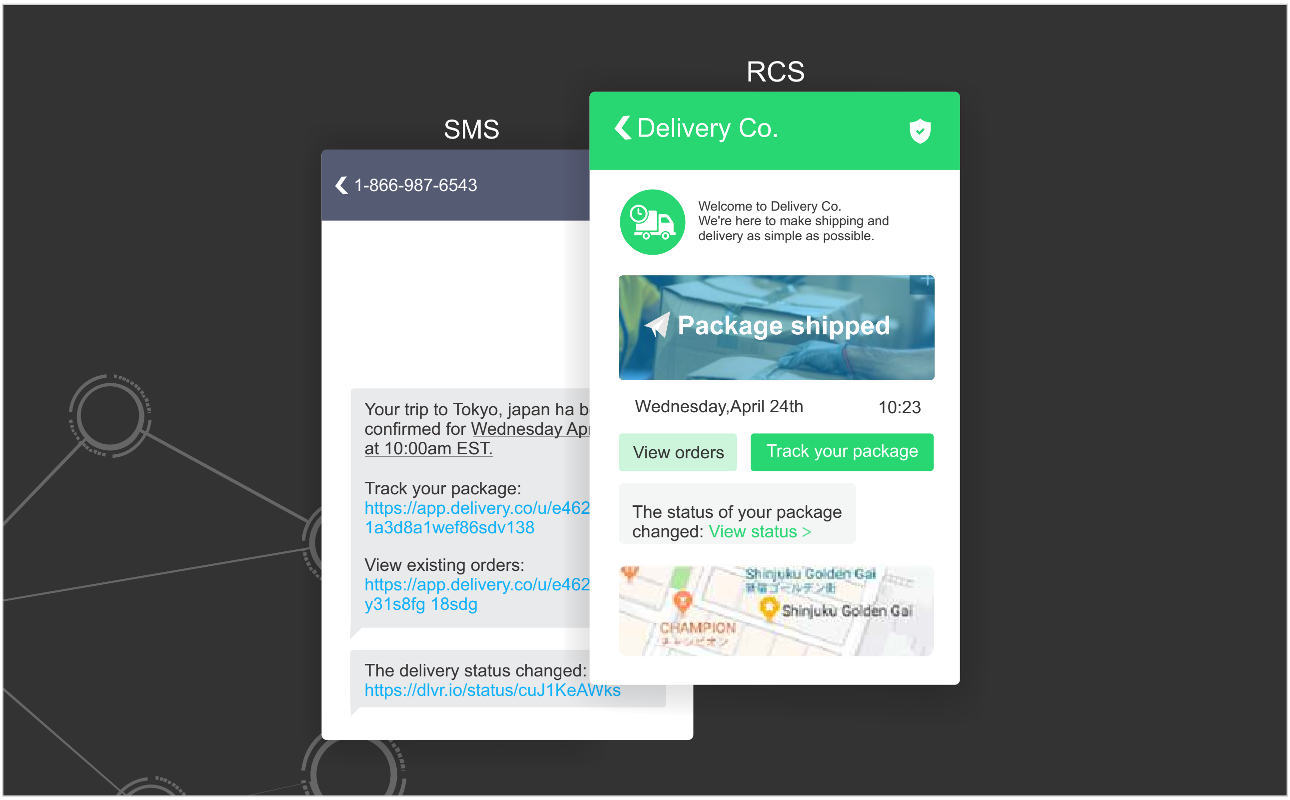


However SMS hasn't evolved at all to keep up with changing customer expectations and business marketing needs. Why? Simply put, because messages are still text-based.

It would be a bit of an understatement to say that consumers today are empowered, not to mention digital natives. Naturally then, they require (and are seeking) a plethora of content and targeted marketing messages, on their terms, of course. It doesn't end there- the content has to be tailored to suit their requirements, in a convenient way, needless to say. Therefore, applications like WhatsApp, Facebook Messenger, iMessage, WeChat, Slack, Skype, Viber, Android Messages, et all, fill that gap with an experience that builds on SMS. They assist in sending the right message, at the right time, employing the right media that is relevant, visually appealing and engaging content. It's no wonder that these feature-rich applications have taken off.

This is where Rich Communication Services (RCS) comes in. It enables text messaging to be as engaging as WeChat, WhatsApp, et all. Not just that, it provides "reach" worthy of SMS and MMS. The result-a plethora of opportunities to seamlessly engage with customers! Rich features like photo and video sharing, map directions, location sharing, among others is perfect for businesses looking to engage with consumers in increasingly 'sticky' ways.

As a quick reckoner, RCS is a next-generation SMS protocol being championed by industry heavyweights such as the GSMA, Google and Android, Samsung, and their ilk. And for businesses, the recently released RCS Business Messaging opens even more doors for customer engagement, marketing, and sales.



RCS is a protocol between mobile operators and phones. It is an evolution in mobile messaging, increasing and improving the ways in which people and businesses communicate. It provides a deeper level of engagement compared to SMS; that is conversational, useful and engaging and would serve as ubiquitously being the default messaging clients on most Android devices. It is poised to become a key messaging channel for conversational consumer engagement with brands and enterprises, using enterprise or application-to-person (A2P) messaging, chatbots, and artificial intelligence (AI).

RCS is like modern day **chat apps**, with a big difference of using the careeier networks instead of the internet. Furthermore, it allows brands to enhance how they engage with customers on many different levels.

Dialogue
Chatbot support, calls and live chats

Verified Sender
Know who is reaching out to you

Engagement
Improve your conversion and click rate

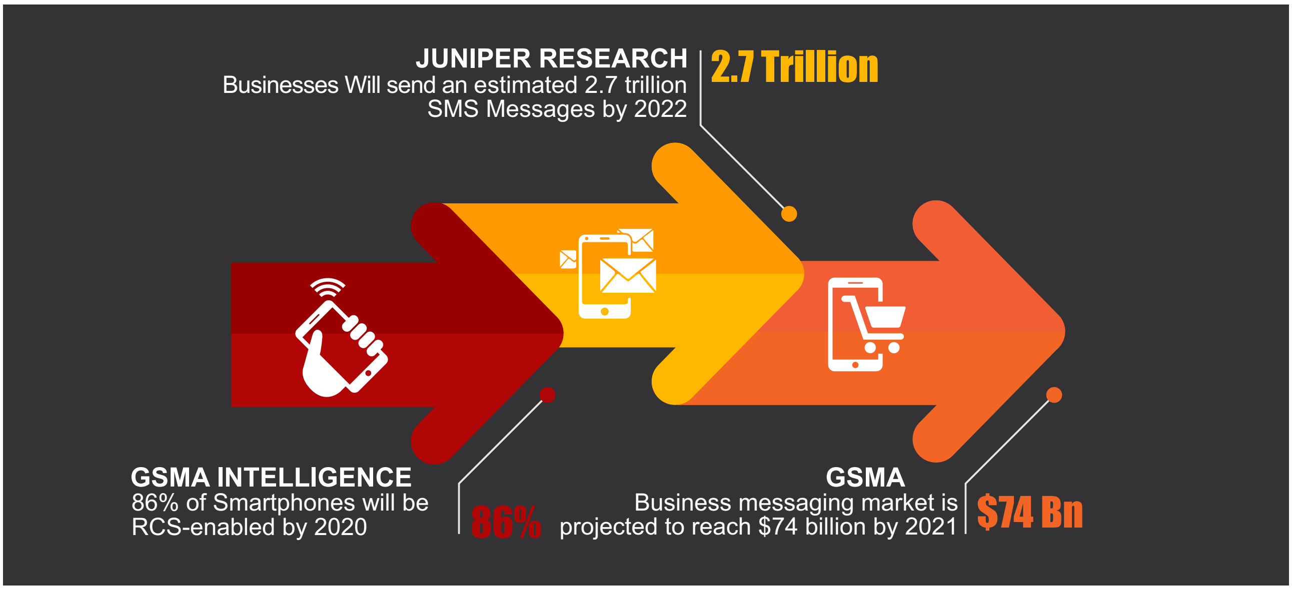
Rich Content
Send images, GIFs, Live Audio and Video

The Rise of RCS

Since its first release in 2008 and until 2011, there was no real mobile operator support to RCS.

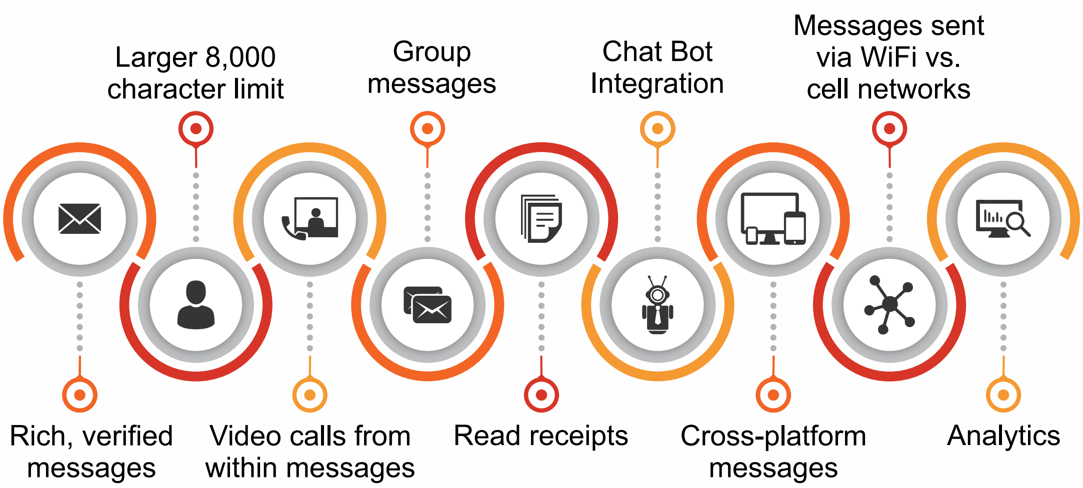
Fast-forward to November 2016, P2P Universal Profile RCS messaging was released, followed by the mid-2017 release of the Universal Profile 2.0, a simpler unified standard with significant support from Google and Samsung, among other technology platforms.

But why should businesses consider RCS in their mobile communications? For starters, these stats provide a compelling case.



RCS provides businesses with opportunities that can address and serve customers making B2C interactions more user-friendly whatever the device they have. RCS makes it easier for companies to get their customers to stay engaged. Today a customer can receive promotional marketing, book appointments, make payments, receive documentation and itineraries and even receive important notifications and alerts.

RCS Versus SMS: Features that come with RCS that aren’t offered by SMS



Early adopters of RCS in P2P

According to the GSMA, there are currently over 50 operators among another 20 international manufacturers phone manufacturers that support RCS. Together they serve nearly 160 million users globally.

And Enterprise (A2P) RCS is driving 80 per cent of SMS messaging in the B2C space. These adopters include telecom, banking/financial, travel and logistics, social & entertainment, consumer brands, among many more.

On the device front, more than 80 per cent of Android devices smartphone already support or can support UP-based RCS. In fact, the Android Messages application fully supports UP 2.x and many OEMs are making that it their default messaging app to leverage the technology and experience that Google has been spearheading with RCS recently.

RCS Business Messaging Takes A2P Messaging Even Further

With companies like Google taking the lead through its Early Access Program, brands and developers can now access and adopt RCS business messaging more easily. GSMA estimates, that there will be a billion RCS users in 2019 and the RCS Business Messaging market will be worth over $74 billion by 2021

Today businesses can move beyond basic texting with a cost-effective RCS messaging and engage more users than ever.

B2C companies of all sizes can create truly branded conversations across networks and device. While it provides the macro benefits across all industries, its applications within each industry or environment can be quite versatile and scalable. Marketers can now know how messages are performing with real-time data on user actions and behavior along the customer journey.

For P2P messaging, WhatsApp or other social/chat applications are most likely the predominant channels and not the SMS or operator messaging. However SMS is still by far the strongest B2C channel out there. And RCS aims to be the next level evolution of SMS.

In conclusion: What's next For RCS and Enterprises

- RCS will evolve to be a favorite channel for enterprises and allow them to
- Send branded messages and conversations
- Share rich media content: such as images, videos or PDF documents
- Drive engagement with suggested replies and actions
- Track message delivery
- Use powerful reporting and analytics to optimize future messages

Through this, there is no longer a need to download multiple apps; instead, users gain direct access to a range of brands and services from within the native messaging app itself,

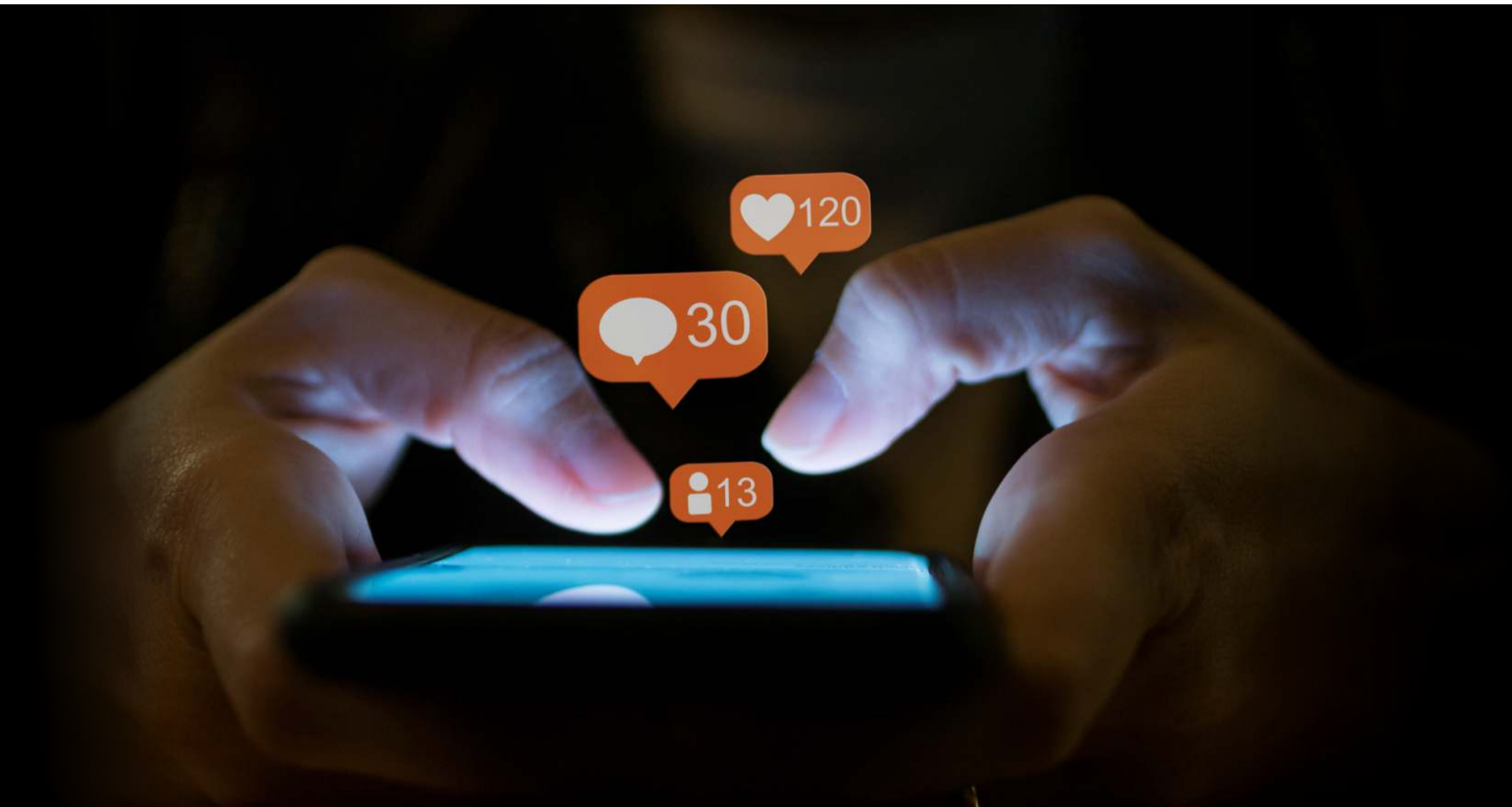
allowing them to engage with virtual assistants to promote and consume VAS and other operator offerings, book flights, buy clothes, book restaurant reservations & more.

With RCS one is already starting to see some innovative and engaging ways business marketers are employing it. In its attempt to "future proof" businesses, brands will be better able to harness their dialogue and interaction with the consumers and community alike.

Graphic: Factors Propelling the Uptake of RCS

- Greater reach with the latest release of the Universal Profile would bring more telecom operators and companies worldwide to sign up.
- Universal support on Android devices would slowly also extend to iPhone users who currently do not have the same rich experience.
- Less fragmentation has been arrested significantly with the Universal profile as the primary standard. While P2P usage has been evident, Google's has helped created a significantly stronger momentum to the A2P play.
- SMS will still be a strong and growing viable B2C/C2B channel until 2023 however with a new milestone businesses will gravitate toward RCS as their primary messaging channel a new milestone, with the number of users surpassing 215 million.

RCS has the potential to change the way the consumers interact with brands in the coming years. While many messaging service providers offer solutions around SMS, only a smaller subset offers true multi-channel solutions that include social or chat applications along with SMS. The number of operators supporting A2P RCS will only increase in the next 12-24 months and we will witness some real interesting enterprise and brand launches. Whatever the timeline, A2P RCS is poised to become a significant channel for consumers to utilize and interact with businesses.



EXPERT SPEAK – INDUSTRY VIEW

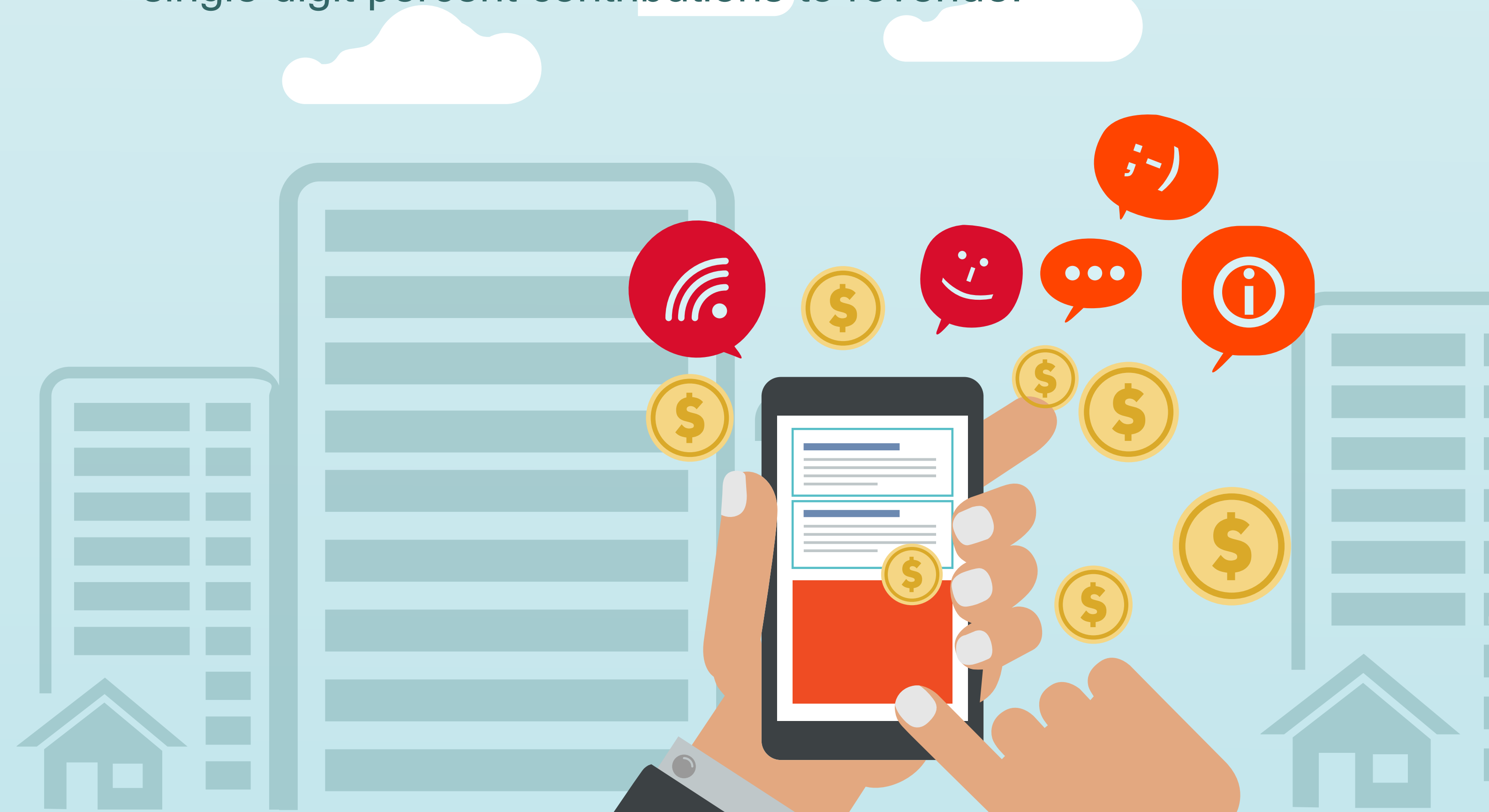
"THE TIME IS NOW RIGHT FOR TELECOM COMPANIES TO BREAK OUT AND REASSERT THEIR CLAIM BY CREATING DIGITAL CONSUMER ECOSYSTEMS OF THEIR OWN"

Kushe Bahl
Partner and lead, Digital and Analytics, McKinsey & Company

BEYOND DATA MONETIZATION

The Telco at the Centre of a Digital Consumer Ecosystem

Telcos have long attempted to monetize their access to subscribers and their data about these subscribers, with a mixed record of success. These attempts have manifested as simple targeted SMS campaigns for everything ranging from real estate to diapers, as well as more sophisticated location-based campaigns and bundled offers (e.g., free video subscription for all subscribers that meet a certain criterion). Over the years, these efforts have led to low single digit percent contributions to revenue.



Meanwhile, digital native players such as the large search, social networks and independent digital ad network players have created massive advertising revenue streams, several times those earned by the telcos. They've been able to do this because of the sticky user engagement that they have created, together with their ability to seamlessly integrate the right marketing messages into the right user's journeys thanks to highly sophisticated analytics engines. So, despite having a lot less information than telcos do at the outset, the behavioral profiles they can build over time are much more sophisticated, informative and monetizable than what telcos have been able to do. This value creation ability reflects in the market valuation – for instance, in the U.S., over the last five years, the top three digital services players have created 16 times the market value that the three major telcos have.

Increasingly, digital native players are solidifying their hold over their users by launching a range of adjacent services (either by themselves or in partnership). For instance, a search or social network player may launch payments, entertainment, or healthcare services. These, in turn, lead to even higher engagement, richer information, better targeting ability, and more opportunities for seamless marketing messages. Such virtuous circles of multiple digital services being orchestrated by a central intelligent customer profiling and targeting engine is sometimes referred to a "digital consumer ecosystem" and virtually every leading digital consumer player is trying to create one. While the most striking examples are the ones created in China, these are being created in most other markets as well.

While billions of dollars of value have been created in consumer digital ecosystems, the telcos which provide their Internet access backbone, have only seen erosion in value due to competitive forces. Over the years, almost all telcos have attempted to create digital services of their own, including entertainment, chat, gaming, news, shopping, health, etc. Most such attempts around the world have either ended in failure or received moderate success. There are of course a few glaring exceptions, which are well known, but these are outliers by far. There are variety of reasons for widespread failure but underlying these is the traditional telco mindset and way of operating. The inability to be agile (putting something out there and then sticking to it despite low traction). The inward-orientation and inability to create disruptive user experiences (not putting the user first or providing distinctive benefits over OTT offerings). The unwillingness to partner (wanting to build everything in-house as a proprietary asset, even if it isn't best-in-class). Inadequate investment in driving adoption of the new services (leadership time, money, experimentation). Using traditional analytics techniques as the basis for cross-sell campaigns, as opposed to the much more sophisticated machine learning driven "N=1" personalization engines that are feasible today.

Increasingly, digital native players are solidifying their hold over their users by launching a range of adjacent services, either by themselves or in partnership.

We believe that the time is now right for telcos to break out and reassert their claim by creating digital consumer ecosystems of their own. There are three reasons for this

The "how to" recipe for creating winning digital products is much better understood and replicable

The advanced analytics techniques that digital natives use to create magical targeting are now widely available, and

The risk capital that is available to digital natives can also be made available to digital ventures spawned by telcos.

Creating winning digital products: Learning from digital natives, there are a few ground rules for building great digital products:

(a) start with the user and design a disruptive experience that's markedly better than existing offerings (e.g., don't just aggregate, add value) (b) rapidly test and learn - don't try to get it right the first time, (c) partner wherever possible for components/ solutions or entire services, (d) spend disproportionate time and energy on generating and improving traction.

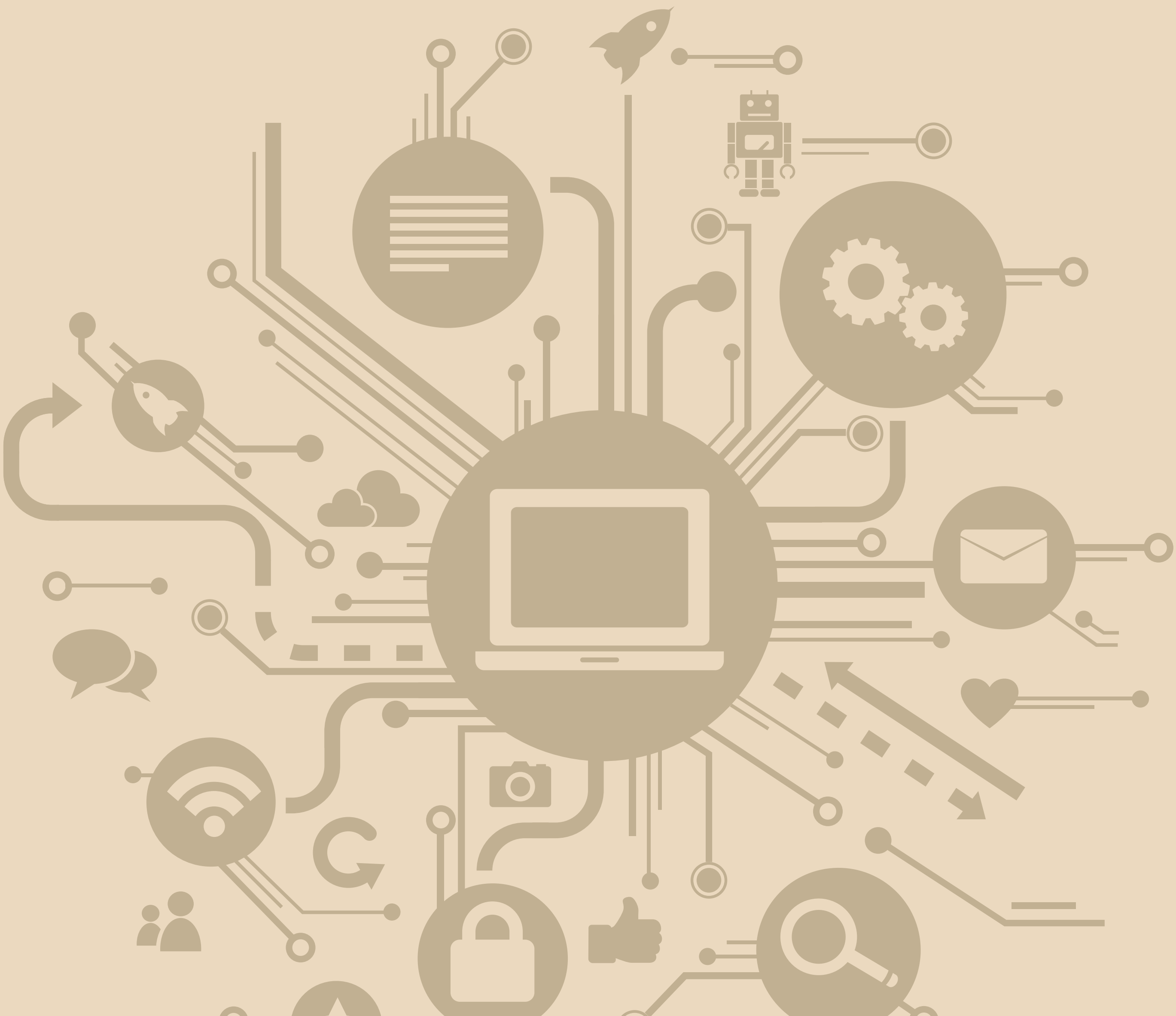
Leveraging Advanced Analytics:

The most sophisticated digital natives can create surprisingly targeted campaigns that seem to pop up just at the right time and the right place with the right message. "Clicking" on these seems almost natural and their success in generating new registrations or new sales or usage of their services is several times what is achieved in conventional campaigns. These brilliantly targeted campaigns are the outcome of using sophisticated analytics techniques as neural networks, automated through "machine learning" methods, to continuously improve their "hit rate". The techniques work on data sets that include basic customer profile information along with every other kind of data that can be collected including location, surfing and social behavior. Their success depends less on the extensiveness of the underlying "data lake" and more on the quality of algorithms used to design, track and improve campaigns.

Inviting Risk Capital:

Often the costs of customer acquisition and retention for new digital services can be high. At the same time, the services need to be promoted aggressively until they achieve critical mass and network effects, or word of mouth, take over. While telcos access to subscribers gives them an advantage (especially when its activated using the targeted approaches outlined above), the total cost of customer acquisition can still be substantial. It is critical for telcos to bring in risk capital (Venture Capital or Private Equity) to help fund this. This risk capital is best suited for financing such ventures with high uncertainty in outcomes. It also creates the option for the telco to hold a minority stake in the digital services company so that the losses due to customer acquisition costs don't have to be consolidated with the main P&L. Finally, these investors bring valuable perspectives from their experience with digital natives, which can help balance the traditional telco thinking in governance of the digital services venture(s).

Using these simple learnings, a telco can today spawn a new digital ecosystem, use both its online and offline assets to drive adoption of the new digital services, add a range of new services using partnerships with best-in-class players, and bring in external investors for both money and perspective. Each of the services provided will have its own revenue model, but the largest source of revenue and profits in such eco-systems around the world is advertising. The sophisticated targeted marketing capability discussed above can be deployed for other brands, running true "performance marketing" campaigns, and this is most likely the primary source of monetization. If executed properly, and with a bit of good fortune, the market valuation of the digital ecosystem, can soon surpass the value of the telco!



WALKING THE TALK

Rajat Dayal
Chief Executive Officer, YABX

Digital Disruption in the Micro-Lending Space

Video interview

Bridging the gap between 2 billion unbanked customers globally and banks is a long-standing challenge. In fact, the paradigm shift being witnessed to "everything mobile" and data poised to play a major role for banks promise interesting times for Rajat Dayal, Chief Executive Officer, YABX.

He is, of course, equally excited about "digitally disrupting" the micro-lending business, given the plethora of opportunities offered, as elaborated here…

Rajan Mathews
Director General, Cellular Operators Association of India (COAI)

Artificial Intelligence, 5G and the Internet of Things

Video interview

Data is the new oil, believes Rajan Mathews, Director General, Cellular Operators Association of India (COAI). After all, the magnitude of data available today expedites the business case for technologies like artificial intelligence, 5G and the internet of things as well.

The communications space is clearly entering a brave new world-are the stakeholders prepared?

UPCOMING EVENTS

Telco AI Series – Europe
5-6 November 2019, London

TM Forum's Digital Transformation Asia
12 – 14 November, 2019, Kuala Lumpur

AfricaCom 2019
12 – 14 November 2019, Cape Town

APOS Tech 2019
19 – 21 November 2019, Bali

MAKING HEADLINES

Interviews

Interview — Manoranjan 'Mao' Mohapatra CEO, Comviva
Building India's Telecom Talent Pool – Voice&Data magazine

Video Interview — Srinivas Nidugondi Chief Operating Officer, Mobile Financial Solutions
"Harnessing Mobile Financial Solutions for the underserved" – TechCircle (VCCircle)

Opinion Pieces

Opinion Article — Ramy Moselhy Vice President & Head of MENA Region
Middle East 2.0: From Oil to Digital Economy – SAMENA Trends

Article — Manish Jain AVP & Head of Engineering, Digital Lifestyle Solutions, Comviva
"The Internet of Things: Simplifying or Mystifying the User's Experience?", BISinfotech Magazine

Press Releases

Comviva and N-able Pvt Ltd. join hands to create new opportunities around Digital Services in Sri Lanka

inwi launches mobile money service 'inwi money' powered by Comviva's mobiquity® Money platform

Comviva Recognized Amongst India's Top 25 Best Workplaces for Women 2019

Awards

RemTECH Awards 2019

ET-Government DigiTech Award

Safaricom Annual Supplier Awards (SASA)

2019 Digital Wallet Innovation Award

Top 25 Best Workplaces for Women 2019

Comviva receives 'Great Place To Work For' Certification

Analyst mentions

Forrester recognizes Comviva as a leading vendor in Cross-Channel Campaign Management

Comviva recognized as a leading vendor for Partner Relationship Management Applications by Gartner

Third year in a row, Comviva recognized as a leading player in Gartner's Magic Quadrant for Integrated Revenue & Customer Management

About Comviva

Comviva is the global leader of mobile solutions catering to The Business of Tomorrows. The company is a subsidiary of Tech Mahindra and a part of the $21 billion Mahindra Group. Its extensive portfolio of solutions spans digital financial services, customer value management, messaging and broadband solution and digital lifestyle services. It enables service providers to enhance customer experience, rationalize costs and accelerate revenue growth. Comviva's solutions are deployed by over 130 mobile service providers and financial institutions in over 95 countries and enrich the lives of over two billion people to deliver a better future.

For more information, please visit www.comviva.com

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