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The Most Valuable Telecoms Brands 2016

Also in this issue:

Customer experience special report feat. TDC's Chief Customer Officer and exclusive research findings

Netflix goes global, Europe's new privacy laws

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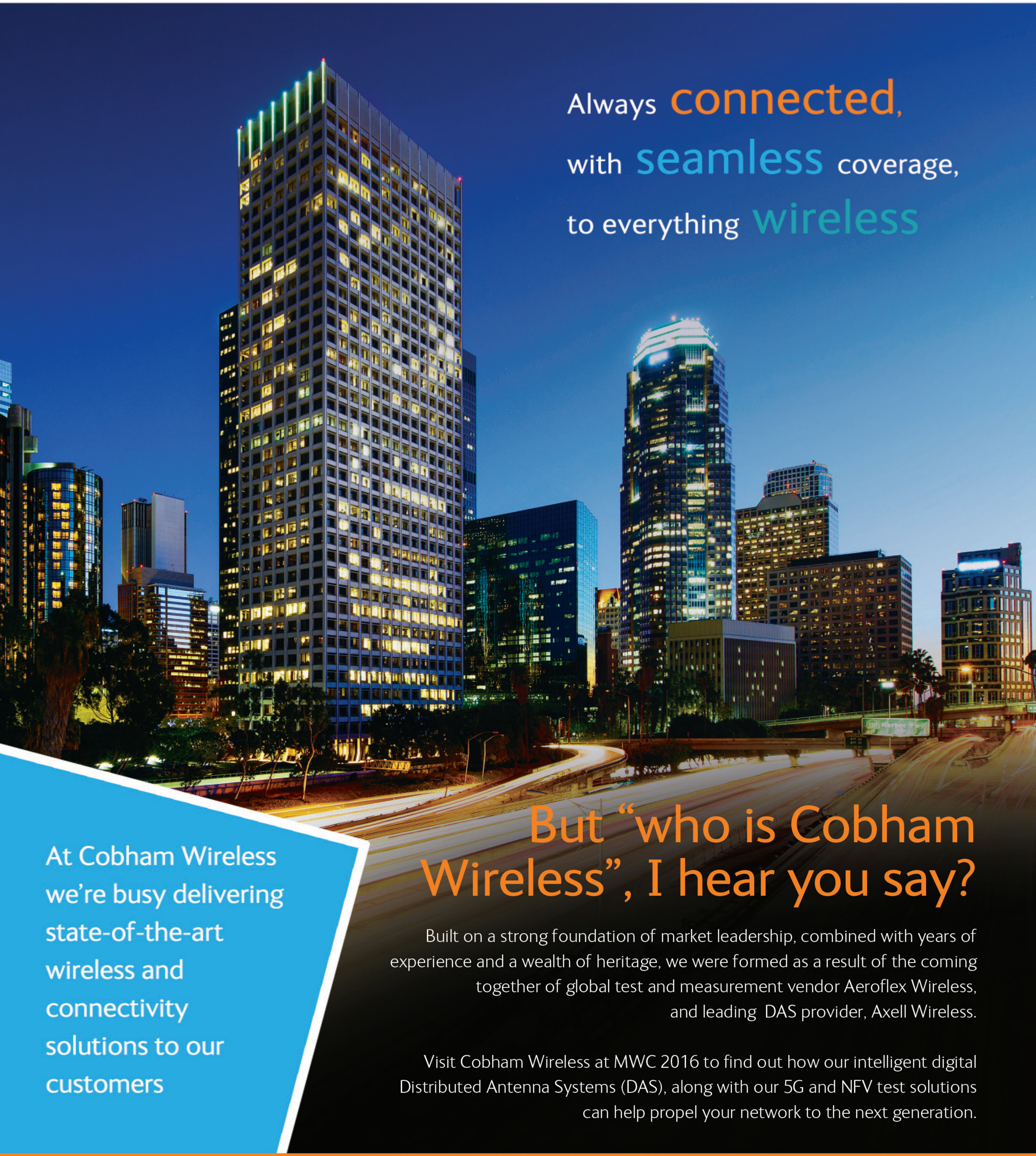

Visit Cobham Wireless at Mobile World Congress 2016, Hall 6, Stand 6D50

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TDC has appointed a customer experience expert to its top executive team. Jens Aaløse tells Marc Smith how he plans to turn the telco's strategy around

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Welcome to the world of brand value

We are kicking off 2016 with an exciting new partnership. Brand Finance have been ranking the brand value of telcos since 2004. We are delighted to share the 2016 results with you in this issue, highlighting not only the global and European operator winners but also the top vendors. As part of this, the Chief Brand Officer of Europe's most valuable operator grants us an interview to discuss how he has taken his company to the top of the tree. Ironically, he wasn't that interested in the telecoms industry when he was approached about the role. "It wasn't attractive to me at all," he says. "I thought telecoms was boring."

One of the operators that Brand Finance picks out as one to watch in 2016 in Denmark's TDC. The operator unveiled a rebrand in January as part of a new strategic plan. Key to this is the appointment of a Chief Customer Officer and Jens Aaløse is the star of our customer experience special report. The former Scandinavia Airlines exec is also in charge of HR. He says: "In my mind there is a correlation between happy employees and happy customers."

However, as our fifth annual customer experience survey shows, operators want to see increased investment focused on technology rather than human resources.

We also delve into how operators should measure customer experience and discover whether we've reached "peak" Net Promoter Score.

Could we also be approaching peak Netflix? The internet TV service announced in January that it had gone global and is now available in 130 countries. As we report, operators are more hopeful than fearful about the Making a Murderer producer's growth.

They are less sure about the European Commission's data privacy regulation, which got a major update in mid December. We pick through the key areas that telcos need to be aware of.

Most of you will be reading this at the industry's annual pilgrimage to Barcelona. Entitled Mobile is Everything, this year's event continues to evolve away from pure telecoms to embrace a wider audience. Alongside car manufacturers and financial firms, which are now regulars, we have the CEOs of Royal Caribbean Cruises and Buzzfeed. The question, as ever, is what role telcos will play in these markets. No doubt we'll posting our thoughts on this on our website in listicle form while cruising round the Caribbean Sea.

Marc Smith, Editor

business media

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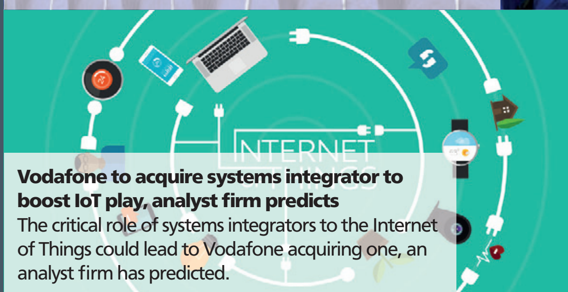
WhatsApp to ditch subscription fee
WhatsApp will no longer charge customers a subscription fee, but will take the fight further to traditional texts and phone calls.

Vodafone wins €100 million enterprise deal
Vodafone has won a deal with ScottishPower Energy Networks to manage and upgrade performance monitoring and fault identification systems in the UK.

O2, Sky big winners in UK regulator's annual customer experience report
O2 and Sky have again been ranked as the leading telecoms providers in the UK by the country's regulator.

BT's acquisition of EE gets regulatory green light
BT's £12.5 billion acquisition of EE has been cleared by the UK's Competition and Markets Authority (CMA), creating the country's largest converged fixed and mobile network operator.



Vodafone to acquire systems integrator to boost IoT play, analyst firm predicts
The critical role of systems integrators to the Internet of Things could lead to Vodafone acquiring one, an analyst firm has predicted.

VimpelCom appoints former Deutsche Telekom exec as Chief Digital Officer
VimpelCom has appointed Christopher Schlaeffer as its new Chief Digital Officer.

Telecom Italia unveils new corporate branding
Telecom Italia (TIM) has unveiled its new corporate branding that is designed to highlight its status as a converged player.

O2 UK extends NetCracker tech to smart meter, Charge-to-Mobile projects
O2 UK is to extend the use of NetCracker technology to a smart meter project and its Charge-to-Mobile initiative

BT appoints tech chief to lead Openreach
BT has appointed the man responsible for its network and IT infrastructure as the new CEO of Openreach.

Netflix goes global as it launches in over 130 new countries
Netflix has launched its internet TV service in more than 130 new countries as it looks to continue to grow outside its home market.

Opinion

Operators need to rethink how they ask customers to pay for digital services
By Jennifer Kyriakakis, Founder and VP Marketing, MATRIXX Software

Feature

Time is of the essence as new Nokia launches
Nine months almost to day after it was announced to the world, Risto Siilasmaa and Rajeev Suri's baby has officially taken its first tentative steps.

Q&A

Luis Alvarez, CEO of BT Global Services, discusses business performance, security, cloud and partnership

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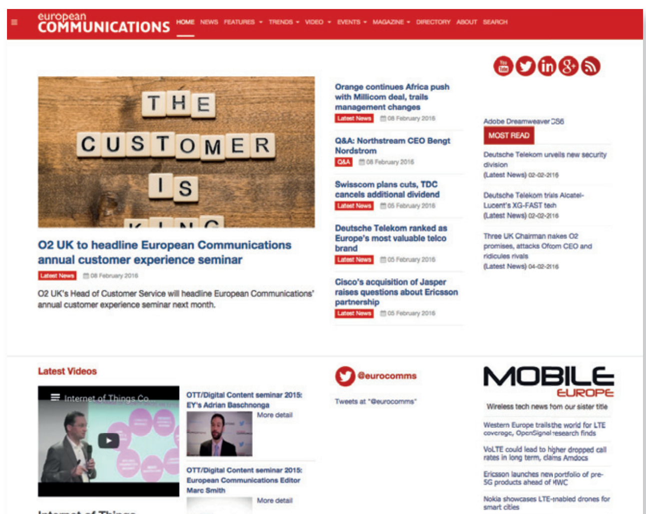

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European Communications

Europe, America, lead global telco stocks turnaround

Shares in the world's biggest telcos rebounded in the fourth quarter, with Europe and the US leading the way

Asia telcos bounce back – just – from summer madness

Asian telco markets steadied the ship after a rocky third quarter that saw a 15 percent slump, but they still experienced Q4 decline. Chang Xiaobing stepped down as CEO of China Telecom on New Year's Eve after he was held by the authorities over "severe disciplinary violations". The corruption probe capped a rough quarter for the operator, which saw its share price fall 2.6 percent to HKD3.64.

China Mobile impressed with October's news that it reached a quarter of a billion LTE subscriptions. Its share price peaked for the quarter at HKD95.95 but it was a bright spark in a gloomy trading period. Despite new 5G research projects and a $1 billion infrastructure deal with Nokia, it closed the quarter down 7.2 percent.

Fortunes were mixed for American telcos, with T-Mobile and Sprint seeing their share price tumble, but Verizon and AT&T making gains. Overall, the market was up 6.4 percent; good news after Q3's 8.9 percent fall.

Sprint had yet another quarter to forget, as its Q3 share price decline of 15 percent was followed by one of 10.6 percent. It has been slashing prices in a bid to turn itself around, but its first postpaid additions in more than two years was matched by a loss of $585 million. It blamed one off legal costs and redundant infrastructure.

Verizon was America's sweetheart stock during Q4, up nine percent to $45.66 during the three-month period. It peaked at $46.64 just before the end of 2015, on the day it unveiled a new campaign to pay off a customer's early termination fee.

AT&T also had a good quarter, with stocks up 7.3 percent to $33.93, as it ended the year by waving goodbye to most of its two-year phone contracts.

▲ 6.4%

The US

The US telecoms sector rose 6.4 percent in Q4 according to data from the Dow Jones US Index

▼ 1.9%

Asia-Pac

The Asia-Pac telecoms sector fell 1.9 percent in Q4 according to data from the FTSE Group Index

Orange in the pink as shares soar

Orange was the biggest winner of Europe's telcos in the fourth quarter as its stock jumped 12 percent.

The France-based telco began Q4 by reporting quarterly revenue growth for the first time since 2009. The increase was credited to a "favourable change" in Orange's mobile business, led by the Africa and the Middle East, where revenues climbed 6.8 percent to €1.3 billion. Orange lifted its earnings outlook on the back of the improved financials.

Sales in Europe fell 0.9 percent, an improvement on the 1.7 percent decline it recorded in the previous quarter.

CEO Stéphane Richard said: "Our return to growth in revenue and restated EBITDA validates our strategy of differentiation through quality and investment and confirms the positive momentum generated over almost two years."

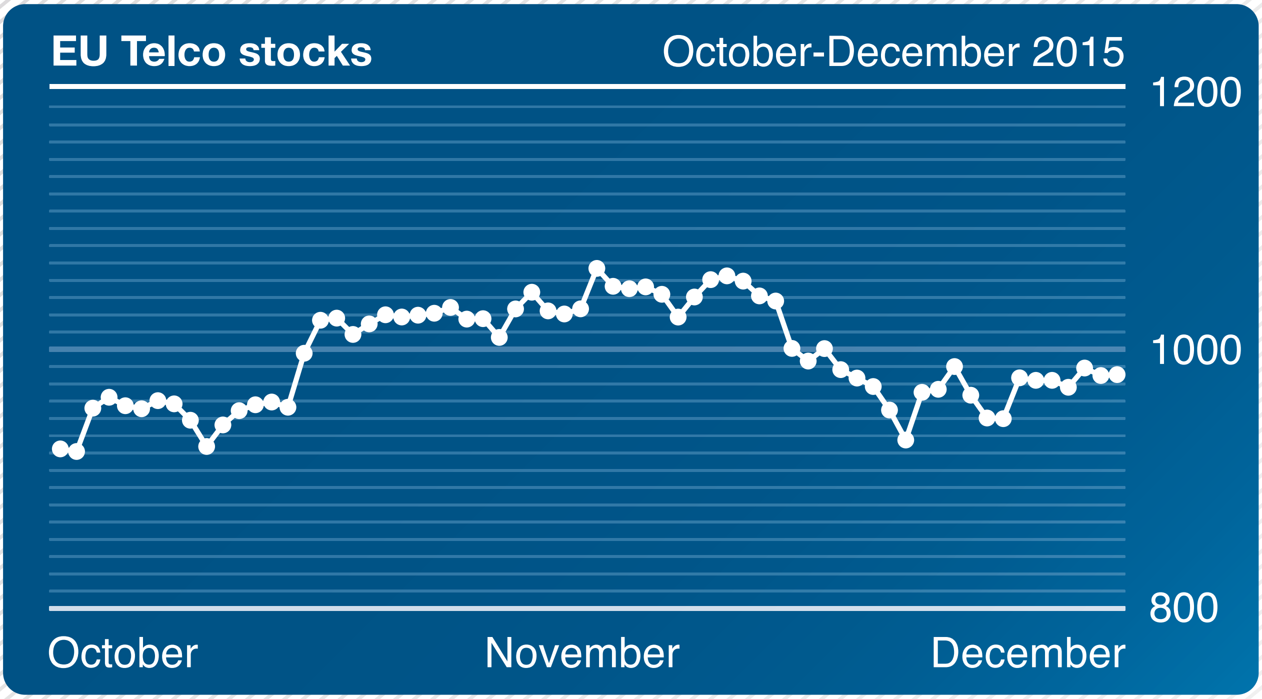
The company's stock was also boosted by rumours that it was in discussions with Bouygues about a possible takeover. It is a deal that Orange had looked into before, but as Free Mobile continued to perform well, market chatter suggested a deal was back on the table.

Speculation reached fever pitch in December. Although official confirmation in January that the two sides were indeed in talks came too late to affect the Q4 share price, it proved the excitement was justified.

Orange had 28.2 million mobile customers at the end of September, while Bouygues had 11.6 million. A combined business would be far ahead of rivals SFR, with 15.1 million mobile customers, and Free Mobile with 11.3 million.

In a statement, Orange said: "The Group is exploring the opportunities available within the French telecoms market, while keeping in mind that its investments and its solid position afford it a total independence in its approach. Orange will act solely in the interests of its shareholders, its employees and its customers and will be particularly vigilant with regards to the value created through any resulting project."

The stock continued to rise throughout January but as European Communications went to press (early February), there has been no official update on how the deal was progressing.



European recovery on M&A chatter, rising customer numbers

Telco stocks in Europe came roaring back in the fourth quarter after a tumultuous Q3. The shares in our index rose 6.2 percent, led by Orange. The France-based operator saw its stock jump 12 percent in the three months to December (see box out).

Four other big hitters also had an encouraging quarter. BT saw its share price rise seven percent after it revealed it had pulled in record TV customer numbers in October. CEO Gavin Patterson said the performance of BT Sport meant that the operator did "better than expected".

In the Netherlands, KPN saw its stock rise four percent. Although its enterprise division continued to perform poorly, investors were cheered by the November announcement that it planned to reduce its stake in Telefónica Deutschland in a bid to raise cash for shareholders and reduce its debt pile.

Deutsche Telekom, up 3.5 percent, and Vodafone, up two percent, were the other telcos to record an increase. Swisscom was flat, but there was disappointment for everyone else.

Former stockpickers' favourite Altice was the biggest faller as its share price declined by 28 percent. France's competition authority announced plans to review Numericable-SFR's role in deploying fibre as part of a JV with Bouygues Telecom in November. Investors also fretted over how much it had paid for exclusive rights to broadcast Premier league football matches in France and Monaco.

Telefónica's stock continued to take a hammering. It fell 12 percent – the same percentage decline as in the previous quarter. Concerns that its bid to sell its O2 UK arm could hit regulatory buffers continued. In December, the European Commission confirmed it would not refer the deal to the UK's competition authority.

Telenor and TeliaSonera continued their share slide as the two operators both saw their share prices fall by 10 percent. Both continued to suffer from the failure of their proposed JV in Denmark. TeliaSonera suffered humiliation after financial research firm Muddy Waters said it was shorting the operator over alleged corrupt payments. TeliaSonera said it did not recognise the conclusions that had been made.

6.2%

Europe

The European telecoms sector rose 6.2 percent in Q4 according to data from the FTSE Group*

* Our index is made up of the following EU telcos: Altice, Proximus, BT Group, Deutsche Telekom, Orange, Swisscom, Tele2, Telecom Italia, Telefonica, Telenor, Teliasonera and Vodafone Group.

Democratise network data to unlock your agility

What kinds of challenges do CSPs face today?
Every CSP has its own list of primary challenges. Many have much in common – for example, delivering a better customer experience. Others are much more specific to individual circumstances, such as responding to a localised set of competitive applications or an unusual mobile device mix. As such, every CSP has to prioritise its investments so that it can equip itself with solutions that allow it to address the challenges confronting it. What's more, each CSP needs to become more agile in order to respond to challenges faster.

What role does the availability of network data play in helping to address these?
The ability to capture and interpret network data has been a key pillar of approaches to addressing such challenges. This was one of the main drivers behind the growth of Big Data solutions within CSP networks. However, in recent times, it has become increasingly clear that historic approaches to data capture and presentation are limited and will not be fit for purpose in the next phase of CSP and network evolution.

Why do you think that's the case?
This is because the procurement process for probes, mediation platforms and so on, has been typically driven by requirements that have become increasingly complex.

Put simply, while mandating support for thousands of KPIs ensures a comprehensive approach, it also creates system bloat, as platforms may have to include hundreds of features that are rarely, if ever, used. The resulting platforms have become slower, more hardware intensive and increasingly complicated to use.

As more and more challenges emerge, these complex systems have become an inhibitor to the agility that CSPs are seeking to adopt.

What would Polystar propose as a better approach?
CSPs are recognising that they need solutions that go beyond service assurance to deliver real-time data and enable agile operations and service management, with a complete, end-to-end view of networks, services and subscriber experience. They also recognise that they do not need overly complicated solutions that cover thousands of different KPIs – especially as the use of such systems has been restricted to a small group of highly technical personnel.

Agility, which is necessary in order to help CSPs to respond more quickly to changing circumstances, requires the evolution of real-time network analytics. It requires faster systems that have enhanced usability and which democratise the use of real-time data in CSP organisations. Enabling more people to view and act on data captured from the network helps CSPs empower their employees and spreads a more agile orientation throughout the organisation.

That's why we have taken steps to re-invent telco analytics with our new product, KALIX. It's the heart of a new set of solutions that have been designed to empower an entirely new way of creating the data-driven environment that CSPs need to make more sense of their networks and address key challenges in their markets. It provides a common framework for a new range of advanced and intuitive solution portals that have greater usability.

Can you provide an example of how this might make a difference?
Instead of trying to make sense of the many thousands of possible KPIs, we think that a better approach is to focus on learning which KPIs are relevant to an individual CSP. We create these via interaction with our global professional services organisation, with the result that each solution is optimised to the needs of each CSP.

Mikael Grill, CEO of Polystar

With this approach, all stakeholders in the organisation can ask and answer their own questions about data, since we present the data relevant to their daily work, adjusted to every skill level. It allows every employee to make data-driven decisions, transforming the efficiency and effectiveness of entire organisations and creating a more agile orientation that is more supportive of CSP ambitions.

What would be your message to CSPs that are trying to improve their agility?
Agility cannot be enabled by simply reusing and investing in legacy solutions. It's clear that they offer diminishing returns and cannot simply be reused to help CSPs confront the current and emerging challenges they face. To secure the agility they need, CSPs need more flexible solutions that can more rapidly be customised, evolved and enhanced, not through legacy approaches that are restricted to small numbers of users.

Data helps drive decisions. It enables CSPs to make objective choices but it has to be democratised so that more users can take action, faster. A reinvention of telco analytics is the only way to enable such a change. Visit Polystar at MWC to find out more.

Meet the Polystar team at MWC 2016 Hall 6, **Stand 6G31**

Hope trumps fear as Netflix goes global

The internet TV service is now a worldwide phenomenon. David Craik analyses what this means for telcos and their content strategies

Whilst most of us were clearing away the party streamers and shaking off the festive sluggishness, Netflix announced on 6 January that it had launched a global service bringing its network to over 130 new countries.

Unveiling the expansion to territories such as Bulgaria, Hungary, Russia and Turkey, Co-Founder and CEO Reed Hastings heralded the "birth of a new global internet TV network". He added: "With the help of the internet we are putting power in consumers' hands to watch whenever, wherever and on whatever device."

Its mix of original series and licensed TV shows and movies has already proved popular. Steady expansion to Western Europe, including the UK in 2012, the Netherlands in 2013 and France and Germany in 2014, has helped it sign up 75 million members to date.

Hastings believes its latest expansion will add another six million members in the first quarter of 2016. But while consumers are clearly embracing the service, what does it mean for telcos?

Analysts, such as STL Partners, have talked up Netflix as offering a cost-effective way to deliver attractive premium content but also carrying a risk of "constraining telcos into the position of a dumb pipe, not sharing in upsides and not owning the consumer who deals directly with Netflix".

According to a recent European Communications survey, telcos see Netflix as their second biggest competitor behind Google in the digital content space and are keen to develop partnerships with it.

Many European telcos have signed deals with the US-based company. As an example, in 2014 Vodafone UK offered a six-month prepaid Netflix subscription for customers who signed up to a 4G plan. Last September it renewed the partnership to expand the number of bundles Netflix is available on.

In its recent fourth quarter earnings presentation Netflix said that its latest expansion would broaden its addressable market by 190 million broadband homes, on top of the 360 million it had at the end of 2015.

"While the opportunity is large, our growth in these new markets will unfold over many years as we improve our service," it said. "We are starting by primarily targeting outward-looking, affluent consumers with international credit cards and smartphones. As with every market we've launched, our approach is to listen, learn and improve rapidly, adding more content, and additional languages. Our global availability sets us up for continued growth for many years."

It added that it recognised that mobile was the primary way many people access the internet and as a result was improving its mobile experience. "This includes sign up, credentials and authentication, the user interface and streaming efficiency. We have begun rolling out complexity based encoding based on the type of content rather than the amount of bandwidth available to a member. We can deliver higher resolution stream at lower bit rates, resulting in bandwidth savings."

But on the question of its relationship with telcos in its newest regions, Netflix is cagey. Spokesperson Joris Evers says: "Overtime we would certainly be interested in partnering with telcos in the new territories. For our more established markets the benefit of these partnerships is that it makes Netflix more easily available and helps promote our service. We are not a threat; we are a complement. Video is a major reason people buy broadband internet services."

Hopeful, not fearful

Operators based in areas where Netflix is expanding into are hopeful rather than fearful. Nikolai Minashin, from the Investor Relations team at MTS in Russia, says it welcomes the arrival of Netflix as it "makes more content available online in Russia, with MTS, as the largest telecom operator benefiting from increased data traffic usage". However, he did not wish to be

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questioned further over whether MTS would be looking to partner with the American firm.

Guillaume Lacroix, Director of Partnerships and Services at Orange, is equally optimistic: “We are not worried. We don’t think Netflix is a threat to Orange. Any adverse impact from Netflix would rather be to SVOD or Pay TV competitors than to distributors or telcos,” he says. “In Poland and Romania it’s the same as in France, we seek to offer our customers the best services available and Netflix is an opportunity to grow our customer service offering.”

He adds that “no decisions” have been taken to date on whether it will look to partner with Netflix in Poland and Romania.

“Where the size of our customer base allows, and when it makes sense, we will develop our own services but it is not an absolute requirement,” Lacroix states. “Netflix is part of the landscape in our territories and is among the options we consider when developing our content portfolio.”

There is also comfort from the past. “On demand services like Netflix are not disrupting our business but continuously changing it. It’s up to us to adapt to this change and provide customers with even better products,” says Dieter Trimmel, Director of Product Development & Portfolio Design at Telekom Austria. “It is similar to Skype’s arrival in 2003. Experts expected the collapse of traditional phone calls but telcos are still doing fine.”

Turkcell is determined to follow its own digital content path - at least for the time being. “Turkcell TV+ is extremely popular with our new fibre costumers and we are seeing strong take up of TV services among new subscribers,” says spokesperson Hande Asik. “Another advantage that we will have in the near future is the introduction of 4.5G in Turkey. We believe this will give us the opportunity to transform the mobile video experience. These unique advantages give us a competitive edge in terms of offering a unified and seamless customers experience with multiplay.”

It isn’t closing any doors to prospective partners, but Asik warns: “If Netflix wants to succeed in Turkey it must be very sensitive to the need for local content in the Turkish language. It is logical to assume that any new entrant into the Turkish market will customise and localise content in the medium term. In the case of Netflix, there might be an opportunity for content cooperation as their SVOD offering complements rather than competes with our TV+ content offering. In addition to content, partnering with local ISP providers would also be beneficial in order to work out broadband quotas and penetration issues.”

> “The nature of the partnership model chosen is key”

Analysys Mason’s Martin Scott points out the two parties need each other. “Netflix is dependent on high-speed broadband availability both mobile and fixed and the affordability and reliability of such services. This can be patchy in countries such as Turkey, at least until LTE arrives, at which point usage allowances will become a limiting factor,” he states. “Local licensing has also been a limiting factor in Netflix launching in China and it may face challenges over licenses in some of its expansion countries.”

While he believes operators have advantages over Netflix – namely local content, local language and local knowledge – they need to offer more. “They need to ensure that they have a strong user interface. Many OTT solutions currently on the market have limited visual appeal, confusing menu structures and ineffective content recommendation engines. Netflix excels in these areas, and local players must ensure a polished user interface to complete on ‘look and feel’ in order to retain higher-spend customers,” he suggests.

Futuresource Consulting analyst David Sidebottom believes partnerships between operators and Netflix in its new territories are inevitable. “Netflix will find that uptake for their service will be initially lower than in other regions because with people on lower incomes there will be a little more reluctance to pay,” he says.

“We will see increased collaboration with key telcos and more joint marketing than in other regions. It will be interesting to see whether there will be multiple telco deals in a country or exclusivity. For operators the advantages are clear – churn will be reduced and their profile will be raised because of the brand association with Netflix. It is an opportunity to make their service stand-out.”

But telcos need to get the balance right. They have strengths Netflix is keen to embrace. If they are considering a partnership it should be on a 50-50 basis, not a desperate race to sign up to Netflix to aid ailing revenues. They should also not abandon innovations in their own digital content provision.

Emma Mohr-McClune of Current Analysis sums it up well. “The nature of the partnership model chosen is key. On one hand, telcos can be simple channel and billing enablers, yet helping Netflix to market in this way does little to boost the telco’s own brand,” she states. “T-Mobile US’ Binge On approach certainly warrants taking a look at, as a more sophisticated approach to mobile video. However, we’ll have to wait to see what the US regulators say about it – there’s plenty who feel the model ignores net neutrality rules.”

Whatever the result, it is clear that Netflix is here to stay. ec

Digital transformation and the need for new

Digital transformation has been telecoms' key driver for the last two years, and a degree of industry consensus is emerging as to what it means, and what impact it will have on the telecommunications business, writes George Fraser, VP EMEA, CSGI. As we approach MWC it feels like a good time to take stock and ask: where are we now with digital transformation?

George Fraser, VP EMEA, CSGI

A double hit for telco

Digital transformation in the telecommunications business is really about two changes.

The first is the transformation of the telco itself into a digital business - one that exploits advances in IT and communications to make itself a more efficient and innovative service provider. This transformation is happening within telecommunications just as it's happening in virtually every other market vertical, and we can see the effect in everything from NFV and SDN at the networks end, to e-commerce and online self-service at the customer interface – exploiting digital technology to become smarter, more agile and more cost-effective.

The second big change is business diversification into digital services that run over the traditional network, in some cases replacing network services. An obvious but very important example is the provision of video services and streamed TV alongside voice, messaging and broadband, but 'digital diversification' in telco is much broader than that, taking in mobile ticketing, in-car services, home security and plenty more – all digital services delivered over the top of fast broadband networks.

It is what you do… and it is how you do it!

What makes digital transformation particularly tough for telcos is having to deal with both of these changes at once. For most industries, digitalization offers a smarter way of selling and delivering relatively stable and familiar services – books, say, or airline seats, or electric power. There may be a hump to get over, but there's a clear and compelling vision of running the same business but in a more effective and profitable way. Telcos, however, are having to revamp how they operate (to compete with 'digitally native' competitors) at the same time as they're extending their portfolios into new digital propositions. And as if that wasn't enough, they are having to convert existing services – including voice and messaging – to digital alternatives such as VoLTE and RCS. It's a pretty tough challenge, not least as legacy networks and services will need to run in parallel and often in conjunction with new, digital services for the foreseeable future. To adapt an old song title, 'it is what you do – but it's also the way that you do it'…

Running a dual business

Perhaps unsurprisingly, many operators have developed a 'dual business' strategy – one which will allows them to sustain and defend margins in their traditional business (which will be with us for a number of years) while simultaneously opening up more innovative propositions over their new digital networks.

Of course they don't want these to be completely separate businesses. The addressable market is broadly similar for both communications and digital services, and telcos want their customers to get an experience that is as consistent and accessible as possible, and to feel that they are dealing with a single, advanced organization. So the customer interface needs to be common across all services. Within the legacy and digital businesses, however, priorities tend to differ, with cost and efficiency most important on the legacy side (to sustain margins for as long as possible) and agility being more important on the digital side (to support market responsiveness and get new services to market as fast as possible).

Releasing the legacy brake

But to what extent is this possible with existing IT and systems? The answer is highly variable, dependent in large part on the maturity of the service provider and of their business support systems. Many CSPs have regularly adapted their systems over the years to deal with new network services and business demands, and the push into new digital services - in particular into the kinds of new business models emerging around the nascent IoT – is for many, a step too far. Many operators are therefore evaluating their future IT strategy with some urgency – looking for solutions that will help them shorten time to market, deal more efficiently with partners, interact more effectively with customers and so on – but without necessarily having to tear down and rebuild their long-established back-office systems.

> “Few operators want to wholesale rip-and-replace their legacy systems so we designed Ascendon as an easily-deployed cloud proposition that would overlay legacy systems as well as providing the flexibility needed to support new offerings”

Another way forward

At CSG, the size and distribution of our customer base means that we’ve had a pretty good view of how digital transformation has progressed over the last 12-24 months – in theory and practice. The Ascendon platform that we launched at MWC in 2015 is part of that response – a digital commerce platform that recognizes the ‘need for new’ in developing and rolling out digital services, and in meeting fast-evolving customer expectations. It recognizes that the customer for today’s digital content and services is very different from the customer for 1996’s mobile or 2006’s smartphone, but that many operators have systems that go back that far. Few operators want to wholesale rip-and-replace those legacy systems though – which is why we designed Ascendon as an easily-deployed cloud proposition that would overlay legacy systems as well as providing the flexibility needed to support new offerings.

Software is only part of the story though. Systems do need to be more adaptable - to provide greater agility in uncertain and evolving markets, and to compete effectively with digital providers that are unencumbered by legacy and are typically offering much simpler propositions. But digital transformation includes a measure of business transformation too, and we see a lot of operators thinking hard about their underlying business model, driven by the need to cut significant cost out of their legacy business and significant risk out of their future ventures. Both of these concerns lead in the direction of managed services and we also see that as a major trend in telecoms revenue management over the next year or two. Using cloud-based and managed services, provided through trusted partners, shifts a lot of the spend from CAPEX to OPEX, making it proportionate to business success, and shifts much of the investment risk from CSP to vendor. In uncertain times, it feels like a smart way to go.

CSG will be exhibiting at this year’s Mobile World Congress in Barcelona. Visit CSG Hall 5, 5B20

Europe opens up on new privacy laws

Legislation slipped out in Brussels just before Christmas proposes major changes to Europe's privacy laws. Keith Nuthall picks out what telcos need to know

The European Union gave the telecoms sector a Christmas present, or a lump of coal, depending on the point of view. On 15 December it unveiled two major pieces of data protection legislation. A reform package was agreed in principle by the EU's two legislators, the EU Council of Ministers and the European Parliament, and the EU executive the European Commission.

Formal texts are now being drafted for final votes by MEPs and ministers. They will comprise two laws: an EU general data protection regulation (GDPR), which will have to be implemented to the letter across all member states; and a revised data protection directive focusing on the police and criminal justice sector. Directives generally give EU governments more leeway on how to implement their legal principles.

The regulation by far the more important of the pair for the electronic communications sector is the GDPR. It tries to take account of the impact of social networking sites, cloud computing, location-based services, smart cards and smart phones in a number of ways that will impact, even damage, how telcos work, especially mobile phone companies seeking to exploit big data.

There are a number of key components that the industry needs to take note of. It enshrines in law a "right to be forgotten", giving consumers the right to demand data is deleted. But this is not an absolute right and the legislation builds in requirements that data be held if useful for scientific and journalistic research and its destruction could restrict freedom of speech and expression. Regulators (data controllers) will decide it this is the case, setting up potential for complex disputes – if anyone challenges data deletion requests of course.

The regulation also lays down rules insisting that customers have easier access to personal data, with telcos having to provide information on how to read and source this information in a clear and understandable way.

A "right to data portability", that is supposed to give consumers the right to transmit personal data between service providers, is joined by a "right of knowledge" that personal data has been hacked. This tells companies they must notify national regulators about data breaches that put individuals at risk and alert them quickly about high risk breaches. SMEs have less onerous duties here.

Meanwhile, companies planning to launch new data-rich services in the EU will have to take account of a "principle of data protection by design". This insists that data protection is a key consideration from the early design stage, through deployment of a device and service, its use and final disposal. This is likely to mean that privacy-friendly default settings will be the norm for mobile apps.

Also written within the law are various requirements and recommendations that companies anonymise, or pseudonymise, data to protect the identity of subjects. These urgings are sometimes written in complex law and maybe sufficiently loosely written to enable member states to maintain some national differences between how such data is protected.

Underpinning all these new controls are some big penalties. The regulation authorises data protection authorities to fine companies who do not comply with these EU rules up to four percent of their global annual turnover, or €20,000, whichever is the higher, with penalties of up to half these amounts payable for smaller breaches of the rules.

Larger companies will also have to deal with the expense of employing a data protection officer to make sure they keep within the law, although with these fines in play that might seem sensible. SMEs do not have to, unless they are data-focused companies, or process sensitive data such as on religious belief and race.

For major telcos operating within and outside the EU, the regulation restricts how and when personal data can be passed to non-EU countries and international organisations. The European

Commission is made the top cop here – it will allow such transfers if it concludes a jurisdiction has privacy standards that approximate EU protections, but restrict or block transfers where it considers these safeguards are too loose.

Meanwhile, telcos will need to pay attention to the parallel revised data protection directive, at least when their data is required by police and other law enforcement bodies. Of course, with cybercrime growing and concern intensifying about the abuse of the web by money launderers and terrorists, their likelihood of close encounters with the police is growing.

The key goal here is to facilitate cross-border law enforcement in a world where criminals ignore national borders, especially online – so there could be benefits or telcos targeted by cybercriminals, as well as hassles from having to comply with more requests for data from police.

Mixed reactions

The telecoms sector has had a mixed reaction to the reforms, as agreed by the three EU bodies. The European Telecommunications Network Operators' Association (ETNO) certainly saw plenty that was positive in the package, recognising the need for more comprehensive EU-wide legislation, given the interdependency of telecoms and internet markets across Europe and between industry segments.

Its Chairman Steven Tas said: "Consistent rules across industries are key in the digital age. We need to eliminate regulatory asymmetries, so that telcos can contribute to boosting Europe's digital innovation". Noting how value chains are global and digital, an ETNO note stressed that it was "crucial to ensure consistent consumer standards and a level regulatory playing-field across industries". This highlighted the fact that all digital and telecoms players entering the EU market will have to abide by these rules, whether based outside the European Union, or not.

But ETNO stressed that the EU still had work to do – noting that the December deal still left the EU's 2002 directive on privacy and electronic communications (the ePrivacy directive) in force, with its rules on processing of personal data in the electronic communications sector. "Europe needs to address this regulatory asymmetry without delay," said ETNO. Mobile industry group the GSM Association later released a joint statement with ETNO that echoed these points.

> "Businesses that are data rich just won't be able to look the other way with the new regulation"

Vin Bange, Partner at media and technology law firm Taylor Wessing, has written an assessment in which he agrees that the new legislation would clip the wings of telcos and internet firms using data – which is pretty much all of them. Stressing the four percent global revenue fine cap for breaches of the "upscaled and tough new standards," he noted: "Businesses that are data rich just won't be able to look the other way with the new regulation." He highlighted how companies providing data-based services to telcos will be covered by the law, warning: "This will impact on technology service providers in particular." Generally, he said: "Businesses will have to genuinely adopt governance and accountability standards and not pay lip service to data privacy obligations otherwise they could be in for a surprise..."

He was not happy however, that the regulation still allowed member states some discretion over some data protection issues to retail national rules, which was "not a welcome scenario" for companies with multi-country products and services. Good news? Bange stressed that the law's 'one-stop-shop' enabling companies to deal with one EU country regulator rather than multiple national regulators, cutting red tape.

The Interactive Advertising Bureau Europe (IAB Europe) found more fault, stressing the risk posed by the new legislation to the burgeoning advertising segment based on big data, drawing on customer web preferences, location, age, gender and more. The reform's text is "full of legal uncertainty, red tape and restrictions," noted IAB Europe analysis. Board member Allan Sørensen warned that "companies will have little choice but to impose annoying requests for consent every time a user accesses their website." The organisation warned that the legislation could limit feasible business models and reduce the availability of information and services on the internet, especially those that are free or provided at a low cost.

The agreement will now need formal approval by both the EU Council of Ministers and the European Parliament before the legislation can be written into the EU Official Journal. These votes are expected to happen by April at the latest and once that happens, the regulation will come into force two years' later and member states will have a two year deadline to write the directive's terms into their own national legislation (which is how directives are enacted).

It can be expected that both institutions will give the laws a fair wind. The German Green MEP Jan Philipp Albrecht, who has coordinated the European Parliament's votes on the issue (called a rapporteur in EP jargon), said following the December deal: "The new rules will give businesses legal certainty by creating one common data protection standard across Europe. This implies less bureaucracy and creates a level playing field for all business on the European market." ec

Standardise to save, then reinvest to innovate:

Srinivasan Jayaraman, Head of Virtusa's Global Telecommunication Business, talks industry challenges, emerging tech and customer experience

Hi Srini, thanks for speaking to us today. With Mobile World Congress fast approaching, things must be pretty busy for your team. I guess the big question is, what has changed over the past year?
Well yes, it's always a crazy time of year, but it's also a good time to reflect. In some ways, the past year has not been much different to the one before except that the pace of change is ever increasing. We are still seeing margins shrink, as OTT players encroach on traditional voice and text revenues, and price wars rage on. As more devices get connected and as consumers and enterprises consume more data, the demand for fast and reliable networks is ever increasing, meaning telcos need to do more to stay ahead of the curve. I guess the big difference is that as every year passes, these problems become more acute, and the environment becomes more complex – particularly when you look at the ever-widening range of Internet-enabled devices being added into the mix. So it's the same, but different.

So what are the major challenges facing CSPs?
The battle to own the customer is one of the biggest challenges CSPs face right now, and the goalposts are constantly shifting. Consumers are setting the agenda, in terms of how fast CSPs need to deliver, what services and devices they need to support, and (in most cases) CSPs are struggling to engage with consumers. Today, there are no barriers to disruptive innovators competing head to head with CSPs. CSPs are in a constant battle to stay ahead of the competition and in step with consumer trends, in order to reduce churn and acquire new customers. From a business operations perspective, there will continue to be pressure to lower costs, increase speed tomarket, improve efficiency, grow the business and so on. As CSPs focus on rolling out newer and faster networks and acquire new consumers, they are still hampered by the reliance on bespoke legacy systems, which run core critical business applications; delivering transformational business change in this legacy-dependent environment is very restrictive and difficult.

Bearing this in mind, what are the three core areas that CSPs should be focusing on?
Firstly, there is a need to redefine the customer experience and how CSPs interact with their customer. There are so many touchpoints that a customer interacts with their provider – from the call centre through to online billing and Point of Sale. Each of these touchpoints needs to engage the customer and deliver a seamless experience, and they all need to run off a common platform, but this often isn't the case. This can mean the customer experience is frustrating and disjointed. This is why having an omni-channel customer environment is essential. Everything from the back office through to front office needs to be connected; there needs to be consistency across all channels, people need to have the option to communicate in whatever way makes them most comfortable.

However, any customer engagement process will not help you if the network doesn't deliver, which is why maintaining Quality of Service will always be a critical focus for any CSP. If customers are experiencing outages, slow service, video buffering, it won't take long for them to take to social media to wreck your reputation. It all comes down to reliability, cost, speed, and stability. But as complexity increases, so do the number of opportunities for things to go wrong, and the difficulty in sorting them out. So a large part of keeping customers happy is in having a network and operations team that can resolve issues fast, and proactively pre-empt problems before they impact customers. Not only this, but CSPs also need to have the ability to launch new services and integrate with more devices, fast.

Yet business transformation requires more than technology and policy, it requires a cultural shift which is often much more difficult to achieve. Many CSPs operate in different siloes with teams for customer care, operations, network teams and so on. This creates issues with communication and inefficiencies can easily slip through the cracks. Overcoming this social challenge, and encouraging people to think and work differently, is one of the biggest challenges I see facing the industry.

So what would you suggest to address these problems? What are the most common mistakes you see people make?
Most CSPs we speak to are stuck in the same dilemma – they want to instigate change, but most of their IT budget is earmarked for 'essential' services, such as maintenance and app support. They have to battle to invest in network upgrades, let alone innovation. Yet increasingly innovation is an essential service – failure to innovate will drive customers away, it will damage reputations and ultimately it will result in lost market share. Getting

the board's buy-in often requires some creative thinking. They need to see the figures, which is why it is vital to take a serious look at where cost savings can be made – and you'd be surprised how many savings are often left on the table.

Typically, whenever we enter into a new engagement, we are able to identify 20-30% of apps support and maintenance cost savings in the first year. When you consider these budgets are normally around £100 million a year, this means £20-£30 million can be reinvested into transformational work and innovation without any requests for funds being made. There is no silver bullet, but a lot of it comes down to the rationalisation, standardisation and finding smarter ways of working. As a strategic partner to our clients, we are exposed to a variety of environments, and an assortment of bad habits as well as common pitfalls to avoid. We are also exposed to the latest waves of technological innovations that, when applied correctly, can deliver even more cost savings. An exciting new area we are currently working with clients to build virtual robots that can automate low-skilled business functions – for example, responding to call centre FAQs, or matching billing, customer, inventory and supplier records to help with billing discrepancy, or auto correcting data discrepancy and systems issues in the order fallout department. So once the savings are realised from cutting inefficiency, they continue to be sustainable because you have invested in smart technology – for example, SDN/NFV, Big Data and analytics, artificial intelligence – these all come together to deliver savings over time which can always be reinvested into what comes next.

What new innovate technologies are CSPs investing in at the moment? What are you recommending to your customers?

We see active interest in the Internet of Things (IoT) – there is tremendous interest in launching new services or capabilities in this area. We are also seeing growing awareness in the areas of AI and Robotics especially in the areas of internal operations or networks. This is an emerging area and we believe this will lead to long term shifts in terms of how CSPs manage certain parts of their business.

We are seeing active interest in areas such as SDN and NFV, as they enable much more flexible networks that can adapt to change and keep in step with consumer demands. Big Data analytics are really key here as they can help you identify trends over time, get a better understanding of your customers, potential demand, allowing you to forecast with much greater degrees of certainty.

The industry is seeing its next wave of consolidation through mergers and this will create tremendous opportunities to unlock value through optimisation and efficiencies. So there is a lot happening, it's an exciting time!

It's been great chatting, is there anything else that you would like to add?

The telecom industry is the engine behind every innovation, whether social or technology, that is emerging today. There has never been a more exciting time to be a CSP and while the challenges in terms of markets, customers and competition is extremely intense, we strongly believe that the CSPs who will make the big bold bets will eventually break away from the rest of the pack.

Srinivasan Jayaraman Executive Vice President, Global Head of Telecoms and Managing Director, Middle East and Asia

Srinivasan (Srini) Jayaraman heads Virtusa's Global Telco business unit. He also heads sales in the MEA region, focusing on Insurance, Healthcare, Media and Entertainment and Diversified Business units. In his Global Telco portfolio, he is responsible for driving significant revenue growth and profitability by building industry leading domain solutions that help address our clients' most pressing business challenges. From a MEA perspective, he is responsible for client relationships, strategy and overall business growth across the above mentioned segments.

Prior to this role, he has held various senior roles in Virtusa driving business growth, establishing and maintaining critical client relations and entering new markets. He also successfully helped various clients transform their business by focusing on accelerating time to market, enhancing customer experience and improving their ability to drive cost efficiencies in IT operations.

Prior to joining Virtusa, Srini was with Tech Mahindra in various roles and was Client Partner for one of their largest customers where he built successful business relations in India and Europe. Srini was also at HCL Technologies in India and US-based roles. He was a part of the core team that led HCL's foray into the Enterprise Applications business and was closely involved in setting up the CRM business.

Srini has a Bachelor's Degree in Mechanical Engineering from University of Pune and has completed his MBA from Indian Institute of Management, Lucknow.

Empirix: Customer Experience Assurance (CEA)

A complete solution to gain detailed insights about your subscribers' experience when using Mobile Data Services

Mobile Network Operator (MNO) technical departments traditionally focused on Service Assurance are struggling to extract valuable information requested by multiple business divisions who need information about customer behaviour and quality of experience on the network. Requested information can vary widely in content and selected area.

Service Assurance departments need the right tools to quickly react to such inquiries from various business units, without advance knowledge of the type of data that they will be requested to collect, correlate and present. These tools must also satisfy the "traditional" troubleshooting and diagnostic role on the same platform in order to reduce costs. Most legacy Service Assurance tools were focused on ensuring insight into network issues, but lack the required flexibility to extract the necessary data from existing and new technologies (e.g., LTE, IMS, VoLTE).

Understanding the impact of customer behaviour on your mobile network

The explosion of applications accessible through mobile networks and the advent of Over-the-Top (OTT) services are putting pressure on traditional service providers to differentiate themselves, attract a loyal customer base and, most importantly, reclaim revenues that are currently flowing to the OTT providers or to the competition.

MNOs used to focus on the bandwidth made available to the mobile users, paying little attention to the services running over it, assuming that more bandwidth meant more subscribers. However, when OTT providers appeared, the MSPs were relegated to the role of dumb pipe providers, triggering a cycle where MSPs would invest a lot of money to increase network capacity so their subscribers could access services provided by other entities!

MNOs must now attempt to regain ownership of the services delivered by emphasizing what they can control: a quality experience over their network. But first, they need to know who is accessing the network, through which devices, from where and for what reason. This allows the provider to more effectively allocate network expansion investments and guide marketing campaigns to retain existing subscribers and attract new ones.

The Empirix solution for monitoring the customer experience is based on the IntelliSight component of the Empirix System Architecture (ESA) that combines industry-leading probe technologies with advanced data discovery and reporting to solve key business problems. This solution provides a framework for improving network management, transformation and monetization that goes beyond the traditional reporting capabilities of most protocol analysis tools on the market today.

With integrated data collection and analytics, Empirix is uniquely able to provide an in-depth understanding of customer experience and user behaviours. This cross-functional data analytics platform provides all departments involved in customer experience with actionable intelligence for faster, smarter decision making.

Features

1. Single Subscriber Analytics

Provide your network operations Tier 1 personnel with a solution that allows fast retrieval of individual subscriber information summarized in a non-technical format for further analysis by customer care agents. This solution is fully integrated with the Empirix probe system to allow Tier 2 personnel to drill-down from the main dashboard to the detailed protocol analysis, enabling advanced troubleshooting and diagnostics of issues that cannot be fixed by the first level of support.

2. Network Performance

Aggregate any set of metrics by the respective network elements to periodically report on the performance of every node being monitored (i.e. MSS, GGSN, SGSN, DNS, HLR/HSS...).

3. Subscriber Intelligence

Generate numerous reports that combine both usage and quality metrics by configurable dimensions. The integrated data discovery tool lets the end-user explore the data related to the subscriber sessions. The Empirix solution does not require any IT or SQL expertise, so it can be adopted without any specific knowledge of database technology or query language, and is accessed through an easy-to-use web-based graphical drag-and-drop user interface. This allows non-IT experts to discover the information hidden in billions of data records and quickly define ad hoc reports, which can then be distributed to other team members, providing detailed insight into network performance and quality, as well as the services consumed and which customers are accessing them.

4. Real-Time Monitoring

This optional component of the solution is capable of analyzing thousands of events (or detail records) per second relating to control and user plane, and generate aggregated KPI/KQIs to compare against configurable thresholds that provide early warning of issues impacting subscriber quality of experience. Its fully configurable service model enables individual providers to customize their service definition regardless the underlying technology (2G, 3G or LTE). This solution is ideally leveraged by organizations looking to transition a network operations centre into a service operations centre.

Applications and users

1. Network Operations: Tier 1 and 2 Support

Information from the E-XMS probe system is integrated with IntelliSight's single subscriber analytics to provide valuable information to Tier 1 support to quickly diagnose subscriber complaints. In case of critical issues, the problem is transferred to Tier 2 support for further investigation.

2. Network Engineering: A Subscriber's View of Performance

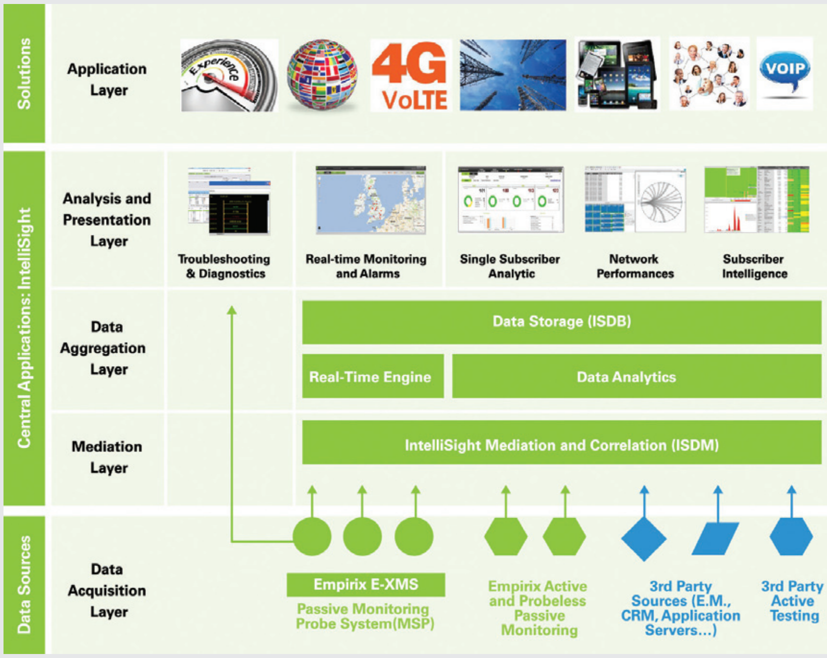
IntelliSight's Network Performance feature monitors network node key performance indicators by subscriber activity. Quickly identify issues related to each node so support organizations can have a direct and measurable impact on subscriber service.

3. Network Planning: Trend Identification

Discover how a set of performance or usage indicators change over time to understand trends, such as changing levels of traffic in specific areas daily and over time.

4. Service Quality: Reporting

The IntelliSight platform provides all the flexibility required to generate reports related to the Quality of Service and the Quality of Experience across a range a of parameters – including location, device, or application – allowing network planning teams to prioritize investments in order to upgrade overloaded areas of the network and to empower executives or business units to constantly monitor network Quality of Service over time.



5. Reporting for Marketing and Corporate Sales

The IntelliSight platform provides detailed information regarding how service provider customers are accessing the network and the service quality they experience. Marketing departments and corporate sales can leverage this information to identify usage patterns, propose segmented personalized retail offerings and analyze the impact of targeted marketing campaigns.

6. Real-Time Monitoring for OSS/ Service Operations Centres

The IntelliSight platform provides real-time views of the services accessed by mobile users in order to generate alarms about any issues that impact revenue, including issues affecting high-value accounts or corporate users. This allows operations teams to proactively fix problems before they impact experience and minimize revenue loss due to service unavailability.

Key benefits

1. Decrease Mean-Time-To-Repair

Single Subscriber Analytics allows non-expert, technical support staff to troubleshoot basic customer-affecting problems so they can deal with a higher percentage of tickets and deliver a better service while also reducing the overall failure of Mean-Time-To-Repair.

2. Proactively Enhance the Customer Experience

The real-time service monitoring features of IntelliSight allow network operations to immediately prioritize fixing the highest revenue-impacting issues, deferring less important problems. This has the benefit of improving the quality of the service perceived by your customers, increases service availability and, consequently, promotes subscriber loyalty.

3. Reduce Operational Costs and Optimise Technical Resources

The Empirix CEA solution reduces operational costs and optimizes the network in order to keep services up and running, maintaining the performance of all the nodes throughout the service chain.

4. Improve your Knowledge for Better Business Decisions

The Empirix CEA solution allows Mobile Operators to have a clear picture of network users, devices, locations, activities and level of quality – allowing them to better prioritize investments in network expansion and marketing campaigns to retain or attract subscribers.

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THE

Most Valuable Telecoms Brands

2016

European Communications and Brand Finance showcase the most valuable telecoms brands in the world in 2016, including an exclusive interview with the Chief Brand Officer of Europe's most valuable telco

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Pricing, profits and investments help Verizon and Deutsche Telekom to star

European Communications discusses the key points behind the 2016 ranking with Brand Finance Associate Director Savio D'Souza

European Communications: Verizon is the world's top telco brand – what can everyone else learn from them?
Savio D'Souza: Although in the beginning of 2015 Verizon did suffer severely by the price war within the US telecoms industry, it did not follow its main competitors AT&T and Sprint in cutting prices. That decision did take its toll on profits and number of customer disconnections, with the latter being 270 million and 760 million higher compared to AT&T and Sprint respectively in the first quarter of 2015.

Nevertheless, after the initial switch of price sensitive customers to competitor services, the number of people leaving Verizon fell considerably over the rest of 2015. Moreover, Verizon's ARPU remained above $50, while that of AT&T and Sprint fell to $41 and $46 respectively. This allowed Verizon to keep its margins high on the expense of short-term loss of customers and revenue, while focusing on delivering superior service.

The company's CFO Francis Shammo has recently stated that the company will not be able to keep customers that prefer price over quality, which clearly shows that Verizon will continue to leverage on its strategy to brand its services as premium. Turning to capital expenditure, it also seems that the company is committed to follow that strategy by investing a lot more in its 4G network and mobile video services.

Verizon's capex in the first half of 2015 were $5.5 billion, dwarfing those of AT&T and Sprint ($4 billion and $3.5 billion respectively). Although it's still uncertain whether Verizon will succeed in the long-term and keep its place as the world's leading telecom brand, it seems that for the time being it emerges as a winner from the price war in the world's largest telecom market.

Deutsche Telecom is Europe's leading brand – what makes it the number one?
Deutsche Telecom, widely known as T, managed to overthrow Vodafone back in 2014 as Europe's most valuable brand, mainly as a result of its successful rebranding strategy in almost all of its countries of operation. In the last year it has been highly profitable, with net profit up to over €800 million in Q3 2015. It has reinvested this in projects such as broadband network extension, laying the foundations for future brand value growth.

Overall, how did European telco brands perform in 2015 versus 2014?
In general it hasn't been a particularly successful year for European telecom carriers, with overall brand values down 0.6 percent. Interestingly, however, the brand values of the top 10 rose by 3.6 percent, hinting at consolidation. Germany and the UK have actually performed quite well, rising 5.9 percent and 5.2 percent respectively. This is offset by France, the Nordics and Italy and Russia, in particular.

How did Europe perform versus the rest of the world?
North America, perhaps the best region with which to compare Europe, saw brand values rise 2.1 percent. In Asia, brand values rose 7.8 percent, while the Pacific region increased 11.1 percent. In contrast, brand values in Central and South America fell by three percent and 21 percent respectively. The Middle East and Africa were also down, by 3.4 percent and 26.5 percent respectively.

Which brands should we look out for in 2016?
One of the top brands that we need to look out for in 2016 is AT&T and the rumours around a potential rebrand of DirecTV. If the company goes ahead and brings the DirecTV brand under the AT&T umbrella that would potentially create the most valuable telecom brand in the world, surpassing the current number one Verizon.

Danish Telecom operator TDC is another brand that we need to watch out for during the 2016 as the company recently announced its intention to merge the TDC and YouSee brands, with the latter as the continuing brand. ec

Top 100 Global Telecom Brands

		Domicile	Brand Value (USD $ Millions)	BV change (yoy)
1	verizon	UNITED STATES	63,116	5%
2	at&t	UNITED STATES	59,904	2%
3	中国移动 China Mobile	CHINA	49,810	4%
4	T · ·	GERMANY	33,194	7%
5	vodafone	UNITED KINGDOM	27,820	2%
6	SoftBank	JAPAN	19,135	19%
7	orange™	FRANCE	19,096	-4%
8	BT	UNITED KINGDOM	18,442	14%
9	NTT	JAPAN	18,186	23%
10	xfinity®	UNITED STATES	17,186	-2%

Rank 2016	Brand	Domicile	Brand Value (USD $ Millions)	BV change (yoy)
11	au	JAPAN	14,209	12%
12	China Telecom	CHINA	13,684	-3%
13	NTT Docomo	JAPAN	13,492	7%
14	Sky	UNITED KINGDOM	11,060	27%
15	Telstra	AUSTRALIA	10,707	23%
16	China Unicom	CHINA	10,414	-24%
17	DirecTV	UNITED STATES	9,476	-8%
18	Bell	CANADA	9,198	20%
19	Time Warner Cable	UNITED STATES	9,162	11%
20	O2	UNITED KINGDOM	8,224	-2%
21	Movistar	SPAIN	8,018	-23%
22	Sprint	UNITED STATES	7,886	15%
23	Swisscom	SWITZERLAND	6,876	17%
24	EE	UNITED KINGDOM	6,323	9%
25	Centurylink	UNITED STATES	6,273	-6%
26	Telenor	NORWAY	6,238	-11%
27	Telecom Italia	ITALY	6,215	-17%
28	airtel	INDIA	5,768	28%
29	3	HONG KONG	5,637	20%
30	STC	SAUDI ARABIA	5,613	-1%
31	TeliaSonera	SWEDEN	5,469	6%
32	KT	SOUTH KOREA	5,234	9%
33	SK	SOUTH KOREA	4,842	-18%
34	Claro	MEXICO	4,682	-6%
35	Telus	CANADA	4,674	-3%
36	Etisalat	UAE	4,564	4%
37	Rogers	CANADA	4,370	-9%
38	Dish Network	UNITED STATES	4,324	-10%
39	SFR	FRANCE	4,035	-10%
40	KPN	NETHERLANDS	3,829	-23%
41	Virgin Media	UNITED KINGDOM	3,796	-5%
42	Optus	AUSTRALIA	3,622	17%
43	Chunghwa	TAIWAN	3,608	18%
44	MTS	RUSSIA	3,601	-9%
45	Charter	UNITED STATES	3,477	-3%
46	Telcel	MEXICO	3,319	3%
47	Megafon	RUSSIA	2,918	-9%
48	Telkom Indonesia	INDONESIA	2,620	-7%
49	MTN	SOUTH AFRICA	2,579	-45%
50	Idea Cellular	INDIA	2,510	46%
51	Singtel	SINGAPORE	2,417	18%
52	LG U+	SOUTH KOREA	2,416	12%
53	Beeline	RUSSIA	2,212	-16%
54	KDDI	JAPAN	2,211	-20%
55	Proximus	BELGIUM	2,195	7%

Rank 2016	Brand	Domicile	Brand Value (USD $ Millions)	BV change (yoy)
56	Tigo	LUXEMBOURG	2,184	4%
57	Free Mobile	FRANCE	2,158	18%
58	Ooredoo	QATAR	2,104	21%
59	UPC	UNITED STATES	1,974	-4%
60	Du	UAE	1,903	12%
61	Tracfone	UNITED STATES	1,868	15%
62	Bouygues Telecom	FRANCE	1,843	-14%
63	Telmex	MEXICO	1,794	-19%
64	PLDT	PHILIPPINES	1,758	16%
65	Mobily	SAUDI ARABIA	1,727	-21%
66	Rostelecom	RUSSIA	1,688	-19%
67	Vivo	BRAZIL	1,628	-42%
68	Shaw	CANADA	1,530	-53%
69	Frontier Communication	UNITED STATES	1,497	0%
70	TDC	DENMARK	1,492	-12%
71	Oi	BRAZIL	1,451	-24%
72	Turk Telekom	TURKEY	1,449	2%
73	Wind	ITALY	1,444	-7%
74	Level (3)	UNITED STATES	1,392	10%
75	UQ Communications	JAPAN	1,350	172%
76	Telefonica	SPAIN	1,349	-12%
77	Turkcell	TURKEY	1,346	-14%
78	Windstream	UNITED STATES	1,330	-11%
79	Taiwan Mobile	TAIWAN	1,314	17%
80	Tele2	SWEDEN	1,203	27%
81	PCCW	CHINA	1,140	12%
82	HKT	CHINA	1,119	-24%
83	Globe Telecom	PHILIPPINES	1,113	50%
84	Optimum	UNITED STATES	1,113	-8%
85	Telekom Malaysia	MALAYSIA	1,101	1%
86	Embratel	BRAZIL	1,093	14%
87	Maxis	MALAYSIA	1,080	-18%
88	Ziggo	NETHERLANDS	1,049	-26%
89	Entel	CHILE	1,049	-6%
90	Kabel Deutschland	GERMANY	1,026	12%
91	Telenet	BELGIUM	1,022	-19%
92	Reliance Communications	INDIA	986	-8%
93	Viettel Telecom	VIETNAM	973	68%
94	Zain	KUWAIT	965	-33%
95	DiGi	MALAYSIA	947	-15%
96	A1 Telekom	AUSTRIA	912	-6%
97	Avea	TURKEY	904	-14%
98	Far Eastone Telecommunications	TAIWAN	874	32%
99	E-plus	GERMANY	868	-26%
100	TalkTalk	UNITED KINGDOM	860	-18%

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Top 100 European Telecom Brands

	Domicile	Brand Value (USD $ Millions)	BV change (yoy)
1	GERMANY	33,194	6.7%
2	UNITED KINGDOM	27,820	2.0%
3	FRANCE	19,096	-3.9%
4	UNITED KINGDOM	18,442	14.0%
5	UNITED KINGDOM	11,060	27.2%
6	UNITED KINGDOM	8,224	-1.6%
7	SPAIN	8,018	-23.1%
8	SWITZERLAND	6,876	16.9%
9	UNITED KINGDOM	6,323	8.9%
10	NORWAY	6,238	-11.5%

Rank 2016	Brand	Domicile	Brand Value (USD $ Millions)	BV change (yoy)
11	Telecom Italia	ITALY	6,215	-17.3%
12	TeliaSonera	SWEDEN	5,469	6.2%
13	SFR	FRANCE	4,035	-9.7%
14	KPN	NETHERLANDS	3,829	-23.3%
15	Virgin Media	UNITED KINGDOM	3,796	-5.3%
16	MTS	RUSSIA	3,601	-9.5%
17	Megafon	RUSSIA	2,918	-8.8%
18	Beeline	RUSSIA	2,212	-16.1%
19	Proximus	BELGIUM	2,195	7.3%
20	Tigo	LUXEMBOURG	2,184	4.1%
21	Free Mobile	FRANCE	2,158	17.8%
22	Bouygues Telecom	FRANCE	1,843	-13.5%
23	Rostelecom	RUSSIA	1,688	-18.9%
24	TDC	DENMARK	1,492	-12.5%
25	Turk Telekom	TURKEY	1,449	2.5%
26	Wind	ITALY	1,444	-7.3%
27	Telefonica	SPAIN	1,349	-11.8%
28	Turkcell	TURKEY	1,346	-14.0%
29	Tele2	SWEDEN	1,203	27.4%
30	Ziggo	NETHERLANDS	1,049	-25.5%
31	Kabel Deutschland	GERMANY	1,026	11.7%
32	Telenet	BELGIUM	1,022	-18.7%
33	A1 Telekom	AUSTRIA	912	-6.2%
34	Avea	TURKEY	904	-14.1%
35	E-plus	GERMANY	868	-25.6%
36	TalkTalk	UNITED KINGDOM	860	-18.4%
37	Elisa	FINLAND	794	-0.9%
38	FASTWEB	ITALY	790	2.3%
39	Bezeq	ISRAEL	735	-5.6%
40	Sunrise	SWITZERLAND	614	9.2%
41	Plus	POLAND	517	-9.6%
42	Freenet	GERMANY	505	-12.9%
43	Play	POLAND	490	28.4%
44	Mobistar	BELGIUM	488	-21.2%
45	Colt	UNITED KINGDOM	488	-6.5%
46	DNA	FINLAND	445	66.7%
47	Pelephone	ISRAEL	408	53.2%
48	Yoigo	SPAIN	388	16.8%
49	Drillisch Telecom	GERMANY	369	85.8%
50	Intelsat Sa	LUXEMBOURG	362	*
51	Cellcom Israel	ISRAEL	353	-30.6%
52	iBasis	NETHERLANDS	337	*
53	HOT	ISRAEL	336	13.8%
54	Base	BELGIUM	335	14.9%
55	SES	LUXEMBOURG	319	-35.4%

Rank 2016	Brand	Domicile	Brand Value (USD $ Millions)	BV change (yoy)
56	The Utility Warehouse	UNITED KINGDOM	312	-26.0%
57	Nos	PORTUGAL	310	-19.8%
58	Inmarsat Plc	UNITED KINGDOM	304	23.9%
59	Meo	PORTUGAL	296	-12.6%
60	PT Empresas	PORTUGAL	286	-6.9%
61	Eircom	IRELAND	270	*
62	m:ts	SERBIA	252	16.0%
63	Eutelsat Communications	FRANCE	251	*
64	Cosmote	GREECE	236	-49.5%
65	Cyfrowy Polsat	POLAND	211	*
66	OTE	GREECE	197	-43.1%
67	Jazztel	UNITED KINGDOM	195	30.7%
68	Kyivstar	UKRAINE	194	-24.0%
69	Bics	BELGIUM	179	-23.9%
70	Meteor	IRELAND	161	8.0%
71	Yousee	DENMARK	136	-35.2%
72	Telekom Slovenia	SLOVENIA	115	34.0%
73	Cellnex Telecom	SPAIN	108	*
74	Teo	LITHUANIA	104	42.3%
75	Vip	CROATIA	97	17.9%
76	Daisy Group Plc	UNITED KINGDOM	96	-43.5%
77	DigiMobil	ROMANIA	95	45.2%
78	Life:)	UKRAINE	88	-26.1%
79	LMT	LATVIA	86	*
80	Euskaltel SA	SPAIN	84	*
81	Kcom	UNITED KINGDOM	82	-1.4%
82	POST Luxembourg	LUXEMBOURG	78	29.2%
83	Velcom	BELARUS	73	-21.1%
84	Si.Mobil	SLOVENIA	72	9.0%
85	Netia	POLAND	72	-36.4%
86	Cable & Wireless Communications	UNITED KINGDOM	71	78.2%
87	Vivacom	BULGARIA	64	-10.2%
88	Telindus	BELGIUM	61	-5.0%
89	Gamma Communications PLC	UNITED KINGDOM	58	*
90	M-Tel	BULGARIA	53	-17.0%
91	Golan Telecom	ISRAEL	53	37.0%
92	Tiscali	ITALY	46	-36.5%
93	m:tel	SERBIA	45	-40.1%
94	Midas Sa	POLAND	42	-34.2%
95	Tattelecom	RUSSIA	41	15.9%
96	Tusmobil	SLOVENIA	38	63.2%
97	Tango	LUXEMBOURG	35	65.4%
98	Fullrate	DENMARK	34	*
99	Bashinformsvyaz	RUSSIA	33	11.5%
100	KC	UNITED KINGDOM	32	*

*Denotes new entry

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The man with the (brand) plan

Deutsche Telekom's Chief Brand Officer tells Marc Smith how he has changed his mind about the boring telecoms industry to take his company to the top

Hans-Christian Schwingen was Head of Marketing at Audi when headhunters working on behalf of Deutsche Telekom first came knocking a decade ago. It proved to be a difficult sell for the recruiters given Schwingen, a former advertising man, didn't view the telecoms industry in the best of lights.

He says: "It wasn't attractive to me at all. I couldn't imagine changing from car manufacturing to telecoms – I thought it was boring."

It was Rene Obermann, the former Chief Executive of DT who took the reins in that same year, who helped him to change his mind. "I read a lot about Rene and what he intended to do," Schwingen says, referring to the wider company transformation that was to be set in train. "I met the management board and we decided to try to transform the brand from a tech brand into an experience brand."

It helped that DT's brand reputation was, as Schwingen puts it, "quite down" at that time. "There were more opportunities than risks," Schwingen admits. "At Audi, everything was done in terms of brand and marketing. I needed a new challenge."

In 2014, DT surpassed rival Vodafone to top Brand Finance's annual ranking of telco brands in Europe. As we report in this issue, it has held onto the summit in the 2016 version. Schwingen has revelled in the "much harder job" he has at DT where the "intangibility" of what all telcos have to sell means it is "much more complicated" to make customers understand what they stand for.

One of his key decisions was to base DT's brand strategy on the theme of sharing. "The digital age has become the age of sharing," he explains. "Regarded as a basic human need, sharing is becoming more than probably ever before the guiding theme behind our thoughts and actions. It´s in our nature. Our T brand strategy exemplifies the fact that 'Life is for sharing'. We believe in the power of this idea, and it´s how we differentiate ourselves in a competitive environment."

This overarching strategy is backed up by three brand values: innovation, competence and simplicity. "Ultimately, these values are what the T brand is all about," Schwingen says. "They provide guidelines for how the employees conduct themselves and their business, at every contact point along the entire value chain."

In turn, these values define the way the brand aims to presents itself to its customers: as reliable, authentic, approachable, sociable and inspiring. "These attributes set the tone for the entire brand identity," Schwingen says.

You cannot copy John Legere

A key part of the operator's success has been its ability to extend the T brand beyond its home market to countries over the last few years. Schwingen says such rebranding projects are some of the most difficult parts of his job. The 2014 launch of converged offerings under the Magenta banner has followed, with DT going as far as making it a registered trademark in the markets it operates in.

Perhaps the most recognised outpost is the US, where CEO and former marketing exec John Legere is the living embodiment of all things Magenta, even if his public trolling of other CEOs might struggle to fit into the sharing mantra.

Schwingen admits the US is treated a little differently. "In terms of style and graphics, the brands are quite close," he says. "But the positioning is different – we are a challenger in the US and had nothing to lose. It's a different game, it's mobile only so less complex than in Europe."

Nevertheless, Schwingen says they have copied some of what T-Mo US has done in other markets. "You cannot copy John Legere but we have adopted his boldness," he says. "For example, in Austria we've been very strict in relaying certain messages, focusing on the individuality of customers."

Currently, Schwingen is engaged in talks with BT about the future of the EE brand. On 1 February BT, in which DT now owns a 12 percent stake, revealed EE would remain one of three brands the operator was managing.

"The merger of two companies seeks to bring brand assets together, to find a common portfolio strategy and to create a common culture and values shared by all employees," says Schwingen. "The brand is the most appropriate tool to convincingly tell the story of the new company, both outwardly and inwardly, and to portray the shared vision in an inspiring and motivating way."

Schwingen, who was heading to London to discuss this topic shortly after this interview, understandably remained tight lipped on how things might change in the future.

Back in Bonn, DT's enterprise arm T-Systems is another brand over which Schwingen does not have total control. He describes himself as "a kind of sparring partner" for the division, adding: "P&L responsibility is their affair."

Overall, however, Schwingen describes the working environment across DT's disparate businesses as "very collaborative". He sits top of the corporate tree from a brand and marketing perspective, dealing with brand guidelines and profiles that are then implemented by CMOs in DT's various markets around the world.

More trustworthy than the competition

Europe remains DT's main focus with the company having publically declared its ambition to be the continent's leading telco by 2018. The brand is key to this journey. "Deutsche Telekom wants to be more than

just a provider of infrastructure. We consider our network [to be] an artery pumping life, and our role is the one of a trusted companion in both people´s private and work lives - whenever, wherever," explains Schwingen. "We are continuing to standardise the network infrastructure in our European markets and simplify communications across borders even further."

The exec claims DT's "broad" product range – from TV and mobile apps to cloud-based enterprise and IoT services – enables it to deliver on its sharing promise. He adds: "We do this more comprehensively and more efficiently than most competitors. In the eyes of many customers and businesses, we are especially safe, reliable and ultimately more trustworthy than the competition."

But there are clear challenges in the current macroeconomic environment. "Europe accounts for 63 percent of the company´s value and 80 percent of its employees," says Schwingen. "Conditions in Europe affect the company therefore particularly strongly."

He says the current regulatory environment "has not yet adapted to the international market´s industry standard". Should it do so, Schwingen sees opportunities to expand the DT brand further afield. "A cooperative European telco market could offer attractive consolidation opportunities, a chance to achieve economies of scale and the possibility of investments in infrastructure," he says.

While that is for the future, it worth reflecting on the impressive turnaround that DT's brand has undergone and how it that has been matched by the change in Schwingen's personal views. The man who just over eight years ago could not see himself leaving one of the world's most famous car manufacturers is today somewhat dismissive of his old industry. He says car manufacturers have reliance on "product pornography" and an inability to find "great stories to tell about their brands". Although he cites watchmaker Glashutter and audio maker Bang and Olufson as brands he admires, it is clear telecoms is no longer boring.

What makes Deutsche Telecom Europe's leading brand?

Deutsche Telecom, widely known as T, managed to overthrow Vodafone back in 2014 as Europe's most valuable brand, mainly as a result of its successful rebranding strategy in almost all of its countries of operation, says Brand Finance Associate Director Savio D'Souza.

In the last year it has been highly profitable, with net profit up to over €800 million in Q3 2015. It has reinvested this (in projects such as broadband network extension) laying the foundations for future brand value growth.

Top 10 Telecom Vendors

		Domicile	Brand Value (USD $ Millions)	BV change (yoy)
1	HUAWEI	CHINA	19,743	70%
2	CISCO	UNITED STATES	19,162	-17%
3	ERICSSON	SWEDEN	9,445	3%
4	QUALCOMM	UNITED STATES	4,138	-17%
5	NOKIA	FINLAND	3,039	37%
6	ZTE	CHINA	2,992	-13%
7	Alcatel·Lucent	FRANCE	2,490	-36%
8	CORNING	UNITED STATES	1,861	-3%
9	HARRIS	UNITED STATES	1,205	25%
10	JUNIPER NETWORKS	UNITED STATES	1,116	-34%

Methodology

Definition of Brand

In the very broadest sense, a brand is the focus for all the expectations and opinions held by customers, staff and other stakeholders about an organisation and its products and services. However when looking at brands as business assets that can be bought, sold and licensed, a more technical definition is required. Brand Finance helped to craft the internationally recognised standard on Brand Valuation, ISO 10668. That defines a brand as "a marketing-related intangible asset including, but not limited to, names, terms, signs, symbols, logos and designs, or a combination of these, intended to identify goods, services or entities, or a combination of these, creating distinctive images and associations in the minds of stakeholders, thereby generating economic benefits/value."

However, a brand makes a contribution to a company beyond that which can be sold to a third party. 'Brand Contribution' refers to the total economic benefit that a business derives from its brand, from volume and price premiums over generic products to cost savings over less well-branded competitors.

Brand Strength

Brand Strength is the part of our analysis most directly and easily influenced by those responsible for marketing and brand management. In order to determine the strength of a brand we have developed the Brand Strength Index (BSI). We analyse marketing investment, brand equity (the goodwill accumulated with customers, staff and other stakeholders) and finally the impact of those on business performance. Following this analysis, each brand is assigned a BSI score out of 100, which is fed into the brand value calculation. Based on the score, each brand in the league table is assigned a rating between AAA+ and D in a format similar to a credit rating. AAA+ brands are exceptionally strong and well managed while a failing brand would be assigned a D grade.

Approach

Brand Finance calculates the values of the brands in its league tables using the 'Royalty Relief approach'. This approach involves estimating the likely future sales that are attributable to a brand and calculating a royalty rate that would be charged for the use of the brand, i.e. what the owner would have to pay for the use of the brand—assuming it were not already owned.

The steps in this process are as follows:

1. Calculate brand strength on a scale of 0 to 100 based on a number of attributes such as emotional connection, financial performance and sustainability, among others. This score is known as the Brand Strength Index.
2. Determine the royalty rate range for the respective brand sectors. This is done by reviewing comparable licensing agreements sourced from Brand Finance's extensive database of license agreements and other online databases.
3. Calculate royalty rate. The brand strength score is applied to the royalty rate range to arrive at a royalty rate. For example, if the royalty rate range in a brand's sector is 0-5% and a brand has a brand strength score of 80 out of 100, then an appropriate royalty rate for the use of this brand in the given sector will be 4%.
4. Determine brand specific revenues estimating a proportion of parent company revenues attributable to a specific brand.
5. Determine forecast brand specific revenues using a function of historic revenues, equity analyst forecasts and economic growth rates.
6. Apply the royalty rate to the forecast revenues to derive brand revenues.
7. Brand revenues are discounted post tax to a net present value which equals the brand value.

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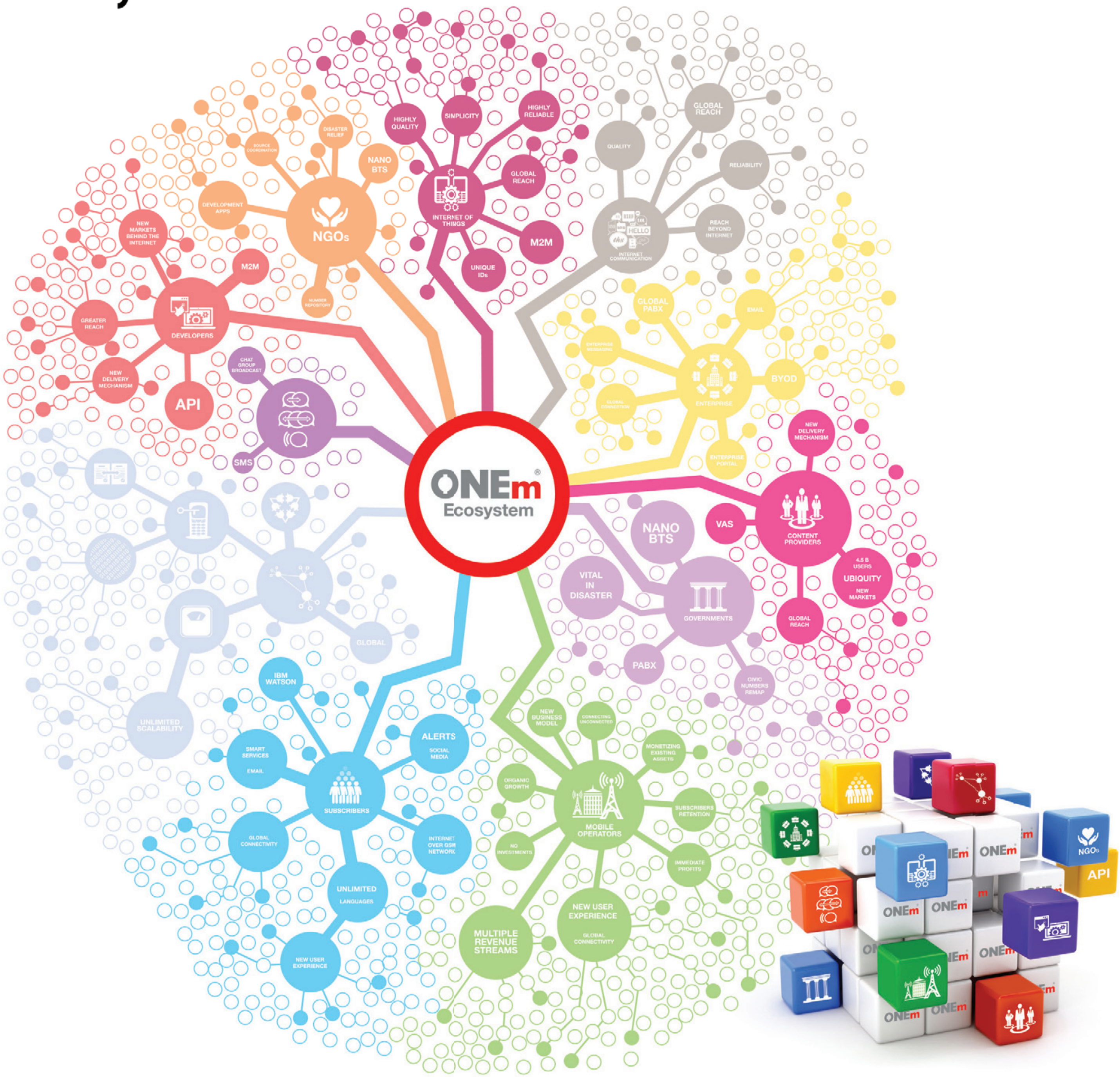

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Telco 2020: the future of mobility

2020 is the next futuristic milestone on our calendar, and only four years away. The next decade will see telcos transformed, as connections get faster and more reliable, and technology becomes more affordable and widespread.

These changes will also see the coming of age of the millennial – the digital native who does not remember a world without the internet.

Virtusa invited a range of experts, from both inside and outside of the telecoms industry, to discuss how they think technology will change the next decade and what consumers will demand from telcos.

Over the next few pages is edited highlights of the roundtable, which initially focused on the consumer of 2020, followed by the telco.

Somnath Biswas, Vice President, Virtusa: "There are so many inflection points that are happening. There's consolidation happening in the market, but equally the MVNO market is coming up. Services and offerings are similar and more commoditised, but equally the millennial generation is becoming prominent and putting pressure on the need for customer experience.

"We at Virtusa work extensively with multiple tier one operators which we deal with at a global level. Every discussion we have, whether it's a back end billing transformation discussion or a digital discussion, customer experience features in all of them.

"With so many interesting trends, we felt it was worthwhile for all of us to take a step back and discuss and debate out some of them"

Ravi Kumar Palepu, Global Head, Telco Solutions, Virtusa: "What is interesting right now is looking at how operators are evolving and the challenges they are facing. From an IT perspective, they have a legacy of systems that they carry. How easy is it for an operator to adapt and really drive the right kind of customer experience and improve time to market?

"That's what 2020 is really all about. It is not about what the transformation looks like but can you really achieve it and are operators best prepared to do that?"

Telco 2020, the customer of the future

What sort of devices do we think millennials will be using?

Biswas: "We are talking about roughly 50 billion devices by 2020 and that's an amazing number to connect as well as bring a better interface to them. But what is more important to ask is do the operators only want to be playing a connectivity role?

"Operators really are best placed to build a platform for instance that recognises all the connected devices and then build services on top, which are

integrated into the banking or insurance industries for example. It can be a one stop shop for the consumers. This is a very difficult challenge though, especially also because connected devices are not going to stop growing."

Is there demand from consumers for the Internet of Things?

Carl Lyon, MD, The QoE: "Customers wants something that meets a purpose but how they express that is always really difficult."

Stuart Newton, MD, Ineoquest: "Our interest is primarily around video and customer experience. All this connectivity needs to enable the services of the next big thing, whether that's 360 degree viewing, virtual reality, or whatever video brings next, what is important is seamless connectivity.

"As techies we tend to get into conversations about connectivity and the next Bluetooth or Wi-Fi and how these things are going to talk. But unless you have an end goal, which is what the user experience is going to be, then all this connectivity is a means to an end."

Can operators move quickly enough, given how consumer behaviour changes from the bottom up, from texting to selfies?

Biswas: "The millennial generation has

> "If you look at the AirBnB model, what's to stop someone from saying 'I have a data plan of 10MB but I only use two of it - can I rent out my 8MB to someone else?' and then create a model out of it?"

two traits. One is it is difficult to predict exactly what they are looking for in terms of actual services. They want everything customised to themselves and they want it free of cost. The other key trait is they are very early adopters. They like to try something out and see how it works.

"If you look at the AirBnB model,. What's to stop someone from saying 'I have a data plan of 10MB but I only use two of it - can I rent out my 8MB to someone else?' and then create a model out of it?"

Robert Wakeling, CEO, Wadaro: "If you look at the likes of Facebook or Snapchat, none of that was predicted by network operators so asking them to be more agile and predict what is going to happen - there has been 30 years of that not happening, they've just followed the demand of consumers."

David Haigh, CEO, Brand Finance: "In just about every sector, whether it's food or pharmaceuticals, the big players seldom do the innovation. What operators could do is create the environment where this innovation can succeed."

How will millennials' demands from their operators be different to previous generations?

Newton: "With a lot of these services, millennials are using operators just as delivery pipes. The whole concept of mobile edge computing is being able to move all of your

functionality to the edge of the network so you can do more processing there.

"What that does is open up opportunities for mobile operators to provide much more advanced services that only they can offer because they control that edge. Whether it's augmented reality, telemetry for cars, you need to know where someone is and what they are doing.

"This move is giving operators the ability to provide a much better experience to customers and in real time. I don't think the millennials have an expectation about where things are going; they just want things to happen faster and be more seamless."

> "If operators can provide something similar, then the innovation could come through them. It is giving an ecosystem for others to provide a solution"

Palepu: "If you look at Amazon, Google or Facebook, what they are good at is integrating different types of technology into a single platform and delivering the services consumers demand.

"If operators can provide something similar, then the innovation could come through them. It is giving an ecosystem for others to provide a solution."

Haigh: "Disruptive technology kills the big guys. It's quite difficult to manage the relationship between an established business and something that could lead to it being substantially changed."

David Swift, Telecoms Consultant:- "There's an opportunity for a 'digital butler' to deal with problems the connected devices of the future might have. There are times when upgrades occur and things stop working. You are left to find out what is wrong - is it the router or a firmware update in my phone?

"This is where the digital butler comes in. When you have these conversations, each connected piece has its own little 'world' and it stops at a certain point. You need to have someone who can manage this interconnection. Operators could manage that space."

Given how social networks offer digital butler services like Siri or Google Now, is it too late?

Biswas: "Facebook is a very difficult platform to dislodge because people are already connected to that. Probably the best thing for an operator to do is to use Facebook as a platform and provide services from there - here is the O2 Guru who is available via Facebook Messenger, for example."

David Heaps, SVP Corporate Strategy, CSG: "A lot of the affinity millennials have is with Facebook or with Apple and not the underlying carrier. That's a difficult thing to break down or break into."

What is the biggest challenge operators need to solve to attract consumers?

Haigh: "The biggest challenge is driving towards simplicity and integration. This is what Steve Jobs was obsessed with. This industry has a problem because there are endless barriers for consumer usage – packages they don't understand, usage curtailed.

"When you get into the Internet of Things, it wouldn't surprise me if a large number of consumers would like to use their smartphones to cut through the complexity. How you tackle that, I don't know."

Avtar Chagger, Symbox Sales Director: "It's the operators that are viewed as the bottleneck and that's because of legacy platforms and the like."

Haigh: "Barclays had a big ad campaign for digital eagles, with advisers in all of their branches to tell old codgers like me how to use computers. The idea was they can bring their costs down if they get people using technology rather than going into a branch. It worked very well and helped to increase customer satisfaction and drive traffic online.

"I don't sense there's a similar initiative in the telecoms industry, whether it's at a GSMA level or individual operator level. All of the talk at the moment is about those who are under 25, but what about those who are over 65? There's a huge consumer problem about the accessibility of technology."

Palepu: "While there is a lot of talk about the role of social networks with customer experience, between 60 and 70 percent of calls still come through to an operator's call centre. While it's interesting to talk about IoT and customer experience, we still need to focus on the basics, like service provisioning & assurance automation, for example.

"Apple and Google are so advanced that the gap between them and operators is increasing. 2020 is all about customers wanting this and that, but we need to remember that a strong basic platform is critical to build from."

Telco 2020, the operator of the future

Do you see the wave of consolidation among operators and telcos stretching into the next decade?

Biswas: " There are various factors in play - margins are low, voice is falling, data revenue is overshadowing voice. In addition to this, operators are trying to own as many aspects of the customers' life as possible. At some point, this consolidation will naturally come to a halt and there will be a period of stabilisation.

"But these things are cyclical in nature. It's logical to assume that it will start up again when fresh disrupters come in and shake up the market. Then there will be a fresh wave of consolidation."

Chagger: "It's less choice for a consumer. The consumer would view BT or Vodafone as corporate organisations so they may be looking for something more innovative. Typically Vodafone takes as much as 18 weeks to launch a new product - that's not a great experience."

Lyon: "In some cases, less choice can be good for customers - look at the iPhone – but I would agree the big operators are not agile enough to introduce products. MVNOs could come on board to launch something really good and imaginative."

Salim Raza, Symbox Professional

Services Director, SLR: "BT has a lot of legacy systems; EE has come from a comparatively young company that was initially developed for the M25 area. The debate is how will these two companies work together because they come from complete opposites.

"EE is quick, agile, it gets things done and it captured a lot of ground with 4G. BT got rid of Cellnet back in 2002 because it didn't see it as a profitable business. It has now done a 180 degree turn and was looking to acquire a mobile company.

"Is this just a consumer question though? I think this merger will account for a big push towards enterprises. Consumer is saturated until 5G comes into play at least. However, there's a really strong case for building a collaborative toolset for enterprises and that's where the focus will be."

Will enterprise arms be treated as a standalone business to maximise the growth potential?

Swift: "Enterprise is sometimes talked about as one segment. But it isn't. You've got SoHo, you have SME, you have small and large enterprise. In the past the large enterprises have been addressed by the likes of BT and Vodafone. The people who are really ignored, and that's 80 per-cent of the business market, are those other smaller businesses. It's all about how to reach them.

"At the lower end of the SoHo, it's literally one man and an office so they are like a souped up consumer. In the middle, there's this area that is not really cost effective to go and service in the same way you would a large enterprise. But in every country you go to, that's the large untouched prize opportunity."

Lyon: "When you look at what an SME wants compared to a consumer, it's no different. They want service, they want knowledge, they want connection, they want to know how to use it and they want it to be delivered on time.

"The other question with that is who do you offer the best service to? If you offer it to enterprise, then they'll be unhappy when they are consumers. Some enterprise offers are so poor, they just use their consumer plan for work. It's a difficult tightrope to walk."

How will virtualisation affect the new look mobile network?

Lyon: "While virtualisation can let an operator breathe, a major problem is the legacy investment. If they can break away from that, they can think in a more agile way and launch new services."

Wakeling: "If you look at the nature of mobile networks, it's a very large piece of IT equipment. Any change, even if it's in one part of the network it can break something else, has to be undertaken very carefully."

Swift: "There's a split in opinion regarding what should be virtualised. 3G and 2G - no, probably not. 4G is a good target as it has a different network architecture. You move away from the converged RAN type approaches and you look to virtualise the baseband. It becomes a new build, setting you up for whatever the 2020 5G network will be, whenever the standards are defined. It will be a mixture of licensed and unlicensed spectrum, some higher frequencies for short range and lower frequencies for long range.

"The prime difference is getting yourself ready for an umbrella technology rather than, in the past, as you went up the Gs, there was a step up in the throughputs and capacities. 5G is a collaborative approach and this will bring operators new challenges because they will be using unlicensed and licensed spectrum, sharing with other providers. The edges of networks will be 'fogged'."

Return on investment remains a major pressure on operators. Will they be able to solve this problem by 2020?

Heaps: "We all love incremental revenue streams. Video is probably more of a loss leader or customer acquisition tool. Will some of these additional applications, like IoT, substitute for the decline in the core voice and data revenues, or is this a means to stay level with where we are at the moment? Because that will determine the level of investment they are prepared to make."

Lyon: "At the end of the day, it's what people are prepared to pay for. Everyone else will have to determine how they make money from that.

"The best example is the music industry. Spotify came along and completely changed what people are prepared to pay. Its only £10 per month. You almost have to reverse engineer from the consumer. If you try and do it the other way around, it's not going to work."

Heaps: "The question here is how much consumers would be prepared to pay for this connectivity on their fridge, for example? Is that a one-off payment, like a Kindle e-book reader? How much more would you pay to be able to stream Netflix to your car? There's a certain amount people are prepared to pay for connectivity and entertainment and I don't think that amount is about to go up."

Where will the next wave of competition come from and what operator activities will be under threat?

Biswas: "One example is BT buying content. The second is Google, which already owns the customer, going backwards and owning fibre. It is effectively trying to push out the telcos.

"The centre of the universe remains the customer and the content. Either you acquire it or partner for it. I don't think operators have much of a choice. It's partnering in the short term and in the long term content creation, maybe. That's what Netflix is doing."

Does that not create problems by throwing more choice at the consumer, as discussed above?

Biswas: "It's survival of the fittest for someone who understands the customer the best, and then provides the service. If tomorrow Google came up with a banking option, I probably would strongly consider switching because I think it would understand my wants and needs better. It's more customer friendly.

"There will be another wave of consolidation in the future to reflect this. The ones who survive will be those who give the most customised, easy to use, simple services." ec

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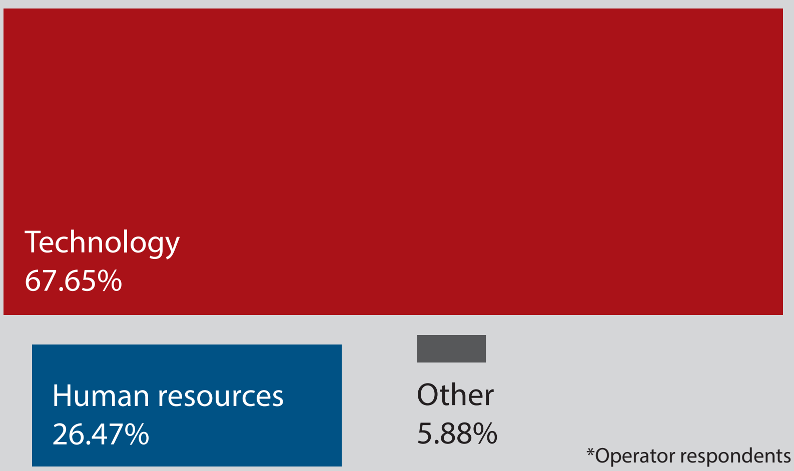
CUSTOMER EXPERIENCE

Contents

Survey: Operators want customer experience tech investment, pivot to retail

Respondents to European Communications' fifth annual survey want increased investment in customer experience directed to tech and look to the retail sector as the benchmark

Fig.1 Where would you like to see investment focused?



European operators want to see increased investment in customer experience focused on technology rather than staff in a bid to improve the service they provide. That is the headline finding from European Communications' latest annual survey into what the industry thinks about customer service provision.

Over the next 12 months, 51 percent of operators expect the investment their company is making in customer experience to increase, while 49 percent think it will stay the same. No one thinks investment is set to decrease.

When asked where they would like to see this investment focused, a clear majority chose technology. Over two-thirds, 68 percent, selected tech ahead of 26 percent who chose human resources (see Fig. 1).

The findings came despite 12 percent of operators saying that they expect the number of staff dedicated to customer experience management to decrease this year (see Fig. 2).

Adrian Baschnonga, Senior Global Telecoms Analysts at EY, says: "Against a backdrop of rising spend over the next twelve months, two-thirds of operators cite technology as the primary focus area for investment, underlining how systems and processes, not people, may represent the ultimate route to a best-in-class experience."

But one survey respondent said a mixture of the two remained key: "Ensure all data is cleaned and validated; get the right data to the right people at the right time; and empower all staff to 'do the right thing' for the customer rather

Fig.2 Over the next 12 months, is the number of staff dedicated to customer experience management going to:

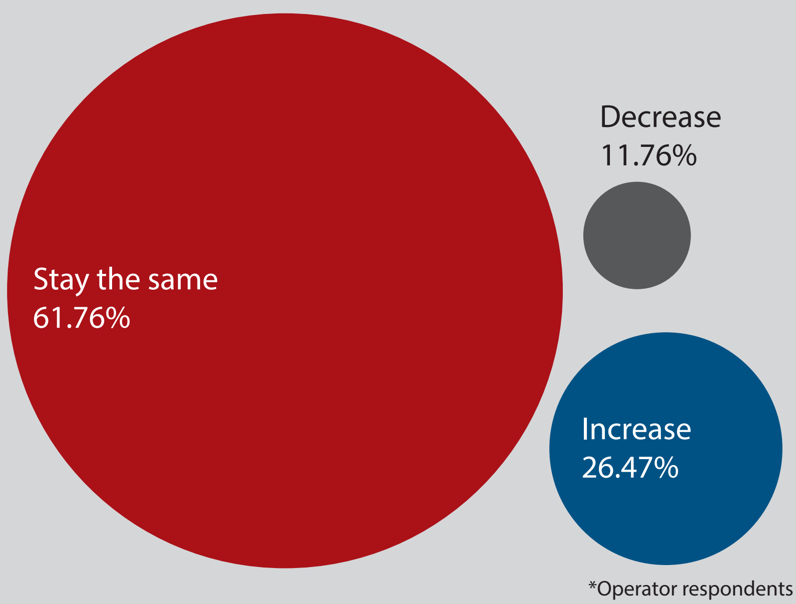


Fig.3 What do you regard as the biggest challenge the telecoms industry faces currently with regard to customer experience?

Fig.4 What do you regard as the biggest source of poor customer experience within telecoms?

than deliver arbitrary metrics."

Matching customer expectations with the quality of services delivered again topped what the industry as a whole thinks is its biggest challenge. It came top ahead of transforming the culture of telcos and providing a consistent customer experience across all touchpoints (see Fig. 3).

Analysys Mason's Justin van der Lande says: "CSPs make trouble for themselves with a bewildering array of mobile offers which attempt to lock-in customers, make them purchase services they will never use or are deliberately confusing as to what is included."

EY's Baschnonga was pleased to see the costs associated with providing a best-in-class service drop down the pecking order. "Crucially cost is no longer seen as a primary barrier to progress, reflecting an industry that finds itself in a sounder financial position compared to previous years," he says.

The industry continues to regard a bad call centre experience as the biggest source of poor customer service. It came ahead of network issues and product/service quality (see Fig. 4).

Fig.5 What do you regard as the most important lever operators have in providing a best-in-class customer experience?

*All respondents

Said one respondent: “With the integration of telecoms, IT and media, operators find it difficult to quickly and efficiently solve customer problems. Providers typically don’t have the expertise.”

Baschnonga comments: “While the industry pays a lot of attention to the role of digital interfaces in the omnichannel experience, survey respondents make it very clear that the call centre is the leading source of a poor customer experience. This should perhaps come as no surprise at a time when customers are migrating to new household bundles that feature TV and mobile alongside broadband and telephony.”

But van der Lande thinks call centre experience is a symptom not the cause of poor customer experience. He says: “When product and services are poor or bills are wrong, subscribers call customer services. Preventing errors in the first-place will prevent those calls coming in. Analytics systems are increasingly being used to predict when customers may call by looking at underlying KPIs from the network, billing system or operational systems.

“Preventative measures can then be put in place to placate customers, divert in-coming calls or quickly fix issues to reduce their impact. Having stated that it is clear that call centres need to improve to be able to better handle customers. Solving issues first time and having access to every system to help the customer is critical.”

However, operators do not regard the call centre as their weakest link. When asked to rank it against their retail stores and their online/social media channels, it fell in between the two. Operators think their retail stores offer the best customer experience and their online/social media channels as the worst.

The industry is acutely aware that it needs to reduce the differences between all three. It was no surprise to see providing a consistent experience across all channels rise to become the top answer to the question “What do you regard as the most important lever operators have in providing a best-in-class customer experience?” (see Fig.5).

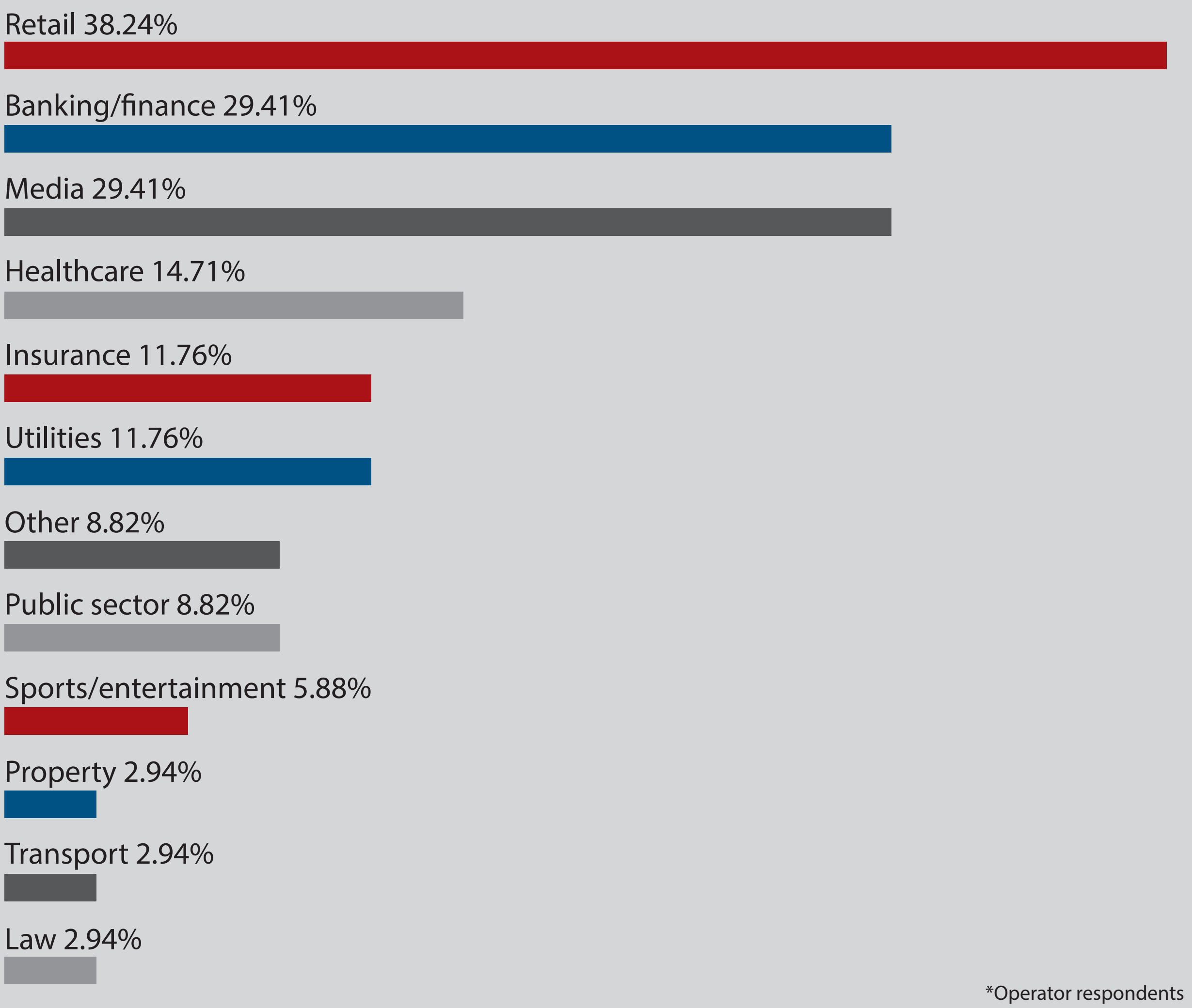
Says Baschnonga: “Respondents have an ambivalent attitude to the role of the network in supporting the customer experience. For operators it ranks lowest as a customer experience lever, while for overall respondents it ranks second, behind only consistency across all channels. This dichotomy suggests that operators are looking well beyond network upgrades as a differentiator, with areas such as rewarding loyalty, predictive analytics and service personalisation all gaining traction.”

It is perhaps with this in mind that operators voted the retail sector as the industry it most looks up to in terms of a benchmark for customer experience. It ousted the banking/financial sector from top spot, with media retaining third place (see Fig. 6).

Baschnonga says: “As ever, operators continue to look to other industries for best practice in customer experience. Retailers lead the way, underlining how their focus on fast fulfillment, while at the same time prioritising mobile and online as sales channels, has made them the poster children for customer experience improvements.”

Adds van der Lande: “The retail sector is often seen as one of the most innovative sectors, particularly large

Fig.6 Which industry do you look to as the benchmark for customer experience?

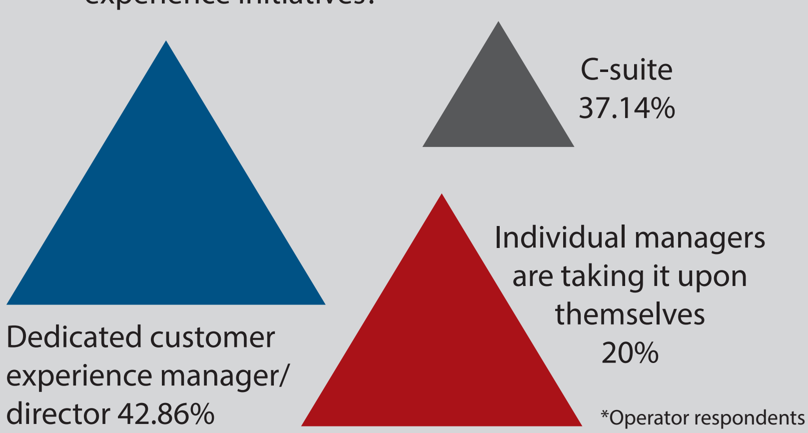


grocery brands who operate in many countries at the same scale as operators. The differences in goods and services between the retailers are very little, margins are low and loyalty and customer services are ultimately their key differentiation. Retailers have for a long time needed to use innovative technology to maintain their market share and retain customers."

C-suite buy-in increases

The C-suite does appear to be getting more involved. The number of operators who said such an executive is leading customer experience efforts increased by 20 percentage points to 37 percent.

Fig.7 Who would you say is leading your customer experience initiatives?



A dedicated customer experience manager/director remains the most popular choice, however (see Fig. 7).

"The appointment of a dedicated customer experience manager who leads the activity is often an initial starting point for many CSPs," says van der Lande. "This can be reinforced by giving the customer experience director budget responsibility to given them sufficient power to achieve true change across organisations.

"The customer experience director needs to be able to operate above departmental requirements, forcing more customer orientated approaches. The C-level staff must therefore be supporting these initiatives."

The increase in senior management buy-in ties in with more operators claiming to treat customer experience as an integral part of everything they do across all business units. The number who said this rose two percentage points year-on-year to 57 percent (see Fig. 8).

"In recent years, operator views on whether customer experience requires a holistic or singular approach within the organisation have fluctuated," comments Baschnonga. "Although 57 percent of respondents this year agree that it cuts across everything they do, one in ten believe it is a distinct discipline while one in four believe it only applies to certain parts of the business. There are merits in all these perspectives, but unless sufficient resources and management support can be directed to customer experience as a distinct part of the business, the majority view – and the shared mindset it incorporates – may represent the best approach."

But confidence can go too far. Over half of operators, 57 percent, claim that their company is a leader compared to competitors in the field versus just six percent who think they are laggards. A similar number, 52 percent, thinks that they offer a sufficiently differentiated customer experience to their competitors.

Fig.8 How would you say customer experience is treated within your organisation?

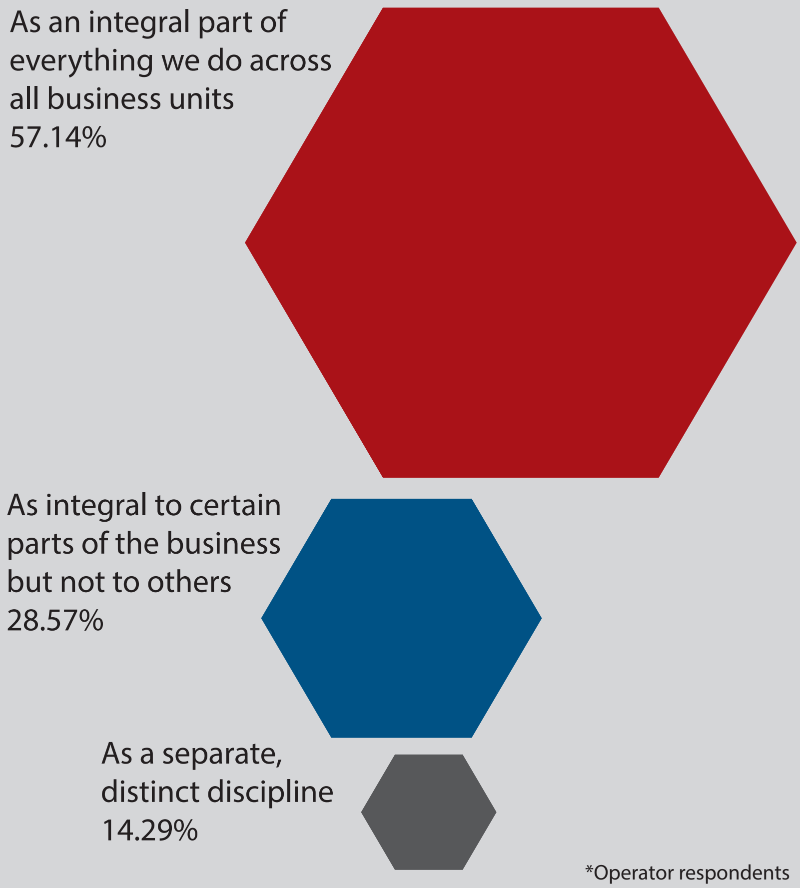
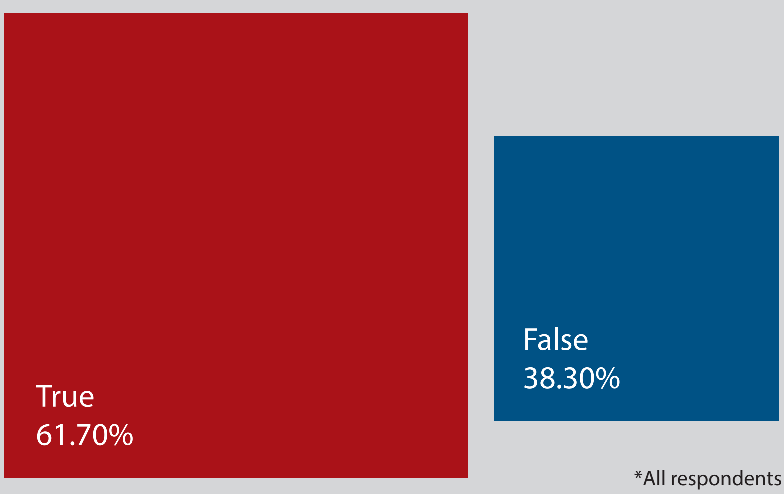


Fig.9 True of false: Customers are willing to pay more for a better experience



Churn rate falls from grace as industry measurement

Customer satisfaction maintained its ranking as the industry's leading customer experience measurement.

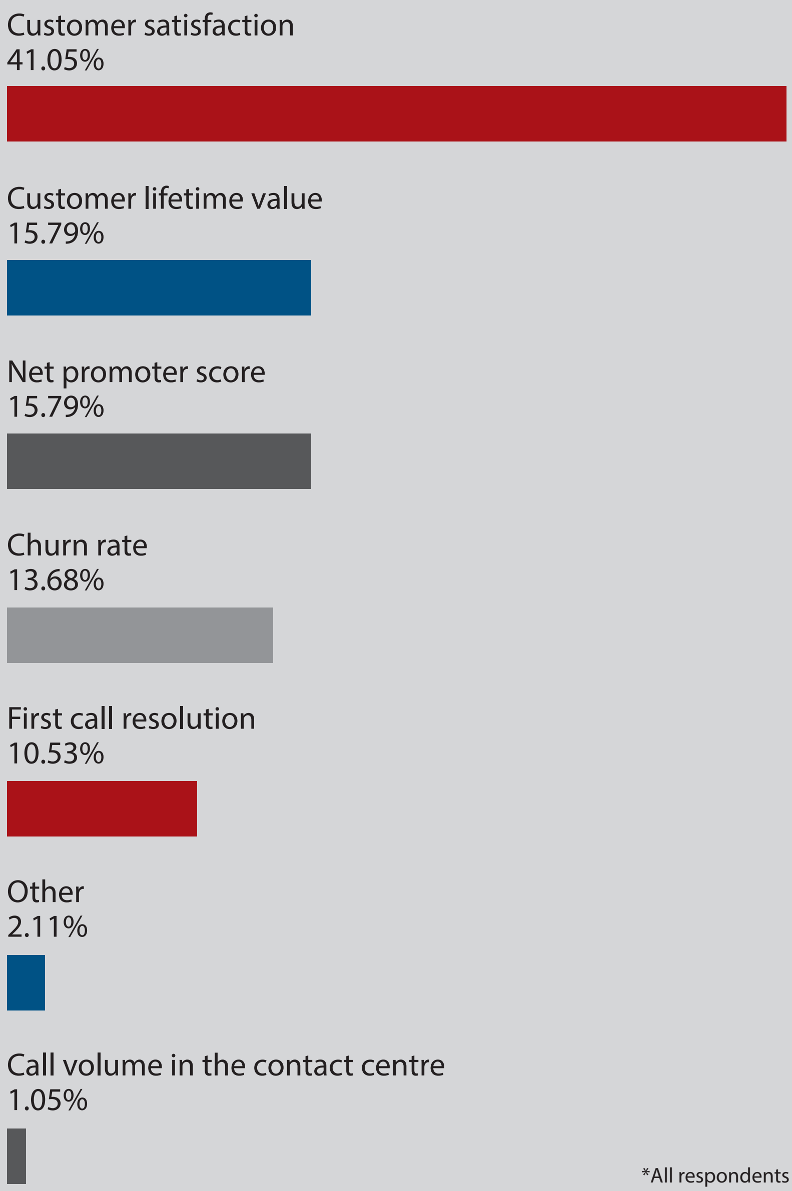
It scored 41 percent of the vote, ahead of customer lifetime value and net promoter score which joint second with 16 percent (see Fig. 10). This meant churn rate fell from second place in 2015 to fourth place this year.

Adrian Baschnonga, Senior Global Telecoms Analysts at EY, says: "This reflects a shift in thinking among carriers, highlighting how they have taken note of historic underperformance by this measure compared to other industries and are redefining their approach to evaluating improvements."

But Analysys Mason's Justin van der Lande says the industry's faith in NPS and customer satisfaction may be misplaced given they are survey-based measurements. "They are valuable in providing feedback to change or improve processes, but have two inherent issues," he warns. "They are retrospective and tend to be bias to poor results. KPIs such as churn rates, first call response rates and customer lifetime values provide a more measured assessment."

Instead, van der Lande recommends looking into the Customer Experience Index (CEI). "This is a synthetic NPS/customer satisfaction score based on KPIs taken from a system that provide each touch-point that a customer has along the journey of their service life. Using big data analytics modelling tools a CEI is created that models survey results, which in turn can be used to predict NPS for any customer."

Fig.10 Which of the following do you regard as the most important measure of customer experience?



Says van der Lande: "Most operators ranked themselves ahead of competitors, which clearly cannot be true. However, customer experience is a complex and multi-facetted topic and it is of course possible that in certain aspects each company could be ahead of others."

Taking it a step further, 62 percent of all respondents and 71 percent of operators think that customers are willing to pay more for a better customer experience (see Fig. 9).

But one respondent said: "The majority of customers always want best price for the best possible service/experience. Only a limited percentage will agree to pay premium rates for "better experience." van der Lande agrees: "We all believe we are willing to pay for better quality and I suspect that we are – but only a very small amount if anything." ec

About the survey

105 respondents took part in our online survey in January 2016.

41 percent were network operators, 32 percent were vendors and the remainder work for other interested third parties, such as consultants, analysts and regulators.

From a geographical perspective, 76 percent came from Europe.

No time to waste for operators' digital transformation

"Going digital" may be the strategy that everyone's talking about but who's putting into practice? Operators have just revealed, in new research by Amdocs, that they believe it will take them more than five years to complete their digital transformation. That's not great news when you consider that customer demand for digital services isn't just going through the roof, but that the expectations around digital services are changing too and outpacing mobile operators' own digital transformations.

And the operators know this, with over half of those surveyed admitting that five years isn't fast enough.

They need to accelerate transformation to meet customers' digital experience needs, to leverage the unique assets that they have mainly around customer experience, and also to face the real threat of the third-party Internet providers. That's the scenario painted by two separate studies by global customer experience solutions leader Amdocs into the changing digital landscape – one study captures the thoughts, concerns, expectations, and strategies of digital-transformation decision makers at over 80 different operators worldwide. The second shows a different perspective, analyzing the views of 8,000 consumers in 13 countries, with almost three quarters of whom saying they would consider getting traditional voice and data services from over-the-top (OTT) providers of digital services if the service was available, and the price was right.

"We've been trained by the likes of Amazon and Netflix to expect a very simple and intuitive experience, whether it's for buying products or renting movies," says Vincent Rousselet, Vice President of Market Insight and Strategy at Amdocs. "Instilling that culture and service agility into traditional operator businesses isn't always easy. Their portfolios are wider, their histories are longer, and, quite frankly, their IT systems are much more complex."

"Making it look simple" is exactly the challenge that operators face right now – taking a very complex back-end (involving systems, networks, activations, complex billing, multiplay bundles etc.), and masking it behind an enhanced customer experience, so that customers feel like it's as easy and as "cool" to use as when they buy a simple product online, like a book, or a new jacket.

The idea that consumer expectations are spiralling upwards as the market in general becomes accustomed to, and reliant upon, more dynamic and sophisticated digital services is hardly surprising, and is confirmed in other research, observes Amdocs.

For example, a recent Vodafone report says 96 percent of UK 'shopping journeys' feature a digital component, and in a separate study by research firm GfK, more than 40 percent of adults switch devices to complete online activities. "Ten years ago, even five years ago, those numbers would have seemed fanciful," says Rousselet.

What the operators say about digital transformation

The more telling statistic from Amdocs comes from their new operator research which found that 50 percent of senior management within telecoms reckon it will take their companies more than five years to transform, and meet these rising expectations for digital services.

Quite simply, this isn't fast enough, admit another 59 percent, who suggest traditional telecoms suppliers will be outflanked by other industries in the meantime. Worse, 46 percent of operators say they don't yet have a digital transformation strategy. And with research firm Ovum claiming that over 80 percent of C-level executives have identified digital transformation the sector's top priority, you'd expect a real sense of urgency, says Amdocs.

"Of course operators understand consumers' digital-experience expectations, but when you ask them about their own transformation, many are still only somewhere near the starting line," explains Uri Gurevitz, Director of Market Insight and Strategy at Amdocs. "They need to accelerate their digital efforts. Their entire culture and outlook needs to change – and fast. Five years is a really long time in today's world. Just look at WhatsApp: five years after its launch, it had 600 million active users, completely disrupting the traditional text messaging market. In five years from now, consumer and business customers' expectations will have evolved again."

"We know that the prospect of digitizing every aspect of their systems and services while keeping existing operations running smoothly, can sound daunting," adds Gurevitz "but they don't have to change everything at once. However, they do need to change their culture and mentality – otherwise I think they'll struggle to keep in synch with customer needs and desires."

Getting going

It's definitely overwhelming to an extent, and undeniably complex, explained Rousselet, adding that this is why operators tend to seek external help through consultancy or managed services from companies like Amdocs to clarify the challenge and simplify the assignment, "because they know they must move forward".

"The reality is that the market's changing faster than ever, and the change is only accelerating. So a good starting point for operators to kick off their transformation is by focusing on the 'low-hanging fruit', by taking a region or a business line first, and digitalizing the relevant services in, let's say, six to nine months," suggests Rousselet.

New digital dimensions

Amdocs is not just asking questions, of course – it has some answers too. Operators must anchor their digital transformation against four strategic imperatives, or four 'pillars', it says.

The first is about straight customer engagement across, what Amdocs calls, 'digital dimensions'. As per the Vodafone statistic about UK customers' shopping habits, Rousselet believes the ability to deliver a consistent, transferable experience across platforms and devices is now a minimum requirement for contemporary services.

He cites a recent project to modernise Telefónica's business support systems in Brazil, Chile and Peru, so Telefónica will be able to provide a consistent multi-channel experience for its quad-play customers across fixed line, wireless, Internet and TV. The work with Telefónica also spans customer relationship management, including self-service, service order management, and revenue management. Telefónica is one of the industry's strongest advocates of digital transformation, with its Global CIO Phil Jordan bluntly making clear that "if we don't go digital, we won't survive".

Diversify, diversify, diversify

Beyond such fundamentals, as a second imperative, operators must also diversify, states Amdocs. Research firm Gartner estimates that, by 2021, one million new IoT devices will be purchased every hour of every day. With changing consumer demands and brand new appetites, it suggests that as much as 30 percent of operators' revenues will come from digital services within this time frame.

Indeed, half of those applications have not even launched yet, it says, and predicts a glut of new digital services coming post-2018. "A digital transformation clearly provides the opportunity to diversify and capture additional revenue streams from new offerings and from new customer segments," says Rousselet.

One of the latest examples of diversification that Rousselet gives is a new project with Globe Telecom in the Philippines announced this month (February) that will allow Globe to make bulk mobile payments of salaries and government disbursements, and enable it to deploy new services faster and more efficiently.

Intelligence and agility

The Globe solution also taps into improved big data analytics functions, which introduces Amdocs' third pillar of 'data empowerment'.

The big data analytics market is growing at over 20 percent per year, it notes, as operators of all stripes take an increasingly granular view of their operations. Analysing the network experience in real time, and exposing it to the operator's business and customer-care teams is a step change, says Amdocs, pointing to another Telefónica project – this time in Argentina – where it has implemented an operational data store to aggregate data from such sources as billing, ordering and customer management, as well as from inventory management, workforce management and network trouble-shooting.

Telefónica says it has enabled a better customer experience across platforms, as well as differentiation in the Argentinian market.

Having an edge comes down to the dynamism of operators' go-to-market capabilities as well, or 'service agility' (which is how Amdocs badges its fourth pillar).

Their ability to bring these services to market swiftly and at scale, in sharp response to changing demands, is increasingly important. "The payback can be measured in reducing the time to market and value from months to weeks or even days, placing operators in the same league as OTT competitors," says Rousselet. As illustration, he points to Bulgarian operator Mtel, which has reduced launch times for its new digital services by more than 80 percent with Amdocs' help.

"This agility is about upgrading IT systems so they work faster, rolling out networks in a smarter fashion, launching services to highly targeted customer segments. It's about how you acquire the dynamism of a start-up or OTT, whilst retaining your inherent culture and values," he says. "Together, these four pillars enable operators to capture the world of digital immediacy."

And there's the rub – the operator community doesn't have five years to overcome such hurdles and enact change. It must act now to "go digital", or else be challenged by younger, more agile contemporaries.

amdocs

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Hello, I'm the new Chief Customer Officer…

TDC has appointed a customer experience expert to its top executive team. Jens Aaløse tells Marc Smith how he plans to turn the telco's strategy around

Jens Aaløse is a rare breed – a Chief Customer Officer that sits at the top table of an operator's executive committee alongside the CEO, CFO and COO. The former Scandinavia Airlines exec was promoted to the role at TDC, Denmark's incumbent operator, last December as part of a wider organisational restructure.

CEO Pernille Erenbjerg said at the time: "We are operating in a market characterised by fierce competition and many new players. The new organisation will bring us even closer to our customers and accelerate our capacity to provide them with leading products and services."

Experts have preached the importance of putting a customer experience specialist in the c-suite in order to drive through the cultural changes required to turn telcos into genuine customer-centric organisations. There are not many that have done this, instead they are often content with paying lip service to the notion.

But dig a little deeper into Aaløse's role and it becomes clear that customer experience is not his only focus. His official job title is Group Chief Customer Officer & Stakeholder Relations, while his remit stretches to HR, legal, public affairs, CSR and Communications.

Aaløse rejects the notion that these other responsibilities risk lessening his focus on the customer. He says: "In my mind there is a correlation between happy employees and happy customers. We are moving from being a product centric organisation to a customer centric one. It's a cultural transformation. If we want to have that mindset in place we need to recruit the right competencies and educate new employees in handling customers. That's why it's very important for me to have responsibility for both the HR and the customers to fulfill our ambitions."

> "We are very offline centric, that's a problem and we need to change it"

However, TDC has what Aaløse calls "an employer branding problem". It is an issue he was aware when he joined the operator two and a half years ago. "I saw a well known company with a lot of dedicated employees but also a company with huge challenges," Aaløse explains. "Service wasn't the main attribute. It was price, price, price... since TDC has such a strong market position we did not need to have a prime customer service in place."

In an effort to overcome this, TDC has signed up to strategic partnerships with a range of Danish universities in a bid to recruit the best pupils. "We need

How TDC plans to deliver a simpler and better customer experience

Today	Tomorrow
I am forced to contact the call centre at specific times, and have no personalised contact	I receive the service I need on my preferred platform whenever I want
The connection I am offered depends on which of TDC's brands I called	TDC always offers the best possible connection at my address
The movie I want to watch is not available in my holiday house	I can view my TV programmes and streaming services on all my devices
My bill is complicated and often contains errors	I receive the correct bill every time and it is easy to understand
My perception of TDC is mediocre	I see TDC as a responsible company that delivers as promised

to be seen as a more attractive place to work," says Aaløse.

Offline centric

The Chief Customer Officer has an ultimate goal of achieving the best customer satisfaction scores in the market by 2018. But this goes hand-in-hand with a financial goal – best cash flow generation. "Customer experience should be viewed at the same level as the financials," according to Aaløse. To achieve the customer satisfaction target, he has put together a three-step process. This year, the focus will be on rectifying unacceptable customer experience and the detractors. "We have to eliminate all the bad things customers see," Aaløse says, citing wrong invoices as an example. In 2017, the focus will shift to offering "a star experience" and looking after the promoters. "In 2018 we will have an extra extra focus on the star experience and the promoters," says Aaløse. He plans to introduce initiatives such as 24/7 customer support.

Getting there will be a challenge. "We are very offline centric," admits Aaløse. "That's a problem and we need to change it. In the future we will start with mobile, then online then call centres and retail. We have to change the mindset from offline to online." The shift also involves moving from three different channels to one omnichannel architecture.

But Aaløse reveals the "high degree of systems complexity" that is holding the business back currently. Unsurprisingly, it has been caused by acquisitions the operator has made over the years. "We have four IT stacks, four billing systems, four of everything!" says Aaløse, adding that he would satisfied with getting halfway through this simplification process by 2018.

Another key area of focus for the Chief Customer Officer is the TDC brand, which the company itself admits has a negative brand perception in the market. Aaløse and the executive team have therefore made the drastic decision to axe the TDC brand from the consumer market. Although the TDC brand has only been around since 2000, Aaløse says it is associated with fixed-line voice and other "classic telco products". TDC will be replaced by Yousee, its cable TV and broadband subsidiary. "Yousee is seen as a household brand but also as one known for entertainment with an edge," says Aaløse. "It was born as a TV product, it's not 135 years old. People in Denmark like smaller companies, not the big incumbents."

TDC will begin to disappear in March although it will be retained for the enterprise market. Aaløse is convinced it will pay off in the long run. "I have seen it in other industries," he says. "Look at airline market, for example. Ten years ago it was only focused on price until everyone in the market said this is not the right way to go, we need differentiation. Of course, there will always be low-cost carriers but what you see is the big companies now starting to earn money again by competing on a fair price with very clear value-added services that customers are willing to pay. I fully believe we can do the same in the telco industry."

Wake up and smell the coffee

Aaløse's role is not all about headache inducing restructuring, however. TDC does have some core customer experience strengths. For example, it is the only telco in Scandinavia that can handle customer care over social media. Even better, TDC is the market leader in all four areas in which it operates – mobile, TV, broadband and fixed-line. "This is very different to rest of Europe and we insist on continuing to be number one," Aaløse says. To stay in front, the exec says the company needs to have "positive differentiation" and to be "more than good... we need to be the best".

He adds: "Over time you need to be known for something unique. I think our connectivity will be unique." Indeed, TDC currently has the fastest 4G in the world and the best network in Denmark.

Interestingly, however, Aaløse is of the opinion that rivals should not be who TDC benchmarks itself against when it comes to customer experience. "I think it's important not to compare yourself with another telco. It is important to get inspiration from other industries. If you want to be the best you cannot have a focus on your competitors because you will find something that already exists."

He has, for example, found inspiration for the retail side of the business from coffee company Nespresso. "They have a very strong customer experience when you enter their stores," Aaløse says. "They have integrated all the info about their customers from online channels so when you are standing there they know what coffee you have bought online." With the appointment of its first ever Chief Customer Officer, it would appear that TDC has itself woken up and smelled the coffee.

Huawei maps out open ROADS for a new digital ecosystem

Huawei joined forces with the big beasts of mobile at MWC this month to call for an industry alliance to drive growth in the digital economy, based on its ROADS principles for digital transformation. It reckons mobile operators can play a decisive role by reinventing themselves as 'ecosystem enablers', in charge of orchestrating the whole revolution.

The telecoms industry is caught between its past and its future. The old systems and structures are crumbling as the market lurches towards a full-blooded digital economy. Mobile network operators, its gatekeepers, must reinvent themselves if they are to grasp the opportunities only just coming into view.

"Operators have, by definition, offered a predefined communications package until now. But, in the digital economy, there are different rules. The telecoms industry has to keep pace. Offering predefined services is not good enough anymore," remarks Dr Dong Sun, Chief Architect of Digital Transformation at Huawei.

That was Huawei's essential message this month as it hosted an open forum at Mobile World Congress to thrash out the industry's future in the digital age. Huawei wants the operator community to enable the transformation of other industries even as it changes its own.

In a response to the cliché that mobile operators will be reduced to utility pipes by over-the-top (OTT) providers, Huawei made the case operators are in fact uniquely positioned to embrace the OTT model and facilitate a richer digital economy for everyone.

Communication service providers should be at the heart of digital society, recast as 'digital ecosystem enablers', facilitating dynamic, homespun service provision for every user, including all public and private sector institutions, and even the OTTs.

"It is vital they reinvent their business model, and provide new services for the digital age, delivered in partnership," explains Dr Sun. "The old model, where they're in charge of the end-to-end delivery, is obsolete. Operators must leverage their unique position to optimise their role within the value chain."

Industry alliance

The Barcelona event, entitled the Digital Operations Transformation Summit, was a heavyweight affair, at which Huawei called for an industry alliance to bring digital services to every corner of society.

"It wasn't a Huawei meeting; it was industry event; intended to be open and collaborative," says Dr Sun. "We're calling on industry leaders, from telecoms and beyond, to work towards an alliance that fosters digital innovation and drives digital businesses."

> "It makes operators more intelligent, responsive and focused"

Among the operator supporters were AT&T, Orange, Deutsche Telekom, Verizon and Vodafone, which shared strategies and experiences on digital transformation, alongside commentators from consultancy firms and research organisations such as IDC, Forrester, Deloitte and Accenture.

Huawei's peers were also on the guest list, including technology firms such as IBM, Microsoft and Amdocs.

For Huawei, the new rules of service provision are dictated by changing demand for digital services, in terms of their usage and provision. On the one hand, a generation is coming of age that was born to it. "They desire and expect a digital economy where the experience is very different from the old telecoms era," says Dr Sun.

On the other, industry must get smarter. Digital transformation is not just about technology providers; it is just that operators have an opportunity to lead it for every industrial sector, and define an ecosystem in which institutions can better engage with 'digital natives'. "This is not just driven by technology, but by business itself," says Dr Sun.

"The demand for digital services is more dynamic, and it's not just from consumers; it's coming from every corner – from every individual, and every public and private institution. We need an open ecosystem, where everyone works together to provide services, rather than the old model where we sell to operators and they sell to end-users."

Roads principles

The digital economy will hang on the immediacy, availability and flexibility of its online services. Huawei believes these should be real-time, on-demand, all-online, DIY and social, in both their design and behaviour. Huawei has grouped these system traits under the acronym ROADS.

"That is the driving force, and the key model for digital transformation," says Dr Sun. "These are the capabilities operators can offer. But these ROADS characteristics must be brought to bear on operators' existing communications services too, in order to make them more dynamic."

The operator community should follow three ROADS-based strategies to ensure a smooth passage. It's akin to spinning plates, remarks Dr Sun, where operators need to hone existing services whilst also reinventing themselves from the inside, reworking their business operations and fundamental market outlook.

He points to virtualised cloud VPN services, allowing for rapid provision of lease line systems, which normally takes 6 months or more to establish the service, and 5G network slicing, which will enable bandwidth to be allocated to thousands of individual users such as IoT on the fly, as powerful instances of communications services optimised for the digital era.

This type of 'digitalisation' represents a first transformative step, he says, and will provide the springboard for other industries to jump, two-footed, into the market. As a network vendor, Huawei will play its own expansive role in the advancement of technology infrastructure.

But rather than the provision of network gear, as before, vendors will help shore up operators' market position, so they can go full tilt at enabling a digital society. "Each party has its own expertise. We provide the operations platform and supporting operational services for operators; they can offer the products and applications to enable partners to develop and launch digital services," says Dr Sun.

Of course, most mobile operators are a way down this road in mature markets. Slower demand can put a dampener on such fine-tuning in emerging markets, as more basic infrastructure takes precedent.

"Different operators are at different stages. Markets like the US, Japan and Korea are markedly more advanced, just because their customers are more digitally engaged. The European carriers are going in the right direction, but they face challenges in terms of their regulatory environment," says Dr Sun.

Telco OS platform

Either way, Huawei is up for the trip. Its technology platform, Telco OS, is designed to support operators' journeys, and bring new efficiency and dynamism to their operations. Dr Sun says the term is more broad-brushed, and captures the company's response to the wider metamorphosis.

"Telco OS represents our vision, strategy, solution and platform for digital transformation," he says. "It's not just a product; we're not just selling a product. We can offer a product, of course, but to make this transformation happen, as an industry, we need to collaborate to develop these new digital capabilities."

But it is a platform in its own right also, which adheres to Huawei's ROADS principles, and comprises a business enabling system (BES), an infrastructure enabling system (IES) and a big data engine at its heart.

Its BES and IES components take the functions of traditional business and operations supporting systems (BSS and OSS), and turn them inside out. They are not just supporting mechanisms for internal processes. "Ours is an enabling system; it's a production system for facilitating the users' business activities," explains Dr Sun, "the users here are not only consumers but also enterprise, partners and operating staff in the operators".

> "We need an open ecosystem, where everyone works together to provide services"

The BES interface enables internal and external business functions to be more agile and focused. In particular, marketing, sales and customer service departments can bring campaigns to life more easily, and manage them more sharply.

Operators can make more of their innate network intelligence, and also extend it to partners to design, launch and manage their own digital campaigns. The platform works like an Amazon e-commerce system for digital services, reckons Dr Sun. "It like a digital market place, where users can define and produce their own products and applications," he says.

Huawei's IES allows the "flexible scheduling of bottom-layer ICT infrastructure". Buoyed by the technological advances of software definable networks and network functions virtualisation, its IES provides operators with a view of the performance of their physical and virtual infrastructure, and allocates resources in case of outages and bottlenecks in an automated real time fashion.

Both work off a big data engine, gleaning actionable insights from every corner. "It is one of key differentiators," says Dr Sun. "It makes operators more intelligent, responsive and focused. It allows them to monitor the whole thing in real-time and improve their decision-making at every level."

Market opportunity

Huawei is less clear on the market opportunity from all of this. The company said in a recent blog post that digital services constitute less than eight percent of operators' revenues at present, but will almost double to 15 percent by 2017, and shift at pace towards the end of the decade.

But Dr Sun is reluctant to put figures against such an undefined and unknowable market. "If we want change the business model, we really have to change how we define the opportunity (from predefined model to dynamic on demand model)," he says.

"Because digital transformation covers all facets of society, and creates entirely new opportunities. It is unlimited, and business will be able to change their strategies and propositions over night through agile digital operations. So it really comes down to the operators' own ambitions. It goes against the principle of the thing to make predictions – because it only places boundaries on your ambition."

The Barcelona summit represents only a start-point, observes Dr Sun – an ideas forum, and a call to arms. A formal alliance will follow, Huawei hopes, when the alternate realities of its message sinks in. "We want to make it happen as soon as possible, but we need the industry to join with us, and share our vision," he says.

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Customer experience measurement gets granular as industry looks beyond 'peak NPS'

Net promoter score (NPS) remains the standard measure of customer satisfaction but, given the complexity of customer journeys, industry commentators claim that both its scoring and methodology are obsolete. James Blackman reports

Measuring customer satisfaction is baked into telecoms these days. Operators incorporate all manner of customer feedback mechanisms into the development and review of products, services, and processes, as standard. It is no longer an afterthought; indeed, it is increasingly a measure by which staff-pay is pegged, at all levels.

"Our ambition is to delight customers. We have integrated this into our guiding principles, and it's prioritised via variable components of our managers' salaries, based on customer satisfaction," remarks Marion Hagen, Senior Vice President of Customer Relationship Management at Deutsche Telekom.

Telefónica says the same, effectively. "Customer satisfaction is a goal for everyone, not only for our quality control departments; for this reason it is a KPI that is included in the compensation model for the whole of our workforce," says a spokesperson.

But is the methodology for obtaining such a fearsome metric still relevant?

Introduced a few years back, net promoter score (NPS) remains the default means to gauge customer satisfaction within telecoms. Based on the principle that peer recommendation is the highest form of praise, it captures satisfaction by ascertaining the extent to which an end-user would recommend a service.

"Customer experience is clearly on the board's agenda now, whereas it was still on the way up a couple of years ago," says Andy Hicks, Research Director at IDC. "We're now in the period of 'peak NPS.' Not every carrier has taken it as a KPI, but enough have that there's a lot of industry practice around figuring out what affects it most and how to make it relevant."

As the industry moves at great pace, consumers are now taking any number of services from any number of competing providers. Surely, measurement of their satisfaction is a developing art? So what's changed?

"Not much," reckons Emma Mohr-McClune, Service Director at Current Analysis. "NPS is still the industry standard, even though there's broad recognition of its limitations in terms of effectively capturing each and every pain point scenario of a customer's journey."

Mohr-McClune suggests NPS works perfectly well for one-time transactional purchases, or services that don't require much in the way of ongoing support. But subscriber journeys are no longer so simplistic. "And no customer journeys are the same," she says.

"How often can operators ask the same peer recommendation question without irritating customers – and defeating the purpose of NPS in the first place?"

It's not just the scoring that's obsolete, suggest commentators, but the means of obtaining it. Most peer recommendation scores rely upon automated surveys. "There are limitations in any survey work, including its bias toward negative experiences, the fact it is retrospective, and the fact it only considers a sample of the population," says Justin van der Lande, Principal Analyst at Analysys Mason.

Mario Nolla, Senior Vice President of Analytics and Consulting at data analytics firm Flytxt, agrees. "In the last year or two, we have seen many operators trying to increase the sample size by asking two-to-three simple questions at the end of every customer interaction, but those results are also questionable because the customers with negative experiences are the ones with the highest motivation to answer on the spot," he says.

In defence of surveys

Of course, there's some defiance among the operator community that survey-based satisfaction reports have continuing purpose. "They work as an early-warning system for management," remarks Judith Krapf, Market Research Expert at Swisscom.

"The aim is to identify pain points as early as possible and to counteract them where necessary. By identifying the relevant levers for customer satisfaction and recommendations, the company can adapt to these circumstances at an early stage."

Deutsche Telekom also recounts positive results from survey-based research. Among its regular polls of customer processes and satisfaction, its 'TRI*M' customer loyalty study, conducted several times a year by an external agency, presents a loyalty index.

"TRI*M serves to ascertain the loyalty of our customers compared to other companies, optimise our customer relations processes, and continuously improve our products and services," says Hagen at Deutsche Telekom.

The company makes the point that early survey-based engagement with customers increases the acceptance of products, and minimises adjustments and costs in downstream phases. The company conducted home visits and workshops with early adopters of its Magenta One quad-play service, and honed its offer in line with their feedback.

"It allowed us to successfully and very specifically tailor the programme to the needs of our customer target group, develop effective customer communication tools, and train the Magenta One service teams accordingly," says Hagen.

NICE Systems specialises in measuring customer loyalty and satisfaction through surveys. Lee Mostari, its Director of Customer Success Consulting, puts up a comprehensive defence. He maintains NPS is the best metric for customer loyalty, still, but says the directness of the CSAT questionnaire appeals to staff themselves, and a Customer Effort Score is better for assessing the digital interactions customers make.

NICE works to the principle of 'census not sample' when it comes to seeking customer feedback. For transactional surveys, such as call centre contacts or retail visits, it endeavours to poll all customers associated with relevant interactions on the network. "This gives a statistically robust volume of feedback, right down to individual advisor level," says Mostari.

The company also provides a view of the customer experience as it is delivered, and not just at the moment a survey is invoked, says Mostari, deflecting accusations that survey work is necessarily biased or retrospective.

NICE returns a cross-section of views, he says, rather than a tendency towards negative customer experience. "Is it retrospective? Well, I guess it is, but it can be retrospective from 15 minutes ago, so I like to think of this as real time."

The dawn of data

Even so, operators are turning to more far-reaching methods to capture the new twists and turns of customers' journeys, and to head off trouble in the passes. Increasingly, they are using a Customer Experience Index (CEI), a model based upon KPIs created from internal systems to drive an algorithm that can predict customer satisfaction scores.

Typically, CEI models draw on internal metrics and data streams such as network performance and quality of service, which are being captured anyway. Increasingly, they also consider data from sundry customer touch points, as well as from external systems.

A sophisticated CEI, which can get around departmental silos, brings considerable dynamism to operators. "In the past, survey-based approaches meant customer experience data was not real-time, so poor experiences were not known fast enough to alter outcomes," says Analysys Mason's van der Lande.

The complexity of services that operators provide is increasing. A large proportion of the issues associated with them need to be detected and resolved automatically, and proactively. Predictive analytics techniques can be applied to data in nearer real-time. This enables managers or automated processes to address potential issues before they occur, or resolve them before they flare up.

But such systems require additional logistical and financial investment. "The computational effort in collecting and analysing data to create a CEI is very high, and often requires the use of newer 'big data' technology to be accomplished at a low enough cost to be viable," he explains.

The ability to contextualise data, strip out meaning and return tangible insights to relevant business functions is a point of real differentiation for forward-looking firms, reckons Ben Stollard, European Managing Director of analytics firm Foresee.

> “NPS is still the industry standard, even though there's broad recognition of its limitations”

"What separates the best in class operators when it comes to the subject of experience is how they are collecting this experience data and how granular it is in conveying when to effect specific improvements," he says.

The number of operators leveraging big data and analytics technology to perform fine-grained measurement of customer experience is growing, at last, says Nolla at Flytxt.

"Instead of measuring it in silos, they're adopting a holistic approach by using common KPIs for measuring experience across touch points, services, interactions and network. Such an approach provides a more comprehensive and in-depth measurement and allows for a more focused, targeted and dynamic response," he says.

The cultural impediment

But obstacles remain, and they tend to come from within. Satisfaction, and disgruntlement, measured by whatever means, must drive fundamental organisational change if operators are to

distinguish themselves and their sector

Despite Nolla's experience, network operators are by nature sprawling, entrenched, and set in their ways. To orchestrate their constituent parts to change at once, and work differently, remains a considerable test.

"Bridging operational silos like care, billing and network operations [is a challenge]. Everyone should be looking at the same information, and should be able to execute most provisioning and assurance tasks without manual intervention," remarks Hicks at IDC.

> "In many cases, telcos are taking the easy way out, equating digital engagement with satisfaction"

Such widespread departmental usage can make a political matter of funding, as well. "There are challenges as to which department foots the bill and provides resources, and vendors struggle because the wide scope of data required to model a CEI means integrations to many different systems are required, which makes a product-based approach complex," says van der Lande.

"Operators need to put an enterprise-wide management system and process in place. The sponsorship for such a project has to be led from the top of the organisation to ensure each department knows and understands how to contribute. The real log-jam tends to be operational, where inter-departmental budgets, systems, data and resources need to interact to accomplish better customer experience."

The industry's not there yet, clearly. Data analytics is not about the measure itself, but the process of getting it. The number of times a customer accesses an e-care app does not necessarily show satisfaction with the app itself, observes Mohr-McClune at Current Analysis.

"In many cases, telcos are taking the easy way out, equating digital engagement with satisfaction. But this type of satisfaction research comes with quite a few broad-brush assumptions, and most customer experience specialists would like to remove as many grey areas as possible in the determination of real customer pain-points and journey problems," she explains.

"There's recognition we need a lighter, less cumbersome and intrusive customer satisfaction measurement process, custom-made for the complexities of the customer journey. We just don't have it yet."

Nolla at Flytxt predicts one-way traffic. "Operators will invest more in analytics to predict changes in customer experience and factors behind it, and, in turn, use these insights to proactively maintain and improve it. Algorithms will be able to assess the quality of an interaction with a client based on the changes in his behavior within hours," he says.

"Eventually, it will be possible to attribute a satisfaction score to a customer without the need of asking. If the capability is added to these algorithms to also integrate unstructured data such as Facebook posts or tweets, the accuracy of these algorithms in the near future will be extraordinary."

Either way, a lot is at stake, everyone agrees. "We must be able to be 'always on' to know our customers are telling us through the different channels at all times, and endeavour to analyse this information using our business intelligence and big data tools so we can convert that information into offers, solutions and personalised services. Companies that don't evolve along these lines run the risk of getting pushed out of the market," says Telefónica.

Hick at IDC puts it more starkly. Operators retain an advantage, he says, as they are associated with critical, highly reliable communications; they need to make it count, or else roll over.

"If they don't make those functions easier to consume – for themselves, for partners, for customers – then a lot of that functionality is going to migrate to OTT providers, just like voice calls and messaging did. You either boost your agility and customer service, or you become a commodity player." ec

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Customer experience differentiation: a realistic goal?

How important is it that the customer experience telcos provide is differentiated from their competitors? Guy Matthews reports

Of Europe's one billion telecoms subscribers, 120 million are giving strong consideration to churning to an alternative provider over the next 12 months, according to market research firm Nielsen. The root of the problem may lie in the industry's patchy track record in customer service. A survey from Pegasystems and Redshift Research reveals that 29 percent of the subscribers queried would sooner spend time on their annual tax return, clean their toilet or sit in a traffic jam on a hot day than have to interface with an operator's customer service team.

Network operators, both fixed and mobile, are increasingly aware that the solution to alarming findings like these lies in managing the customer experience better. But how effective is tinkering with the customer experience as a way to stand apart from rivals?

Richard Goold, Partner with business transformation consultancy Moorhouse, is clear: "Telcos that go above and beyond for customers have an excellent opportunity to differentiate themselves – particularly if they focus on easy-to-fix areas where customers often express dissatisfaction."

Avoiding well-documented black holes, like poor customer handling in the call centre, can be a basic differentiator: "One telco that has recently made changes to its customer experience operations to reflect the needs of its customers is BT, which announced that it would re-shore many of its call centres in response to customer demand," says Mark Turner, a Senior Vice President of Sales at Genesys. "But when it comes to customer experience, it's not differentiating from competitors that is key, so much as providing responsive, helpful and efficient customer service through the channels that customers want to correspond through. Enabling a variety of communications channels, whether it's by social media, email, web chat or video call, means that consumers don't have to contact call centres if they choose not to."

The oldest differentiator in the game is, of course, pricing. Just as premium pricing invites customers to judge their experience more critically, so basement pricing, as with low cost air fares, is subtly tied to far lower expectations. But pricing that sounds low in the shop and is subsequently bloated by too many unexpected extras unravels this dynamic and is a recipe for customer fury.

Where operators may be able to score is with pricing that manages the trick of offering good value combined with genuine transparency and flexibility. Last year, UK retailer Dixons Carphone launched iD, an MVNO business based on the Three UK network. Marketed as the 'lowest priced 4G plan on the UK market', it allows customers greater flexibility than they may be used to with the configuration of data plans and roaming options. Hidden extras, says Dixons Carphone, have been eradicated.

Don't take personalisation too far

An important way for operators to delight customers more than rivals is to harness their big data better. Acting decisively on customer data can be simple, for example the case of an operator that has information showing that customers are most likely to call with a bill query shortly after receiving it. This might simply necessitate recalibrating back office systems so that they are no longer a day in arrears of the systems that generate bills.

Timo Ahomäki, CTO at Tecnotree, says big data own goals are common: "In eagerness to collect and analyse all forms of data, many CSPs have forgotten to actually feedback their results to customers," he laments. "While they know the exact social media moods and service experience of their customers, they have little to show for actually acting upon this information in a way that gets the service recognised by customers."

Key moments when there is a problem and a customer needs to contact the operator may be rare, but it is at these sporadic touchpoints that the real test of how well all the underlying processes are working is tested, says Ahomaki. "In the case of self-care especially, caution must be taken to keep things simple, straight-forward and intuitive," he adds. "After all, with the speed of change in the online space, most customers can and should be considered first–time users every time they reach out to the operator."

Personalised marketing offers that are context-aware is a good example of an area where operators can differentiate their services, believes Martin Morgan, VP of Marketing at Openet. "They can do this because they have the data needed

> "If the operator claims to offer the cheapest service, then they must prove it"

to trigger these offers and build customer context." But he points out the fine line between promoting personalised, contextually aware offers and scary marketing. "Understanding where this line lies for different customers is key," he says.

"Some customers fully expect their mobile providers and app providers to know where they are and what they're doing on their mobiles as they give this permission when they sign up for service. Others may not be so comfortable and will not respond to personalised contextually aware offers."

Handled sensitively and positively, data-driven insights can provide visibility not only into the quality of service being experienced by subscribers, but can also enable operators to gain a better understanding of their subscribers' interests and preferences, says Jean-Philippe Goyet, Senior Director of Product Management at Guavus. "This information can be used to enable operators to go one-step further, offering personalised subscriber experiences that truly differentiate their services. For example, a subscriber that regularly streams high-quality video content could be offered an upgrade to a package that enables them to do so more easily, or a free video download once a month."

It is important, he warns, that operators don't take personalisation too far, being sensitive of the need to add value for the customer whilst staying within the terms of their contract. "It's the ability to toe the line between being helpful and being too helpful that will enable operators to realise the biggest gains through personalised services in the coming years," Goyet says.

The worst customer scenario is surely one where the operator's attempt to fine tune the subscriber experience winds up looking like manipulation or exploitation. And endless claims of one service's superiority over another can start to look like unsubstantiated propaganda. Is it possible to be just too clever or be seen to be trying too hard? Yes, believes Mikko Hyvärinen, Director of Operational Development and Product Management with testing specialist Anite, a company at the forefront of research into the development of 5G mobile networks.

"It is important for the operator to base its value-proposition on facts," he advises. "If the operator claims to offer the cheapest service, then they must prove it. If they offer the best application usage experience, then the operator must carry out measurements to reinforce the statement. This is something many operators already do – but not all."

But it is important to remember that there are really no quick customer experience fixes, believes Bengt Nordström, CEO of telecoms strategy consultancy Northstream. "The solution for providing a better customer experience requires a thorough review and change of key existing business processes," he says. "To buy yet another IT system for getting customer data presented in a new fashion is not the solution."

In a saturated market, retaining an existing client base has never been more critical for operators, according to Maurizio Canton, CTO at Tibco. "As such, the focus falls on driving the customer experience as a core differentiator with shorter waiting times, self-service opportunities, personalised offers and next best case, a timely resolution of service problems and the integration of sales, technical support and customer interaction channels becoming the objective." EC

O2 tops UK customer service rankings

O2 UK decided in 2014 that customer experience was to be one of its key areas of competitiveness, but rather than a top down strategic rethink, it decided to spotlight one area – the often troublesome bear pit of managing customer billing.

"For many telecoms providers, the most frequent engagement they have with customers is when they pay their bills," says Grant de Leeuw, General Manager at TalkingTech, the revenue collection consultancy chosen by O2 for the project. "Companies that use personalised, self-service payment technologies are changing how consumers view the billing and collections processes and giving them positive choices."

He says what O2 wanted was a way to provide a new and convenient payment channel to customers who had fallen into arrears. This would help to increase collections payments at an earlier stage, reducing time and investment on the operator's side and improving customer sentiment. The result was 'Pay by SMS', a collections service that enables customers to use pre-registered payment cards to pay outstanding bills by replying "YES" to an O2 SMS asking if they wish to pay. Since the introduction of the service, O2 has lowered its cost of collections by seven percent and, it believes, made customers happier.

The facts would appear to bear that out. In January, O2 was ranked as the leading mobile telecoms provider in the UK when it comes to customer service. Regulator Ofcom's 2015 survey reported that O2 upped its score by two percentage points, to 80 percent, versus 2014.

EE plumps for Allera as Swantee exits

Chief Commercial Officer Marc Allera was appointed as the Chief Executive of EE in January. The announcement came as Olaf Swantee stepped down following regulatory clearance of BT's acquisition of EE. Swantee said: "I feel the time is right for me to handover for the next exciting chapter of EE's incredible journey. I wish Marc all the success for the future."

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