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Enterprise Network Market in 2020

Where is the enterprise network market heading in 2020?

The networking field is changing quickly with the emergence of new technologies. This change, along with the onset of digital transformation and increasing cloud-adoption, highlights how businesses have realized the importance of the third platform, as it interconnects mobile computing, cloud computing, social media, and information analytics.

2019 has been the year of edge computing and the dawn of the SD-WAN. While 2020 will see these technologies in use, there are other technologies that will define the future of the IT landscape for years to come. So let's dive into the predicted major network trends for 2020 and the how they'll impact different business models and processes.

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The fifth-generation wireless networks (5G)

5G has been a buzzword for quite a while now, and in 2020, we may just see it becoming a reality. 5G promises data transfer rates of up to 20 Gbps, ultra-low latency, massive capacity, and a more cohesive user experience.

5G will serve as a platform for innovations across industries. Its benefits aren't exclusive to mobile broadband services; 5G can benefit a vast range of devices and services connecting different businesses. It will redefine a broad spectrum of businesses including e-commerce, education, entertainment, medicine, and transport. Businesses should be ready to embrace this technology and equip themselves with all the infrastructure required to stay ahead of the competition. Monitoring systems will need to scale to handle the increased bandwidth and traffic 5G will generate.

Wireless fidelity 6 (WiFi 6)

Wireless has always been the easiest source of connectivity for business. Wi-Fi 6, also called 802.11ax, is the latest upgrade to the widely used 802.11ac. It's been developed to support 5G.

The major enhancement that comes with this technology is that it can handle an increased number of devices in a given space while also increasing their speed. This means a single router can effectively support a vast number of devices connected to it without compromising on speed.

All Wi-Fi users will benefit from Wi-Fi 6, from businesses to public sectors, where a multitude of users will be accessing the same Wi-Fi network. This will also serve as a boon to businesses using the Internet of Things (IoT). The role of monitoring tools is crucial here, as they need to be able to keep up with tracking the performance of every device connected to a single Wi-Fi device, and should also be capable of handling the data transferred at any speed.

Software-defined wide area networks (SD-WANs)

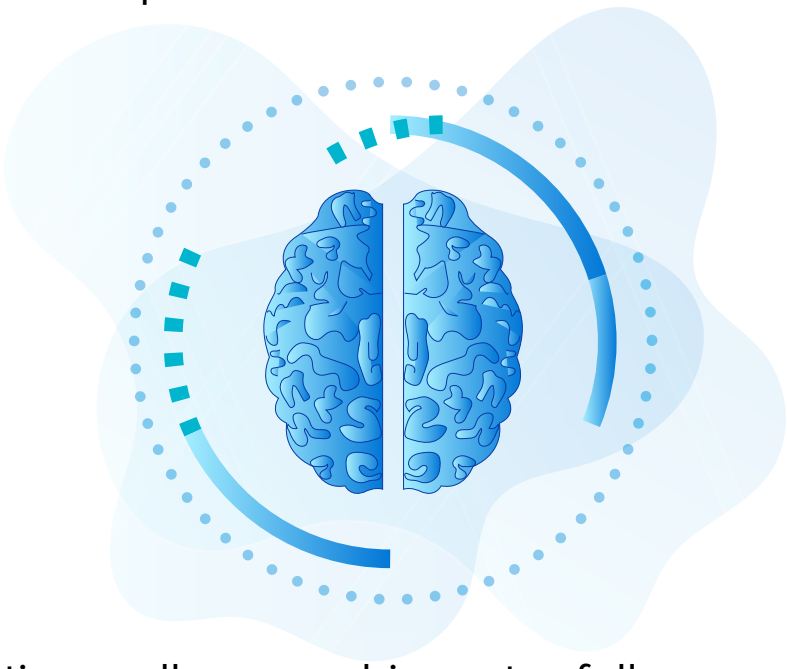
2020 will see the growth of SD-WAN technology, a software-driven approach that can connect a network using any combination of transportation services like Multiprotocol Label Switching (MPLS) and 3G/4G LTE. SD-WAN decouples the network from the infrastructure, facilitating multi-site deployments. This technology connects enterprise networks, including branch offices and data centers across geographies.

SD-WAN is cloud-driven, meaning it's highly scalable. This new central approach to network connectivity reduces operational costs and reduces the load on the infrastructure.

Since it's cloud-based, if a certain link fails, traffic can be rerouted through different links, facilitating continuous network connectivity for business-critical applications. With this, the monitoring systems need not monitor traffic, bandwidth, errors, discards, or other hardware metrics.

Artificial intelligence (AI) and machine learning (ML)

AI and ML are continuing trends for many major platforms for over a decade now. ML's statistical learning approachhelps organizations spot unusual behavior of users and entities, while AI can be leveraged to automate responses to these incidents. These timely actions, which require less human effort, set the floor for further development in this aspect.



Hyper automations allow machines to follow a certain set of procedures automatically. AI and ML provide better insights for hyper automations and leverages these automations to transform businesses and enrich the customer experience. With AI and ML, many aspects of different departments can be automated, so that anomalies can be quickly detected and analyzed, and a solution can be swiftly implemented. Monitoring tools powered by anomaly detection, ML, and built-in alerting mechanisms can make this a reality for businesses.

Cybersecurity, AI security, and resilience

Technological growth often introduces new challenges. Cybersecurity has been and continues to be one such challenge; cyberattacks have risen by 67 percent in the last five years, as per the Cost of Cybercrime study by Ponemon Institute. It also estimates that cybercrime in 2018 cost organizations, industries, and individuals $13 million. For businesses, protecting digital and network assets has become as important as managing them.

Security teams have to keep an eye on potential areas of threat with IoT, cloud computing, and various network systems. Network admins and security experts should seek AI-powered means to mitigate attacks, identify the nefarious use of AI by attackers, and frame defense mechanisms. A tool capable of identifying cyberattacks and instantly alerting IT teams upon detecting an incident will help businesses become resilient against cyberattackers.

Sum up

2020 is expected to set yet another benchmark in the networking industry with technologies like 5G, Wi-Fi 6, and SD-WAN redefining the approach to the internet, while automations can benefit both processes and security, paving the way for better secured networks.

Though all these technologies continue to grow, one thing that remains constant is that networks seeing changes in technology require constant monitoring. A good monitoring tool should monitor all key traffic metrics, provide an intuitive view of the network, automate processes, and send timely alerts. Site24x7 Network Monitoring comes with all these features and seamlessly monitors your network performance from the cloud.