

OPENET
An Amdocs Company



BUILT FOR CHANGE

5G GUARANTEED QUALITY OF SERVICE: MONETISING THE NETWORK TO GROW 5G REVENUES

Openet, telecoms.com Industry Survey 2020

telecoms.com

INDUSTRY SURVEY

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INTRODUCTION

Telecoms.com carried out its annual industry survey in October 2020. Openet, once again were a main sponsor of this important survey and under our sponsorship we focused on the area of digital transformation.

We wanted to understand where service providers are currently at with regarding the value that this brings to them and the industry. The focus of this survey has been effected by covid-19 as companies all over the world have had to drastically alter how they do business. This means that what was a priority this time last year has somewhat changed on the back of this global pandemic.

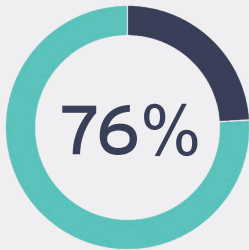
We also wanted to understand whether or not service providers are seeing data as a commodity but also what they are doing to mitigate against this as 5G is being rolled out across the world. We wanted to see how service providers are pivoting their business models and what are potential upsides and revenue generating opportunities with 5G.

The 2020 Telecoms.com global industry survey was answered by 517 telecoms professionals.

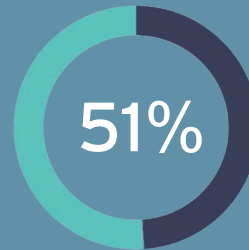


KEY FINDINGS

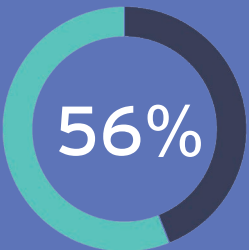
One of the main results of this survey showed that data has now reached commodity status. However the view is that 5G can help reverse this. As can be seen below 56% feel that customers would pay a premium for 5G services that come with a guaranteed quality of service. With regards to how much extra customers would pay the results showed a 4.64% average in revenue uplift, which equates to a US\$16.5bn revenue opportunity for service providers by 2025.



Maintain or increase investment in digital transformation

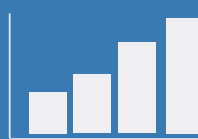


Data is already a commodity



Customers would pay a premium for guaranteed 5G QoS

4.64%

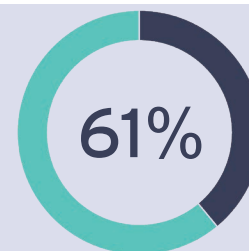


Revenue uplift from 5G guaranteed QoS

\$16.5bn

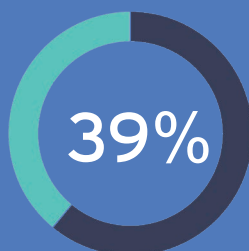


Additional service provider revenue by 2025 from 5G QoS

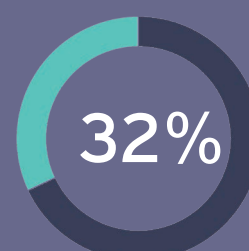


Want wholesale SLAs for partners to show 5G QoS

How many partnerships do service providers need?



Need 10 - 50 partners



Over 50 partners needed

SURVEY RESULTS:

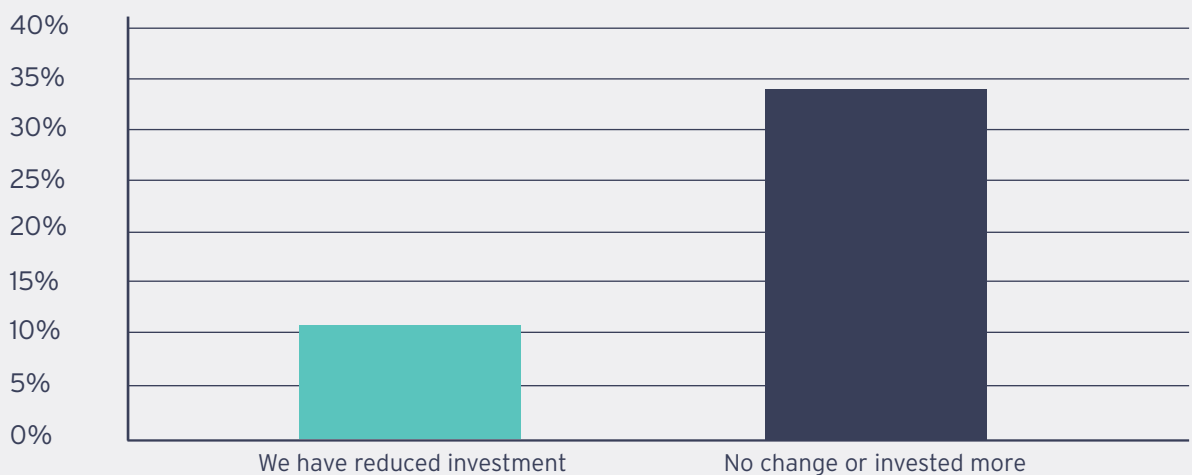
COVID-19 AND ITS IMPACT ON INVESTMENT IN DIGITAL TRANSFORMATION

Covid-19 turned the world as we know it upside down in 2020. It has also placed service providers centre stage in providing the connectivity that keeps societies and economies working.

With this in mind we wanted to understand whether or not Covid-19 impacted on their investment in digital transformation. 76% have decided to either increase or maintain their existing investment. This has to be seen as a positive because of how important this investment should be, not only for service providers, but also to deliver the best customer experience. With retail stores having to close during lockdown and the prevalence of online shopping, there is a huge opportunity for service providers to truly digitise their operations from a sales and care point of view as well as the ability to roll out new offers faster to react to changing circumstances.

Figure 1:

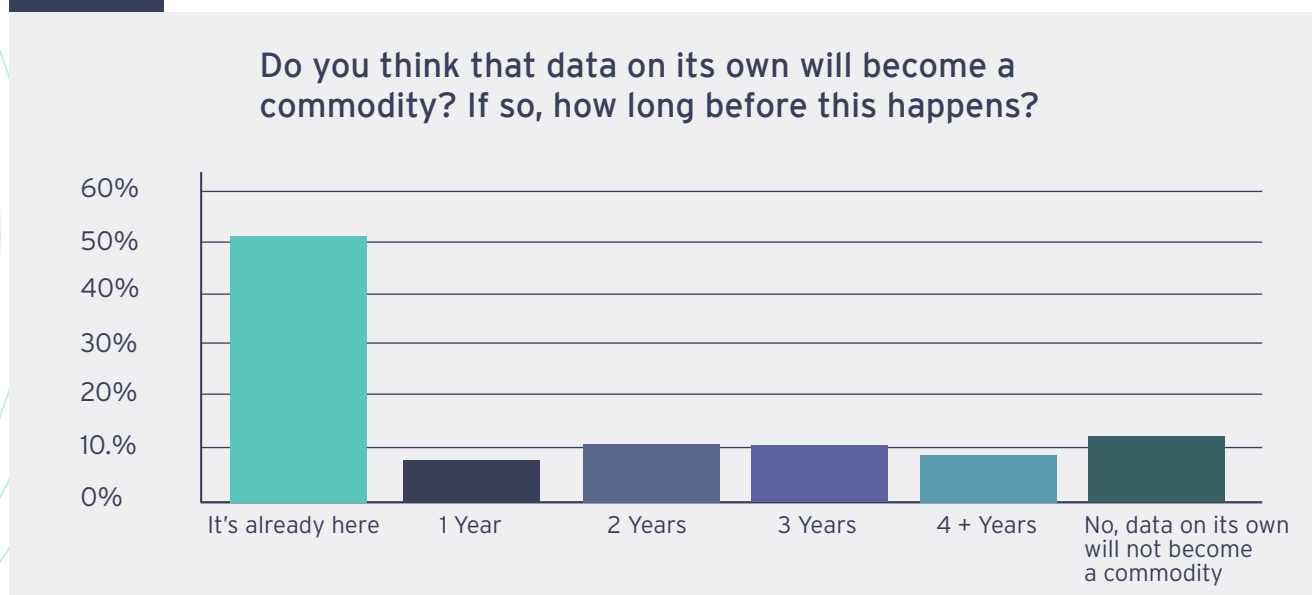
Has Covid-19 impacted your company's investment in Digital Transformation?



IS DATA A COMMODITY?

The unit price for a MB/GB of data on a global scale has been steadily declining for the last few years, so we asked when will data, on its own, become a commodity? Not surprisingly, 51% said that data is already a commodity and 37% have indicated that it will become a commodity within the next 4 years or so. Only 12% said that data will never be a commodity.

Figure 2:



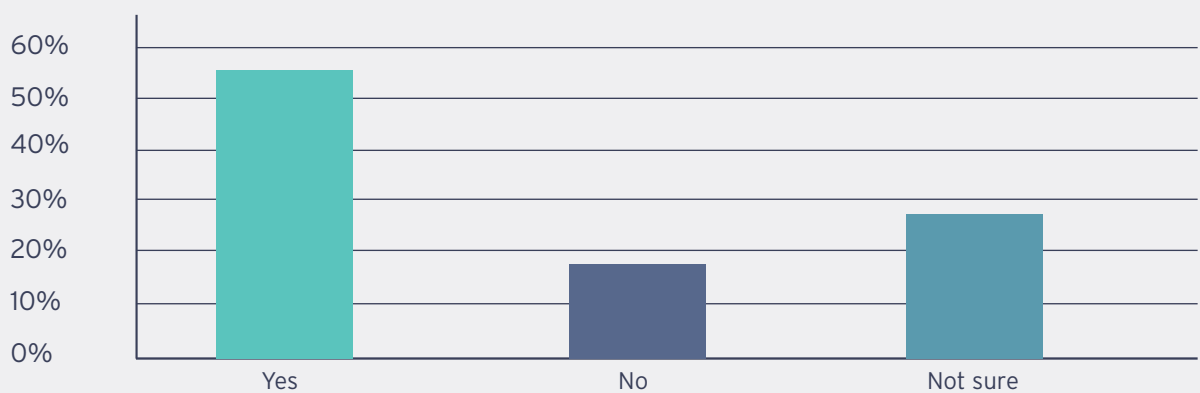
For years, data usage was the driving force behind revenue generating activity for many of the world's service providers, however this has to change and for over 51% of the respondents, they have acknowledged this. There could be a danger that offering 5G data on its own may not reverse the trend of commoditisation. However with 5G service providers have many more options for developing differentiated services over and above just the supply of connectivity. Our [2019 survey](#) showed that it was clear that having content partners was key for delivering new products and offers. This will still be relevant for the coming years but there needs to be more of an emphasis on leveraging and monetising the capabilities of 5G networks. So for this year's survey we wanted to see how important Quality of Service (QoS) will be in the roll out of 5G.

WILL CUSTOMERS PAY A PREMIUM FOR 5G QUALITY OF SERVICE WITH SPECIFIC SERVICES?

With the majority of respondents in agreement that data is a commodity, service providers need to watch out that 5G data doesn't just become 'faster 4G'. Service providers have an opportunity to monetise the 5G network by developing more valuable services, where they can charging a premium and so increase the profitability of the network. One way to do this is by providing 'network embedded services' where network features (e.g. latency, QoS) are a central component of the offer. This survey asked the question if providing a guaranteed 5G QoS to customers could be an opportunity to grow revenue above and beyond the standard price plan charged. 56% agreed that their customers would be willing to pay a premium.

Figure 3:

With 5G rollout and the ability to provide quality of service (QoS) management on different network slices, do you think customers would pay a premium for specific services with a guaranteed quality of service (e.g. home working offer)?



The example given in the question related to home working. For those of us who have worked from home during the different lockdowns, if you were sent a notification from your service provider that you could be guaranteed a certain level of service for an additional €5 or €10 a month you would probably pay it if you've had a poor home working experience of Zoom calls dropping. Then you have another segment such as gamers who heavily rely on reliable speeds and service to deliver the right gaming experience.

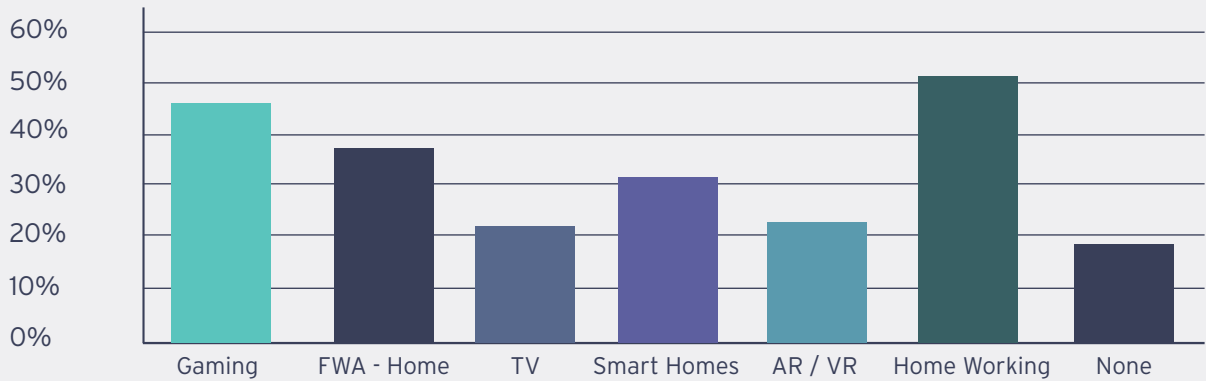
5G isn't just about providing connectivity and bundling in digital services for customers. The opportunity is to have the characteristics of 5G network as central components of the 5G offers. So rather than just selling a 5G gaming service that uses best effort connectivity - sell a 5G gaming service with guaranteed quality of service, that delivers the best gaming experience.

WHAT SERVICES WITH BUILT IN QoS WILL DELIVER MOST REVENUE?

There will be a range of 5G enabled offers that could benefit from guaranteed QoS, but we wanted to see which ones would deliver most revenue uplift in the next two years. According to the survey the offer which could deliver the largest uplift in revenue will be for a working from home package. If this question was asked 12 months ago we would not have seen anywhere close to this number but now we can see that this is vital for people to work effectively. For gaming the response showed that 46% will see an uplift.

Figure 4:

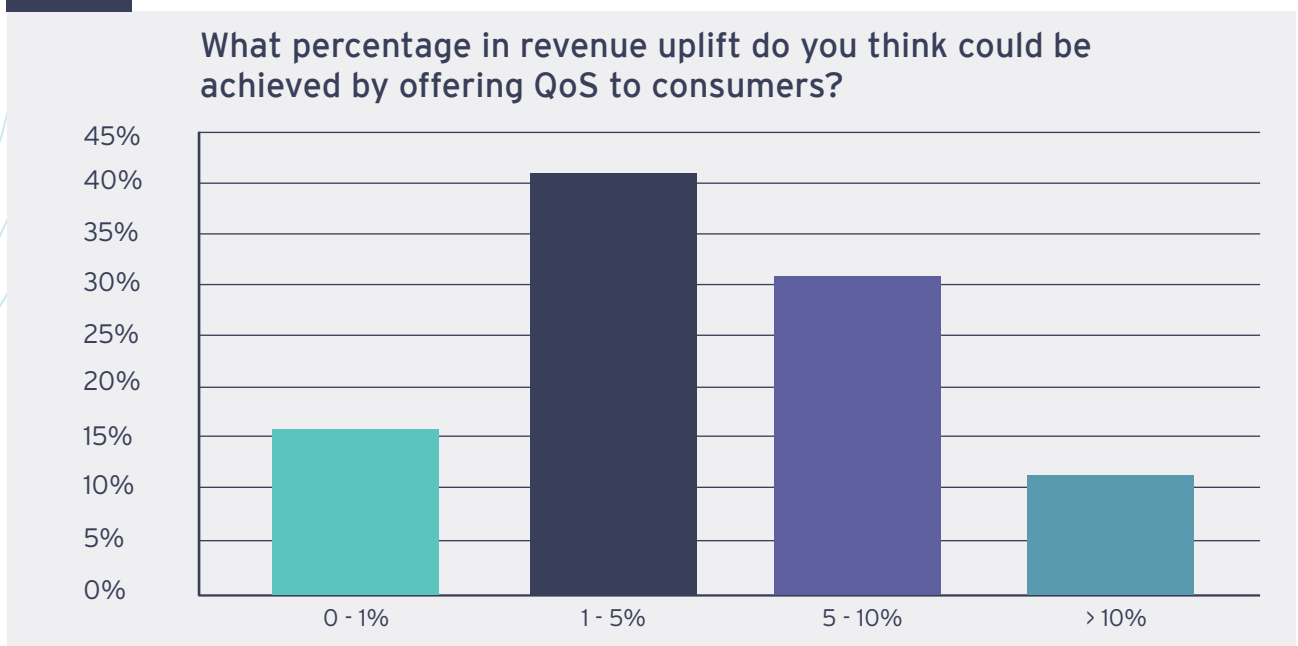
Do you think in the next 12-24 months you will see an uplift in revenue by offering QoS to consumers for any of the following services delivered by 5G? (choose all that apply)



HOW MUCH EXTRA REVENUE WILL 5G QoS GENERATE?

56% of respondents stated that they will see revenue uplift from QoS for 5G, but what could that mean in actual monetary terms? We wanted to get into the specifics of what percentage of revenue uplift they might see and the response was positive. The highest total revenue uplift at just under 42% was between 1-5% followed by 31% who see uplift of between 5 - 10%. On average across the total respondents the average uplift they can see is that of 4.64%. According to the recent Juniper report (Operator Revenue Strategies: Future Market Outlook, Business Models & Emerging Opportunities 2020-2025, published October 2020), by 2025, 5G revenues for service providers will be approximately US\$357bn. So this means that the potential revenue uplift for service providers could stand at an additional US\$16.5bn for offering QoS to their customers.

Figure 5:



QUALITY OF SERVICE WHOLESAL SERVICE LEVEL AGREEMENTS

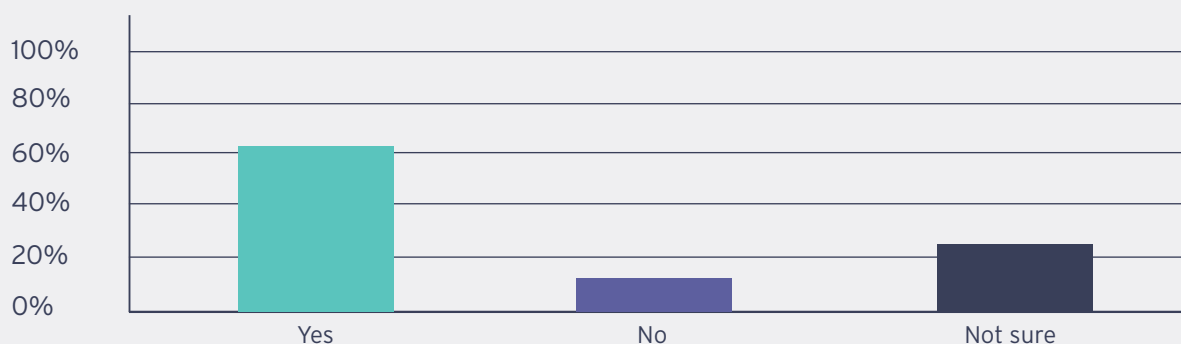
We're already seeing the success of partnerships in driving increased 5G revenues. By bundling in digital services service providers can get customers to move to higher value bundles. This approach is already being successfully used by Verizon. Their premium unlimited offer which includes unlimited data, Apple music, Disney +, Hulu and ESPN+ has seen its share of Verizon's post-paid customer base jump from 11% in year end 2019 to 18% in Q3 2020.

So we wanted to see if offering wholesale service level agreements (SLAs) based on QoS would attract more partners to work with service providers and give them a wider range of 5G enabled services to sell. The survey showed that 61% believe that SLAs will make 5G a more attractive channel to market.

The survey results tell us that by being able to offer wholesale SLAs to potential partners, we will see more partnerships as more companies look to use 5G as delivery channel for their services.

Figure 6:

Do you think being able to offer wholesale service level agreement for QoS will drive more service companies (e.g. gaming companies like Nintendo) to use 5G as channel to market for their services?



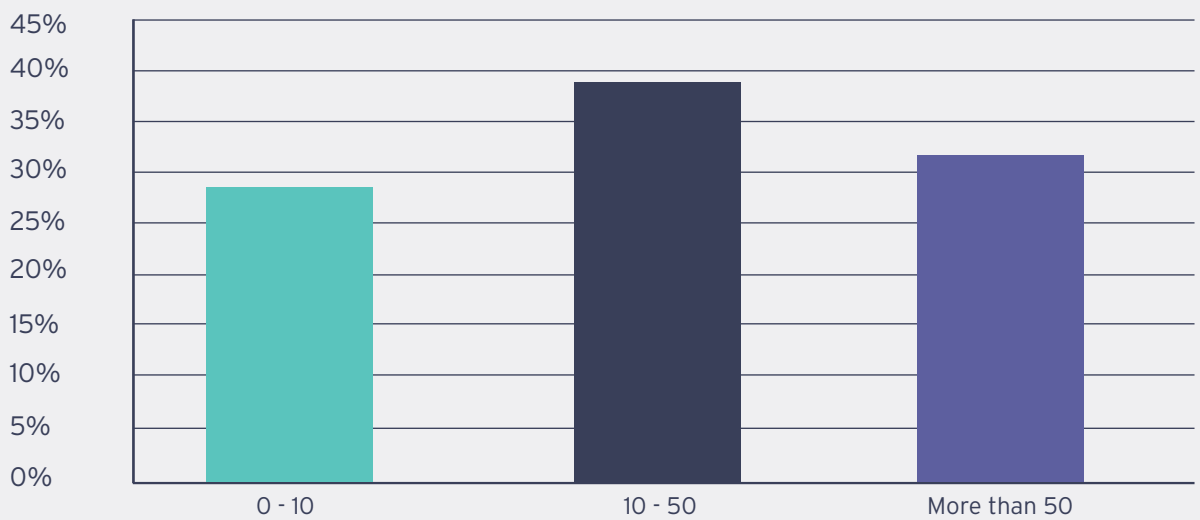
HOW MANY PARTNERS WILL OPERATORS NEED?

So the next question is how many partners will service providers need?

Most respondents, 39%, felt that anywhere between 10 and 50 partners will work, 33% said that service providers need more than 50 partners and in last place with 28% of the vote was the view that 10 or fewer partners would suffice.

Figure 7:

How many partner companies will service providers need to develop offers with?



THE IMPACT ON BSS

This research has shown that customers will pay a premium for 5G services that come with a guaranteed quality of the service. In 5G we will see the roll out of network embedded services where the network characteristics are central to the offer. Think of a 5G gaming service with low latency and high quality of service to deliver the right gaming experience.

By offering higher value network embedded services, service providers can ensure that higher value services are being delivered by the network, thus increasing the profitability of each cell site. However to do this, you need 5G charging and policy forming a 5G Value Plane between the BSS, business / IT systems and processes and the 5G network, as the network experience is now part of the offer.

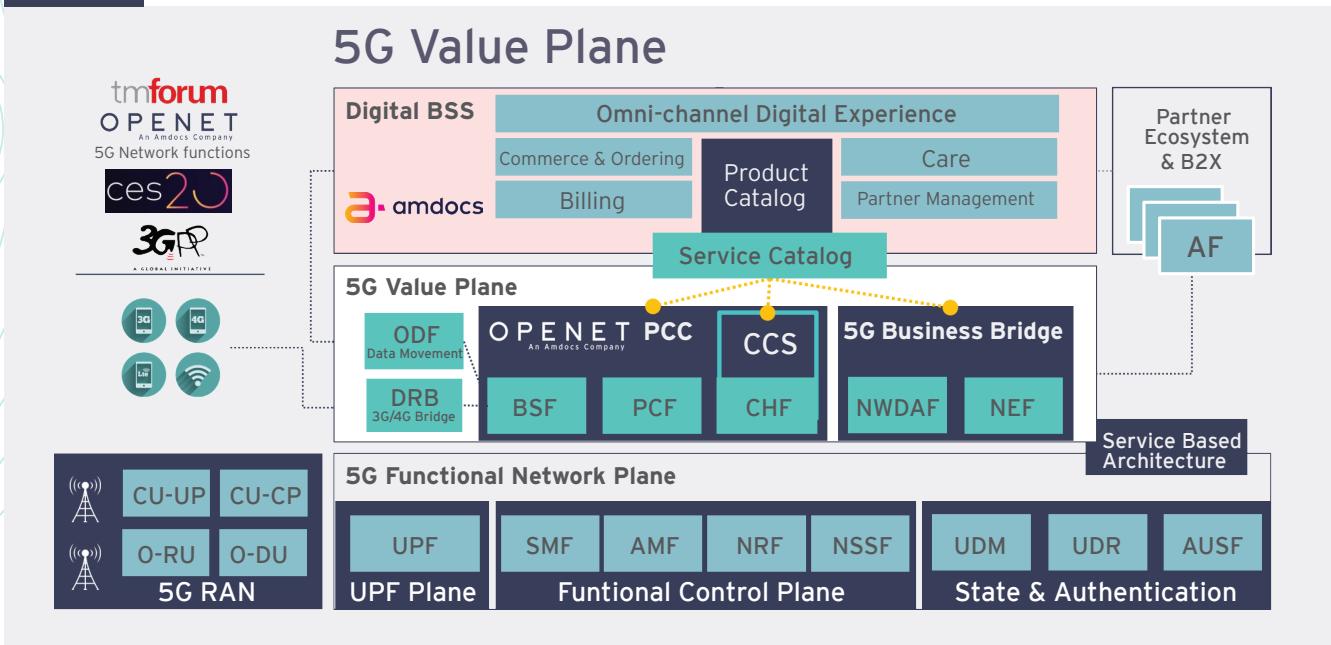
What we are seeing is that in order to offer the guaranteed quality of service to customers, service providers need to look at their BSS functions and how they engage with the 5G network. 5G Policy (PCF) and Charging (CHF, CCS) are key tools that what will enable this monumental business change for service providers.



NETWORK EMBEDDED SERVICES AND 5G VALUE PLANE

With the emergence of network embedded services and the subsequent monetisation of the 5G network, there will be closer scrutiny on how service providers develop, manage and monetise 5G services. Clearly the network functions in 5G need to be very tightly integrated into BSS - after all, the network attributes are not just a means of delivering a service, but they are now part of the service. As such we'll see the emergence of a 5G Value Plane that bridges IT & business functions and the 5G network. Central to this 5G Value Plane are the service catalog in BSS as well as 5G Policy (PCF) and Charging (CHF, CCS).

Figure 8:



With 5G, policy is no longer just a network control mechanism. It is used to build and deliver 5G services. It's like the brain of the network and is integrated with 5G charging so that different offers with different network characteristics (e.g. guaranteed QoS) will have different pricing and charging rules applied. 5G policy and charging functions in the 5G Value Plane need to be integrated to service catalogs in existing BSS stacks and also to the 5G network, thus providing a bridge between business & IT, and the 5G network. This provides the agility needed for service providers to quickly develop, launch, manage and monetise new 5G offers. This will open new revenue streams, enable the development of new business models and dramatically improve the ability to monetise the 5G network.

SUMMARY

While 4G mobile data has become a commodity, 5G and the introduction of network embedded services can reverse this trend. 5G offers with a guaranteed QoS could potentially achieve revenue uplift of US\$16.5 billion by 2025. The ability to grow revenue from selling additional data on its own, to consumers is gone. We're already seeing that content rich 5G offers increase 5G ARPU. With the emergence of network embedded services where network characteristics (e.g. QoS, latency) are a fundamental part of the offer then service providers can bundle in 5G guaranteed QoS to specific offers (e.g. 5G gaming, 5G home working offer) and customers will pay a premium for these services.

There are always customers who are willing to pay slightly above the normal price to get something of higher quality. This survey showed average potential revenue uplifts of 4.64%. Covid-19 has now put a new focus on the importance of having a level of QoS especially in the home. There is a need for service providers to meet this need and develop new offers specific to the home that deliver the quality of experience that people want and are willing to pay a premium to get.





ABOUT OPENET:

Openet, an Amdocs company, is a leading software and services provider to communications companies. Our deep domain expertise & understanding of complex systems, underpinned by the tenacity and determination of our people, enable us to radically transform how our customers do business, providing best in class digital and 5G business support systems.

In an industry where the only constant is change, our open and innovative technology is built for change. For the last 20 years we have helped the world's most innovative communications companies manage and monetise their business and evolve from communications companies to digital service providers. This gives our customers the power to enter new markets, open new revenue streams and increase profitability.

Openet. Built for Change

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ABOUT AMDOCS:

Amdocs' purpose is to enrich lives and progress society, using creativity and technology to build a better connected world. Amdocs and its 26,000 employees partner with the leading players in the communications and media industry, enabling next-generation experiences in 85 countries. Our cloud-native, open and dynamic portfolio of digital solutions, platforms and services brings greater choice, faster time to market and flexibility, to better meet the evolving needs of our customers as they drive growth, transform and take their business to the cloud. Listed on the NASDAQ Global Select Market, Amdocs had revenue of \$4.2 billion in fiscal 2020.

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