



Growth Marketing:

Unlocking the Potential of
Actionable Insights

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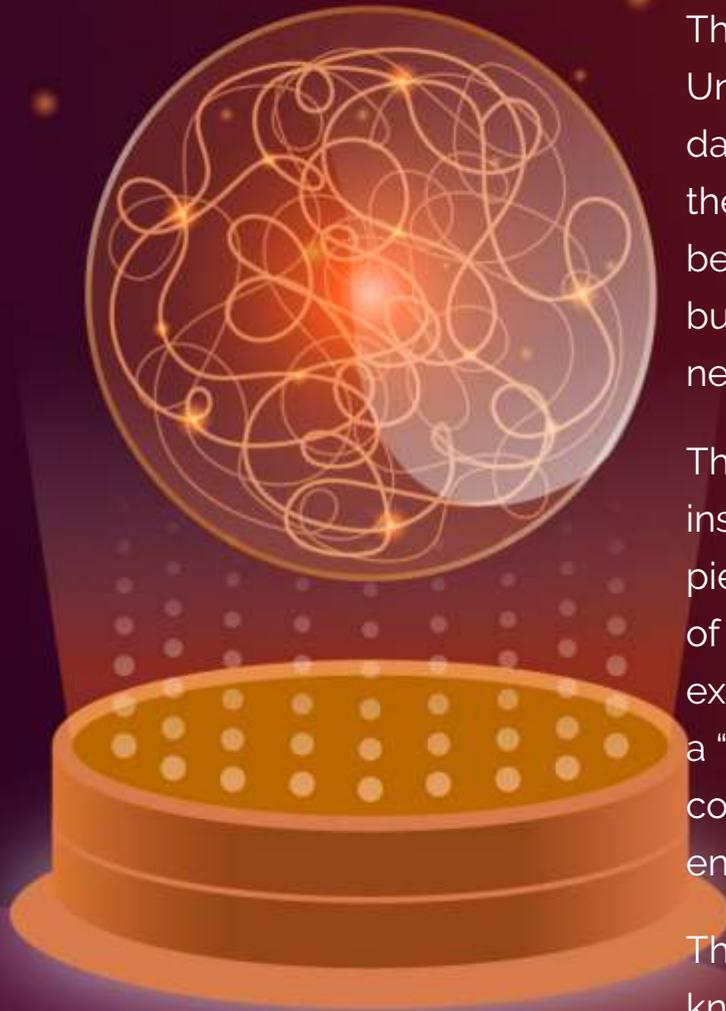
By Deshbandhu Bansal, Chief Operating Officer, Messaging Solutions, Comviva

INTRODUCTION

The race to implement a “data-first” strategy is growing fiercer by the day. Understandable, really, given how vital it is for companies to map out data-driven strategies, with multiple end objectives in mind. “Knowing” the data and structuring it to gain actionable insights is merely the beginning. What’ll count in the end is effectively monetizing the data and building new revenue streams. This is why Growth Marketing becomes a necessary tool in every organization’s arsenal.

This e-book is aimed at driving home the point, via a compilation of insightful opinion pieces, articles, and even the odd tête-à-tête. Each piece focuses on a different aspect of Growth Marketing. The importance of data (and breaking free of silos) is highlighted, as is how experimentation and iterative learning is critical in the quest to becoming a “truly data-centric” entity. Equally in the spotlight is why (and how) companies ought to align their technological efforts to the cause, whilst ensuring flexible processes and operations.

The idea, in short, is keeping pace with today’s customers. After all, they know more than the company catering to their requirements. And demanding customers present a plethora of opportunities.



A man with glasses and a mustache, wearing a dark suit, light blue shirt, and patterned tie, is sitting on a dark couch. He is looking towards the camera with a slight smile. The background is a plain, light-colored wall.

Most People are
**Disrupting for
the Future,**
not to Meet Today's
challenges

In conversation with Manoranjan "Mao"
Mohapatra, Chief Executive Officer,
Comviva and Mark Newman, Chief
Analyst, TM Forum



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- 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.

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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.

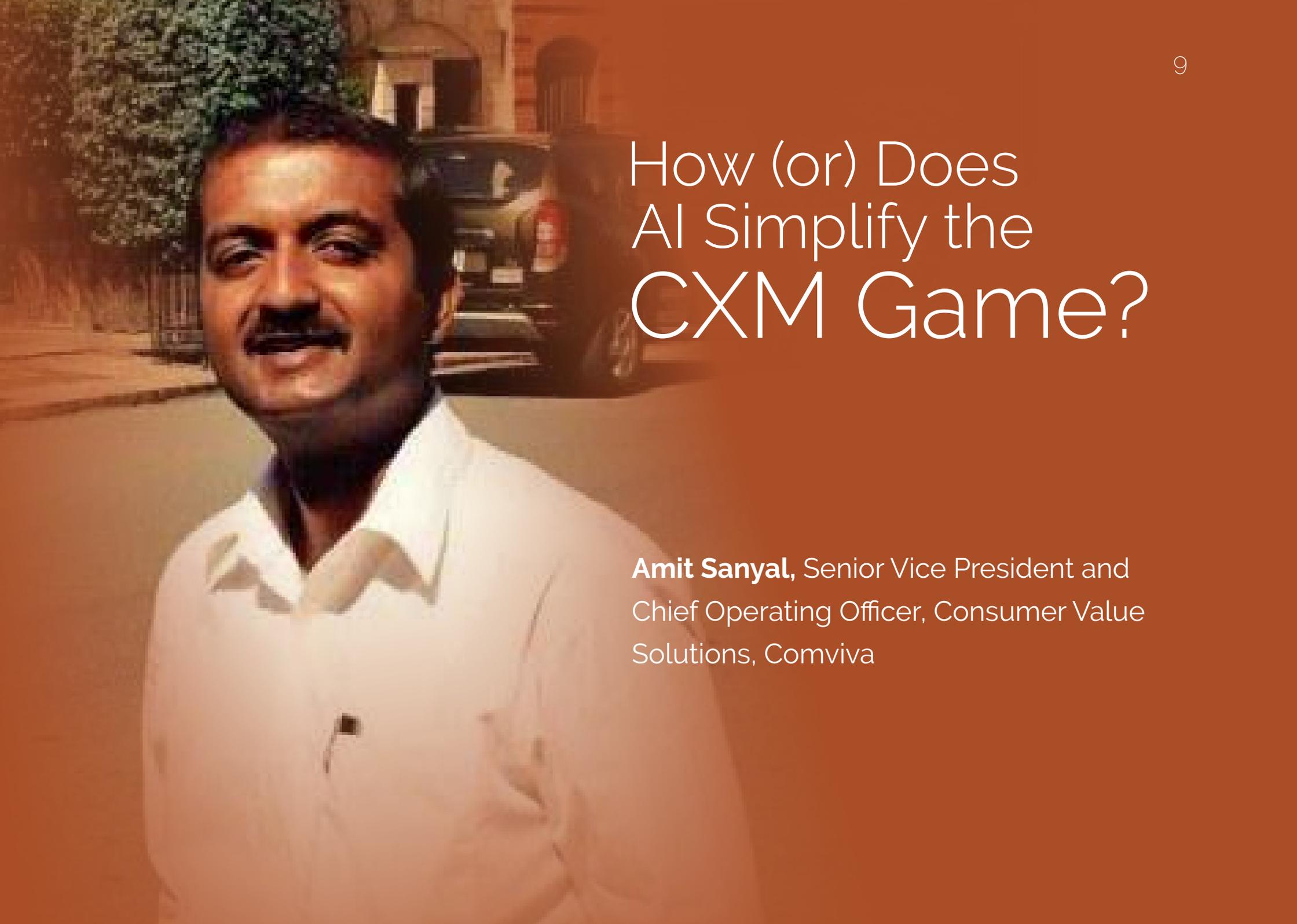
TMF- You've talked a lot about operators leveraging their data. Do you believe that they can make money from their data?

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 under-developed, 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.



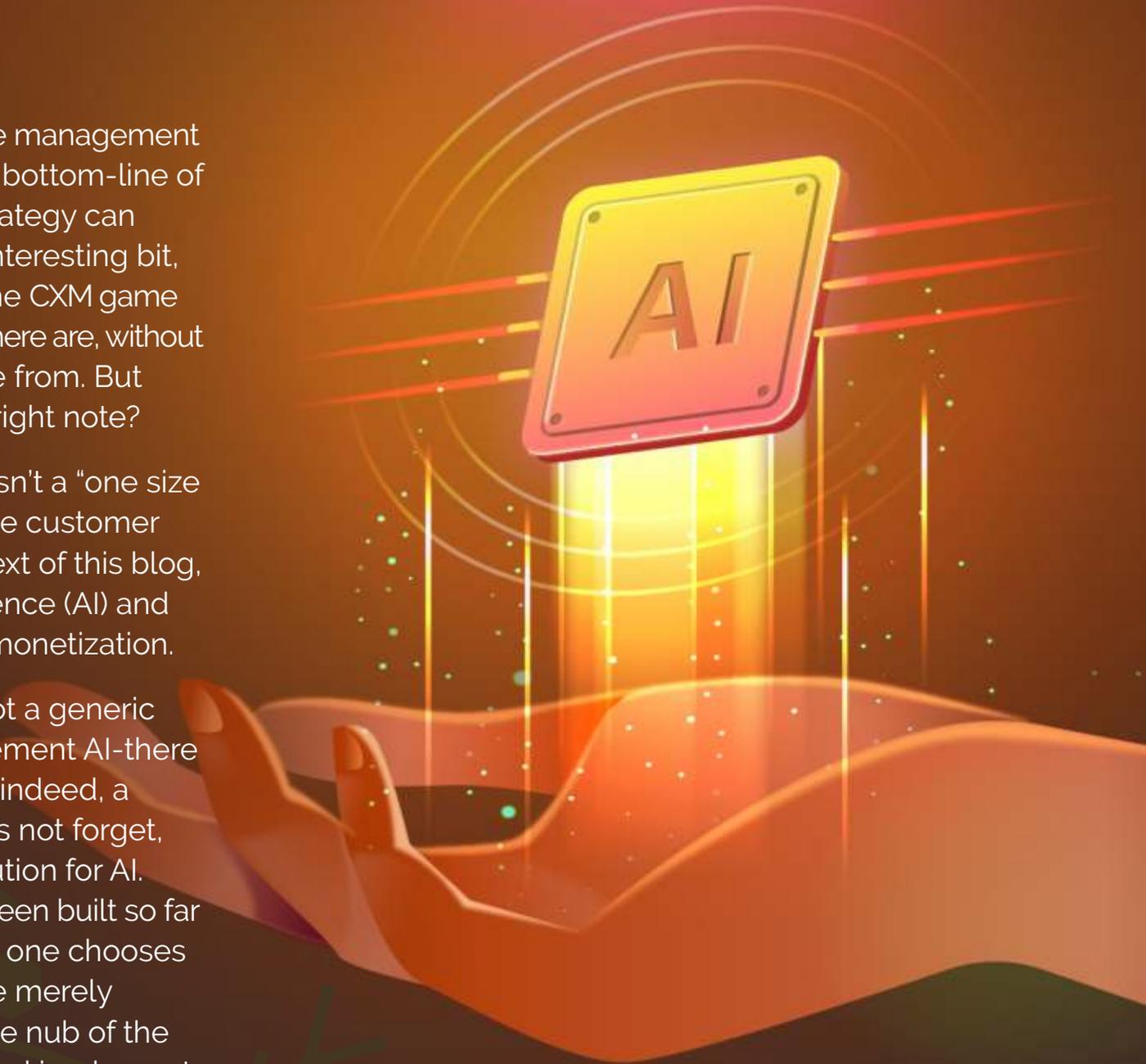
How (or) Does AI Simplify the CXM Game?

Amit Sanyal, Senior Vice President and
Chief Operating Officer, Consumer Value
Solutions, Comviva

Penning blogs on customer experience management (CXM) can get tricky after a while. The bottom-line of each piece is simple—a sound CXM strategy can make or break a business. Here's the interesting bit, though. Equally important factors in the CXM game are the tools of the trade one opts for. There are, without a doubt, a plethora of options to choose from. But which strikes (or is likely to strike) the right note?

Permit me to point out, though, CXM isn't a "one size fits all" solution. What may work for one customer may not apply universally. In the context of this blog, though, let's focus on artificial intelligence (AI) and how it ensures customer experience monetization.

Permit me to start by restating—AI is not a generic solution. One simply cannot just implement AI—there are larger implications. While there is, indeed, a large amount of hoopla around AI, let's not forget, there's no field tested and proven solution for AI. Every solution, every use case that's been built so far can only be improved, not replicated. If one chooses the latter over the former, well, they've merely limited the possibilities. Therein lies the nub of the argument—the field is yours to prove and implement.



AI and CXM: A Multi-Faceted Equation

There may be a million ways to address this point (and why not, don't forget, all data provides some outcome!). A very straightforward approach would be thus-AI enables companies to ensure real-time decisioning. How? Well, the data is on hand. Customers haven't really changed their patterns, except every decision is usually made "in the moment". And apart from the fact, of course, that the sheer number of decisions has increased dramatically.

So, AI, in a nutshell, enables companies to inject predictability with a fair degree of accuracy whilst dealing with customers. The idea is to see if the likely short term future outcomes of a customer's actions come to the fore.



AI-Based Use Cases That May Turn the Tide for Operators

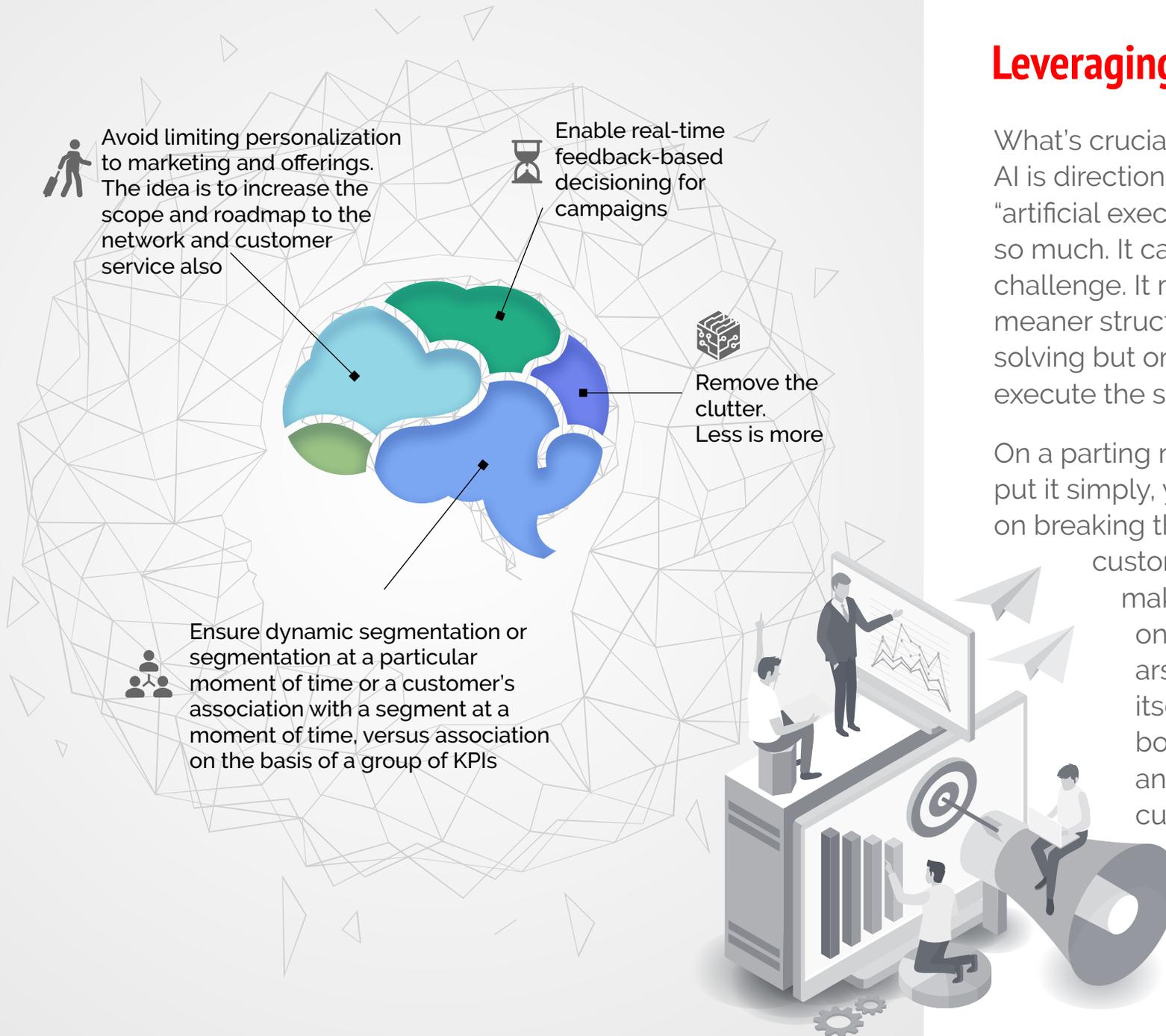
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Monetizing micro moments,
both invisible and visible



Ensuring cross-selling, as opposed to increasing upselling, with the idea of increasing a customer's product associations, rather than the value of apart product



Leveraging AI Intelligently

What's crucial to remember is that AI is directional. Don't mistake it for "artificial execution"-it can only do so much. It cannot address a challenge. It may offer a leaner, meaner structure for problem solving but one's still got to execute the same, for best results!

On a parting note, permit me to put it simply, yet succinctly. Focus on breaking the clutter. Focus on customer retention and making the brand. Focus on AI as a tool in your arsenal, not the arsenal itself. For, isn't the bottom-line providing an unforgettable customer experience?

A portrait of Greg Armstrong, a middle-aged man with short, graying hair, smiling. He is wearing a dark blue suit jacket over a light blue collared shirt. The background is a soft, out-of-focus light blue.

AI Cannot be Merely Deployed. There are Larger Implications

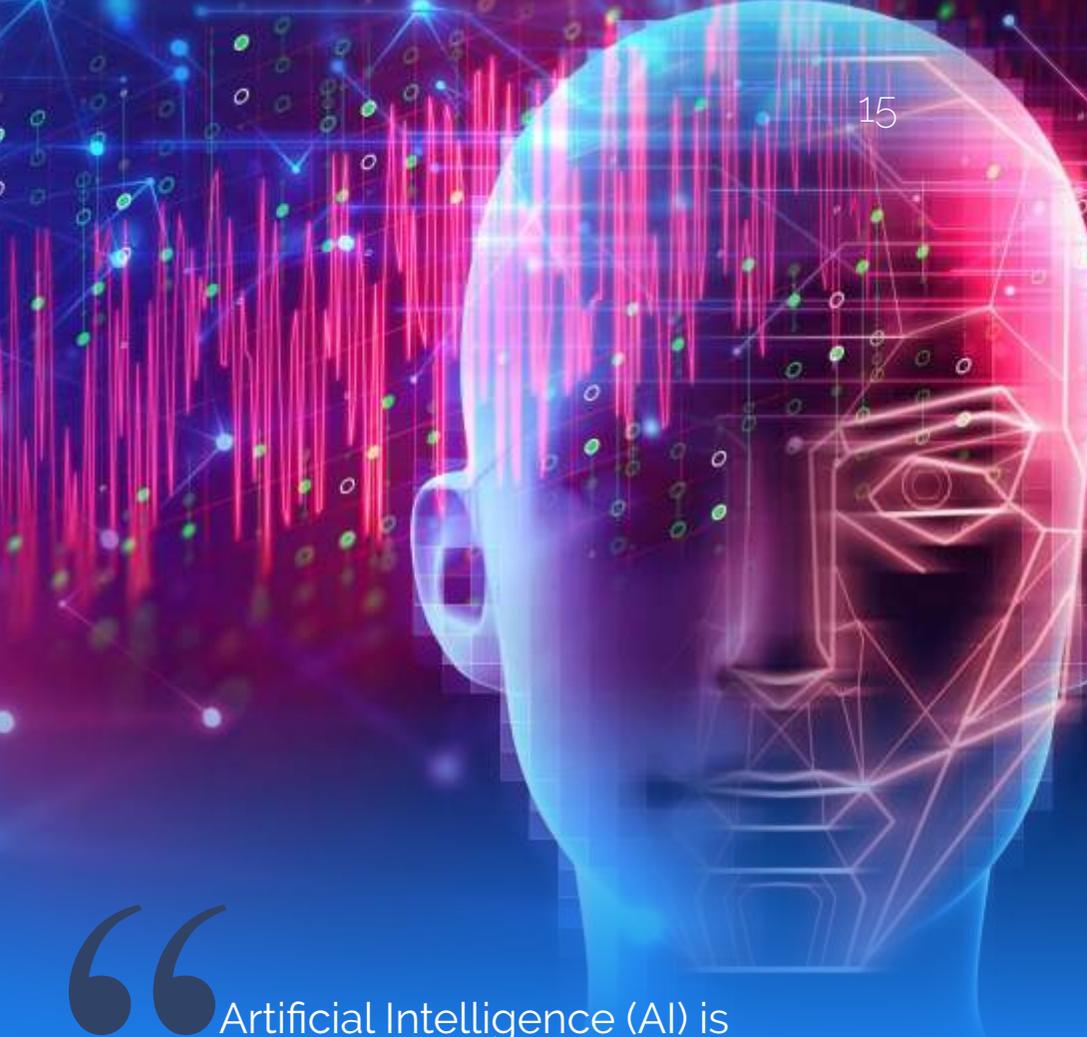
Greg Armstrong, Chief Marketing and
Strategy Officer, Consumer Value
Solutions, Comviva

For some, a proof-of-concept (POC) has been successfully executed and a model has been created that uses machine learning (ML) algorithms. For example, in the context of telecom customer value management (CVM), this is often around churn or decay prediction, and the date and value of the next recharge.

For others, it means the technical capability has been put in place to build, evaluate and execute ML-driven models across multiple use cases – our own AI at Scale platform is a case in point. It can be used for building, evaluating and running in production both CVM and non-CVM models.

Typically, the AI platform will sit on top an existing big data lake or incorporate a data fusion layer to capture data from multiple sources (covering real-time and batch, structured and unstructured data).

A fully functioning AI platform provides a graphic user interface (GUI)- based workbench for data scientists to rapidly build models using ML algorithms. It also supports the full lifecycle of model creation and execution; data ingestion, data exploration, feature engineering, model development and evaluation, and deployment and execution in production.



“Artificial Intelligence (AI) is certainly a popular buzzword in the industry today and according to surveys by TM Forum, many have now “deployed” AI and are looking to scale. But deploying AI means different things and it depends on the strategy adopted by the organisation for implementing AI.

But, along with the technology challenges associated with scaling for AI, there are larger implications for the “people” and “processes” that go along with it. Often, our clients will point out that one of the biggest challenges they face is the hiring and retention of key talent in data science. Understandable, really, as data scientists are in a “hot” market. This is why companies will often turn to partners to assist.

In fact, this people-centric factor is not only limited to the data science team. In the context of CVM, marketers need to adapt. It is one thing to be designing and implementing campaigns that are based on business rules created by a marketer; the criteria for the segment, and the offer to make to that segment. It is quite a different thing to be prepared to leave this to a “black box” solution. This is exactly what a ML model is. It is next to impossible with a ML-driven model to determine exactly why a particular offer is made to a particular customer.

An ancillary consequence of this is that the robustness of the methodology for measuring performance is critical. There must be confidence that when an improved result is seen, it is trusted. This is why effort is required to ensure the universal control group (UCG) is highly representative of the base. Performance is measured as the difference between the UCG and the universal target group.

The “process” side is also extremely critical. This covers the governance and practices in place to ensure data integrity is maintained, and that data is updated when expected. Critically, it also covers those processes associated with putting a new model into production. This DevOps side is particularly challenging for many organisations because there are new practices to be developed. A ML driven model is not constant. By its very nature it changes while in production, which is very different from what we see as “normal” software deployment. In fact, this is so different that the TM Forum has a Catalyst stream in progress for “AIOps” to develop frameworks for supporting the operations of AI. Engage with this Catalyst programme to keep abreast with the thinking as it develops. And perhaps become a contributor.

“Therefore, a scaling strategy is required, that allows confidence to be built. For example, allowing the model to apply to a proportion of the base while the traditional business rules approach is applied to the remainder. When positive results are seen, then the proportion of the base that receives offers based on the model can be increased.





The Internet of Things Simplifying OR Mystifying the Users Experience

Manish Jain, Vice President and Head of
Engineering and NPD, Comviva

It's been quite a while since the Internet of Things (IoT) made its debut in the technology space. Since then, of course, it has gained enormously in terms of technology, availability of connected devices and customer uptake. This, simply put, can be attributed to the very real advantage it offers, in terms of transforming the way customers live and work. Now to dive in deeper. Today, the developer has a plethora of technologies and protocols to choose from. This includes (but isn't limited to) Zigbee, RFID, Thread, NFC, 6LoWPAN, Bluetooth, Z-Wave etc. Of course, the choice depends on the application itself, in terms of power utilization, battery life, security, data usage efficiency etc.

In short, IoT is here to stay. Let's take a look how...

The Rise and Rise of IoT

Gartner has predicted that the connected things numbers will reach 20.4 billion by 2020 and Internet of Things end point spending to reach \$292.5B by 2020. Similarly, IDC has predicted the revenue opportunity of \$1.7T for the ecosystem by 2020.

Constant innovation in wireless technology, reduced costs of manufacturing, changing business models and advancements in security models are leading to a surge in the uptake. Consequently, the world is becoming more and more



connected. IoT devices are making in-roads into the lives of people at a speed never seen before. Here's more data to support the argument.

Imagine that if the predictions are correct, you may expect at least 3-4 devices every individual by year 2020. Considering IoT penetration of 40-50%, the devices per actual user may be to the tune of 6-7

But, it doesn't end here. The question that arises naturally, what are these devices used for? Does one really need these? The answer (in my opinion) is yes to both questions. Here's the explanation. Today, from the leaders of the technology industry to the startups (yes, even start-ups) are feverishly working on IoT-based applications. The bottom-line, of course, is to net customers by offering never-seen-before innovations. The basic idea is to change the method of how to access devices that have been around forever. At the top of the list (in my opinion) include smart homes, smart cities, connected cars, connected health and wearables.

Of these, smart homes top the pecking order. This is a reality today, no matter with domain one considers. Here's why-it offers multiple benefits. The user can control their home appliances (or "things" in the Internet of Things) by a mere click on their handheld

devices. This entails switching the devices on or off, monitoring ongoing activities, using smart assistants to control devices. et al.

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Sounds familiar? If so, then you're probably an IoT fan already.



But, Challenges Remain

However, there exists fine print-like all technologies, really. While there is no argument that devices are steadily making their presence felt in the everyday lines of customers, things are getting increasingly complicated. Permi t me to delve deeper into this.

Is one usually aware of the number of applications on one's mobile device? Now to stretch the argument a bit-can one usually define a timeframe of how long the appli-cations have been on the device? Or, for that matter, how long they are likely to stay? Interestingly, keeping and discarding applications on one's mobile device is based on several factors. For instance, it may be difficult for the user to juggle between the mutliple applications on their device. Or, simply put, to conserve the device's memory and battery life, to limit the number of notifications received. the list is endless. Currently, the model for IoT devices entails every device manufacturer providing their own application for controlling appliances. So, assuming one purchased a smart bulb from vendor A, then one would need this vendor's application to control it.The result? An unwanted overhead on the customer, as they would not only have to juggle multiple applications but

remember which application controls what. So, dear reader, is one's life simplified or further complicated? So is there a solution....

The solution is to opt for a model that aggregates the devices for the consumer. The device manufactures should congregate on a common platform, so that multiple devices can be controlled from a single common user interface, or, a common application for the devices. This would entail providing customers with the option of odding, configuring and controlling the devices in question. From a single place, of course!!! Manufacturers can, needless to say, continue with their business. The difference would result in providing the devices at the same time and on a common plattform. Now, put this in context of the issue posed in the challenges section. Isn't this, by all means, a doable solution? Creating a win-win for customers?

To Conclude

In my opinion, the model ought to do wonders for the uptake of lot in the future. Not that the future was in any doubt, it's just that this would definitely streamline the entire process, do good to all parties involved and provide a fillip to IoT start-ups.

AI & Machine Learning Thwarts Threat to Enterprise Messaging Ecosystems

Deshbandhu Bansal,
Chief Operating Officer,
Messaging Solutions, Comviva



Enterprise loves messaging; it allows them to engage their customers in the most cost-effective manner, moreover, in today's highly competitive markets messaging provide businesses with a channel to drive customer lifetime value with highly interactive and engaging communications, designed to cater to each individual's unique persona and requirements. Similarly, the growth of messaging has allowed operators to create new sources of revenue besides rising up the value chain in the messaging economy. Since the messaging opportunity is so critical for operators, as well as the enterprise segment, there is a growing interest in AI & Machine Learning to ensure the continued growth and health of the overall messaging ecosystem.well, they've merely limited the possibilities. Therein lies the nub of the argument-the field is yours to prove and implement.



Rising Demand for Enterprise Messaging

One of the biggest factors for messaging popularity is the increasing penetration of mobile. According to GSMA Intelligence, today there are more than 8.97 billion mobile connections, surpassing the world population by more than a billion. Similarly, there are 2.71 billion smart-phone users today, constituting almost 35 per cent of the global population.

Secondly, SMS has made B2C communications easier. Businesses can reach out to anybody with a mobile phone with short messaging services. SMS is also a high ROI messaging channel, where SMS open rates are measured in seconds. Studies have shown that four out of five customers will read an SMS within 30 seconds, which is a higher rate than any other medium. Now, if we compared this number to email open rates, it will become easy to understand why SMS has become so critical for enterprise communications today. Thirdly, the growth of analytics, combined with the customer's willingness to share their data if it leads to better service, have made it easier for enterprises to understand the impact and ROI of each messaging platform, and fine-tune it to different customer personas and requirements.



Grey Route compromises the ability of the operator to monetise the messaging opportunity leading to operator losses running into billions.



Operator Opportunity

With the operator's voice and SMS business declining rapidly, there is a growing need for operators to generate fresh revenue streams. In this context, A2P is critical for operators, as it guarantees consistent revenues for them in the near future, especially with the app ecosystem growing by leaps and bounds. However, in order to fully monetise the A2P opportunity, the operator will first have to tackle the problem of Grey Routes.

In order to understand the Grey Route problem, we will have to distinguish between a P2P message, which is the transfer of SMS messages between two individuals, and A2P message, which is the transfer of SMS between an application and an individual. The problem arises when the A2P message is masked as a P2P message, with the objective of saving A2P termination charges, or if the message sender wants to hide his identity for the purpose of spamming. There are several ways to mask an A2P message, such as GT spoofing, SIM farms. In GT faking: the message's global title is altered, hiding its

identity. In SIM farms, hoards of SIMs are collected and used for sending out A2P messages in the guise of P2P messages.

When enterprises or aggregators try to send commercial messages via illegitimate or zero-rated routes, it is known as grey routes. Grey Route compromises the ability of the operator to monetise the messaging opportunity leading to operator losses running into billions.

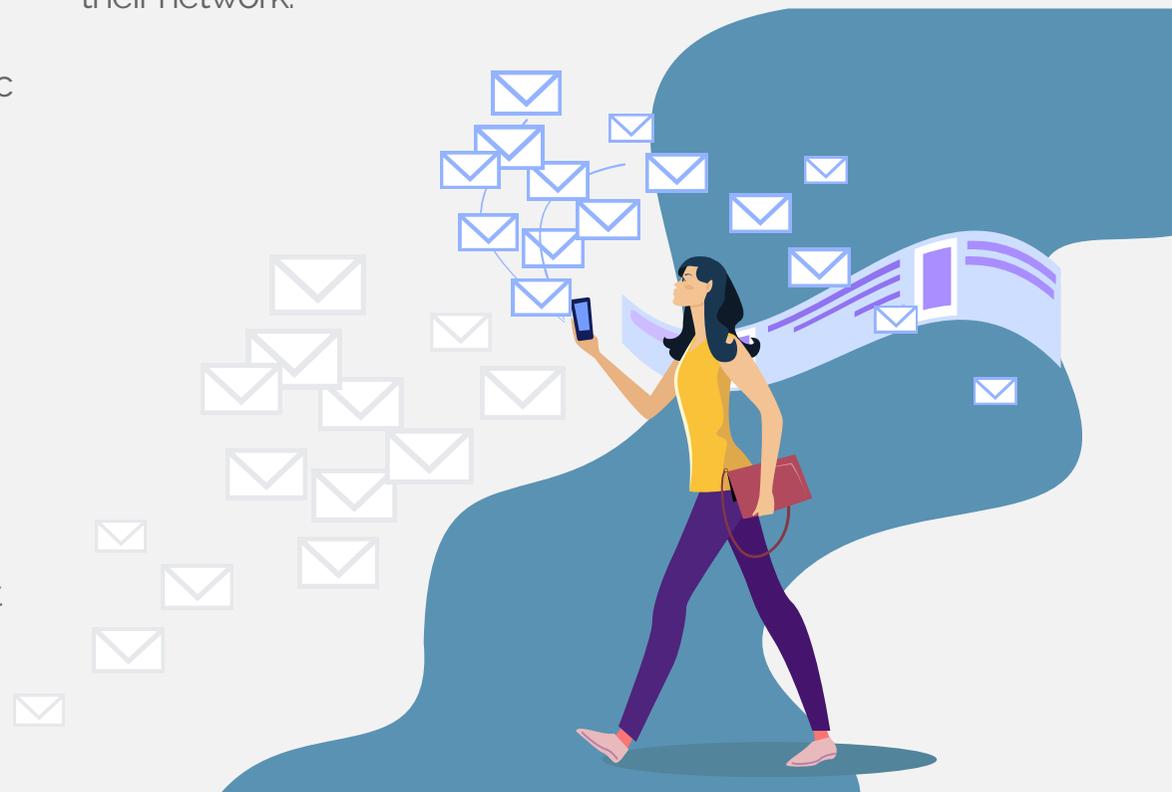
Besides revenues losses, Grey Routes have an impact on the operator's ability to drive quality traffic on its networks. Also, without the means to distinguish between good and bad traffic, the operator is unable to prioritise message delivery. The resulting traffic congestion may eventually lead to slower message delivery in critical industries such as banking, where a customer wants to be notified immediately for every withdrawal, for example, at the ATM. In the event of this happening, it is the enterprise that has to bear the brunt of the irate customer. Similarly, if the sender is using the system for spamming, it puts the operator's credibility under the sword.

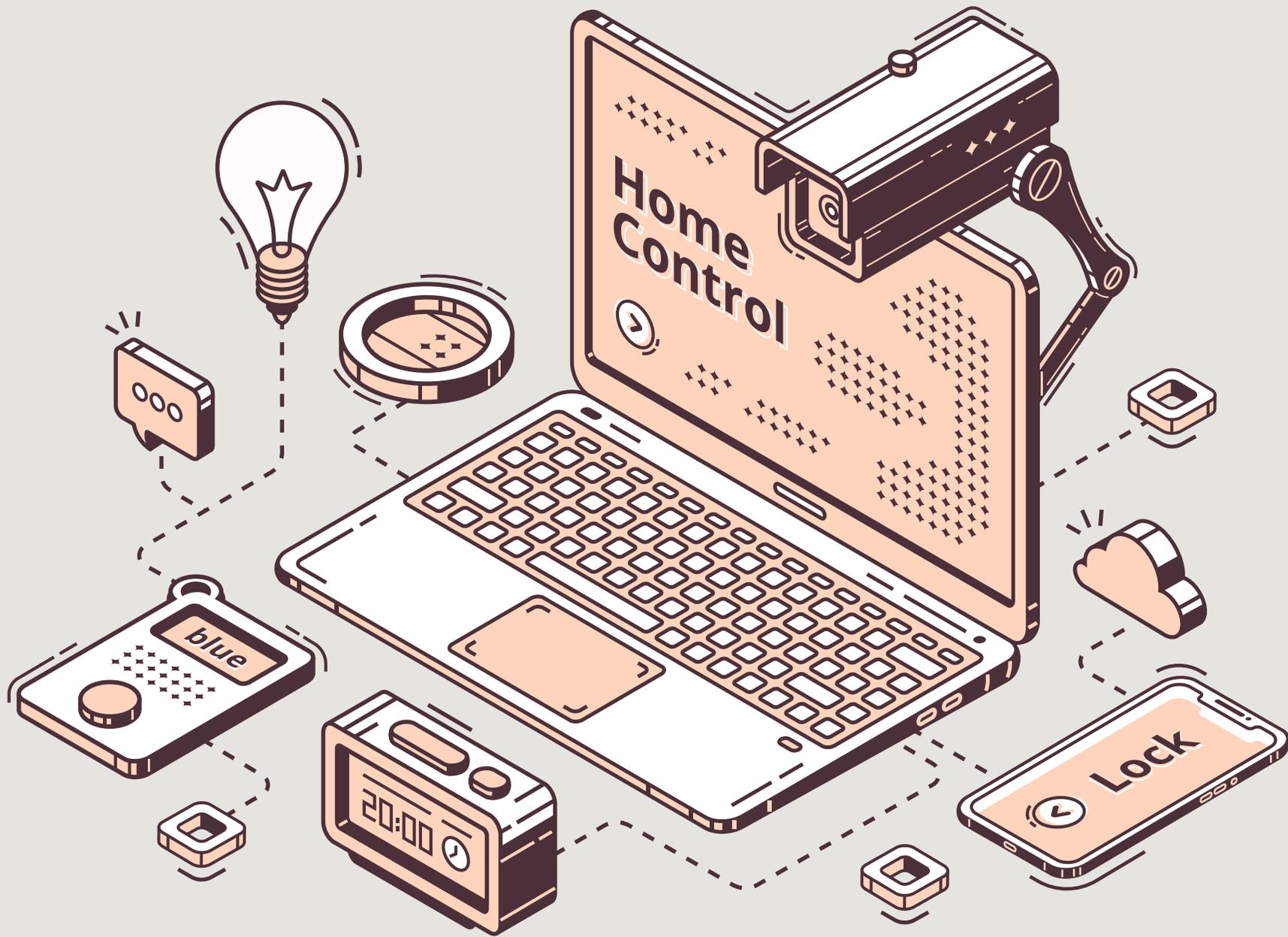
The Way Forward

Traditionally, operators have been using rules-based SMS firewalls for safeguarding the network from misuse. Rules-based firewalls use a combination of blacklisted numbers, keyword search, URL destinations for categorising messages. However, sophisticated scammers are easily able to overcome traditional detection and prevention techniques based on deterministic rules, limited pattern search and blacklists. Another problem with these deterministic platforms is that they are not 100 per cent accurate, which means that legal traffic may also be blocked if they meet the criteria set by the platform. On the customer experience front, it may lead to a poor experience, as they miss out on promotions. Therefore, in the interest of the overall messaging ecosystem, it is time to take a more nuanced approach to the problem.

In this context, AI capabilities take a more comprehensive view. Using new advances in the field of natural language processing, the AI-based SMS firewall auto classifies a message into different

categories. Unlike conventional platforms which provide limited pattern search, AI platform leverages the past training with millions of similar messages and it analyses words using pattern matching techniques and the context in which the words are used to predict the category to which a given message belongs. Once the messages are categorised, the operator can enforce policy control on a much granular level, which will help to protect the subscribers from spam and fraud, arrest revenue leakages and reduce the operational effort of the operators ensuring low subscriber churn from their network.





Walking the Fine Line between Insights and Actionable Insights...

The key takeaway is simple; the best insights are generated by the decisions pertaining to which offer to make. Or, simply put, when not to make an offer, because the customer will comply anyway.

Our role in this context, therefore, is equipping customers to stay relevant. To know the audience. And Growth Marketing is, naturally, an important tool in our arsenal. In a nutshell, what this entails is deploying advanced machine learning, artificial intelligence and predictive and prescriptive analytics to glean actionable insights. Enabling real-time decisioning. Leveraging micro-moments. Offering relevant services across the right channels. Providing tailor-made experiences.

Simply put, we will continue to offer insights aimed at ensuring our customers stay a step ahead of theirs. We will churn out meaningful, insightful material, whether blogs, thought leadership articles,

whitepapers, et al, to emphasize that each end-customer is different. And that a “one-size-fits-all” approach isn't just old school, it is irrelevant!

In case of any queries, write to us at **info@comviva.com** or log onto **<https://www.comviva.com/>** for more information on how we can help you stay relevant in a hyperconnected world.

Last but certainly not the least; we would like to thank all the authors mentioned in this book. Not just for the insights, but for proving that CXM isn't a technology; it isn't just a customer touch-point problem. Nor is it just a visibility problem. The best way to define CXM is from a technology perspective. Why? Because CXM and technologies are two sides of the same coin. CXM may not be a technology, but technology is what makes or breaks it.

About Comviva

Comviva is the global leader of mobility solutions and a part of the \$21 billion Mahindra Group. With customer centricity, innovation and ethical corporate governance at its core, the company's offerings are broadly divided into three categories-Financial Solutions, Digital Systems and Growth Marketing. Its extensive portfolio of solutions spans digital financial services, customer value management, messaging and broadband solution and digital lifestyle services. The company strives to enable service providers to enhance customer experience, resolve real, on-ground challenges and leverage technology to transform the lives of customers. 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