

Gartner Top Strategic Technology Trends for 2021

A summary – by Yuval Keren, Head of Digital Solutions



Introduction

Every year, Gartner publishes their predictions for what they see as top strategic technology trends that business owners should be concerned with.

Understanding these trends, their impact and how a business could benefit or apply these is essential.

The trends for 2021 are centered on the following themes:



People Centricity

People Centricity promotes the concept that people are central to all business.

We explore three themes:

- Internet of Behaviours
- Total Experience
- Privacy – Enhancing Computation



Internet of Behaviours

“The Internet of Behaviour captures the ‘digital dust’ of people’s lives from a variety of sources”
Gartner



What is the Internet of Behaviours (IoB)?

The Internet of Behaviour is about collecting data from different sources in order to understand customer behaviour and how to influence future behaviour.

Sources include commercial, customer, citizen data from government agencies, social networks, facial recognition, geo location, data collected from devices...

Applications

A good example is the Insurance companies putting in place contracts based on user behaviour. These Usage-based insurance (UBI) programs collect data coming directly from the owner’s car.

They track certain driving behaviors such as Speed, Acceleration, Hard breaking, Hard cornering, Phone-use while driving. The driver insurance premium is then calculated based on the driver’s habits. The safer they drive, the better the discount they get.

In this case, the insurance company wins by lowering the risks of accidents of their customers - and the customers are motivated to drive more safely to pay less.

However, IoB does raise some ethical concerns around rewards for good behaviour. Judge for yourself – [China social credit scoring](#)

Total Experience

“Companies that provided a good TX would be more likely to outperform their competitors across key satisfaction metrics over the next three years” Gartner



What is Total Experience?

Total Experience “TX” means that anyone who interacts with your brand has a consistent and exceptional experience.

“Anyone” means customers, users, employees.

Multi-Experience

“MX”

The overall experience of your brand, product and/or service across different channels and devices.

Customer Experience

“CX”

The overall look, feel and quality of your interactions with customers at every touchpoint across their journey.

User Experience

“UX”

The design, usability and functionality of your product or service.

Employee Experience

“EX”

The look, feel and quality of your interactions with employees from recruitment to retirement.

TX encourages companies to think about Experience as a unified key element.

Tightly linking all these experiences — as opposed to individually improving each one in a silo — differentiates a business from competitors in a way that is difficult to replicate, creating sustainable competitive advantage.

Privacy-Enhancing Computation

"IT leaders need to understand how PEC can support their confidentiality and privacy use cases"
Gartner



Why is Privacy-Enhancing Computation important?

When personal data is breached, this costs a company both from a reputation standpoint as well as financial.

This has forced organizations to re-examine and strengthen their cybersecurity efforts.

What is Privacy-Enhancing Computation?

It relies on three technologies to protect data:

- Providing a **trusted environment** in which sensitive data can be processed or analyzed.
- Performing processing and analytics in a **decentralized** manner.
- **Encrypting data and algorithms** before processing or analytics.

Applications

This kind of ultra-secure approach enables organizations to collaborate on research securely across regions and with competitors without sacrificing confidentiality.

This approach is designed specifically for the increasing need to share data while maintaining privacy or security.

Location independence

Location independence is something we've become familiar with over the last year – the idea that we can work from anywhere. This raises questions on how we **deliver** services, how we **access** them and how we **secure** them.

We will look at the following:

- **Deliver:** Distributed Cloud
- **Access:** Anywhere Operations
- **Secure:** Cybersecurity Mesh





Distributed Cloud

Providing geographic or location flexibility for delivery of cloud services

What do we mean by Distributed Cloud

Distributed cloud is a cloud computing service that lets you run cloud infrastructure in multiple different physical locations.

The operation, governance, updates and evolution all remain the responsibility of one service provider – the public cloud provider.

Applications

The idea is that although you have one cloud service provider – there are many different physical locations : not only your cloud provider's infrastructure but also third-party data centers or even on-premises.

This can mean that organizations can have these cloud services physically closer to where they are used. This helps with low-latency scenarios, reduces data costs and helps accommodate laws that dictate data must remain in a specific geographical area.

One use of distributed cloud is to ensure that data remains in the geographical location in which it's mandated to reside.



Anywhere Operations

“By the end of 2023, 40% of organizations will have applied anywhere operations to deliver optimized and blended virtual and physical customer and employee experiences.” Gartner

What do we mean by Anywhere Operations

Anywhere Operations is all about allowing employees, customers, and business partners to work in physically remote environments and have complete access to everything they need.

Applications

Ensure seamless customer support all year long with no physical limitations.

Empower employees to work from anywhere, giving them the ability to pave their pathway, manage their schedule, and become decision-makers rather than order-takers.

Manage and automate the deployment of business products and services across distributed infrastructures.

Example: [Operate from 9,000 KM away](#)

Cybersecurity Mesh

If your employees and assets are located anywhere, your protection needs to extend there as well.



What do we mean by Cybersecurity Mesh

Traditional security strategies were built around the “walled city” approach: a big security perimeter was drawn around the IT network and everything *inside* was considered safe and everything *outside* as dangerous.

This approach doesn’t work where at least one-third of data breaches occur inside the network. Additionally, a company’s employees can now be almost anywhere.

With the expansion of connected devices, there is more opportunity than ever for hackers to gain access.

Applications

Cybersecurity Mesh is part of a “zero-trust environment” that tailors the cybersecurity system around the different access points (people, devices, identities..)

The basis of the security mesh is that all connections for data are considered unreliable unless verified otherwise.

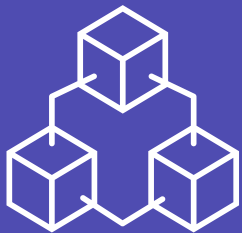
Implementing a security mesh ensures that the right people have access to the ‘Right Information’ across the network – No matter where the information or the resources are located.

Resilient Delivery

Create a technology organization that can **rapidly** adapt to overcome **new** challenges and support **new** operations.

We will look at the following:

- Intelligent Composable Business
- AI Engineering
- Hyperautomation



Intelligent Composable Business

“by 2023, organizations that have adopted a composable approach will outpace their competitors by 80% in terms of implementing new features” Gartner



Intelligent Composable Business

ICB is all about a business' ability to react and transform. 2020 showed us just how important it was for a company to be able release new products and services and keep up with changing customer demands.

Composable business

CB means creating an organization from building blocks. The modular setup enables a business to rearrange and reorient as needed e.g. like a shift in customer values or sudden change in supply chain or materials.

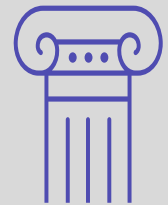
Composable Thinking



Composable Business Architecture



Composable Technologies



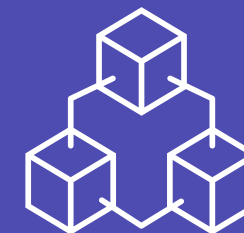
Applications

With no doubt, flexibility is a prerequisite for success in the new normal.

Forbes published an [article](#) with 10 examples of how the pandemic forced businesses to transform.

AI Engineering

“only 53% of projects make it from artificial intelligence (AI) prototypes to production” Gartner



AI Engineering

It is all about making AI part of the mainstream operations process rather than a group of specialists who work on AI technology.

The practice of AI engineering consists of 3 key pillars:

AI Business Engineering

Reimagine your business model & ways of working

AI Solution Engineering

Implement AI solutions to drive these new processes

AI Platform Engineering

Build enterprise AI platforms to build AI solutions at scale



Applications

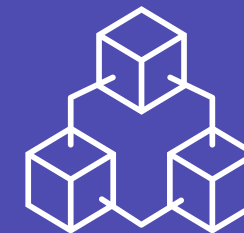
Gartner [research](#) predicts that business value derived from AI will reach \$3.9 trillion by 2022.

However, despite increased interest in and adoption of artificial intelligence (AI) in the enterprise, 85% of AI projects ultimately fail to deliver on their intended promises to business, according to a [report](#) from Pactera Technologies.

AI Engineering gives organizations a roadmap to make AI a part of the mainstream DevOps process, rather than a set of specialized and isolated projects.

Hyperautomation

“Hyperautomation is now inevitable and irreversible. Everything that can and should be automated will be automated” Gartner



What do we mean by Hyperautomation

Hyperautomation is the mix of automation technologies including Robotic Process Automation (RPA), Intelligent Business Management Software (iBPMS) and Artificial Intelligence (AI), with a goal of increasingly AI-driven decision making.

Applications

Automation initiatives mainly focus on cost reduction and increase in compliance. Benefits of hyper-automation include:

Productivity Increase:

Automation frees the time of employees so that they can focus on more value-added tasks.

Improved collaboration:

Hyper-automation enables integration of digital technologies across their processes and legacy systems. Stakeholders have better access to data and can communicate seamlessly throughout the organization.

Agility:

Hyper-automation means that a business doesn't rely on a single technology for automation purpose. Having a suite of tools enables organizations to achieve scale and flexibility in operations.

“Technology can’t solve all of our problems, but we can’t solve our problems without technology.”

Daryl Plummer, Gartner

If you are interested in finding out more about any of the topics discussed here, we would be happy to hear from you!

Contact: ds@itecor.com

References

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