

With the pandemic accelerating digital transformation, new-age distributed enterprises are creating challenges and opportunities alike.

### **BY** SHUBHENDU PARTH

ntil a few years back, global organisations were considered the benchmark for a dispersed workforce. In a connected world, it was a given that companies would battle operational challenges from multiple locations that criss-cross international boundaries. However, the pandemic suddenly changed the rules of engagement and accelerated the pace at which enterprises had to align with the massive shift towards "work from home." The new digitalfirst enterprise strategy has pivoted towards a model that is different from the traditional location-centric concept of an organisation.

This shift has put the spotlight on some of the key aspects of the enterprise, including applications and security. Thus, any discussion on distributed enterprise strategy today evaluates cost and complexity vis-a-vis the organisations' goals. Cloud and edge computing have now become key infrastructure components for modern enterprises. Managing a distributed enterprise is more than just a technology issue. It is also about people and process transformation.

# EMERGENCE OF DISTRIBUTED ENTERPRISES

The first few months of the pandemic were defining from every perspective, be it the enterprise, the workforce or the customers. For many businesses, operations had to run from home as much as possible. "This was the

moment when everybody got creative and tried to manage the situation. A lot of work where physical presence was mandatory was impacted," says Sandeep Lodha, Co-Founder at Netweb Technologies.

However, this change also brought about a reality check and hence the transformation that is redefining enterprises. "At the back of the mind, enterprises are aware of the gaps in their systems to meet such contingencies. There is more acceptance of work from home, and organisations are widely implementing it. Also, businesses have started investing in a disaggregated team so that people can join the remote setup," adds Lodha.

Gartner predicts that by 2025, 60% of infrastructure and operations (I&O) leaders will use disruptive technologies to drive business innovation. The research firm says that automation, edge computing and other technology trends will enable IT to drive business value rather than simply responding to business needs. At the same time, I&O leaders are also looking to retool processes, add skill sets, and encourage innovation and risk-taking.

"Currently, we are in an environment where our employees' end-to-end journeys have been adjusted to support hybrid working. Since many epidemiologists and infectious disease experts predict that the COVID-19 could become endemic in 2022, businesses are embracing flexible hybrid working patterns to bring their workers back to the office," says Girish Chandangoudar, VP VP - Head of Infrastructure Management Services, Happiest Minds Technologies.

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digital strategies and journeys before the outbreak of a pandemic. Shifting business models, the need for business resiliency and the threat of a post-pandemic world are driving the current changes enabled by the ability to tap into a distributed talent pool," he adds.

#### CHALLENGES VS TECHNOLOGY

In a distributed enterprise set-up, the challenges are manifold. The pandemic changed the nature of workplaces overnight, sharply increasing the tribe of remote workers. Thus, security has become a major concern.



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#### SANDEEP LODHA

Co-Founder, Netweb Technologies

"There are several challenges in this new way of working. Some are technology challenges, while others are policy-related. Organisations are worried about data security in this new WFH environment. As for the infrastructure. there are solutions available, including from our company, where you can have a centralised architecture that is easy to scale and manage. You can set up the backup and other safety and security features to fortify it," says Lodha.

The identity and access management (IAM) challenges for businesses couldn't have been greater. The remote work environment that has transformed workplaces forever will further accelerate the growing trend of Cybersecurity Mesh that helps implement a Zero Trust Architecture by securing all data and systems accessed securely regardless of their location. The need for Cybersecurity Mesh Architecture (CMA) is further aggravated with the increase in hacking and ransomware attacks.

Gartner predicts that in the future, cybersecurity mesh will support the majority of IAM requests and enable a more explicit, mobile, and adaptive unified access management model. It says that by 2024, organisations adopting CMA to integrate security tools to work as a cooperative ecosystem will reduce the financial impact of individual security incidents by an average of 90%.

"Endpoint and edge network security is a major concern since IT teams can only manage the company-issued IT assets. The home network remains unmanaged. It is necessary to use a mix of solutions to mitigate security threats, including next-generation cloud-based anti-virus, antimalware, and web gateway

solutions deployed and managed by security and IT teams. Solution based on Zero Trust Network Access (ZTNA) can be considered for securing the edge network," says Chandangoudar.

Businesses wanting to free themselves from the shackles of traditional cloud-based networks are readily embracing edge computing platforms that enable a zero-touch, secure, distributed computing architecture for applications and data processing at or near the edge. According to IDC, the global edge computing market will reach \$250 Billion by 2024, registering a compounded annual growth of 12.5%. Besides fulfilling the need for predictive maintenance and intelligent processes, other benefits for businesses include cutting costs while delivering application services and the ease to offer better user experiences with bots and voice-enabled assistants.

As the breath of cloud offerings and capabilities continue to grow, the adoption of cloud services is on the rise. According to Gartner, end-user spending on public cloud services will grow 21.7% to reach \$482 Billion in 2022. Increased agility, innovation and resilience that the cloud delivers to business coupled with faster time to market and efficient scalability makes a strong case for the cloud to be the vehicle for digital transformation.

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In addition, recent wireless communications advances, such as 5G R16 and R17, will push cloud adoption to a new level of broader, deeper and ubiquitous usage, adds Gartner.

## MULTIPLE DEVICES, MULTIPLE PROBLEMS

It came as a knee-jerk reaction across all sectors, irrespective of company size. When the pandemic began, organisations immediately distributed laptops to employees who had been using desktop computers only. And employees with personal devices were also able to access enterprise applications through Virtual Desktops.

"As of today, all employees receive laptops as a standard. To reduce the load on the VPN, Intranet applications were made accessible over the Internet with security controls in place, such as cloud-based multi-factor authentication. To ensure seamless file sharing and conferencing across the organisation, we consolidated our collaboration tools and platforms into a single cloud-based Team Collaboration platform," says Chandangoudar.

"To ensure seamless device management, we have moved away from a location-centric device and software configuration management tool to a cloud-based device management platform. Cloud-based Internet and web gateway solutions deployed on the user devices were enhanced with zero trust features to provide contextualised network access," he adds.

End-user device management is another critical element of the distributed enterprise. To enable work from any location using any device, modern cloud-based device management solutions enable seamlessly unified management of devices regardless of their location or ownership (corporate or personal). Similarly, with more organisations adopting cloud-based solutions, there is a need to rationalise the tools and applications deployed for communication and collaboration. Organisations can deliver seamless experiences to their employees by using a cloud-based approach.

#### **PEOPLE MATTERS**

People are at the heart of a distributed enterprise as flexibility and balance associated with remote work is a big positive. The pandemic has blurred the lines between personal and

professional life and created a new normal with respect to people and policies.

Businesses that adopt hybrid working models garner employees who are on average 30% more productive than their in-office counterparts. Distributed enterprise solutions are also cheaper to maintain and offer multiple hiring options and benefits for organisations. One of the most important advantages is workplace engagement which builds positive associations and connections to work-based environments and cultures.

According to Gartner, a dispersed workforce is the most effective way to build a 21st-century business because it allows for greater worker autonomy, increased productivity, and better engagement.

"In our organisation, human resources, learning and development, and talent acquisition policies evolved quickly to address the needs of remote work, encompassing the entire employee journey. To meet the needs of the pandemic, employee engagement programs and health and wellness policies were also modified," Chandangoudar points out.

"Policy-wise, there are templates, and every organisation will need to keep on tweaking to make it work better for them. Technology like metaverse is picking up, and maybe soon we will have a virtual office on metaverse where a colleague can walk up to a persona and have a casual talk or quickly gather up for a huddle," says Lodha.

Distributed enterprise as a strategy is picking up momentum in Asia and across the world. The hybrid workforce will continue to grow, and its high time organisations align themselves with the new-age work environment.



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