



monetizing **connected** consumers

telemedia MAGAZINE

ISSUE 56 | £4.99

IN THIS ISSUE

8

RCS: the second coming?

After several years of development and much discussion, RCS – the next generation of text – is poised to go large in 2020. What does that mean?

16

2020 Visions

John Strand kicks off 2020 with a detailed breakdown of the trends that will shape telecoms in the year ahead

26

5G and roaming

Gunter Reiss takes a look at why roaming is still going to be vital with 5G

VALUE ADDED SERVICES

Consumers spend almost \$400bn through mobile, as games, video, retail and ads boom

Mobile is booming, with annual global consumer spend via the channel likely to reach \$380 billion driven by effective mobile ads, games, retail and video.

So finds The State of Mobile 2020 report from App Annie, the mobile data and analytics company helping brands and

>> 3

BILLING & PAYMENT

DCB goes vertical – and global

Direct carrier billing is finally coming into its own: PSD2 and GDPR-friendly, it is starting to fit the bill for a growing number of mobile services from gambling and dating to car parking, transport and even education. **Paul Skeldon** what's driving its renaissance

The surge in prominence of mobile gaming, a rise in demand for over-the-top (OTT) content and an increase in penetration of smartphones is driving the growth of the global direct carrier billing platform market, with research suggesting it will be worth

\$172.3 million by 2026.

According to Allied Market Research's report, "Direct Carrier Billing Platform Market by Content (Application & Game, Video & Audio, and Others) and Operating System (Android, iOS, and Others): Global Opportunity Analysis and Industry Forecast, 2019–2026", the global direct carrier billing platform industry garnered \$55.6 million in 2018, and is estimated to generate \$172.3 million by 2026, growing at a CAGR of 14.7% from 2019 to 2026.

While, complications related to direct car-

>> 4

IN THIS ISSUE

06 DCB AND UK GAMBLING

The UK gambling commission has banned the use of credit card. Does this now present DCB with a golden opportunity?

10 RCS FOR RETAIL

With RCS services likely to start to get mass adoption in 2020 as more networks, brands and consumers get on board, John Wick takes a look at what that means for retailers in particular

12 MOBILE FRAUD

Mobile fraud, especially on Android, is growing – but we take a look at how one company is doing it all it can to keep it at bay

14 AFFILIATE GOES GLOBAL

The rise of global e and m-commerce is giving renewed vigour to the affiliate marketing world. Here we take a look at where it is playing out and what's in it for telemedia

30 COMPANIES YOU SHOULD BE DOING BUSINESS WITH!



See page 28



„LINKING TELECOMS AND MEDIA THROUGH INTERNATIONAL PREMIUM RATE SERVICES“

**International Premium Numbers.
Domestic Premium Numbers.
Bulk SMS.
Call Center.**

www.kwak-telecom.com
sales@kwak-telecom.com
+357 220 223 18

„Award Winning Micropayment
Provider with global Footprint.“



Mobile spend

<< 1

publishers win on mobile, which paints a bright picture for mobile taking over the world. For starters, according to the report, the global mobile industry is set to contribute €4.8 trillion to global GDP by 2023.

Mobile-focused companies, such as Uber and Alibaba, have a combined IPO valuation of \$544 billion, six and a half times higher than companies without a mobile focus.

Consumers averaged 3 hours and 40 minutes on mobile in 2019, up 35% since 2017, and downloaded 204 billion apps.

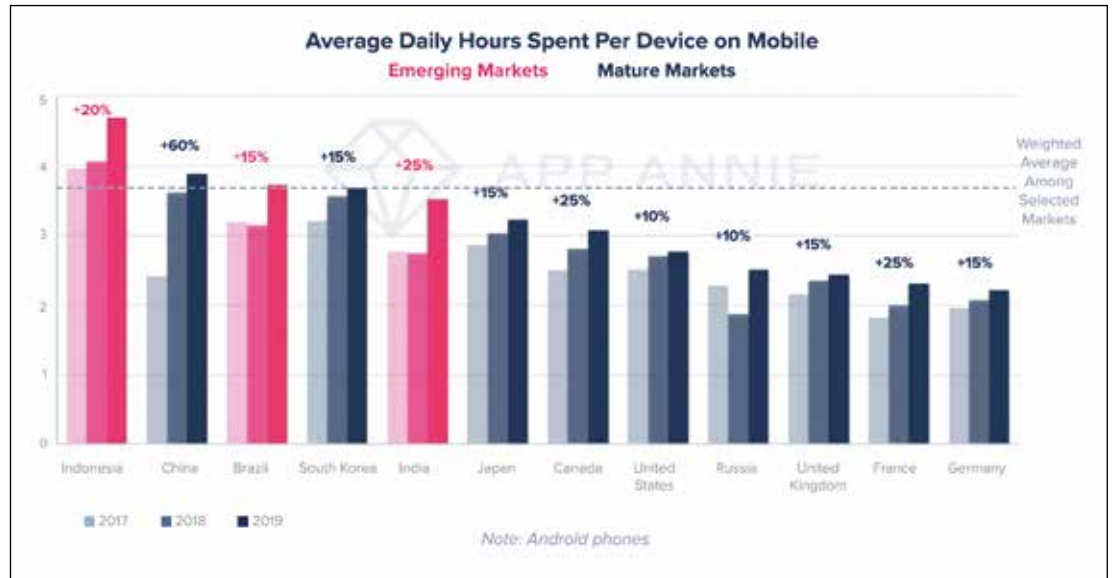
Games, finds the study, make up 72% of all app store spend. Subscriptions in non-gaming apps fuelled growth in spend, from 18% share in 2016 to 28% in 2019.

Spend in gaming and non-gaming subs is also driving growth even in mature markets such as the US, Japan, South Korea and the UK.

China, meanwhile, remains the largest market, making up 40% of global spend.

MOBILE ADVERTISING

It has also been a massive year for mobile advertising, says the study. Brands continue to embrace the unprecedented reach and value of mobile,



bolstering the success of Snap, Facebook, Google, Twitter, and TikTok. Advertisers will pour more than \$240 billion into ad spend in 2020—up 26% from 2019.

SUBSCRIPTIONS

Subscriptions contribute to 95% of spend, with three out of four top non-gaming apps monetising via subscriptions, with video and dating categories propelling app store spend as adoption of Tinder, Tencent Video, iQIYI, and YouTube climbs.

Meanwhile, global spend on mobile games reached 56% of all game software in 2019. Spend on mobile games across

all app stores projected to top \$100 billion in 2020. Tencent's Honour of Kings, Sony's Fate/Grand Order, and Activision Blizzard's Candy Crush Saga are examples of games that are dominating on mobile.

VIDEO STREAMING

Video streaming is also heating up, with nearly 25% of Netflix's iPhone users also using Disney+ in Q4 2019, the highest overlap of users among top video streaming apps in the US, demonstrating consumers pay for multiple services.

Furthermore, Gen Z is becoming an increasingly strategic segment to business. Mobile is Gen Z's native language. This demographic is highly engaged with apps: they have 60% more sessions per user in the most popular apps when compared to older generations.

"Snapchat continues to double down on mobile experiences that help real friends communicate visually. As our audience has expanded, so have our app's capabilities," says Kathleen Gambarelli, Group Product Marketing Manager for Performance at Snap. "We continue to develop powerful advertising technology that

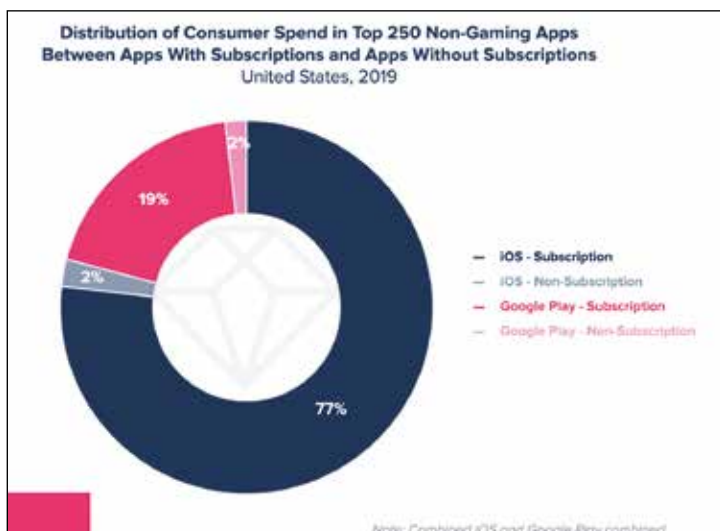
enables brands to efficiently engage with and convert our valuable Gen Z and Millennial audience. As a product marketer, my goal is to verify product-market fit and grow adoption of effective solutions for our customers. App Annie and its Intelligence platform have been instrumental throughout this process, from initial research all the way to launch."

FUELLING DIGITAL TRANSFORMATION

"For brands and publishers worldwide, mobile is fueling digital transformation," adds Theodore Krantz, Chief Executive Officer of App Annie. "We uniquely surface both market data and critical advertising insights to optimize monetization and help our customers thrive on mobile."

The State of Mobile 2020 examines macro mobile trends; identifies which leading brands and publishers across gaming, fintech, retail, social, video, and others are winning on mobile; and shows how businesses can navigate and reach key demographics.

The analysis and data in this report is based off of data from App Annie's Intelligence platform.



DCB goes vertical – and global

<< 1

rier billing ecosystem hinder the market growth, the surge in usage of subscription based digital content create new opportunities in the market.

DCB certainly has come into its own of late. In the UK, a ban on credit card for online gambling is likely to be a fillip for carrier billing, offering as it does a great alternative, with built-in spending limits (see page 6).

In an increasingly regulated online world, too, DCB has some key advantages. In Europe, where PSD2 and GDPR are now fully in place to regulate payments and use of data, DCB offers a quick and easy to use mobile payment tool that requires the least amount of consumer data to provide a payment at the point of use.

This is a vital facet of DCB and one which is increasingly being seen as an offset to the traditionally poor out-payments seen with this billing type.

WHAT IS DCB USED FOR?

Based on content, the applications and games segment held more than two-thirds of the total market share of the global direct carrier billing platform market in 2018, and is estimated to retain its lead position during the forecast period. This is due to rise in collaborations by platform companies with digital content providers for optimisation of their businesses, increasing in-app payment revenues and creating large market for applications, in-app purchases, and games. The research also analyses the video and audio content segment.

However, the other type of content segment is expected to grow at the fastest CAGR of 37.6% from 2019 to 2026. This is due to rise in purchases of on-demand features, such as gaming

applications, podcast, eBooks, health and entertainment applications through app stores.

Based on operating system, the android segment held the highest share in the global direct carrier billing platform market in 2018, contributing to nearly three-fourths of the total share, and is expected to maintain its dominance in terms of revenue throughout the forecast period. This is attributed to higher smartphone penetration and availability of 2.8 million apps for download on the platform. Contrarily, the iOS segment is expected to grow at the highest CAGR of 15.3% from 2019 to 2026, owing to purchases of on-demand features for various applications.

DCB AROUND THE WORLD

Based on region, North America held the largest share in 2018, accounting for nearly half of the global direct carrier billing platform market, and will lead during the forecast period.

This is due to rise in demand for trending digital contents, increase in collaborations of platform providers with several content creators, and surge in number of over-the-top (OTT) providers.

Asia-Pacific is estimated to witness the largest growth rate, registering a CAGR of 18.6% from 2019 to 2026. This is attributed to adoption of direct carrier billing platform payment method by mobile network operators and other content creators in the region.

In Europe, the Nordics lead the way. With smartphone penetration approaching 90%, carrier billing in these countries has a 10-21% market share from digital content payments. In Norway, DCB is the second most popular payment method for digital gaming, while in Finland, it has a 16.2% market share in digital gaming transactions, according to SuperData Research. Digital merchants including Facebook, Apple, Google, Netflix, and Riot Games have begun to leverage carrier-based payments in the region.

LatAm and MENA, meanwhile, offer some of the key areas of growth for DCB services.

Fast adoption of smartphones and low access to traditional payment methods such as credit cards has made DCB very popular in LatAm. According to a report by Fortumo, carrier billing is the second most popular payment method for digital gaming transactions in this region.

Like the rest of the world, the rise of subscription services and the need to access mobile services such as music and games is driving the LatAm DCB market. According to a report by GSMA, it is expected that by 2025, 75% of Latin America's population will subscribe to mobile services, closing the gap with the average for developed markets, which stands at 87%, points out a white paper from DOCOMO.

However, as the Fortumo report shows, LatAm still has some way to go when it comes to the deployment of modern direct

carrier billing solutions by telcos, while the complicated taxation system makes doing business in the region challenging.

For this reason, telcos rolled out their own offerings, such as Vivo with its Android app store in Brazil and Claro with its music streaming service across the entire region. Also, a great potential here is represented by gaming and digital content.

Meanwhile, MENA is also on the up when it comes to DCB. The Middle East has witnessed rapid advances in technology in recent times which has led to rapid economic growth, industrial production and the birth of a considerable mobile consumer base. As a result the mobile telecom sector is booming.

So finds the latest report from DOCOMO Digital – Middle East's digital ecosystem: set for growth – which says that the total number of mobile subscriptions in the Middle East increased by 8 million in 2018 to reach 304.5 million. And in this time, the total number of internet users in the region increased by 18 million to 182 million.

Here, digital content and streaming is largely paid for using DCB with SLA Digital the key player players in the region. In fact, the average revenue per user from DCB in UAE was \$6.4 in September 2018, higher than in Switzerland or Netherlands. Of great importance for the evolution of DCB in the region is 5G technology, with its commercial 5G networks, which is expected to drive the usage of DCB. ■





Central African Republic

+236

Guinea Bissau
+245

Poland
+48

Somalia
+252

Comoros Islands
+269

Sierra Leone
+232

Tonga
+676

Guinea
+224

Congo
+242

Guyana
+592

Albania
+355

East Timor
+670

Burundi
+257

Morocco
+212

Liberia
+231

Vanuatu
+678



Promote our Exclusive International **Premium Rate Numbers** and benefit from our highest payouts, fastest payments, secured transfers and most reliable partner!

Want to know more?! www.interprems.com | info@interprems.com

THE POWER OF PAYMENT !

Is carrier billing set to get a boost from gambling in the UK?



The UK's Gambling Commission is banning the use of credit card to try and cut down on problem gambling online and in bookmakers – but could the in-built limits of DCB make it a viable alternative. **Paul Skeldon** takes a look at how this may be just what carrier billing needs

The UK's Gambling Commission kicked off 2020 with the announcement in early January of a blanket ban on the use of credit card for all gambling services – online and in stores. At first glance this looked like a body blow to the gaming industry, but could direct carrier billing (DCB) save the day and prove its case in the gaming sector – and show case what it can do to all other verticals at the same time?

The online and mobile gaming sector has boomed for the past 10 years and, as more consumers have gone mobile, on-the-go gaming, sports betting and more have blossomed. Much of this growth has been driven by credit card payments – not least because it is the easiest way to get money into the online world.

However, according to the Gambling Commission, 22% of online punters using credit cards are 'problem gamblers, with even more suffering some form of gambling harm'. Hence, from 14 April, their use for gambling is banned.

Gambling Commission chief executive, Neil McArthur, said the new regulation should "minimise the risks of harm to consumers from gambling with money they do not have".

He added: "We also know

that there are examples of consumers who have accumulated tens of thousands of pounds of debt through gambling because of credit card availability. There is also evidence that the fees charged by credit cards can exacerbate the situation because the consumer can try to chase losses to a greater extent."

The UK gambling world was, of course, rocked by the news of the ban – which takes effect on 14 April, after the Grand National – but could this be a massive opportunity for direct carrier billing (DCB)?

Gambling companies have long used carrier billing as an on boarding mechanism, using it to allow people to engage in mobile gambling on the fly without an account – and they sign them up to a subscription service or get them using credit card once they are bedded in.

Let's face it, the gambling isn't going anywhere, so something will fill the credit card shaped void, a view shared by Jens Bader, co-founder of iGambling payments company, Much Better.

According to Bader: "The Government's long-awaited credit card ban raises more questions than answers. Most importantly, will it actually work in the real world? There are so many payment options available

to players, that banning credit cards may not have the desired effect and protect the people it is designed to protect."

This is precisely why it credit card may not be so sorely missed. "From an industry perspective," he adds, "it will be relatively simple for gaming operators, payment companies or credit card operators to introduce new controls once the ban comes into force. This isn't an issue of great technical or logistical complexity."

One of these solutions is going to have to be DCB. "DCB offers a concrete solution, it is a responsible gambling centric product as a payment cap of €50 per transaction and, in accordance with PSD2, an additional monthly limit of €300 is set whilst tackling the pain point age-verification at the same time," says Charlotte Newby, Head of Corporate Communications at DIMOCO. "A great alternative payment option for operators now looking for alternatives, it is a solution literally every punter already holds in hand."

It also fits in with what the Gambling Commission wants. The small print in the Gambling Commission's suggests that there is nothing wrong with using carrier billing. Paragraph 3.82 of the Commission's rul-

ing says: "We do not expect a ban to prevent the use of credit cards for gambling by wholly indirect means [the italics are mine – Ed] – for example, we acknowledged in the consultation that individuals intent on obtaining gambling funds from their credit cards could use those cards to withdraw money from a cashpoint. They might also try to load funds onto a pre-paid card via a credit card transfer or indeed through money withdrawn from a cashpoint via credit card".

'Wholly indirect means' legitimises the use of credit card to pay a phone bill where gambling has been paid for. It also makes it ok to use carrier billing to pay to play.

Another analogy comes from the world of supermarkets. Again buried within the Commission's ruling, it says: "We acknowledge that National Lottery and society lottery tickets and scratchcards can be bought in supermarkets and newsagents along with other products. It would be a disproportionate burden on retailers to identify and prevent credit card payments for lottery tickets if they form part of a wider shop. National Lottery retailers are trained in preventing excessive play and National Lottery draw-based games have the lowest

problem gambling rate of any product at 1%".

On the surface, then, it looks like the credit card ban in gambling is a boon for the carrier billing market. It fills the void and has caps on it that will make problem gambling less likely with DCB users – it could well be a 'clean' alternative.

However, there are still many unknowns. The spotlight on consumer protection that the Gambling Commission's credit card ban directs at gambling isn't going to go unnoticed by carriers. It could be argued that they are providing credit – directly and indirectly – to fuel problem gambling. Given the history of carriers and carrier billing, this is something they are not going to want to be involved in.

MuchBetter's Bader agrees: "Carrier billing on post-paid

contracts ultimately represent a credit line as well. However, due to high payment costs of carrier billing to operators, they usually only use this option mostly for customer acquisition to get people quickly depositing with little friction. So, most operators would not want large amounts/volumes on carrier billing - pricing is prohibitive," he says.

But it may be possible, thinks Elson Sutanto, senior analyst at Juniper Research. "Of course, mobile operators will have a responsible part to play in ensuring control over the amount spent, and frequency in which DCB is used by smartphone users, particularly the youth segment, for gambling purchases.

The question is what does this control look like? Is it standards that have to be determined by the Gambling Commission, the

Gambling businesses/operators and the telecom operators themselves?"

Sutanto continues: "For the gambling commission, there is needs to be significant thought around how to regulate/oversee spending on gambling via DCB and by which type of consumer in terms of demographic. Also, this could be in the form of limiting the amount of spend per day, or to limit/stop top ups for gambling if these top ups/transactions exceed a certain amount, or are done a certain number of times per week. This approach could be used to determine and tackle 'addiction' to gambling."

MuchBetter's Bader adds: "I personally do not see too much of an issue here. A post-paid mobile bill needs to be repaid within 14 days usually. People are dependent on their phones

and being reachable- they won't endanger that by ramping up large amounts on their bills and then unable to pay back. And last but not most important, carriers have sensible limits in terms of what they can bill for 3rd party services each month."

Only the next few weeks will see what happens. Carrier billing has a huge – and growing – role to play across the gamut of digital services, including gaming, so it would make sense to see it only benefit from this move. However, there are many other opportunities for DCB that may or may not be harmed by any fall out from gambling. My feeling is that it should just join all the other ways of paying – people will gamble no matter what barrier you put in the way and it can only be a win for carrier, billers, gambling providers and consumers. ■



DRIVING VALUE-ADDED SERVICES

MONETISING CONTENT



1 DIRECT CARRIER BILLING
APIs to facilitate mobile payments for digital goods and services, safely and securely.

2 PSMS
Spontaneous payment solution to monetise interactions that are offline or in an interactive environment such as donations, chat, broadcast response and interactive services.

3 MESSAGING & RICH COMMUNICATIONS
Communicate with consumers, improve and automate processes through effective, direct messaging platforms to improve campaign ROI on marketing activities.

4 VOICE SERVICES
Premium Click-2-Call services or non-premium engagement solutions. Bespoke cross platform solutions that integrate both voice and SMS call to actions to deliver seamless, effective consumer interactions and monetisation.

#WorldTelemedia2019
GOLD SPONSORS AGAIN

W: www.dmb-uk.com
T: 'sales' to 63333 **E:** sales@dmb-uk.com

RCS: the second coming?

RCS has been long on promise, but has so far failed to ignite. However, that could all be set to change now that three US telcos are working together on making it happen – but could its future lie in B2B, wonders **Paul Skeldon**

According to a new market research report “Rich Communication Services (RCS) Market by Application (Advertising Campaign, Content Delivery, and Integrated Solutions), End-User (Consumers and Enterprises), Enterprise Size, Enterprise Vertical, and Region - Global Forecast to 2024”, published by MarketsandMarkets, the RCS market size is projected to grow from \$4.5 billion in 2019 to \$10.6 billion by 2024, at a CAGR of 18.9% from 2019 to 2024.

Separately, the GSMA is predicting that there will be 363 million active RCS users by 2021, generating some \$74 billion in revenues. With major growth drivers for the market including the growing expenditures on digital marketing across verticals, is RCS finally about to explode onto handsets worldwide?

AT&T, Sprint, T-Mobile and Verizon have formed the Cross-Carrier Messaging Initiative in a bid to make a strong case for the Rich Communications Services (RCS) standard yet again. Can RCS garner mainstream adoption?

Shashank Venkat, from Cerillion certainly thinks this is the

time. “After a decade of stop-starts, the GSMA’s Rich Communications Services (RCS) standard is trying to make another comeback,” he says in a blog. “However, this time around the push for RCS is coming from leading US telcos such as AT&T, Sprint, T-Mobile and Verizon as part of their new Cross-Carrier Messaging Initiative.”

Venkat adds: “RCS can be

seen as a successor to the humble text message. It brings in capabilities such as messages with advanced features including high-resolution images, receipts, notifications and lots more. The big US carriers want to roll it out in 2020 on Android with the hope that it can bring the ‘next-generation of messaging’ to users. Interestingly, tech giants Google and Samsung have their own RCS implementations in place as well.”

But is the user case for RCS as clear cut as it first appeared? According to MarketsandMarkets, advertising campaigns via digital marketing is the prominent approach adopted by enterprises to attract customers. Sharing rich media contents have enabled end-users to engage greatly with the enterprises to take benefits of the services.

Enterprises being the prominent stakeholders for RCS in the market, advertising campaign application is expected to maintain dominance throughout the forecast period.

The enterprises throughout verticals are expected to have a significant dependency on SMS for digital marketing. Deployment of RCS messaging platforms to share media-rich content amongst the end-users is expected to bring growing instances of customer engagements.

WHAT HOLDS RCS BACK?

RCS has been on the agenda since 2015, but is still to catch light, not least in the public’s mind. There are several reasons for this, all of which still need to be addressed.

Firstly, there isn’t the interconnectedness of operators needed globally to make this work. US carriers teaming up to jointly work on it will help, but globally there is still much to do.

There is also the issue of Apple. Apple’s iMessage still doesn’t support RCS and there is no indication as when it, if ever, it might. With iPhones accounting for 20% of global smart-



phones – 50% in the US – that is potentially a massive disruptor to RCS deployment.

The third hurdle is pricing – and how operators can monetise RCS. There is something of a blank canvas when it comes to cost and there is still a big debate as to whether enterprises need to be charged per message or per session. This may seem something of an esoteric debate, but it profoundly impacts business models – not least when costing out campaigns that also run on SMS: just what is the ROI on doing it with RCS and is it worth the effort?

For MNOs, the question is even more pressing. How can they effectively monetise RCS and make it sustainable? While RCS promises to recoup some of the A2P messaging business lost to OTTs, it must do so at a price

that not only pays for itself but also compensates for any SMS A2P messaging lost to the newer, more evolved format.

IS RCS A B2B TOOL?

The big question, however, around RCS is whether consumers actually want it. In a world

In theory, the features available on RCS are already available to users on other, OTT platforms. Instead, it is starting to look like RCS might be a messaging engagement tool better suited to B2B

where we are all on WhatsApp and Telegram, as well as Facebook messenger and even SMS, is there really a role to play for RCS in the consumer market?

Venkat isn't sure. "Specialist messaging apps such as WhatsApp and Telegram have made life extremely

easy for users with a range of 'rich' messaging features," he says. "In theory, the features available on RCS are already available to users on these popular messaging platforms.

So, even if RCS brings in a seamless and interoperable messaging experience among

carriers, it simply cannot beat the scale of WhatsApp which already caters for millions of users around the world."

Instead, it is starting to look like RCS might be a messaging and engagement tool better suited to B2B applications.

"With automated Application-

to-Person (A2P) messaging already popular, RCS will open up a lot more options for operators," ponders Venkat.

"The big advantage with carriers supporting RCS is that businesses will not need to know whether someone has a particular app installed to send their message," he says.

In fact, Venkat believes, RCS offers a great opportunity for telcos to retain A2P messaging revenues.

"While tech upstarts have tried disrupting B2B messaging, no player really stands out in the broader business messaging sphere where SMS is still prevalent. Telcos can therefore drive RCS adoption in B2B messaging if they make a strong enough push for it, considering that competitors such as WhatsApp are still in the early phases of the B2B play." ■

Software Solutions For Performance Marketing And Compliance



vene



veneoverwatch



Protect your business

with the industry standard solution for DCB fraud management

Regain control

of the traffic you are getting without losing your advertisers

Balance risk and revenues

by adjusting your individual risk profile down to the sub source

The ultimate online traffic risk assessment and fraud protection tool, with custom-made solutions for both mobile carriers and performance marketing companies. With a multilayered approach to fraud detection, it finds and blocks many fraud types.

info@veneoverwatch.io

veneoverwatch.io



venedash

All-in-one solution

full control over your campaigns with a stable platform

German innovation

engineered in Berlin following the strictest of data protection policies

Competitive pricing

conversion-based model; the more you convert, the less you pay!

A performance marketing solution that allows you to track all your digital campaigns and manage your partners all in one place. Take your business to the next level with our key features like Intelligent Smart Links, Offer Monitor and more

info@venedash.io

venedash.io

What is RCS and why should retailers start preparing for it now?

RCS is coming down the pipe and 2020 is set to be the year when it starts to see some real world use. One of the key markets that is going to be quick to benefit from it is retail. So how can retail put it to use? **John Wick** explains

After many starts and stops, it's finally here. Rich Communication Services, or RCS, has been an emerging technology that is finally reaching fruition and promises to revolutionise text messaging as we know it.

RCS is set to transform messaging by taking its best functionality and giving it a 21st century upgrade, with features like high-resolution imagery, advanced video and audio capabilities, location information, and analytic feedback, just to name a few.

One of the most exciting capabilities of this new technology will be the opening of a new world of ways for brands to connect with customers. Features like high-quality photos and videos, payment options, and mapping directions are just a few of the

more engaging capabilities that brands will be able to take advantage of to create truly branded conversations with any device.

Retailers don't have much time, though, before RCS will become widely available and hit the retail world full force. Here are some of the most important benefits of RCS to understand and how retailers can start taking steps to implement them now.

BETTER CUSTOMER ENGAGEMENT AND SATISFACTION

Many of the most engaging channels to customers are currently distributed among desktop and third-party apps. Now, with RCS, these will be able to become a more direct, simple mobile-based experience.

The technology will allow retailers to send promotional content, manage payments, and create chatbots that interact directly with the mobile number of a user, and without the user having to switch between different apps and devices.

Let's take a closer look at these capabilities:

- **Live delivery tracking** – Through RCS, customers who want to track their deliveries only need to send a text, and they can receive a reply with all the information – instantly. Retailers can share anything from a live tracker, to buttons with options to reschedule the delivery, to an option to choose a safe place to leave a package. And it can all be done with branded graphics, and without users

having to follow links or open other apps.

- **Technical assistance** – Although customer service representatives will never be able to be completely replaced, RCS will relieve a lot of pressure from call centres. RCS is a perfect channel to support chatbots, which can be trained to offer support for the most common problem customers may encounter. Instead of waiting for an operator to be free, a customer can text a company and receive immediate assistance. This efficient approach makes sure that smaller problems can be handled by an algorithm, and that human representatives can concentrate on solving more serious problems.
- **Coupons and vouchers** – Redeeming discount codes will become easier. With RCS facilitating the sharing of high-quality pictures, retailers can bring

products to life in a manner impossible right now. For improved conversion, retailers can send QR codes with discounts directly through text, similar to how airlines provide virtual boarding passes. This will make redemption much simpler and promise to dramatically increase conversion. Instead of relying on third-party apps to download and access coupons, retailers can keep customers engaged in their own digital space, building a closer, more direct relationship with them.

- Mobile payments – Payment options are becoming a new standard for shoppers, fuelled by tap-and-pay convenience. Taking advantage of this capability as a wallet (and reassuring them about the security of the transaction) will be a game-changer for brands. Until recently, these transactions have

been provided by third parties, like PayPal or Apple Wallet, but with RCS, retailers can own the transaction directly without the need to redirect to third-party platforms. This will bring the customer even closer to a 360-degree experience, and foster even more loyalty. Moreover, as an extension of mobile payments, RCS can enable one-click repeat purchasing for everyday items such as contact lenses, and it can also be used to offer promotions on related products, like lens cleaning fluid. Upselling and repeat selling can form the nucleus of a longer-term strategy.

- New product announcements – RCS allows retailers to share high-quality pictures and videos, making it easier to send customers information on new arrivals. For example, fashion retailers could send a show reel

of their new collections, and game shops the trailers of the most anticipated video games.

HOW RETAILERS CAN PREPARE NOW

While telecom operators work on rolling out RCS, retailers have a short amount of time to prepare an effective strategy now, which will allow them to use the technology to its full potential and start monetising from day one.

The first step is thinking about what kind of services retailers can offer to their customers. Based on the examples above, if they send packages regularly, implementing a delivery tracker is a priority; an automated assistance service is also crucial. To this end, retailers should do in-depth research on their customers and look for ways that RCS can make their relationship more direct and simple.

Once retailers have an idea of

the kind of content they want to create, it's time to start looking for people who can develop it. They will need designers who understand RCS and its formats and necessities, and who can work closely with them to have the content ready for a smooth rollout.

NO TIME TO LOSE

RCS is coming. Soon it will be the new standard for today's mobile retail experience.

Now is the perfect time for retailers to prepare, and there's not a moment to spare. They must look to impress their customers with a new, engaging service that eliminates barriers and makes the retail experience more direct and simple. And the earlier the preparation for this, the better. 📱

John Wick is Senior Vice President and General Manager, Global Product

MOBILE AD MONITORING - SERVICE TESTS - MARKET ANALYTICS - COMPLIANCE SUPPORT - FRAUD PREVENTION



WWW.MCPINSIGHT.COM

Mobile fraud: taking

93% of mobile transactions blocked as fraudulent in 2019, says a new study. So what's up in the world of mobile? **Paul Skeldon** reports

According to mobile technology company Upstream, 93% of total mobile transactions in 20 countries were blocked as fraudulent in 2019.

The company's "Invisible Digital Threat" report features data based on deployments of Upstream's Secure-D full-stack anti-fraud platform that detects and blocks fraudulent mobile transactions and found most originated from ad fraud malware. The platform at the end of 2019 covered 31 mobile operators in 20 countries.

In the markets examined,

Upstream's security platform processed 1.71 billion mobile transactions and blocked 1.6 billion of them as fraudulent, a staggering 93% of total transactions.

It is estimated that left unchecked these transactions would have cost users \$2.1 billion in unwanted charges. For the industry as a whole, losses from online, mobile and in-app advertising reached \$42 billion in 2019 and are expected to reach \$100 billion by 2023.

The number of malicious apps discovered by Secure-D in

2019 rose to 98,000, up from 63,000 in 2018. These 98,000 malicious apps had infected 43 million Android devices.

With Android devices now accounting for 75 to 85% of all smartphone sales worldwide, Android is by far the most dominant mobile operating system (OS). At the same time it is the most vulnerable due to its open nature, making it a favourite for fraudsters.

While it is always a good rule of thumb for consumers to only download mobile applications from Google's official storefront, Google Play, thanks to its scale and set up, rogue apps are still getting through its defences. Of the top 100

most active malicious apps that were blocked in 2019, 32% are reported still available to download on Google Play.

A further 19% of the worst-offending apps were previously on Google Play but have since been removed, while the remaining 49% are available through third-party app stores.

Fraudsters appear to target some app categories more than others. Ironically, apps designed to make a device function better and make everyday life easier are the ones most likely to be harmful with 22.32% of malicious apps for 2019 falling under the 'Tools/Personalization/Productivity' category globally. The next

TELECOM2

Excellence Through Innovation



+44 (0)207 058 1000



INFO@TELECOM2.NET



WWW.TELECOM2.NET

All in one, business-to-business telecommunications provider with an extensive portfolio of technology, products and services across the voice and mobile sectors.

BUSINESS, PAYMENT AND HOSTING SOLUTIONS FOR YOUR BUSINESS

down the miscreants

most popular categories cybercriminals target are Games (18.97%) and Entertainment/ Shopping (15.76%).

CRIMINAL ENTERPRISE

Dimitris Maniatis, CEO of Upstream explains: "Mobile ad fraud is a criminal enterprise on a massive scale. Though it may seem that it is only targeted at advertisers, it greatly affects the whole mobile ecosystem. Most importantly it adversely impacts consumers; eating up their data allowance, bringing unwanted charges, messing with the performance of their device, and even targeting and collecting their personal data.

It is more than an invisible threat, it is an epidemic, calling for increased mobile security that urgently needs to rise up in the industry's priority list. Left unchecked, ad fraud will choke mobile advertising, erode trust in operators and lead to higher tariffs for users."

The effects of mobile ad fraud are particularly damaging in emerging markets where data costs are significantly higher. As evidenced from detailed data presented from five such markets including Brazil and South Africa fraud rates in most cases exceed the 90% mark. As Upstream's report highlights consumers in emerging markets are more vulnerable to digital

fraud; they are unaware of the dangers as they often go online for the first time via their mobile devices and data depletion caused by malware has a much greater effect on them due to the high cost of data in their countries. In Africa 1 GB of data costs prepaid mobile subscribers the equivalent of 16 hours of work at minimum wage.

"A key part of successfully tackling mobile fraud is awareness," explains Maniatis, "something that the whole industry, surprisingly, lacks. With all indicators pointing that its value will grow in the hundreds of billions in the next three years, we cannot afford to remain idle. This is the

main reason we steadily and openly share all our findings with the whole community."

"Mobile ad fraud remains a hidden threat for most consumers. It usually goes undetected and is not high on people's agendas when choosing apps. However, as the industry delays its response, consumers should take steps to stay safe from mobile ad fraud in 2020. For example, by using anti-malware services like Play Protect, by only downloading from the official Play store after checking reviews carefully and keeping a close check on bills for unwanted subscriptions or charges," adds Maniatis. ■



SECURE MT

Secure, trusted and flexible card payment processing for online and retail businesses, whether that be for one off payments, wallets, pay for view or subscription services. Our payment forms are optimised to work with any device, so your customers can even pay via their mobile.

- Fully compliant with Mastercard and Visa rules
- FCA licences payment gateway
- Utilises PAS certified age verification software



+44 (0) 207 058 0200

WWW.SECUREMT.CO.UK

info@securemt.co.uk



Affiliate marketing goes global

... and it is all thanks to a global boom in ecommerce leading brands and retailers to look for new ways to target users in new geographies. **Paul Skeldon** reports

2020 will be the year that brands expand their affiliate programmes beyond mature markets like the UK and US and complement their programmes with affiliates in emerging markets – it looks, according to CJ Affiliates at least, as if affiliate marketing’s time has come. And it is all thanks to a global boom in ecommerce.

Mexico, Malaysia and the Philippines are three of the top five biggest risers for e-commerce spend in 2019, with the other two spots filled by India and China. “Most retailers will be aware of the substantial opportunities to be had in mature markets. Dig a little deeper, though, and you’ll find so many hidden gems that are now generating billions in online revenue and many brands are missing out by neglecting them,” explains Jules Bazley, Regional Vice President, Europe at affiliate marketing network CJ Affiliate.

Bazley adds: “Expanding affiliate programmes in markets such as these could have been a risk ten, or even five, years ago, but ecommerce growth of over 30% compared with the year before, have made them the logical next step for marketers.”

And the trend is for this to all continue. According to an Accenture and AliResearch report, it’s expected that more than 900 million consumers will shop internationally by the start of 2020, importing \$994 million worth of products and services – three times as much as 2015. Increasing access to the internet and accessibility of mobile are major drivers behind the growth in e-commerce spend, connecting those who can’t afford a desktop or tablet, as well as growing numbers of new sellers and

secondary industries, adding to market momentum.

Additionally, Salesforce believes that the rise in the need for discounting, coupled with a growing use of AI to allow for personalised ads and offers is what lies behind making all this work and is proving to be a boon for affiliate marketing.

“As a result of more consumers being able to shop abroad, and the ability and willingness of businesses to expand abroad, we’ve witnessed huge demand among advertisers for local market experts, offering the capabilities to recruit publishers in emerging territories and supply granular insight into the potential of each

region,” says Bazley.

Retailers can launch in a market with little more than a single member of staff on the ground, supported by dedicated companies that have been set up to help them launch in some of the more challenging markets.

“Challenges do remain. Logistics remains one of the biggest barriers to cross-border selling, but it’s not the same problem it once was,” explains Bazley. “Part of the improvement has been linked to increased urbanisation within highly populated areas of Asia and Africa, which has opened more customers up to home delivery.”

Affiliate World Europe: The place to leverage global ecommerce

With the growth in in global ecommerce driving affiliate marketing to new levels, the place to learn how to leverage it – and how to link it to your telemedia and carrier billing offerings – is at Affiliate World Europe (AWE) in Barcelona on 8-9 July.

Happening bi-annually in Asia and in Europe, Affiliate World is the largest performance and ecommerce marketing mastermind you’ll ever experience. More than 3,500 of the top performance marketing professionals from around the globe attend for enhanced networking opportunities and above all, key takeaways to increase profits.

In just four short years, it has grown to become what Neil Patel considers “the absolutely must-attend event in the industry”.

Bringing together advertisers and traffic sources with brands and agencies – covering TikTok, Facebook, Google, Uber, Onnit, Doordash, Rappi, Lyft, Alibaba, Shopify, and many others.

At the show, you will network with the industry’s brightest minds, absorb mastermind-level content on stage, and be exposed to an exhibition floor overflowing with opportunities to push your career forward.

After each day, you’ll head out for evenings stacked with patio happy hours, rooftop sunsets, and industry nightlife that seems to never end.

AWE EUROPE



THE BIG GUY Paul Skeldon
paul@telemedia-news.com

ART DIRECTOR Victoria Wren
victoria@wr3n.com

CONTRIBUTORS & CONSULTANTS

Tony Pearce, Victor T Miller, Rory Maguire, Nick Lane, John Strand, Sofia Alves, Bruce Pharoah, Paul Dunone, Jarvis Todd, Sheldon Johns, Mark Birkett, Eric Felton, Tim Green

SALES & MARKETING

info@Telemedia-news.com

PRODUCTION DIRECTOR Annika Micheli
annika@Telemedia-news.com

PUBLISHER Jarvis Todd
jarvis@Telemedia-news.com

TO SUBSCRIBE www.TelemediaOnline.co.uk

CIRCULATION ENQUIRIES

Geraldine Lawton - O'Sullivan
Geraldine@Telemedia-news.com

WHAT WE'VE BEEN LISTENING TO

It's Always Been You, Ray LaMontagne
Fucitfano, Peter and the Test Tube Babies

WHAT WE HAVE BEEN READING

Collected works, Carl Jung

WHAT WE HAVE BEEN AMUSED BY

Man like Mobean

WHO WE'VE BEEN FOLLOWING

The Red Hand Files, Nick Cave

SPRING 2020 WILL BRING...

Brexit

TELEMEDIA MAGAZINE is published five times a year and circulated in print to qualified readers and downloaded in digital format to 12,000+ requested readers.

BUSINESS ADDRESS: Ground Floor, Virginia Cottage, Nash Lane, Scaynes Hill, West Sussex, RH17 7NJ, UK. Web: www.TelemediaOnline.co.uk

Overseas subscriptions and non qualified readers can obtain Telemedia Magazine with an annual subscription rate of £15 / £20. Refunds on cancelled subscriptions will be provided at the publisher's discretion, unless specifically guaranteed within the term of subscription.

© World Telemedia Ltd. All rights reserved. No part of Telemedia Magazine may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording on any information storage or retrieval system without the written consent of the publisher. The contents of Telemedia Magazine are subject to reproduction in information storage and retrieval systems. Repro and Print by Trio Offset

FROM THE EDITOR

Direct carrier billing – the payment tool that fits the bill

Has direct carrier billing's time finally come? It looks like it might. Mobile is now the definitive device for consuming content and services for the majority of users across Europe and the world (see page 1).

The State of Mobile 2020 report from App Annie, finds that annual global consumer spend via the channel likely to reach \$380 billion driven by effective mobile ads, games, retail and video.

Mobile is the place for OTT music, TV, films and more. It is also creating a wealth of new services from hiring electric scooters to paying for bus tickets to paying to charge the device itself.

Subscriptions contribute to 95% of spend, says App Annie, with three out of four top

non-gaming apps monetising via subscriptions, with video and dating categories propelling app store spend as adoption of Tinder, Tencent Video, iQIYI, and YouTube climbs.

While there is a move towards subs, there is also a move to one-off payments for access to some services or one-off access to content, again consumed on mobile.

Taken together this is a very powerful new paradigm – and it needs a new way for consumers to easily pay.

Carrier billing fits this bill perfectly. It is quick and easy to use from a consumer point of view and, despite some reservations in some markets, it is now well tried and tested.

However, there is way more to carrier billing than just pleasing

consumers. Here in the era of GDPR and PSD2, in Europe at least, carrier billing offers the least consumer data-centric way to pay on mobile.

It also comes with built in spending limits per day and per month... something that the UK's gambling companies are likely to view with renewed interest now that the Gambling Commission has banned the use of credit card (see page 6).

In fact, the more you look at the way the consumer market for media and content has shifted, the more carrier billing suddenly fits the bill. 📱

[@telemediaTweets](http://www.telemediaonline.co.uk)

Paul Skeldon, editor



BOLD.Pay

A **MACROKIOSK** Solution

BOLD.Pay is a cloud based multi-channel payment access that enables dynamic billing arrangements to be executed on multiple formats such as mobile, web and in-applications.

Supports
various
channels

- + Direct Carrier Billing
- + Credit Cards
- + Online Banking (FPX)
- + E-Wallets
- + Over-The-Counter

MACROKIOSK

A digital technology company based in Asia enabling digitalisation platform as-a-service in the areas of **Notification, Engagement and Payment.**



MORE



ISO/IEC 27001:2013
ID: 9105061191



2020 vision: what lies ahead for telecoms

John Strand has been predicting the future of telecoms for 24 years – and as 2020 gets going, he doesn't disappoint. Here are some of the key issues facing the telecoms and telemedia industry this year

Telecoms is a fast evolving business and, as 2020 roars into life, there is much set to happen this year – from 5G roll out to Chinese equipment supplier mistrust, to personalisation to privacy issues, it is all to play for. So what is going down in 2020?

THE MOBILE OPERATOR'S CLASSIC BUSINESS MODEL IS PROBABLY DEAD AND BURIED

Most of the world's mobile operators have evolved their business model in face of competition and revenue erosion by OTT players. Mobile operators have realised that revenue from traditional streams of voice, SMS, and MMS is in free fall. In 2020 the industry will see a new direction in which operators divide into infrastructure companies and service companies.

We believe that this split

comes in many forms and models. We think we will see companies that make a classic split, but we also think that we will see companies that will make more creative splits in which divesting masters and towers is just the first step. We expect this trend could translate to spectrum. We envision an industry divided into three elements: infrastructure, services and spectrum.

Such fragmentation will require a new view of spectrum and its ownership and use. When it comes to spectrum sharing, dynamic spectrum sharing will open several new technical possibilities. To see the future spectrum market, look at the introduction of Citizens Broadband Radio Service (CBRS) in USA, a model likely to spread and which is creating a new value chain and dynamic market. Many new and exciting companies have already

entered and created equipment and services. This is the same dynamic underpinning the introduction of premium SMS, MVNOs and in connection with the app industry that has emerged at the top of the smartphone universe.

Of note is massive rollout of 5G and fixed wireless access (FWA) solutions. If 5G is hot in 2020, then 5G/FWA will be super-hot in 2020. Strand Consult's forthcoming report on 5G/FWA will show how fixed line providers can extend their service and revenue with 5G. The business and economics of this development follow a similar dynamic to the MVNO market, and customers can reuse this knowledge from Strand Consult.

5G LAUNCHED WITHOUT A GREAT VISION

5G is coming faster and stronger than 2G, 3G or 4G. With each new G, implementation and adoption time gets shorter. However, regulators in many countries are failing to keep pace

with the technology, as they are behind on frequency allocation and rollout policy.

Indeed, few regulators have succeeded to make infrastructure rollout more efficient or auctions more quickly. The pressure is on the Federal Communications Commission (FCC) in 2020 to deliver an auction for the C-band so that the US can stay in the global 5G race and correct for the misguided history of handing out frequency to government users without accountability measures in place.

Strand Consult has worked on these problems for years and notes that it is still too difficult and expensive to roll out new network in most countries. In Denmark Strand Consult has helped to reduce total annual rental costs for mobile masts by about 20%. In most countries, 5G will be first marketed as an alternative to fixed line broadband. Wireless solutions based on 5G will help stimulate competition.

The performance of most EU countries on 5G is disappointing.

Countries which used to lead the world in mobile standards are nowhere to be found with 5G. Unless the EU reverses course on its anti-investment telecom policy, don't expect to see the EU lead in 5G or any other G in 2020, 2021, 2022, 2023 or for that matter in 2030.

Like 4G, most of the value in 5G will accrue to players other than the telecom operators providing the networks. In 4G, most of the value went to smartphone makers and over the top service (OTT) providers such as Google, Facebook and Apple. In most countries, ARPU and earnings for mobile operators have fallen year after year—even though the speed and quality of mobile networks have increased.

Strand Consult would like mobile operators to focus on how partnerships and creative business models can use 5G to create value for their shareholders. Mobile operators have had successful revenue partnerships with premium SMS to develop the service market and MVNO brand strategies to reduce their sales and marketing costs. Operators need to look at these models to find partners for 5G.

OTT, IOT, AND ALL THE OTHER SERVICES

Already with 5G, we see the world moving to the over the top (OTT) providers and when it comes to Internet of Things (IoT). This creates a challenge for how mobile operators can engage in partnerships and business models.

The big question is whether it will be a market that will be dominated by classic mobile operators or by MVNOs like Cisco IoT and Wireless Logic that offer corporate clients one stop shopping. Unless mobile operators are smart, they will relegate themselves to dumb pipes again.

CHINA CRISIS

In 2019 Strand Consult focused

heavily on the problem of Chinese equipment in telecommunications networks. While the media has largely focused on Huawei, the discussion should be broadened to the many companies that are owned or affiliated with the Chinese government including but not limited to TikTok, Lexmark, Lenovo, TCL, and so on.

The Chinese propaganda machine has succeeded in misleading many media outlets, particularly with the unchecked claims that Huawei's products are technologically superior. Few media will dare to publish an analysis comparing the operating

EU policy makers promised that GDPR would bring a level playing field. Instead, the opposite has happened; the largest platform companies have increased market share and revenue

conditions foreign companies get in China compared to the favourable treatment Chinese companies enjoy abroad.

Moreover, there are little to no critical articles investigating Huawei's role to suppress human rights in China. The vast majority of stories about Huawei start with the company giving an exclusive interview to a friendly, Chinese-speaking journalist in a leading medium which is then syndicated globally.

Too many have a naïve view of the China debate and have not considered the ramifications of turning over key technologies to the autocratic country, not to mention the risk for the telecommunications industry and its customers.

REGULATION WILL HIT TELECOM OPERATORS AGAIN IN 2020

The need for greater security in networks and removing vulnerable elements will hit operators in 2020 with new standards for resilience. While Huawei likes to spin that restrictions on its equipment are mere trade war

tactics, the debate about security will become more holistic to encompass the many elements of security including software, vendors, and risk management.

The need for network security can be traced through telecom network policy. Strand Consult documents that already in 2005 restrictions were placed on Chinese technology for the 3G rollout. It is telling that the current US President defends European technology companies Ericsson and Nokia while many European operators defend their Chinese suppliers. It will be interesting to see whether

the new European Commission will finally "walk the walk" and demand the same safety and security standards of Chinese companies that European, US, Korean and Japanese firms have had to uphold in EU.

NET NEUTRALITY

Net neutrality or internet regulation was invented by the OTT players to cement their business models and provide reduced, if not, free delivery of traffic for the largest platform companies. OTT companies funded many non-profits to conduct global marketing campaigns to overwhelm regulators with millions of comments.

It is telling how many countries in Europe, Latin America and Asia have had net neutrality policy in place for years with nothing to show for it. The policy has not produced locally made innovation or an increase in infrastructure investment. There is an important case study in the FCC recognizing a mistake and reversing it. The FCC realised that the heavy-handed 2015 policy did not deliver the intended

effects and thus removed it and restored the proper role of the competition authority to police anticompetitive practices on networks. Notably in the more than two years of Restoring Internet Freedom in the US, investment has boomed, internet speeds have increased, and the pace of internet startups has not slowed down.

2020 should be the year that policymakers come clean and admit that net neutrality regulation is not working to deliver investment or innovation. Telecom regulators should make policy that incentivizes the best new technologies in networks, not freezing in place obsolete architectures from 40 years ago. In any event, it makes no sense to create network policy which rewards the richest companies such as Google with free transit when they can afford to pay for their use of telecom networks.

PRIVACY: EU, US AND THE REST OF THE WORLD

The drive for online privacy regulation worldwide reflects distrust and disappointment in the large platforms, however regulation, however well-intended, can have the opposite of the intended effect. 2020 will mark the two-year anniversary of the General Data Protection Regulation (GDPR) in the European Union.

EU policymakers promised that GDPR would bring a level playing field. Instead the opposite has happened; the largest platform companies have increased their market share and revenue in the region. In some two decades of successive data protection regulation in the EU, small and medium sized internet companies have failed to grow, and consumer trust online is at its lowest point ever, according to Eurostat.

Ongoing reporting by Politico shows how large players have gamed the system and how European data protection authori-

AFFILIATE WORLD

8-9 JULY 2020

EUROPE



3,650+ MARKETERS

200+ EXHIBITORS

40+ SESSIONS

COVERING:

**AFFILIATE MARKETING,
ECOMMERCE,
LEAD GENERATION,
AND SEO**

EUROPE'S #1 PERFORMANCE MARKETING CONFERENCE

BUY EARLY BIRD TICKETS NOW: [AFFILIATEWORLDCONFERENCES.COM/EUROPE](https://affiliateworldconferences.com/europe)

ties have difficulty enforcing the rules.

TELECOM COMPANIES WANT TO BE 'WOKE'

In the coming year, there will be a continued drive to make everything green, and telecommunications is no exception. The future will favour those firms that can build environmental value into their business. Telecom companies can either purchase Guarantees of Origin (GOs) from their energy providers or enter into power purchase agreements (PPAs) with green energy providers.

The first solution does not increase the supply of green energy and is thus "greenwashing", while the second model is the true green solution. In Denmark, Google has already shown the way by purchasing solar cell capacity from Better Energy A/S.

Telecom companies should investigate these solutions.

They also need to address the lack of women in the industry. Unfortunately 2019 was not the year which marked more milestones for women achiev-

In the coming year there will be a continued drive to make everything green and telecoms is no exception. The future will favour those firms that can build environmental value into their business

ing leadership in the industry. Of the 25 board members of the global industry association GSMA, just three are women. Notably, two of the three are American. Moreover, the heads of most telecom regulatory authorities are men. Only the US has succeeded to deliver the first and only woman for the Director role at the International Telecommunications Union.

A NEW APPRECIATION FOR THE ROLE THAT TELECOM COMPANIES PROVIDE FOR SOCIETY

In 2020 security of telecommunications networks will become a key theme in policy circles.

Whereas regulators in the past overwhelming focused on low prices and ubiquity, people will come to appreciate that security is also important and worth paying for. This may evolve into new regulatory obligations for mobile operators, like the network requirements for first responders and national security users.

The human rights discussion will also be broadened to

network equipment and other technology providers. In Europe and in large parts of the world, the focus is on protecting a democratic social model where freedom, freedom of expression, privacy and human rights are important elements.

Europe attempts to focus on the rights of citizens, including data protection, and many want to preserve a role for technology to improve the quality of life and add value to our society. In a dictatorship like China, technology is instrumental for the state to fulfil its goals, regardless of whether it improves quality of life or promotes human rights.

It will become increasingly difficult for European policymakers to defend the use of many Chinese technologies which violate EU rules. 🇪🇺

John Strand runs Strand Consult



OTT-X
The next generation app platform.

App enable your voice, messaging and transactions

Meet us for a demo at **WTM, Marbella**

12 TELECOM
www.12telecom.com

Say goodbye to ad campaign optimisation... let machines do it for you



Digital ad campaigns need to be individual and they need to yield results. Is it time to hand over the creation and tracking of ad campaigns to smart machines? **Maxime Chevallon**, thinks it is and explains how it works

Digital ad campaigns are now more intricate than ever. Not only are advertisers dealing with myriad ads in different formats, but the publisher network is also constantly expanding and it is challenging to assess whether each of your ads are performing as well as they should be. Every advertiser wants their campaigns to yield the best returns at every opportunity. Yet, keeping track of the performance of each and every ad is a monumental task.

However, as with many other aspects of modern business, sophisticated machine learning is beginning to take away the 'heavy lifting' from advertisers to enable seamless, automated ad optimization. One particular tool driving this intelligent ap-

proach to performance marketing is Cost Per Acquisition (CPA) Target bidding - an emerging bid type that automatically optimizes the campaign's bids based on its conversion rate.

AN INTELLIGENTLY AUTOMATED APPROACH

Today, advanced machine learning algorithms power CPA Target tools to identify the best segments, as well as the best bid for each impression, by intuitively adjusting to traffic performance changes on the fly. If a traffic source (specific ad placement on a specific website) meets the target set by the advertiser, bidding is continued automatically to achieve the maximum number of conversions with minimal effort from

the campaign owner.

This can also work in reverse; if the source doesn't meet the goal, bids are automatically lowered or the traffic source turned off completely if the performance doesn't improve. When compared to the more traditional CPM model, the dynamic nature of CPA Target can work to protect an advertiser's budget which might have previously been lost, as well as eliminate all time spent on making manual bid adjustments.

The potential for machine-led ad optimization to revolutionise the way advertisers enhance the performance of their campaigns is clear, with automatic adjustments aiming at maximising the number of conversions while minimising cost. There

are however some key considerations to be had before this technology can be utilised with the most effective return. There are two critical phases to a successful CPA Target campaign.

MOVING THROUGH THE PHASES

The first being the learning phase, which enables the optimization algorithm to find the best performing segments and the exploitation phase, which pinpoints the good performing segments to exploit the campaign and bring the maximum number of conversions.

As its name suggests, the learning phase is very much a process of trial and error at the beginning of any campaign. Like any machine-based algo-

rithm, CPA Target solutions are only as intelligent as the data with which they are fed. This process, therefore, requires demand-side platforms (DSPs) to put their algorithms into action, giving them time to analyse their network traffic sources and make effective automated bids based on each campaign's specific requirements before exploitation can begin.

Once successfully optimized, this highly intuitive approach can both maximise efficiency and ROI for advertisers.

However, the time spent on getting algorithms up to speed can be seen as a barrier to CPA Target's effectiveness, particularly to advertisers that want instant profits gained from their ad investment.

During the stage of optimisation, the observed average conversion costs per segment could initially exceed the target, as algorithms adjust their logic when analysing traffic sources.

For brands wanting to navigate the world of programmatic with the most effective results, a certain degree of risk is therefore ultimately required in order to unlock the true value that machines can deliver for their ad campaigns.

A SMART WAY TO SCALE

The responsibility, therefore, falls on DSPs to build a technology that both instils trust among advertisers from the outset and leverage the power of machine-based learning in order to deliver strong ROI for customers as quickly as possible and at scale. Guiding advertisers through this process is paramount, to ensure best practices are followed and that they receive the most return on their ad spend.

For example, once targets are set, it is important that advertisers aren't tempted to change

Consumers prefer email over any other marketing channel

Despite the improvements in digital advertising, let's not give up on some of the 'old fashioned' forms of marketing. For instance, email.

According to consumers surveyed in the 'Consumer Email Tracker 2020' report from the DMA, supported by Pure360, reveals that email remains the most popular channel across a range of contexts and the number of people that prefer email is almost twice as much as any other channel: 46% stated this compared to 26% for post, and 24% for either text or face-to-face.

In late 2019, consumers estimated the number of emails they receive, on average, as 54.9 per week to their personal inboxes, down from 73.3 in 2017. Around half of respondents (56%) also believe more than half of these emails are marketing messages from brands.

However, despite the importance and preference for the channel, just 13% of people said that over half the emails they receive are useful to them. The most cited reason for unsubscribing from a brand also remains receiving too many emails (57%).

"It's clear from our findings that email remains at the heart of brands' ability to communicate with customers, but they also highlight key areas where marketers can improve, such as relevancy and frequency of contact," said Tim Bond, Head of Insight at the DMA. "Whether they're considering a purchase, have just made one or need some help, our latest findings showcase email's ability to help brands

engage across the customer journey."

Komal Helyer, VP of Marketing, Pure360, explains: "What's clear is that email marketing remains core to the multi-channel experiences available to brands. These latest figures highlight how consumers believe email to be the best channel in a range of different contexts, and as a marketing communications channel, it continues to provide brands with a unique opportunity to create valuable and meaningful experiences for consumers."

Content-wise customers like a clear transactional link behind the marketing emails they receive, such as discounts or offers (65%), email receipts (59%) and advanced notice of new products/services or sales (43%). In other words, customers are looking for practical content that's able to facilitate their interaction with brands.

The main reasons given for signing up to receive emails from a brand echo this, with 'Discounts & offers' (48%) coming top. However, loyalty also clearly plays a role, as simply being a regular customer already (43%), being sent email receipts (40%), or joining some form of loyalty programme (40%) are also key drivers.

Helyer concludes: "Offering recipients more control on top of balancing frequency and relevance could be a trend we see growing over the next few years, further cementing email's position as a powerful communication channel that has a variety of applications when it comes to customer engagement."

it often, particularly in the learning stage when they may not necessarily see the best results. A pragmatic approach to setting campaign conversion targets is also crucial. By setting the real value - either industry standards or metrics they have already experienced for user acquisition - advertisers can be assured that they are getting the best performing traffic for each of their campaigns.

Elaborate smart-bidding tools now present across the performance marketing sector, like CPA Target, have the power to achieve this; enabling marketers to fully automate the entire campaign optimisation process - from analysing traffic

sources and blacklisting to measuring overall performance. But how can such powerful tools be used most effectively?

Successful digital ad campaigns are built on three core pillars; conversions, scale and value for money. Any automated technology powering these campaigns must therefore help brands to meet these goals with minimal interference from the team. Combining smart bidding technology with vast modern networks, traffic sources and supply partners, advertisers are able to set their value and automate full campaign exploration.

Not only does this find the best performing sources

automatically, but allows advertisers to scale their campaigns quickly and ensure the most effective conversions in less time.

When it comes to leveraging revolutionary technologies such as AI and ML in new ways, there are bound to be a few teething issues. While there is still a long way to go before these technologies reach their full potential across the digital ad ecosystem, advertisers who take the steps towards intelligent campaign bidding are better poised to succeed in an automated world. ■

Maxime Chevallon is Chief Operating Officer at Adcash

influencers verses Advertising

How has consumer mindset changed the way we buy?



Advertising is still a force to be reckoned with, but the rise of social media has seen influencers become at least as effective in raising awareness. But how do they compare when it comes to reaching audiences and monetising services? **Fran Prince** explains

Our screens are filled every day with an array of adverts tempting us to spend, spend, spend – but in an era when consumers value a more personal experience, is the power of the traditional paid ad coming to an end?

With thousands of retailers competing to advertise their products on almost every platform we view, it's natural that they are looking for new ways to get their messages across. And that's where the power of influencers comes in.

Current trends show a shift in the consumer mindset, with people wanting to feel part of a community and to have a more customised experience, both of which fuel their shopping behaviour.

Amelia Neate, an expert from the agency Influencer Matchmaker, has warned that while ignoring ads has become easier than ever for potential buyers, influencers – equipped with personality and creativity – are the sales tool every retailer should invest in.

ARE SOCIAL MEDIA ADS REACHING THE RIGHT AUDIENCE?

With Facebook and Instagram

having a combined worldwide active monthly user pool of three billion, they are the obvious go-to platforms for advertising.

And, as we know, Facebook and Instagram tend to select advertising content based on a person's activity and preferences. Those adverts are driven by data, whether that is location, demographics, interests, liked pages or behaviour.

But this personalised targeting can be irritating – In fact, 49% of consumers have reported they find brand-created ads “annoying or irrelevant”.

“The issue for advertisers is that many of us will never have set our ad preferences or don't regularly update this information on our social media platforms,” says Amelia. “Therefore, there's no guarantee that brands are really reaching the right audience. So, just how relevant are those advertisements?”

An influencer's audience has already established an interest in the content they are posting, explains Amelia, making them a powerful tool.

“Influencers can understand their audiences on a deeper level, through polls and con-

stant communication. Their followers don't feel like they are being ‘sold’ to – they feel connected with and valued by that influencer and therefore are more likely to buy a product on their recommendation.”

DATA PRIVACY CONCERNS ARE PUTTING PEOPLE OFF ADS

With the ability to use online location services to target ads to households, adverts can spark concerns over security, with many consumers believing they are being listened to through their devices.

For example, while one household member may have expressed an interest in a certain product online, their flatmate or other half may also receive the same advertisement without having even looked at it online.

All that has happened is that the platform has targeted the advert based on location.

“As consumers are becoming more concerned with controlling their online data and identities, they are more adverse to being targeted with sponsored content and obvious advertisements,” says Amelia. “Influencers have gained trust

and authenticity and are more discreet with product placement, even though they must disclose gifted or paid content.”

TRUST IS ONE OF THE MOST IMPORTANT FACTORS

“Adverts on social media can have a reputation for being too salesy. They often highlight a sale or use terminology like ‘great offers’ and ‘buy now’, plus they are listed as sponsored right away so they are instantly recognisable as an advert.

Trust is one of the most important factors in the buying process. All adverts must adhere to the Advertising Standards Authority (ASA) guidelines and, although influencers must declare all paid for or gifted partnerships, they are still more persuasive than adverts.

Offering a ‘human’ element to promoting a product helps to make them more relatable, natural and less obvious, even with the use of hashtags such as #gifted and #AD, says Amelia.

Influencer Matchmaker recently partnered Amazon Handmade with inspirational TV personality and mum Stacey Solomon. The Loose Women regular, known for

her down-to-earth personality and family values, filmed a video – which featured on her Instagram Stories - where she prepared her home for Christmas with the company's handcrafted items.

Targeted at like-minded mums looking for something special and more personal, the campaign reached more than 2.6 million followers and sold out many of the featured products.

"Stacey is a relatable person whose honest and humble personality matched the messaging behind a hand-made and personalised Christmas," says Amelia. "Putting the items in situ, in a real home with real people did more than any advert could."

ADS STRUGGLE TO STAND OUT

"There's a psychology to scrolling on your phone on

social media. Within your feed a familiar face or filter (from an influencer account) will encourage you to pause while ads may appear to look like junk content if the image isn't grabbing or recognisable.

"Platforms are also constantly adjusting algorithms so it's hard for businesses to keep up. Add to that the competition with other retailers as well as image and text restrictions, then your messaging can easily get lost," said Amelia.

"As influencers already know what works best with their loyal viewers, the content a brand is 'putting out there' with them is instantly going to be more engaging. They can tell a brand's story in a creative and individual way and ensure consumers are part of that journey."

CONVERSATIONS WITH AN AUDIENCE ARE KEY

The key to successful selling is audience interaction. Pages and posts that generally don't see any engagement and, more specifically, comments are seeing less and less attraction. The same goes for advertisements.

"Audiences build a friendship with the influencers they follow," says Amelia. "Many of them ask for and give advice and opinions to and from their followers, which prompts a conversation and shows an interest in them as people."

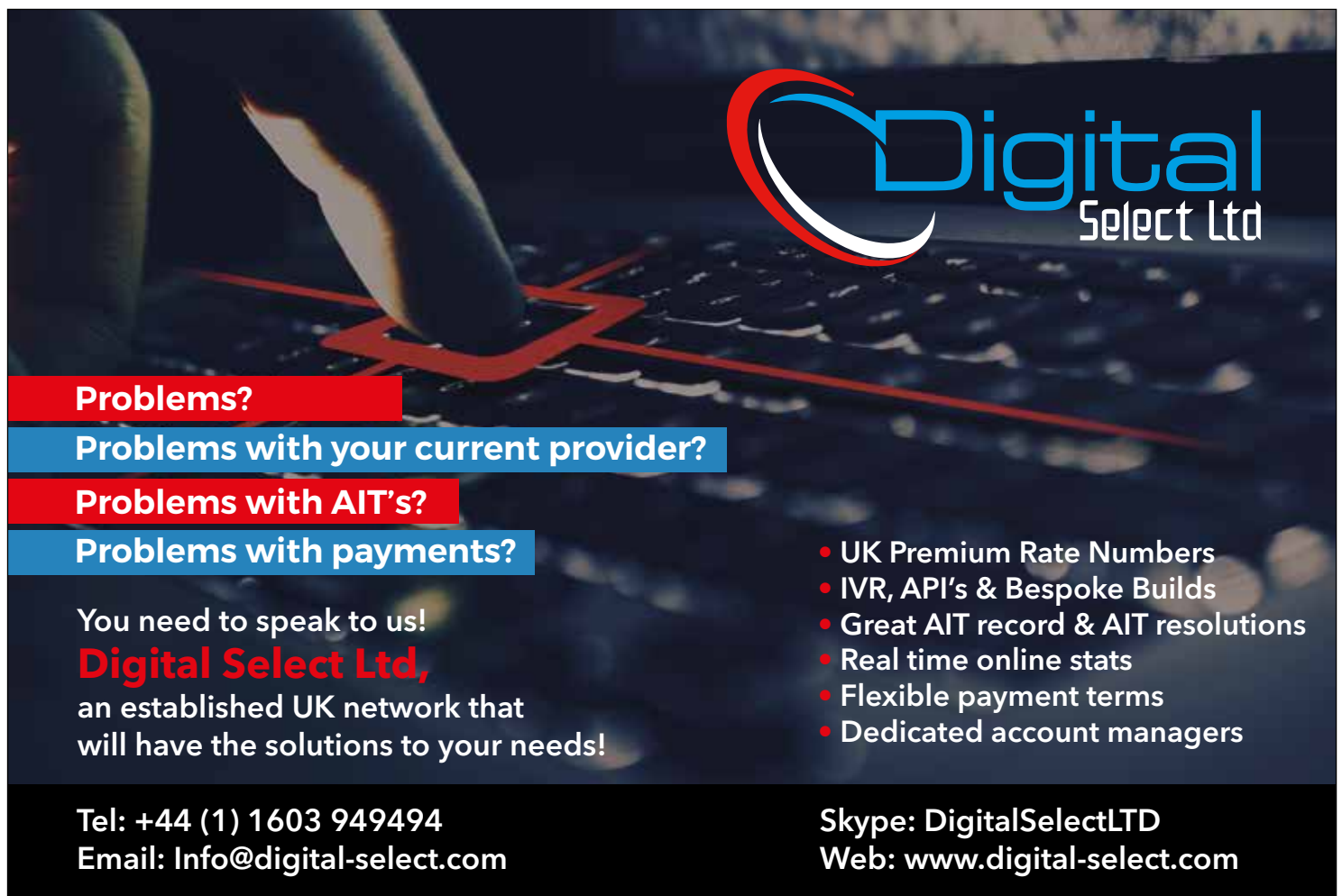
Retailers need to start meaningful conversations with their consumers which can't unfold easily through digital advertising. Robert Lockyer, a retail expert in the luxury retail sector, said: "We've seen a shift in what retailers want to promote via their social pres-


ence. Consumers are connecting with and repeatedly buying from brands that share the same values as them."

Amelia added: "It is clear that consumers are more intuitive these days. Purpose is fast-becoming the most important factor when choosing to buy from a brand and while ads are also only active for the paid period you choose to promote them, influencers drive lasting brand awareness and should be a go-to marketing method."

"Influencer marketing is proving to be more effective and more targeted than digital advertising. Retailers must leverage influencers to get in front of potential customers and affect purchase decisions." ■

Fran Prince is from Champions UK





Problems?

Problems with your current provider?

Problems with AIT's?

Problems with payments?

You need to speak to us!
Digital Select Ltd,
 an established UK network that
 will have the solutions to your needs!

- UK Premium Rate Numbers
- IVR, API's & Bespoke Builds
- Great AIT record & AIT resolutions
- Real time online stats
- Flexible payment terms
- Dedicated account managers

Tel: +44 (1) 1603 949494
 Email: Info@digital-select.com

Skype: DigitalSelectLTD
 Web: www.digital-select.com



Personalised marketing: is the Holy Grail within reach?

Wanting to market to individuals has long been the dream of marketers. Mobile brought that a step closer. Now, thanks to that and technology advances the Holy Grail is within our grasp. **Adhish Kulkarni** explores how close we are and what benefits it will offer telemedia

To point out that personalisation has long been the Holy Grail of marketing is to say nothing new. Long before digitisation was a twinkle in the most optimistic technologists' eye, the quest to personalise marketing communications, albeit at a cost in those days, had been identified as a key route to commercial success.

Thus, it comes as no surprise that with the digital era now upon us, Communications Service Providers (CSPs) in particular want to tap the advantages afforded by personalised offers and experiences for their customers more urgently than ever before. The trouble is, in attempting to do so they're consistently coming up short.

Why? There's no shortage of the data needed to fuel individualised offers. Plenty of that can be sourced via loyalty programmes, in-store behaviour, apps, websites and other sources. Whenever and wherever there's a customer interaction - be it checking the latest data bundle or Spotify offer, looking for the newest devices, reviewing time left in a contract or double-checking the last six month's bill, CSP's subscribers are providing price-less information to their operators. It's this information, when harnessed, that can effectively

inform what happens next: The right offers to present, the most attractive price options based on historical behaviour, and even the orchestration of the next customer.

And yet...despite the presence of this treasure trove of the raw material required for effective personalisation, many CSPs still find themselves using only the most basic set of data attributes; time, channel and segmentation variables to drive their communications with and persuade their customers to act. The million-dollar question (and it is, literally, that) is why is this the case?

The evidence suggests that the reason is because creating a unified customer view that informs an effective customer engagement framework, as well as a roadmap for personalised marketing success is, you guessed it, anything but easy. Dynamic commercial conditions require agility allied to efficient processes to drive a quick turnaround for omnichannel campaign activity.

Unfortunately, disparate data sources, unwieldy legacy systems, internal power struggles, siloed organizations and sometimes unclear commercial priorities and KPIs all mitigate against building solutions that drive fast and timely access to

the rich customer profiles that inform relevant, desirable, and meaningful value propositions.

If the above situation is the reality many telecoms operators find themselves facing, the good news is that it needn't be the case. Recent advances in technology have now removed any excuse to operate in this way. AI, Advanced Analytics, Omni-channel engagement platforms, Predictive Targeting, Dynamic Segmentation tools, Digital Next Best Offers and real-time, contextual marketing platforms are available, and they are enabling marketers to take a much more nuanced approach to outreach activity.

This means that surprising, delighting and engaging customers at a level more effectively than ever before, and at a fraction of the cost and time than has traditionally been the reality, is not only possible but is fast becoming table stakes for those who aspire to be market leaders.

Tapping into the new dawn of personalisation solutions is absolutely critical. In a world of endless noise marked by fierce competition and the availability of almost unlimited information, the customer is overwhelmed by choices. CSPs are pushing more content and products than ever before. The

abundance of options can not only lead to satisfaction but also to confusion. Counter-intuitively, the breadth of the new industry menu has driven a scarcity of clarity. That can only be resolved by pursuing trust and attention in both directions.

Carriers need to provide it to their customers via the manner in which they communicate with them. In return, customers will give their trust and attention back to brands they feel a human connection with. To do that, CSPs must create unique and personalised propositions that foster a special feeling that reflect the uniqueness of each customer.

Today, expectations have changed. Customers want to be treated as individuals by empathetic brands that know them and recognise their tenure and the on-going financial commitment to the relationship. They are actively looking for personalised, value-adding and frictionless experiences that make their lives easier and help reflect their values and priorities. But to do this - to meet and exceed customer needs and expectations - CSPs must make far more effective use of the component pieces sourced from their loyalty programmes, retail footprint, archives, call

centre logs, transaction and search histories, revenue management and websites despite the fact that all of these are likely stored in different applications designed to support different functions.

The key is the implementation of a unified platform into which all data can be fed and from which that data can then be accessed, managed by multifunctional teams who have shared objectives and incentives, who possess deep customer understanding and who, armed with advanced analytics, financial resources and decision rights, will be in the best position to tailor the offers, price policies, messages, channels and go to market strategies that the customer actually wants; and that he or she is most likely to respond to in order to maximise impact

and commercial results.

At Evolving Systems, our years of experience in this area and the expertise we've acquired as a result has led to the development of platform technologies that have been able to dramatically increase the commercial performance of our telecoms clients. They have moved from relying on last generation customer engagement platforms and insight led, real-time approaches to true one-to-one marketing campaigns.

One leading European CSP was able to reduce postpaid and prepaid churn within its targeted and participating customer base by 24% and 28% respectively, to achieve a 19% improvement in overall conversion rate and increase its open rates by 60% and digital (app) usage by 100% as a direct result

of using our technology.

In another embattled environment, our client has been able to improve the CPS's commercial performance by leveraging our Digital Next Best Offer algorithm to increase the revenue of targeted customer base by 6%.

It seems obvious to point out that this approach, not to mention results like this, are the future. CSPs must immediately focus their marketing efforts on developing a unified database that combines information from disparate sources then pairs it with advanced analytics capabilities, AI powered decision engines and a variety of Machine Learning Algorithms. Only when this happens will CSPs be able to score, rank-order and select the Best Contextual Offers for each individual customer, in real-time, on multiple channels

and across multiple selection strategies.

For those smart enough to invest in better understanding of their customers and deploying such an approach, the future is extremely bright. The delivery of the Holy Grail of a truly personalised customer journey and brand experience is, finally, within reach. But to grasp success will require confronting deep-seated assumptions, old company structures and mind-sets, and the barriers inherent in legacy environments. CSPs should, however, be consoled by the reality that the storm always comes before the calm and the calm, commercially, puts a very bright future within reach. ■

Adhish Kulkarni is SVP and GM, Digital Engagement & Loyalty Solutions, Evolving Systems



sexysjobs.com®
THE ORIGINAL ADULT JOB SITE!

Thousands of talented performers ready to work! Hundreds of fresh new jobseekers with photos signing up daily!

RECRUITERS:
We offer great rates to fit any budget.

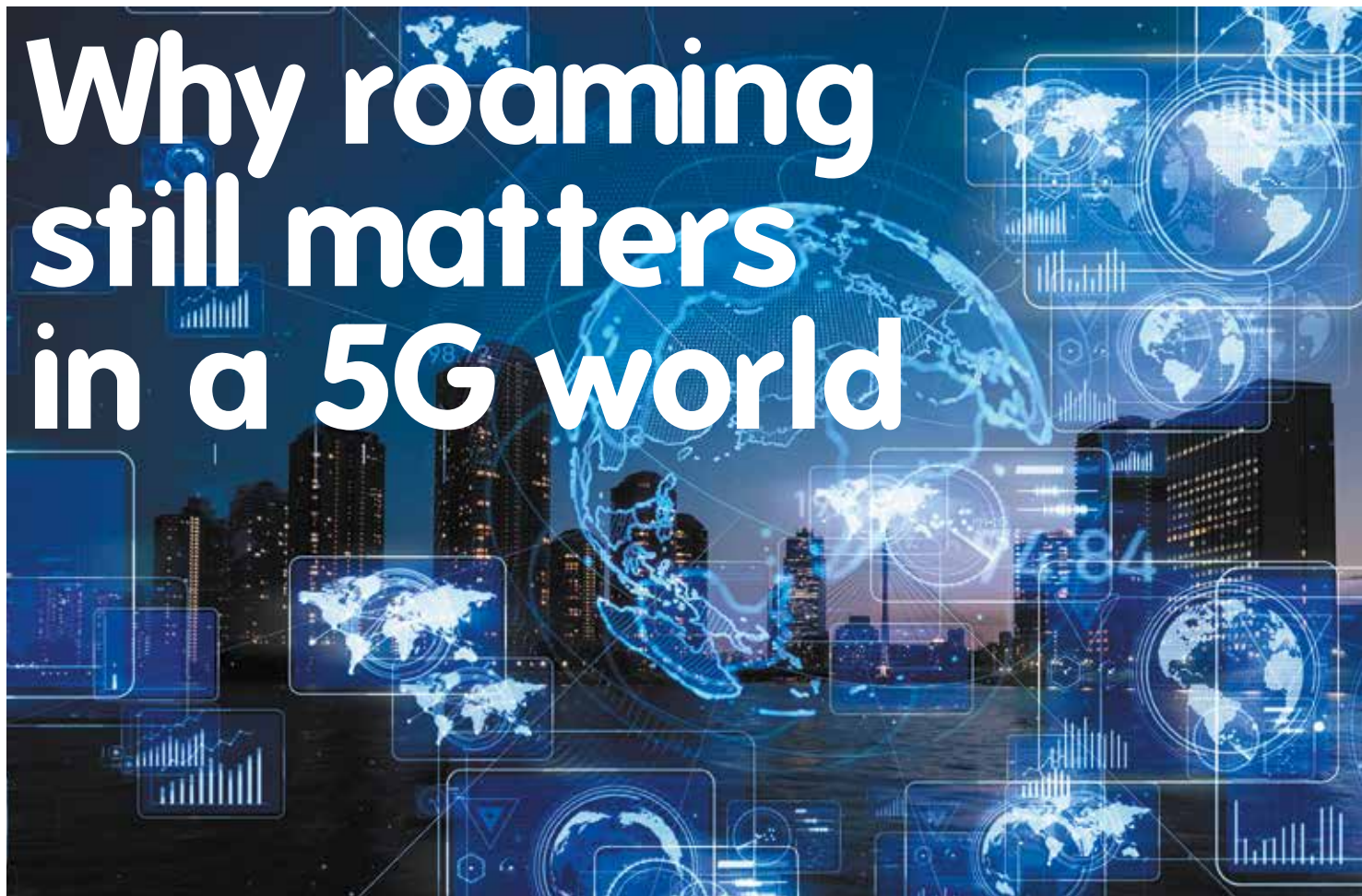
JOBSEEKERS:
Register and post your resume for free!

We'll place your ad in front of serious jobseekers. Accounts are fast and easy to set up, so you can start hiring immediately!

Categories Include:

- Webcam Models
- Actors/Actresses
- Clip Performers
- Adult Phone Operators
- Text Chat Operators
- And much, much more...

CELEBRATING OUR 22ND ANNIVERSARY!



Why roaming still matters in a 5G world

5G changes a lot, but not everything. While 5G security is a big step forward, vulnerabilities and risks still abound, especially when it comes to roaming. **Gunter Reiss** explains

Why roaming? Because GTP, the legacy protocol that provides interconnect between multi-generational network interfaces, is inherently vulnerable. And as we'll see, multi-generational networks – 2G through 5G and beyond – will remain on the scene for quite some time, long into a 5G-exclusive or single-generation mobile technology universe ever comes about – if ever.

FIRST, A BIT ABOUT GTP

GTP (GPRS Tunnelling Protocol) is a 2.5G technology that enables mobile users to roam seamlessly between networks of different generations. The protocol was developed alongside GPRS (General Packet Radio Service), the mobile data standard integrated into GSM

that allows mobile networks to transmit IP-based communications to external networks.

As a 2.5G technology, GTP was not developed with security in mind because, before the advent of smartphones, mobile networks had few, if any, security issues. The proprietary technologies within what was then a largely closed industry made for mobile network infrastructures that were virtually “attack-free.” As the industry developed and IP-based technologies came to the fore, the need to secure GTP-enabled interconnections became critical, as evidenced by the increasing exploitation of GTP-exposed interfaces left vulnerable to attacks.

Mobile subscribers and operators alike are impacted,

as cyber attackers tap into mobile communications to steal network information and subscriber IDs, which, in turn, can lead to service disruptions, customer churn, and fraud.

ROAMING IS ON THE RISE

The elimination of international roaming charges and the skyrocketing number of applications, mobile subscribers who travel, and devices both smart and “stupid” (e.g., IoT and IIoT) has led to exponential growth in roaming traffic — as much as 95% according to Telecoms.com. Billions of smartphones accessing mobile broadband and permanently roaming IoT devices with limited functionality and little or no security are driving mobile data traffic sky high.

According to a recent Ericsson Mobility Report, such traffic, moving across almost 7 billion cellular devices connected

worldwide today, is forecast to increase four-fold by 2025. And with next-generation infrastructure support for new device types and new use cases, the growth of international roaming traffic is expected to accelerate even more — Juniper Research predicts a 32-times increase by 2022.

AS ROAMING INCREASES SO DO THE RISKS

As the volume of roaming traffic continues to grow, so do the risks. What's at stake are new and emerging 5G-enabled mobile network revenue streams. To capitalise on the opportunities, mobile operators will need to solve security challenges unique to 5G environments and today's hyper-connected networks. In the 5G era, security will become an increasingly complex endeavour as the roaming ecosystem grows and becomes more diverse, opening

to a broader range of partners.

With industry-specific Mobile Virtual Network Operators and IoT solution providers coming on board, mobile operators will find themselves confronting a security model built on aging protocols such as GTP rather than robust security. Cyber criminals are sure to see the potential of such a booming, yet vulnerable, target, and direct their hack and attack activities accordingly.

THE PERSISTENCE OF MULTI-GENERATIONAL NETWORKS HEIGHTENS THE RISKS

Multi-generational mobile networks will exist long into the foreseeable future, which means that GTP will continue to be relevant in a 5G world. As with earlier generations, 5G introduces new standards. However, new standards do not replace the previous ones, but rather, they overlap. So, if earlier generations remain operative, old protocols and their vulnerabilities will threaten networks, 5G or not. Mobile roaming has also changed radically over the course of the industry's evolution.

Today, more than 2,000 global partners participate in a web of interconnections supporting four generations of mobile technology through dozens of interfaces and protocols. As the industry moves to 5G, with significant overlap of 3G and 4G, new services and technologies will enlarge the attack surface.

GTP-BASED ATTACKS

GTP is a communications protocol, not a security standard. As such, it facilitates the flow of data within and between mobile networks, while leaving vulnerable network interfaces exposed to exploitation. GTP vulnerabilities make it easier for attackers to gain access to critical network and subscriber information, including key identifiers such as

the Tunnel Endpoint ID (TEID — a pathway into the network's mobile core assigned by the GPRS Tunnelling Protocol — GTP), the Temporary Mobile Subscriber Identity (TMSI), and the International Mobile Subscriber Identity (IMSI).

That's everything an attacker needs to impersonate a legitimate subscriber and breach a mobile network. Using such information, hackers can pilfer confidential data to commit fraud, overload networks, drop subscriber communications, and launch denial of service (DoS) attacks.

While 5G security is a big step forward, mobile networks will continue to be exposed to GTP threats. So mobile operators will need to deploy GTP firewall protection against attacks

Here's how:

- **Brute Force (aka trial and error)** — Using automated, brute-force tools, the attacker sends messages with arbitrary TEID values to the packet gateway until one proves successful. Then, again with brute force, the attacker captures the victim's TMSI by passively scanning for it with the help of an eavesdropping device (e.g., an IMSI catcher — a rogue or fake base station). With the TEID and TMSI the attacker can send an identification request to the Mobile Management Entity, which will respond with the victim's IMSI.
- **IMSI Theft** — Here, an attacker takes advantage of legacy 3GPP mobile standards that don't require networks to authenticate devices and uses an IMSI catcher to steal the IMSI from an unsuspecting subscriber. The lack of authentication makes it relatively easy for an IMSI catcher impersonating a legitimate base station to capture the info needed to launch attacks.

Subscribers are often careless about protecting their smartphones and they expect to use their mobile devices and access all of their services on the road, especially now with recently enacted "Roam Like at Home" rules whereby people pay domestic prices for voice calls, SMS, and mobile Internet while travelling across the E.U. Plus, constantly roaming IoT devices are often unsecured. It all adds up to an environment that makes GTP-based attacks easier and more prevalent. For more information about the types of attacks enabled by GTP

vulnerabilities, download the eBook: *Smart Phones and Stupid Devices — Why Roaming Still Matters in a 5G World*.

5G BEEFS UP SECURITY — BUT IS IT ENOUGH?

5G architecture provides several important cybersecurity enhancements, including encryption, mutual authentication, integrity protection, privacy, and availability. Nevertheless, security will still be needed to protect against 2G, 3G, and 4G multi-generational threats during the transition to 5G. New 5G specifications cover security procedures performed within the 5G system, including the 5G core and the 5G New Radio.

Key 5G cybersecurity enhancements include a new Security Edge Protection Proxy that provides additional protection against known inter-exchange/roaming vulnerabilities. 5G also enables network operators to steer home customers to preferred visited partner networks to enhance the roaming experience and prevent fraud.

While 5G security is a big step

forward, mobile networks will continue to be exposed to GTP threats. So mobile operators will need to deploy a GTP firewall to protect against attacks coming in from access networks, roaming partners, and IoT to support uninterrupted operations for their networks and subscribers.

PROTECTING 5G INVESTMENTS

With its high data rates and massive scale, 5G is raising the bar on the demands placed on operator networks. By enabling mobile broadband and ultra-reliable, low-latency communications, the technology will deliver the customer value needed to support long-term industry growth and profitability. However, massive 5G investments will remain at risk without the ability to protect customers, infrastructure, and mobile operators. Fortunately, most mobile operators are aware of 5G security challenges and are taking a proactive approach to addressing them, as evidenced by a recent survey sponsored by A10 Networks.

GTP FIREWALL

To fully capitalise on 5G opportunities, mobile operators need to ensure GTP security. GTP firewall protects the mobile core against GTP-based threats such as information leaks, malicious packet attacks, and DDoS attacks through GTP interfaces, providing the security and scalability needed to support uninterrupted operations. It leverages the latest standards and technologies to reduce vulnerability and prevent attacks, ensuring better mobile experiences for customers and a more profitable future for mobile operators. ■

Gunter Reiss is VP Strategy, A10 Networks

GrSWITCH + callcom + m

Offer the new Class 4 VoIP softswitch applying Swiss precision to telecoms services

- Ensuring Selected Routes Are Always Profitable
- Monitoring Traffic Performance At All Times
- Routing & Filters Maximise Quality & Profit
- Rapid Price Management & Flawless Invoicing
- Tailor-made Installation
- Includes exclusive IPRS features to control and analyse real time traffic whilst preventing fraud

**NOW
ALSO IN
PAY PER
USE**

info@callcom.ch | www.callcom.ch | +41 91 225 8330

MESSAGGIO

MESSAGGIO is technology and cost effective B2B supplier for DCB and Business Messaging. We provide direct connections to 50+ carriers and to the messenger apps. Highload Multichannel Messaging Platform **messaggio.com** provides enterprises for One-Time Services (OTP, 2FA, A2P) as well as for interactive marketing campaigns. Scalable and developer-friendly traffic processing system enables customers to verify codes, authenticate users, send any kind of notifications and boost customer engagement at low costs.



Email: info@messaggio.com | Tel: +356 99991117
messaggio.com



SECURE MT

info@securemt.co.uk

WWW.SECUREMT.CO.UK

+44 (0) 207 058 0200

Secure MT provides card payment processing for online and retail businesses, whether that be for one off payments, wallets, pay for view or subscription services.

ENTERPRISERED

EnterpriseRed offers tools and support to help organisations protect themselves from cybersecurity threats. We provide products and services to help businesses identify, understand and mitigate risks from their technology, people or processes, including specialist software solutions from cybersecurity industry leaders, vulnerability assessments, penetration testing, employee training and access to Managed Security Services.



Contact: sales@enterprisered.com | +44 203 371 9178
www.enterprisered.com

**MAKE SURE
YOU CAN
BE FOUND**



**ADVERTISE IN THE LEADING DIRECTORY FOR
THE TELEMEDIA INDUSTRY. CONTACT JARVIS
FOR RATES ON +44 (0)7711 92 70 92**



GLOBAL

DMWF

DIGITAL MARKETING WORLD FORUM

28 – 29 MAY 2020

BUSINESS DESIGN CENTRE, LONDON

A FORWARD-THINKING CONFERENCE

EMPOWER THE AMBITIOUS, NEW AGE MARKETER



2

DAYS



100+

SPEAKERS



4

TRACKS

SAVE 20% WITH THE CODE: **TELEMEDIA20!**

REGISTER NOW AT: DIGITALMARKETING-CONFERENCE.COM/GLOBAL





global telco innovation

We are seasoned mobile billing experts in Africa's emerging economies

MobiPay is our mobile billing solution incorporating:

- Billing gateways
- Content Management System
- Subscription portals
- Single API integration
- Direct Carrier Billing
- Click to Buy
- Premium SMS
- Click to Subscribe

info@mobivate.com +44 207 267 5222 www.mobivate.com



Dynamic Mobile Billing is a global provider of mobile and payment solutions including:

- Direct Carrier Billing
- Bulk Messaging
- SMS Billing
- Voice Short-codes
- Voice Number Ranges
- Virtual Mobile Numbers

www.dmb-uk.com
Tel: +44 (0) 808 206 0808 Email: sales@dmb-uk.com

PreferredTEL

-PreferredTel is a leader provider of International Premium Rate Numbers Solutions

-World wide coverage

-Highest payout

-IVR services

-Bulk SMS, International premium SMS

contact@preferredtelemedia.com




International Premiums is a worldwide telecom media services Provider and Aggregator.

International Premiums has acquired the sole distribution rights for Albania, Burundi, Central African Republic, Comoros Islands, Congo, East Timor, Guinea, Guinea Bissau, Guyana, Liberia, Tonga, Morocco, Poland, Sierra Leone, Somalia, Vanuatu offering the **HIGHEST Payouts** with monthly, biweekly and weekly payments.

e : info@interprems.com
w: www.interprems.com

- OTT-X next generation app platform
- UK Premium, National, Toll-Free, Personal & Geo Numbers
- International PRS, Geo & Toll-Free
- Indemnified debit/credit card payments for service providers
- SMS, PSMS & Mobile Billing
- Voip Wholesale CLI & Non-CLI Termination
- Hosted IVR & Conferencing with meet-me
- Global airtime and stored value transfers

sales@12telecom.com
www.12telecom.com




Send Verify Numbers Analyse Pay

www.messagecloud.com | sales@messagecloud.com
HQ phone: +44 (0)3301 130 243



DREAM JOBS - DREAM TALENT SINCE 1998

Thousands of talented performers ready to work! Hundreds of fresh new job seekers with photos signing up weekly!

SEXYJOBS.COM



CINE-BOOK is a new type of entertainment that combines the advantages of books and movies.

www.Cine-Books.com
business@cine-books.com

**ORIGINAL & CUSTOM MOBILE CONTENT
in BRAND NEW MEDIA FORMAT**



Premier Operator Supplier

Adult chat | Tarot chat | Clean chat | VOIP | Live stream moderation | Fully managed 24/7 | Worldwide team | More info on www.text121chat.com

Lorna@text121chat.com 0844 4483121
Helen@text121chat.com 0844 4482121



Billing solutions and media applications in +120 countries:

- ✓ Web billing
- ✓ PSMS
- ✓ PRS and IPRS
- ✓ Full payment Platform
- ✓ IVR Platform
- ✓ Service numbers
- ✓ Media Consulting

Atlas Interactive provides you with a unique international portfolio of Web, SMS and Voice billing solutions.

The Atlas Groups global presence allows you to monetize your content and internationalize your business all over the world

Please contact our sales team
P: +44 (0) 208 779 8700
E: contact@atlasinteractivegroup.com
W: www.atlasgroup.bm

#BILLING



YOUR MOBILE MONETIZATION PARTNER

twistbox
ENTERTAINMENT
www.twistbox.com

- Carrier Billing
- Mobile VAS
- Monetization
- Content
- Technology
- User Acquisition



GLOBAL BILLING

International Premium Rate Numbers

#MEDIA MARKETING

BOLD.Pay

A **MACROKIOSK** Solution

Supports various channels

- + Direct Carrier Billing
- + Credit Cards
- + Online Banking (FPX)
- + E-Wallets
- + Over-The-Counter



MORE

Software Solutions For Performance Marketing And Compliance



vene

- Protect your business**
with the industry standard solution for DCB fraud management
- Regain control**
of the traffic you are getting without losing your advertisers
- Balance risk and revenues**
by adjusting your individual risk profile down to the sub source
- All-in-one solution**
full control over your campaigns with a stable platform
- German innovation**
engineered in Berlin following the strictest of data protection policies
- Competitive pricing**
conversion-based model: the more you convert, the less you pay!

info@veneoverwatch.io veneoverwatch.io info@venedash.io venedash.io

#NETWORK OPERATOR

TELECOM2

- UK numbers
- Call centre grade PBX for resellers
- VoIP, PBX outbound dialler
- International premium rate numbers
- PRS/IVR & call handling
- Payment & number hosting solutions

+44 (0)207 058 1000 INFO@TELECOM2.NET WWW.TELECOM2.NET




Digital Select Ltd

A UK VOICE NETWORK
info@digital-select.com

kwak.

„LINKING TELECOMS AND MEDIA THROUGH INTERNATIONAL PREMIUM RATE SERVICES“

www.kwak-telecom.com
e-mail: sales@kwak-telecom.com
phone: +357 220 223 18

NORDCONNECT


- LONG-TERM ACCESS
- VAST RANGE OF NUMBERS WORLDWIDE
- ON-TIME PAYMENTS

WE CONNECT YOU
www.nordconnect.com | info@nordconnect.com

#SUPPORT SERVICES

CORE TELECOM

Core Telecom is the UK's leading provider of UK Numbering solutions. A fully independent network operator since 2005, we offer unprecedented carrier network accessibility across the globe. With over 35 years of industry experience we can find the right solution for you.



Core Telecom
Telecommunications Network

t: 0344 504 0000
e: paul.turner@coretelecom.co.uk
w: www.coretelecom.co.uk

MOBILE AD MONITORING - SERVICE TESTING - MARKET ANALYTICS
COMPLIANCE SUPPORT - FRAUD PREVENTION



MCP INSIGHT

WWW.MCPINSIGHT.COM



Nr 1 for Micropayments

The Preferred Partner of Carriers, Content Providers and Media

Industry leader since 1992

- Fully integrated Micropayment Platform
- Covering 120 countries with PSMS and PRS
- More than 25 exclusive IPRS terminations
- Direct bilateral agreements to secure traffic
- Unbeatable access and coverage



Contact@atlasinteractivegroup.com or www.atlasgroup.bm



WORLD telemedia

14 - 16 October 2019 **marbella**

EXPO • CONFERENCE • NETWORKING

ENGAGEMENT

- Carriers, MNOs & Telcos
- SPs & Aggregators
- VAS & App Developers
- Payment Providers
- Content Owners
- Publishers
- Merchants & Brands
- Affiliate Networks
- Performance Marketing
- Media Groups
- Ad Agencies
- Fraud Specialists
- Cyber Security Experts
- Social Media Networks

BILLING

€449 Includes all parties, conference sessions, 24 country updates, lunch and access to a worldwide network that generates huge volumes of **minutes, messages and traffic**

CONTENT

The secrets to engaging and commercializing 'connected consumers' whilst they interact with VAS, apps and premium content propositions.

HANDLE WITH CARE