Synoptek

White Paper

TOP 3 ESSENTIAL DIGITAL TRENDS TO EMBRACE IN TODAY'S EVOLVING TECH LANDSCAPE

This white paper covers:

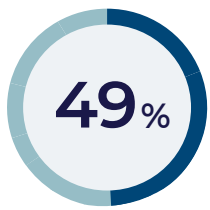
- Shed light on why digital transformation is important
- Link transformation with your IT infrastructure
- Provide detailed insight into the three types of trends to embrace
- Explain how each trend will improve and optimize your IT infrastructure
- Provide actionable items and tools for following the trends

Introduction

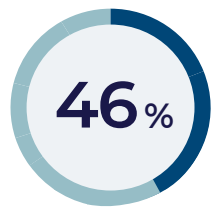
Success in today's technology-obsessed, customer-centric age is no longer just about the revenues generated. Success today is about an organization's ability to keep pace with the changing times and emerge as winners in the competitive digital landscape. Embracing digital transformation will be the only way for organizations to drive value and remain competitive. By providing continuous optimization across processes, departments, and the business ecosystem, digital transformation will enable organizations to transform both processes and competencies while enhancing business efficiency.

What does "digital business" mean to organizations?

Enable worker productivity through tools such as AI-assisted processes



Ability to better manage business performance through data availability



Meet customer experience expectations

Source: IDC

As the business ecosystem evolves, the volume and complexity of customer demands are increasing. Organizations not only have to manage everything they have already been managing, but also manage them with speed and agility. In a situation like this, organizations find themselves exhausting their internal resources by simply playing Catch-up in their day-to-day operations, let alone finding time and resources to innovate for the benefit of their customers and their profitability.

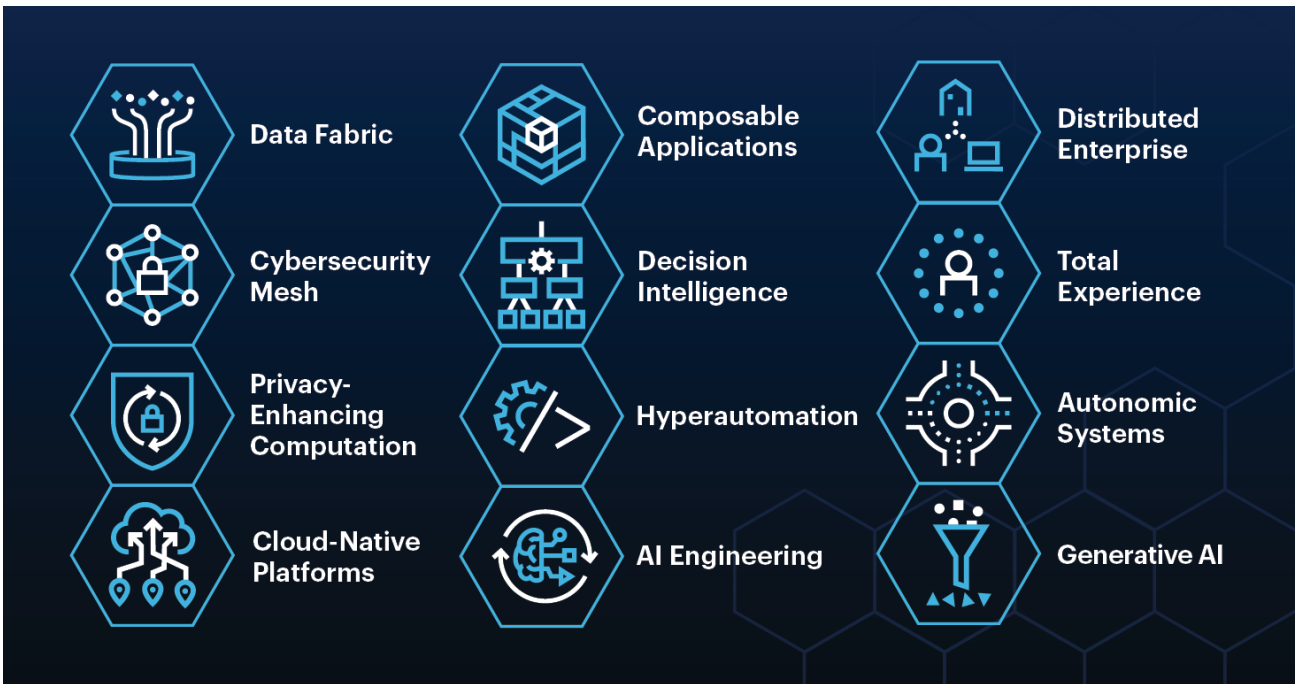
However, the good news is that organizations can largely escape this vicious cycle by updating just 3 parts of their business process, highlighted in this whitepaper.

In this whitepaper, we will:

- Shed light on why digital transformation is important
- Provide detailed insight into the three types of digital transformation trends to embrace

Why Digital Transformation Is Accelerating The Future Of Work

The accelerating pace of technological advances and fluctuating customer expectations are putting immense pressure on organizations. Developing new competencies is no longer an option but a requirement to be more responsive, accomplish goals, and meet the needs of customers. With the modern customer being extremely informed, the way organizations meet their expectations has become a key differentiating factor that determines their fate. Exceptional customer service is a must – and to provide exceptional customer service, organizations need to break through data and departmental silos, improve access to critical data, and ensure 24/7 security of data and assets.



Source: Gartner

Businesses across the world need to make the most of digital technology to enhance business process efficiency and achieve a competitive advantage in the market. Embracing modern digital technologies can have a profound impact on business outcomes – which is why adoption of these technologies need to happen in a well-planned yet accelerated manner.

Three Main Types of Trends

With digital transformation making massive advances across industries and geographies, every company needs to be on the road to digital transformation – or risk becoming obsolete. Now is the time for organizations to adopt and integrate disruptive technologies and fundamentally change how they operate as well as how value is delivered to customers. Let's look at the top three types of digital trends to implement in today's rapidly evolving tech landscape:

Engineering Trust

Sculpting Change

Accelerating Growth

Engineering Trust

A robust and effective IT foundation is essential for any digital company. Scaling cost-effectively is impossible without a well-designed and robust foundation. IT is in charge of engineering the trust required in this connected world with the following four trends:

1. Cloud-native platforms

Lift-and-shift cloud migrations concentrate on transferring legacy workloads to the cloud. These workloads demand a lot of maintenance and don't benefit from any of the advantages of the cloud because they weren't created for it.

Cloud-native platforms make use of the flexibility and scalability capabilities of cloud computing to accelerate time to value. They make it possible for teams to develop, run, and use applications without the manual labor involved in building or maintaining the underlying infrastructure. It is a self-service method which reduces handoffs and other delays that may otherwise hinder development. You can build new application architectures using resilient, elastic, and agile technologies and adapt to the quick changes in the digital landscape.

2. Privacy enhancing computation

As it becomes more challenging for consumers to monitor who uses their personal information and how it is handled, they are growing more wary of sharing it. Also, because of the surge in cyberattacks and attackers' use of more sophisticated tactics to access data, utilizing privacy-enhancing computation (PEC) and technologies (PET) has become an essential security precaution for enterprises.

This allows data to be shared within ecosystems while generating value as well as protecting privacy. Various privacy-protection strategies are used in privacy-enhancing computation to derive value from data while still adhering to compliance standards. There are several approaches, but some of them involve encrypting, splitting, or preprocessing sensitive data to enable efficient handling data without jeopardizing its privacy.

3. Cybersecurity mesh

Data centers and the cloud host many digital business assets. But organizations are increasingly vulnerable to breaches because of outdated security strategies that concentrate on enterprise perimeters.

An adaptable, modular architecture known as a cybersecurity mesh connects widely distributed and disparate security services. It makes it possible for best-in-class, standalone security systems to collaborate in order to increase overall protection while relocating control points closer to the assets they are intended to protect. No matter where they are, all assets are protected by an integrated structure, enabling a security strategy that permeates the core of IT services. It can quickly and accurately authenticate identity, context, and policy adherence in both cloud-based and non-cloud systems.

4. Data Fabric

Over the past ten years, the exponential increase of big data has been fueled by advancements in edge computing, artificial intelligence, hybrid clouds, the internet of things (IoT), and artificial intelligence. This has added to the complexity faced by businesses in managing this data and has led to the unification and regulation of data ecosystems to a higher priority because of the resulting challenges, including data silos, security threats, and general decision-making bottlenecks.

Data management solutions address these difficulties. A data fabric can determine what data is being used by scanning metadata within built-in analytics. Regardless of where the data is located, data fabric offers flexible, resilient integration of data sources across platforms and business users, making data accessible everywhere it is needed.

Sculpting Change

After establishing a solid basis, organizations may now concentrate on developing technology that will help them scale their digitalization initiatives. But IT alone cannot keep up with the pace of change. Fusion teams - which are composed of IT and business personnel - will need to work together and foster innovation to digitize the company quickly. As our upcoming trends demonstrate, IT's role is to provide the tools necessary for fusion teams to shape the shift.

1. AI Engineering

The delivery of AI is streamlined through AI engineering, which automates changes to data, models, and applications. It offers revolutionary solutions that help firms survive during rough times, but simply using AI won't be enough.

Companies must optimize AI. By using integrated data, models, and development pipelines, they can implement improvements to AI models and generate consistent commercial value from them. They can also incorporate robust AI governance with automatic update pipelines, eventually mitigating risks associated with AI.

2. Hyperautomation

The need for greater, widespread automation has come to light as growth, digitization, and operational excellence has received increased attention. A business-driven method for identifying, validating, and automating as many IT and business processes as possible, hyperautomation combines several elements of process automation and integrates tools and technologies that increase the capacity for job automation.

It begins with robotic process automation (RPA) at its foundation and adds AI, process mining, analytics, and other cutting-edge tools to increase automation capabilities. The goal is to automate increasing amounts of manual work while improving the efficiency and productivity of the workforce. Scalability, remote operation, and business model disruption are also made possible by hyperautomation.

3. Decision Intelligence

Numerous experiences and biases can affect judgments, and in a world of rapid change, organizations need to make better decisions faster. By modeling decisions using a framework, decision intelligence enhances organizational decision-making and uses stakeholder behaviors to influence adoption and decision-making.

Frequently, business intelligence, data science, management, and decision modeling are fused to make better conclusions. To inform, learn from, and improve decisions, it represents each choice as a collection of processes. Based on user input and the lessons learned, fusion teams may manage, assess, and improve decisions. Integrating data, analytics, and AI also allows the development of decision intelligence platforms to support, amplify, and automate judgments.

4. Composable Applications

Fusion teams encounter a variety of obstacles: They may not have coding expertise, may be restricted to outdated technologies, and are yet compelled to deliver work quickly. Composable applications that are created from modular, business-centric packaged-business capabilities (PBCs) or software-defined business objects. can helpspeed up the time to market for innovative software solutions and unleash enterprise value by making it simpler to utilize and reuse code. Fluid source pools are delivered by real-time software and composable applications, which reduce operational complexity for traditional workloads while boosting operational momentum for next-generation services and applications. PBCs also develop reusable modules that fusion teams may independently build to quickly develop new-age applications and meet the evolving needs of customers.

Accelerating Growth

Once the foundation and building blocks have been established, it's time to concentrate on technology developments that increase the value of the products the business produces. These innovations serve as prime examples of the IT force multipliers that will increase sales and market share.

1. Generative AI

With the help of data, generative AI can learn about artifacts and produce new creations that are close to the original but do not replicate it. With generative AI, computers can recognize the underlying pattern in the input and generate material that is similar. For this, a variety of methods can be employed, including generative adversarial networks (GANs) and transformers (GPT-3, LaMDA, and Wu-Dao).

AI is typically taught to draw conclusions, but true force-multiplying technology can come up with new ideas on its own. By learning a digital representation of artifacts from sample data, generative AI helps create new, unique realistic artifacts that bear some resemblance to the training data but are distinct from it. This makes it possible for generative AI to drive quick innovation for businesses.

2. Autonomic Systems

As self-managed machines or computer programs, autonomic systems canadapt to their surroundings and dynamically alter their own algorithms in the present to improve their performance in complex ecosystems. Autonomic systems produce a flexible collection of technological capabilities that can adapt to changing conditions and requirements, improve performance, and defend against threats without human intervention.

In contrast to traditional manual management cannot scale at the same rate as an organization's rapid growth, autonomic systems are self-configuring hardware or software that can adapt to their surroundings. Unlike autonomous or automated systems, they can also dynamically change their own algorithms without requiring software updates and enable quick responses to change and the large-scale management of complicated situations.

3. Total experience

Your brand will endure for a longer period if customers have a positive experience using your products and services or browsing your website. To provide customers with the highest level of quality, many firms follow the customer experience (CX) management track, but this is not the only experience that has an impact on businesses.

User experience is influenced by employee performance and satisfaction, and vice versa. This entire cycle has interrelated parts that require meticulous maintenance in order to function effectively. To improve the experiences of both customers and employees, total experience integrates four disciplines: customer experience, user experience, employee experience, and multi-experience. The objective is to connect and improve each of them for a more, all-encompassing experience for everyone.

4. Distributed enterprises

The idea of distributed enterprises has gradually but steadily gained attention since the pandemic began. This is because the strategy is shown to be the most effective way to deal with post-pandemic issues.

Many businesses are already making the conversion to a distributed approach, thanks to benefits like increased agility, a wider talent pool, increased production, and many others. A virtual-first, remote-first architecture strategy called distributed enterprise is used for digitizing consumer touchpoints and creating experiences that support products. Distributed enterprises are better able to meet the needs of remote workers and customers, who are driving demand for virtual services and hybrid workspaces.

Conclusion

In a world where customers and employees are setting the rules of the game, true digital transformation stems from providing a modern, secure, and unified experience. While adoption of new technology is the steppingstone to any digital transformation strategy, a deep and continued focus on data management, infrastructure improvements, and security and compliance is just as important. By using the right data governance tools, modernizing systems, moving to the cloud, automating processes, integrating security with the underlying infrastructure, and embracing IT security best practices, organizations can achieve their performance goals, reduce business risks, and drive better economies of scale.

Ensuring that these three categories are operating at optimal capacity puts any organization in a better position to deliver the types of products and services customers, today, expect. If an organization does not have the internal resources to devote to these changes, they have the option to opt for professional services to bridge skill gaps, implement new solutions, or simply supplement an organization's core team. Additionally, utilizing a Managed Services Provider can deliver a much-needed breather, allowing the business to focus on important priorities such as product innovation and user experience.

About Synoptek

Synoptek delivers accelerated business results with enabling transformative full-life-cycle systems integration and managed technology services. We partner with organizations worldwide to help them navigate the ever-changing business and technology landscape, build solid foundations for their business, and achieve their business goals.

Learn more about our service offerings:

Consulting, IT Leadership, and Management	Business Applications	Data Insights	Product Development
Workforce Productivity	Cybersecurity	Cloud Advancement	Infrastructure Performance

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