Breaking Analysis: Cloud Remains Strong but not Immune to COVID

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Cloud Remains Strong but not Immune to COVID. While cloud computing is generally seen as a bright spot in tech spending, the sector is not immune from the effects of COVID-19. It’s better to be cloud than not cloud, no question, but recent survey data shows that the V-shaped recovery in the stock market looks […]

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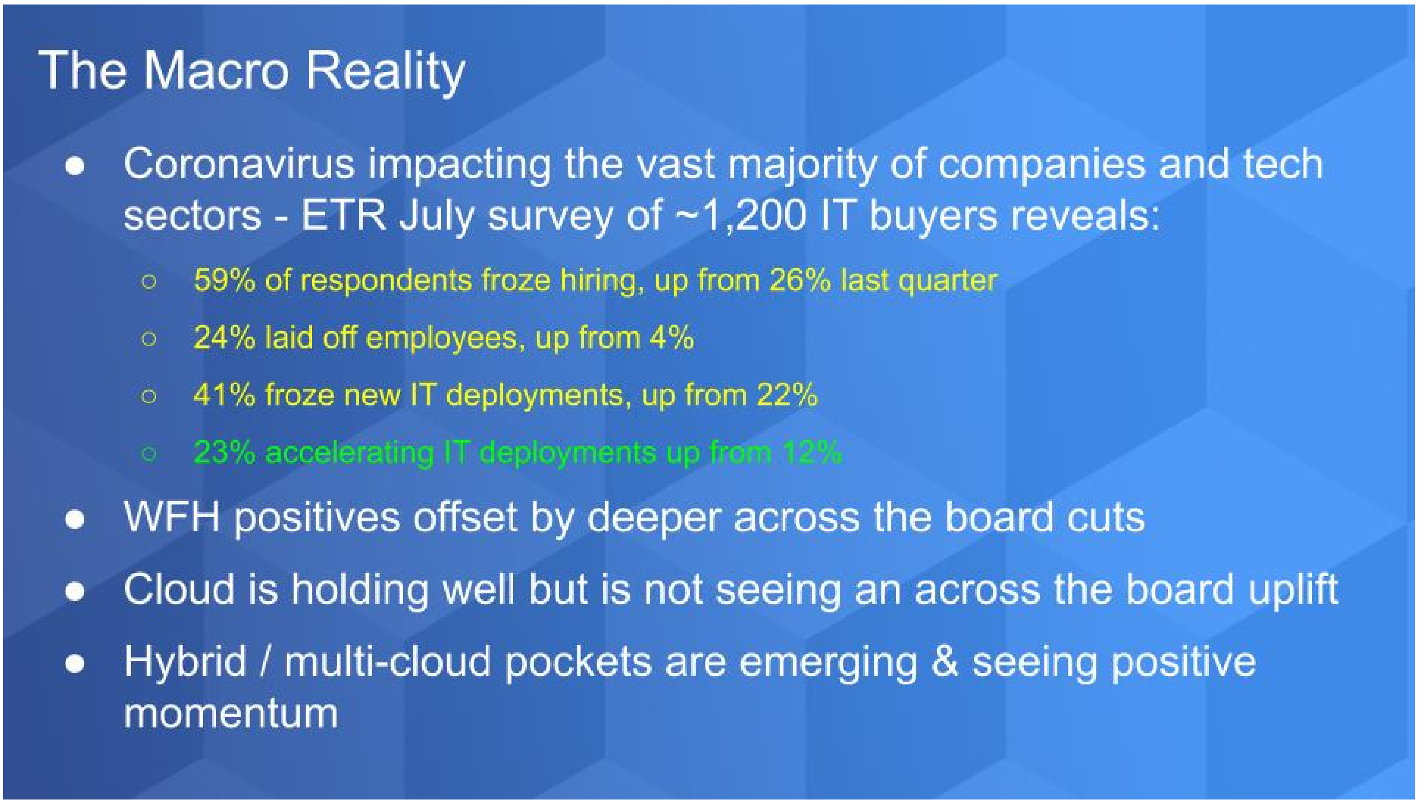
While cloud computing is generally seen as a bright spot in tech spending, the sector is not immune from the effects of COVID-19. It's better to be cloud than not cloud, no question, but recent survey data shows that the V-shaped recovery in the stock market looks much more like a square root sign for IT spending in 2020. And even the cloud will be negatively impacted, albeit much less so than many other sectors.

Welcome to this week's Wikibon CUBE Insights, Powered by ETR. In this Breaking Analysis we want to update you on our latest data and thinking around the cloud computing market with an emphasis on infrastructure as a service. We will also update our latest quarterly estimates of the Big 3 and with our typical trailing twelve month view.

The Big Picture – Not so Pretty



The reality is that the latest ETR survey of nearly 1,200 respondents shows that the vast majority of companies is hitting IT budgets. Notably:

- 59% of respondents have frozen hiring. That's up from 26% in the last survey taken in March April
- 24% have laid off employees up from 4%
- 41% froze new IT deployments – nearly double the percentage from the last survey
- On the plus side there are some shops – 23% – accelerating IT deployments and that's up significantly from last quarter.

As we've reported, that one positive trend is coming from the work from home and COVID tailwind segments. Cloud computing is one of those, but these spending shifts are not enough to offset the overall IT outlook for 2020 and likely into 2021.

Because the big cloud players, especially AWS and Azure, are so large, they are exposed to industries that have been hard hit by the pandemic. As such we see pockets of spending deceleration even at these companies.

The other piece of data that has our attention is the hybrid and multi-cloud market is beginning to show spending momentum. This is particularly notable within VMware and Red Hat accounts and we even see a bit of momentum for Oracle Cloud that we'll explore in a moment.

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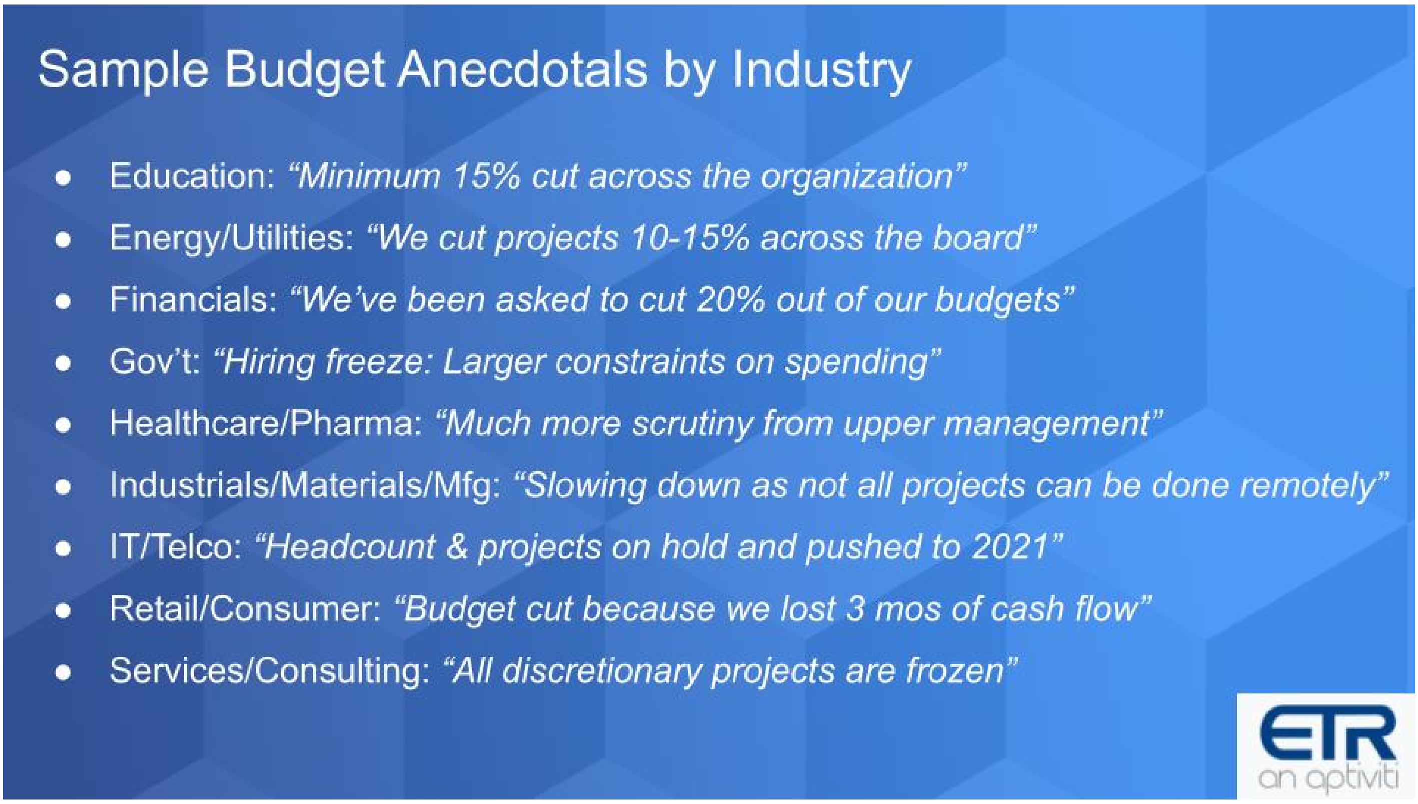
What Technology Buyers are Saying

What we show below are some of the verbatim comments from ETR customers – one of the things we appreciate about the survey is it includes both quantitative and qualitative data that we can sort by industry. We've highlighted a few examples that underscore some of the broad-based pain that companies are facing.



Education: "Minimum 15% cut across the organization"

Energy/Utilities: "We cut projects 10-15% across the board"

Financials: "We've been asked to cut 20% out of our budgets"

Government: "Hiring freeze: Larger constraints on spending"

Healthcare/Pharma: "Much more scrutiny from upper management"

Industrials/Materials/Manufacturing: "Slowing down as not all projects can be done remotely"

IT/Telco: "Headcount & projects on hold and pushed to 2021"

Retail/Consumer: "Budget cut because we lost 3 months of cash flow"

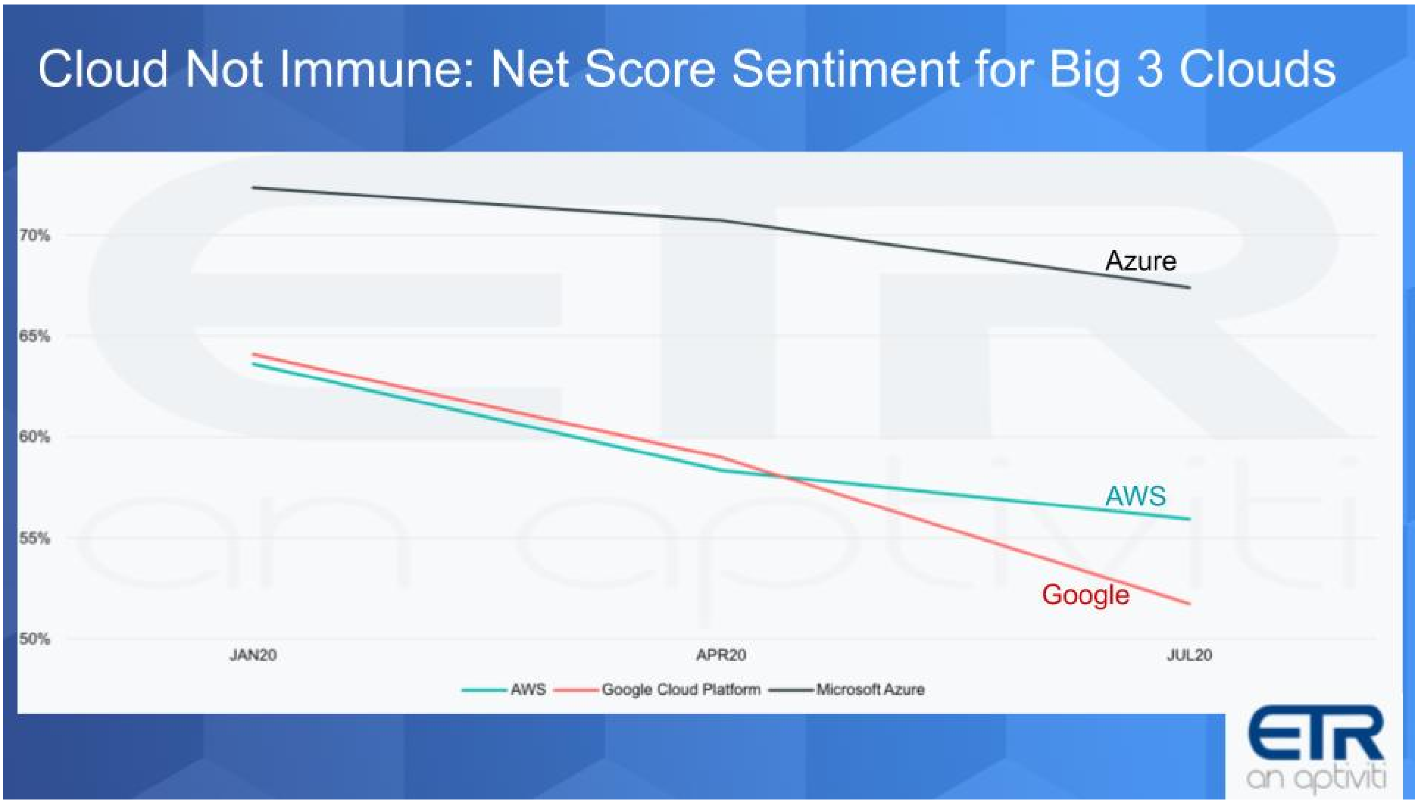
Services/Consulting: "All discretionary projects are frozen"

These comments are predominantly from large companies that are big spenders. Now in fairness there are some positives in the anecdotal responses but we have to say in squinting through hundreds and hundreds of comments this pretty much sums up the sentiment.

This is especially true in the all important U.S. market. We heard this in Cisco's earnings call this week – the theme is uncertainty related to the pandemic and this is hitting IT budgets.

Cloud Spending Remains at Elevated Levels but there is Pressure

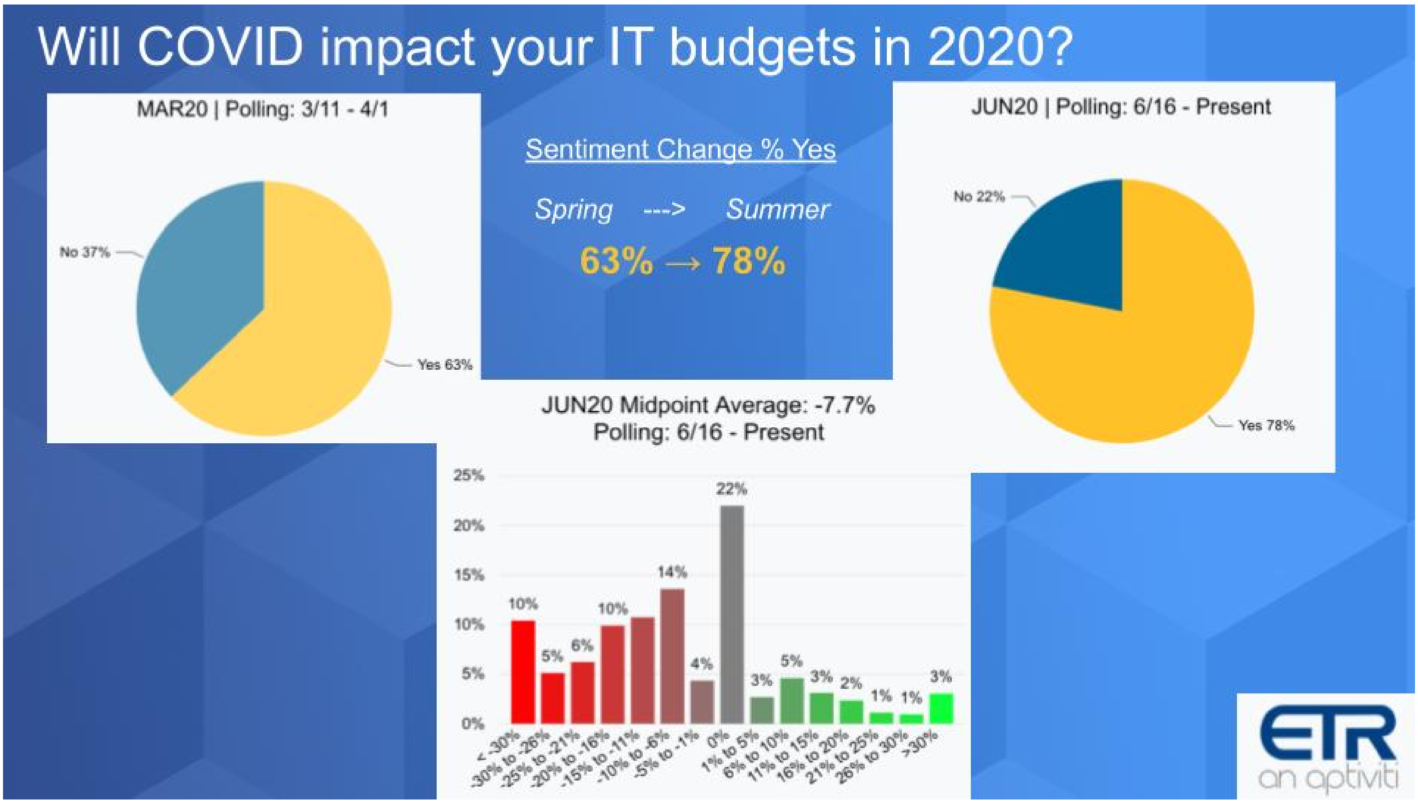
The chart below shows Net Score for the Big 3 cloud players – Microsoft, Amazon and Google – for each of the three surveys of 2020. Net Score is ETR's measure of spending momentum. Each quarter ETR asks buyers are you spending more or less on a platform and Net Score subtracts the lesses from the mores. It's a bit more complicated than that but that's the essence. And you can see the deceleration in all three platforms. Now it's important to point out that these are already at elevated levels and represent strength. But there is clear pressure on spending, even in cloud.



No Sector is Immune but Some Firms are…

There are clear pockets of spending strength such as video conferencing and security that are winning. However, even in these sectors, it's often a story of a firm that is well positioned to gain share – like a Zoom or Okta or Crowdstrike or Zscaler or Sailpoint who we've highlighted in previous segments.

This slide shows data from multiple ETR surveys. The pies compare the spring survey to the summer sentiment, asking buyers ***Will COVID impact your IT budget in 2020?*** In the latest COVID survey 78% say yes up from 63% from the last survey.

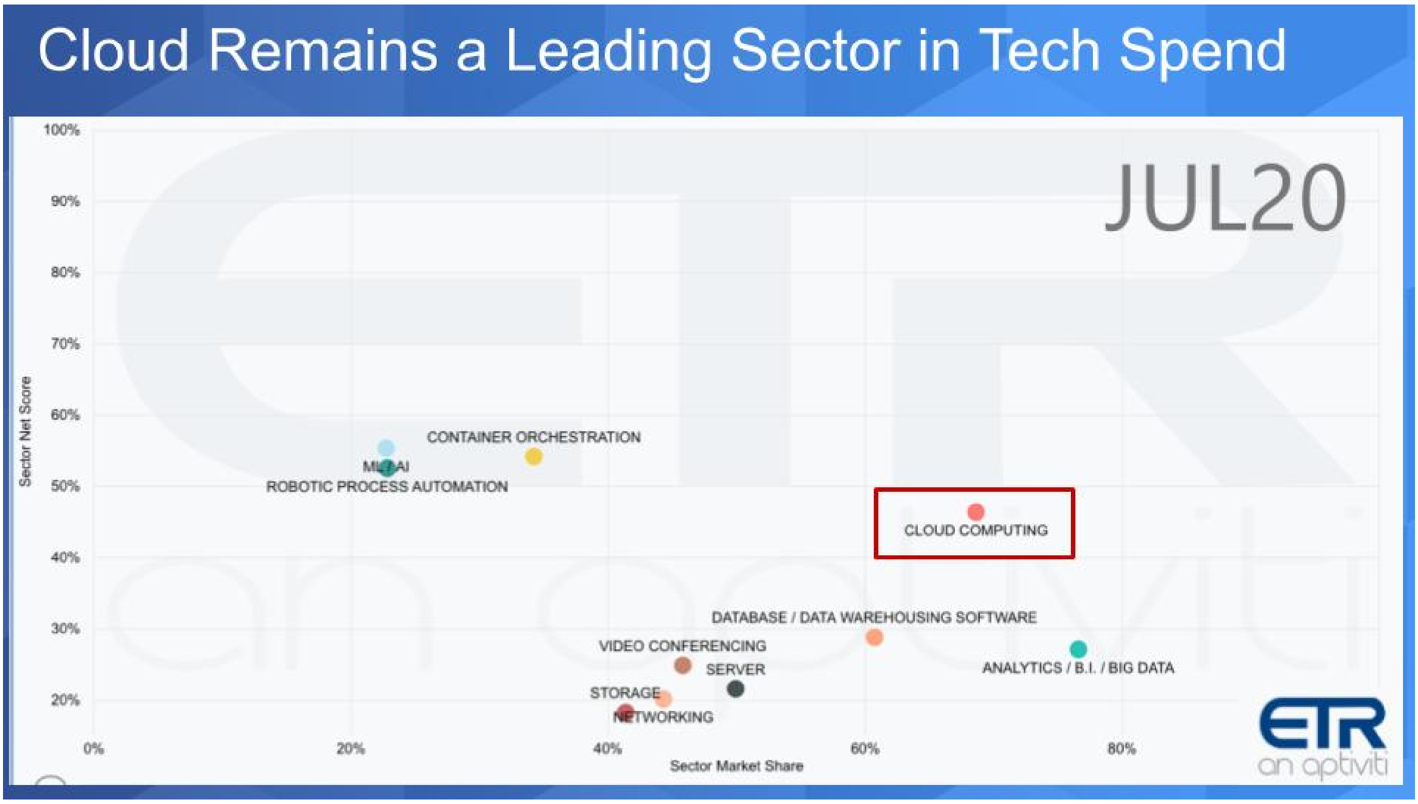


The bar chart answers the next obvious question: ***How will your budget be impacted?*** You can see the distribution of growth or decline in the reds and greens. A sizable portion, 22%, say no change in budget, but the red bars are much bigger than the green bars and that's why we continue to forecast IT spending declines of 5-8% in 2020. We think this will spill into the first half of 2021 as well.

Cloud Spending in Context – Still the Place to be

Now despite our somewhat dire outlook we have to remember that it's all relative.

The chart below shows one of our favorite views. It plots Net Score – or spending momentum – on the vertical axis against Market Share on the horizontal axis. Market Share is measure of pervasiveness in the survey and calculates the penetration of the sector as a percent of the overall survey.

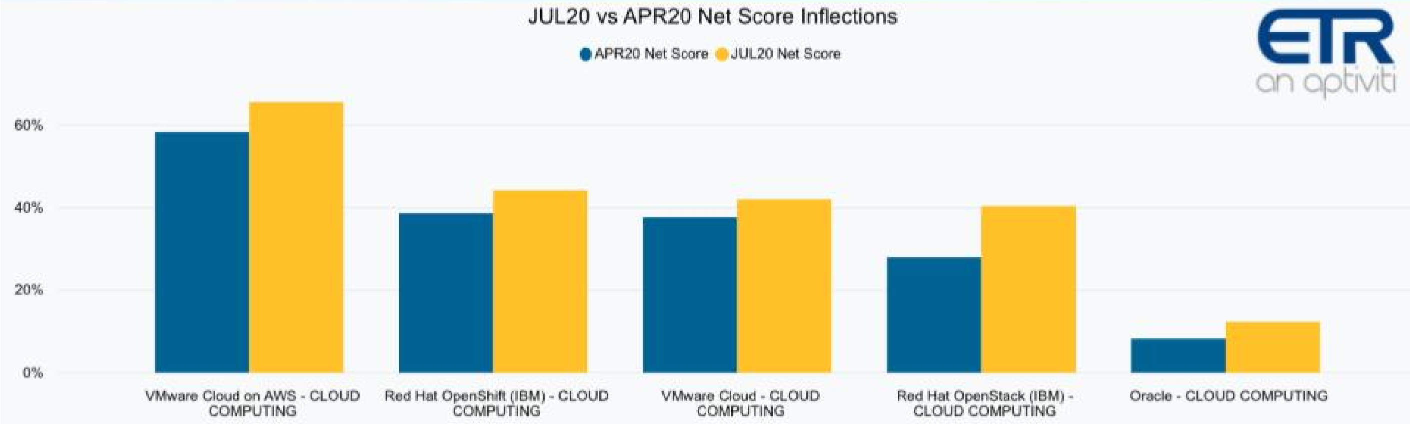


What this view tells us is the degree of spending momentum on the vertical axis – cloud is elevated relative to the other sectors we're showing. And it shows the penetration of cloud in the dataset on the horizontal axis. So cloud shows both spending momentum and high penetration relative to other IT spending priorities. Note there are dozens of other sectors in the ETR data set but we've cherrypicked a few here for context. To wit – other than containers, AI and RPA, cloud is outpacing all sectors shown in terms of Net Score and only Analytics/BI/Big Data is more pervasive. So cloud remains strong but as we'll see in the next section there are COVID headwinds.

The Pandemic has Created Spending Friction Event in Cloud

We showed earlier the decline of Net Scores for the Big 3 – again still holding elevated levels. What the chart below shows is the sectors of infrastructure-as-a-service that demonstrate increasing Net Scores relative to the last survey. And you can see there are only five areas that show positive momentum in Net score.

Only 5 cloud platforms show positive net score delta



Sector	Vendor	Adoption	Increase	Flat	Decrease	Replacing	Citations	Net Score	Net Score Delta vs APR20	Net Score Delta vs Survey
CLOUD COMPUTING	Oracle	2%	28%	51%	18%	1%	130	12%	4	0
CLOUD COMPUTING	VMware Cloud	6%	43%	44%	6%	1%	100	42%	4	0
CLOUD COMPUTING	VMware Cloud on AWS	20%	47%	30%	2%	0%	93	66%	7	0
CLOUD COMPUTING	Red Hat OpenShift (IBM)	11%	41%	39%	7%	2%	61	44%	6	0
CLOUD COMPUTING	Red Hat OpenStack (IBM)	8%	40%	44%	6%	2%	52	40%	12	0

Positive change in Net Score Apr → July w/ citations >50

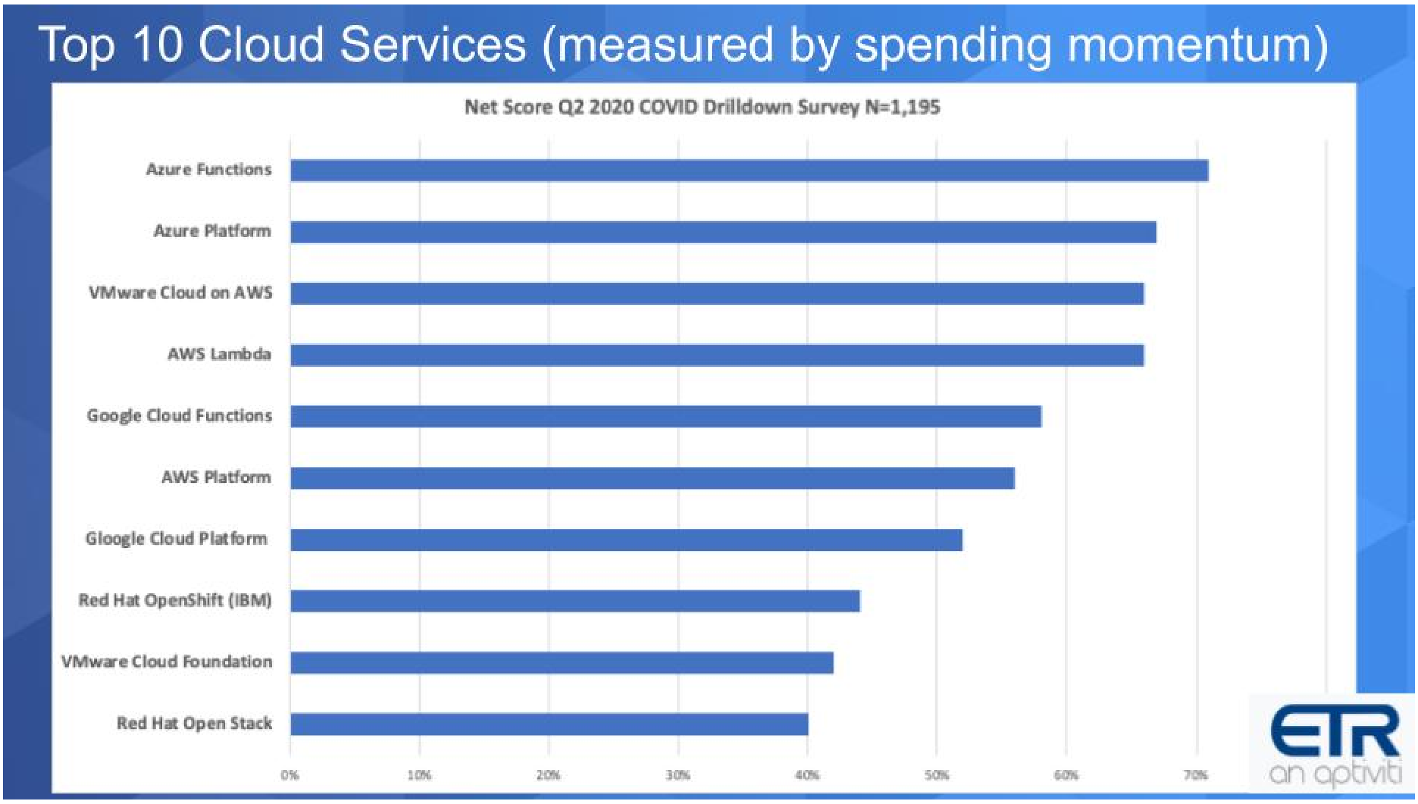
Reading the bars left to right:

1. VMware Cloud on AWS shows an impressive Net Score of 66% – up 700 basis points since the last survey.
2. Next is Red Hat OpenShift with a 44% Net Score up 600 basis points.
3. Then VMware Cloud which comprises VMware Cloud Foundation and other hybrid and multi-cloud services – it shows a Net Score of 42%, up 400 basis points.
4. After that is Red Hat OpenStack – yes OpenStack – with a 40% Net Score – up 1200 basis points since the last survey. Red Hat sells and supports its OpenStack distro. Prior to the IBM acquisition, Red Hat would frequently cite OpenStack as a growth business on its earnings calls and this data confirms there's some momentum there. As an example, Red Hat is selling into the telco sector to service providers that want to stand up a private cloud. Why? Well the the big cloud players may not have a local presence and there are data sovereignty requirements in the country – that's just one example.
5. Then finally on the chart we have Oracle. Now there's probably some SaaS included in the Oracle numbers and the Oracle Net Score is an uninspiring 12% – but it's up from the last survey.

So these are the only five areas showing Net Score expansion from the last survey, which speaks to the impact of COVID that we discussed earlier.

Which Cloud Services are Strongest?

However we stress that cloud remains stronger than most sectors. What we show below are the top ten cloud services measured by Net Score or spending momentum. This is for the July survey of 1,195 respondents.



The first point is these are all solid Net Scores – so while we are putting forth a less than sanguine outlook for 2020, these are very strong scores relative to most other parts of the technology stack. Most companies would kill to have this type of momentum.

Azure functions and Azure platform lead the pack in Net Score. But look at VMware Cloud on AWS. We've seen this popping up in recent surveys and showing strong. This service is doing well and gaining presence and momentum in the data set. Then there's AWS Lambda…functions or serverless – this remains strong as does Google Functions.

Next you see AWS – that's AWS overall and even though it's off a bit in Net Score terms from previous quarters, as we'll discuss in a moment, this is a $40B business with Net Scores that remain elevated. Remember that Net Scores can't grow to the moon. They will fluctuate and the larger the base the harder it is to maintain high Net Scores so the AWS performance is very impressive.

Google Cloud Platform is next and frankly we'd like to see stronger Net Scores. GCP is around one eighth the size of AWS and yet AWS still maintains a notably higher Net Score each survey. Google continues to struggle with selling into the enterprise.

Hybrid Cloud Making Some Moves

Now look at the last three on the chart above. Cloud purists might say that these hybrid or multi-cloud services aren't "real cloud" but these are customer responses and if the customer says they're cloud we'll go with that. Forgetting about the semantics, the point is we've been talking about hybrid and multi-cloud for a while and we see VMware and Red Hat – two companies that we've predicted are in a strong position to compete for hybrid and multi are showing up on customers' spending radar.

We should also mention that Microsoft is a leader if not the leader in hybrid, multi-cloud because it has a massive public cloud presence and numerous relevant services in the space. Microsoft doesn't show up necessarily as discreet hybrid services in the ETR taxonomy but its hybrid services are likely embedded in these numbers.

AWS & Azure Separate, Google Chases & Hybrid is Emergent

Below is our old friend the X Y graph. It's one of our favorites. This time we show specific named vendors. On the Y-Axis is Net Score or spending velocity and on the X-Axis Market Share or pervasiveness.

As usual, we see AWS and Azure separating from the pack. In our view, infrastructure-as-a-service and PaaS is such a huge market that it's not a winner take all space. Maybe not even a winner take most.

And you can see the players that we've highlighted in the Hybrid / Multi Zone with Google kind of on that bubble. Any player on this chart with a Net Score above 40% is in the green as you can see in the upper right corner. Red Hat, VMware Cloud, Google. And look at VMware Cloud on AWS – this service is getting a lot of traction and it should given the effort both companies have put behind this.

Notably, AWS has created special bare metal instances to run this service on its cloud. VMware refers to AWS as its preferred partner. This service has been a winner for both companies. AWS gets access to 500,000 VMware customers and VMware gets a really solid cloud play. Where this goes in the future will be interesting to watch. When this service was announced several years ago it didn't take long for AWS to launch its VMware migration services. But for now it's a win-win for the two companies and a win for customers.

For context we've included both Oracle and IBM cloud services and you can see where they stand relative to the rest. They're not setting the world on fire but, as we've said many times, they at least are in the cloud game. And both companies are in a good position to migrate their customers' mission critical workloads to their respective clouds.

Revenue: AWS Continues to Lead, Azure is Closing, Google way off the Pace

As has been our custom, we like to share our estimates of how the big U.S. cloud players stack up as shown in the chart below. The data puts forth our IaaS and PaaS revenue estimates for AWS, Azure and Google

Cloud Platform for 2018, 2019, 2019 growth rates, the first two quarters of 2020 and a trailing twelve month view.

Cloud Revenue Estimates* - IaaS & PaaS

Big 3 $B	2018	2019	Y/Y	Q1 '20	Q2 '20	Q2Y /Y	TTM
AWS	$25.7	$35.0	36%	$10.2	$10.8	29%	$40.0
Azure	$9.7	$16.0	65%	$6.0	$6.7	47%	$22.8
GCP	$1.8	$3.4	89%	$1.4	$1.6	59%	$4.8

*Source: Wikibon estimates, company earnings reports & ETR survey data

> ***For the first time, Microsoft's trailing twelve month IaaS revenues have surpassed 50% of AWS'.***

Below are the five key takeaways. Remember, AWS reports clean numbers. Microsoft blends Azure revenue with other services as does Google with GCP. So we have to read through a variety of financial reports and triangulate with survey data to come up with an apples to apples comparison.

1. AWS is now a $40B business on a trailing twelve month basis.
2. Combined, the Big 3 now account for nearly $70B in IaaS and Paas revenue. That's a more than sizable chunk of the data center business, which has not been all incremental growth to the IT market. In other words, the share shift continues from on-prem to cloud.
3. Growth is strong but not surprisingly the bigger the players get, the slower the growth rate.
4. In 2018, AWS revenue was 2.7 times greater than that of Microsoft. For the first time however, AWS revenue has dropped below 2X that of Microsoft. Looked at another way, Microsoft's IaaS and PaaS revenue is now about 57% of AWS's revenue.
5. Google's growth rate at its size appears to be lagging where AWS and Azure's growth was at earlier points in their respective journeys. For example, when AWS put up nearly $8B in 2015, it grew over 70% that year. Azure at $16B in 2019 grew at 65%. Google grew 72% last quarter and 59% this quarter so it's no slouch but at its size with its resources we would like to see Google pick up the pace, but we may have to wait until post-COVID.

But despite the COVID headwinds in the overall IT market, there's little question that this is a cloud world and we just live in it.

We're grateful for our community and the input you provide to these segments. Look for survey updates on the ETR Web site and make sure to check out SiliconANGLE for all the news and analysis. Remember these episodes are all available as podcasts wherever you listen.

Ways to get in touch: Email david.vellante@siliconangle.com | DM @dvellante on Twitter | Comment on our LinkedIn posts.

Also, you may want to check out this ETR Tutorial we created, which explains the spending methodology in more detail.

Watch this week's full video analysis:

David Vellante is co-CEO of SiliconANGLE Media, as well as co-founder and Chief Analyst at The Wikibon Project, the world's leading open source technology research community. Dave is a long-time tech industry analyst, entrepreneur, writer and speaker. As co-host of theCUBE – "The ESPN of Tech," Vellante has interviewed over 5,000 experts since 2010. He is also a co-founder of CrowdChat, an angel funded startup based in Palo Alto using big data techniques to extract business value from social data. Prior to these exploits, Dave founded a CIO consultancy and spent a decade growing and managing IDC's largest business unit. He lives in Massachusetts with his wife and four children where he is active in town activities including serving as the president of his town's local "Kiddie Sports" association. Dave holds a B.S. in Applied Mathematics from Union College.

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