

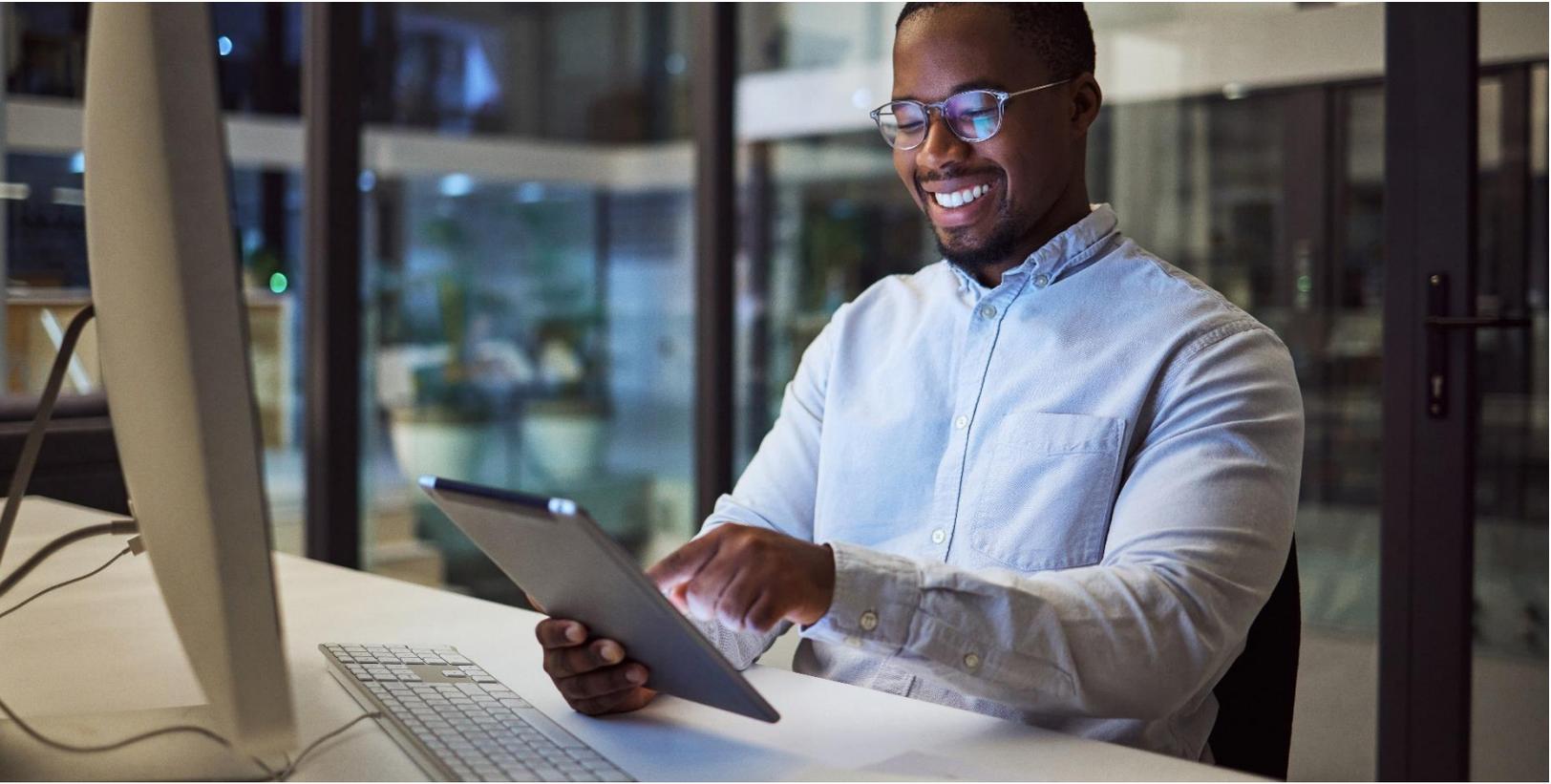
DIGITAL TRANSFORMATION

Digital transformation is not a journey with a start, middle and end. It is an ongoing process.

Table of Contents

Introduction	1
Major Benefits of Digital Transformation.....	2
The Six Success Factors for Digital Transformations	3
Interlocked Requirements	4
Challenges of Digital Transformation	5
What will Digital Transformation Mean for Your Business.....	5
Technological Advances	5
Convergence	6
Talent & Culture.....	7
Culture	7
Talent	7
Key Activities Supporting Digital Transformation Through Talent, Mindset, & Culture	7
Trends Impacting Digital Transformation	8
The Top 4 Digital Transformation Priorities for 2023.....	8
Key Activities for the Digital Transformation of Customer Experiences	9
Customer Communication Priorities to Support Digital Transformation	9
Key Activities for the Digital Transformation of Workflows	9
Key Activities for the Digital Transformation of Data & Analytics	9
The Path to Enabling Innovation and Revenue Generation.....	10
Tools for Digital Transformation	10
Funding the Process of Digital Transformation	12
Best Practices to Ensure Success	14
General	14
Leadership.....	15
Customers and Users	15
Conclusion.....	16

Discover how leading firms improve the customer experience, create efficiencies, and drive business growth through digital transformation.



Introduction

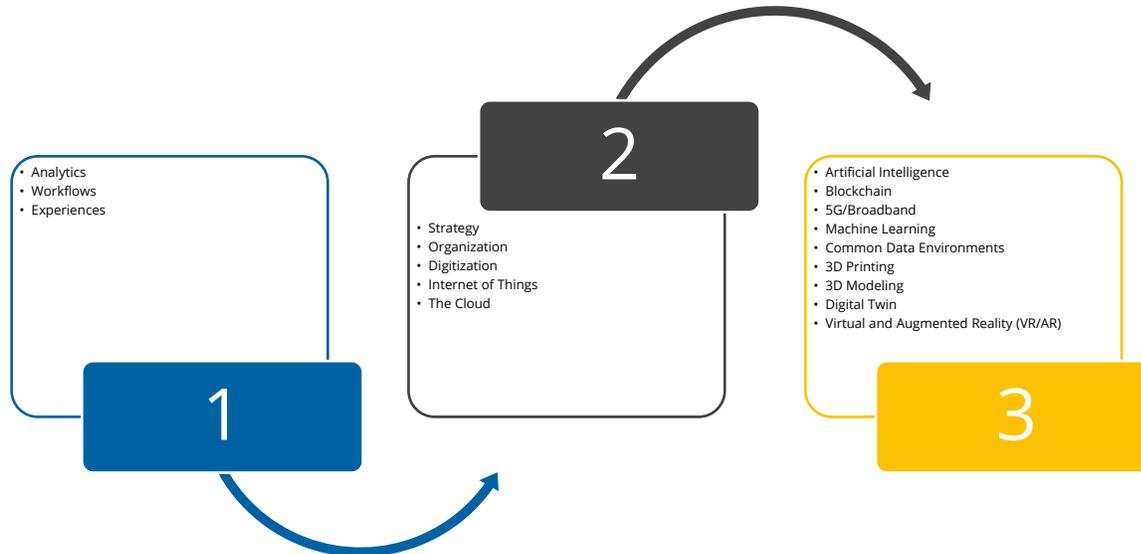
Organizations can no longer afford to think of digital transformation as anything less than a necessity. Firms must continually evolve their business models and value propositions with next-gen technologies to maintain and build competitiveness with scalable business architecture. This requires a culture of innovation that enables rapid adaptation.

Digital transformations typically occur in multiple stages, and organizations will reach different overall maturity levels. Developing awareness and embarking on the journey with a strategic plan and roadmap in mind is essential. Like every other type of transformation, a digital transformation is a change management journey at the core.

The COVID-19 pandemic forced organizations to accelerate their rates of digital transformation to cope with its impact. Innovative practices, such as virtual communications, personalized digital engagement, immersive modeling, rapid prototyping, and efficient collaboration, are now mainstream. It also changed thought processes and beliefs around an organization's ability to undertake digital transformation projects as initiatives that were completed in weeks and months that would normally have taken years in the scramble to adapt and survive. The reality that digital disruption is both continuous and accelerating was found to be a key truth recognized by many. Research has found that 71% of organizations expect digital transformation disruption in the next [two years](#).

The pandemic's disruption has created two classes of organizations. The first class has a low digital maturity level, struggles to implement innovative practices, and continues in their attempts to catch up. The second organization class has prominent levels of digital maturity, thrived during the pandemic, has already implemented most of the latest innovative practices, and is preparing for the next wave of digital disruption. Overall, [research](#) estimates that 87% of organizations actively pursue digital transformation, with 46% undertaking enterprise-wide efforts and 41% focusing on specific business areas.

Digital Transformation Maturity Framework



The top two enterprise IT goals in [3](#) include increasing cloud adoption via multi-cloud or hybrid models and optimizing data and analytics capabilities such as AI, machine learning, and IoT. Tying for third place is transforming or modernizing legacy applications, upgrading legacy infrastructure, and networking technologies.

Historic value drivers such as the expansion of production capacity and product portfolio diversification are being replaced by [three new](#) transformative forces, according to EY consulting, including:

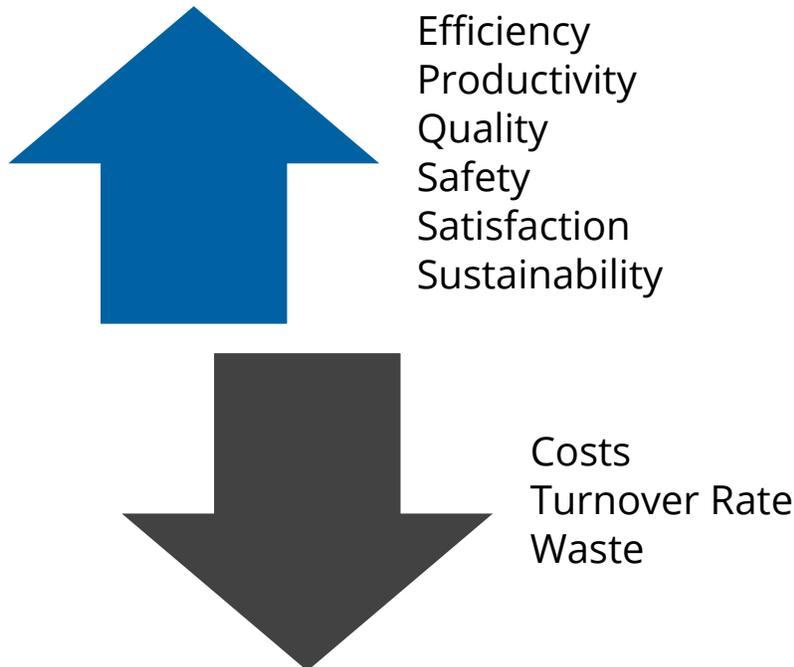
- Humans at the center of value creation
- Technology at speed
- Innovation at scale

Fortunately, if there is one lesson many enterprise-level organizations have learned recently, it's far easier to benefit from transformative change than they'd thought.

Major Benefits of Digital Transformation

Digital transformation will accelerate an organization's growth and optimize its operations by:

- Optimizing operations & increasing productivity
- Increasing customer satisfaction
- Ensuring data safety, integrity, and cyber security
- Smart decision-making through data analytics
- Greater sustainability and profitability
- Increasing flexibility & scalability through the cloud



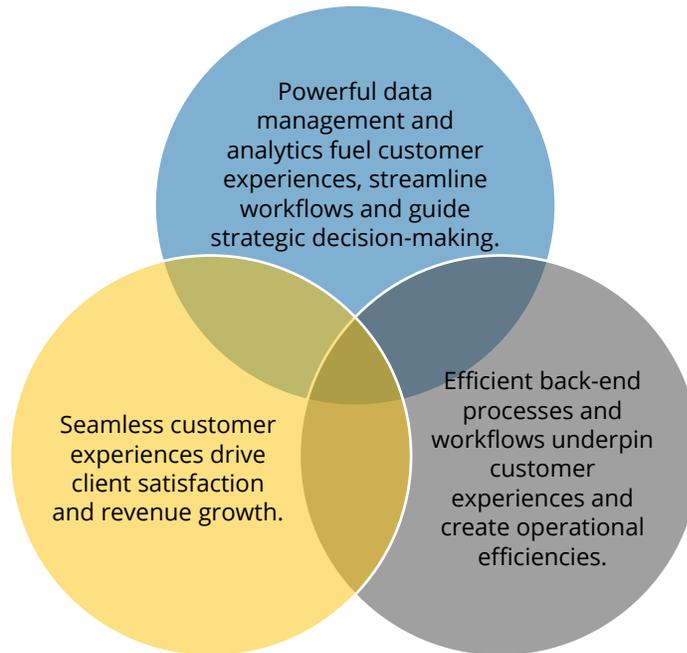
The Six Success Factors for Digital Transformations

A [study](#) by BCG uncovered six factors that move the odds for success from 30% to 80% for transformation. These factors are:

- **An Integrated Strategy with Clear Transformation Goals.** The strategy describes a transformation's why, what, and how, each of which is tied to specific, quantified business outcomes.
- **Leadership Commitment from the CEO Through Middle Management.** The organization has reliable leadership engagement and alignment, which carries to middle management's ownership and accountability.
- **Deploying High-Caliber Talent.** Management identifies and frees up the resources to drive the transformation.
- **An Agile Governance Mindset Will Drive Broader Adoption.** Leaders quickly address roadblocks, adapt to changing contexts, and pursue cross-functional, mission-oriented, "fail-fast-learn" behavioral change in the organization. They can deal with individual challenges without losing sight of the broader goals.
- **Effective Monitoring of Progress Toward Defined Outcomes.** The organization establishes clear metrics and targets around processes and outcomes, with sufficient data availability and quality.
- **Business-Led Modular Technology and Data Platform.** The organization puts a fit-for-purpose, modern technology architecture driven by business needs to enable secure, scalable performance, rapid change deployment, and seamless ecosystem integration.

Make the Shift from Reengineering to Innovation as You Scale Your Digital Transformation

Interlocked Requirements



Organizations leading the way in digital transformation are **1.5 times** more likely to report increased revenues from their projects.



Challenges of Digital Transformation

A digital transformation is a complex and often strategic organization-wide set of initiatives and brings several significant challenges with it:

- **Managing Change** - Managing and driving change are organizations' biggest challenges when introducing digital transformation projects.
- **Lack of Experience** - The ability to transition smoothly and successfully requires experience and expertise that are not always available inside the organization. Outside resources are sometimes needed to give strategic direction, provide required capabilities, and adapt this process to the IT infrastructure.
- **Culture** - Digitalization is a technical process, but cultural change is at the core of any business transformation, and that remains one of the most underestimated challenges organizations face.
- **Leadership Commitment** - Digitalization is complex and requires the executive team's unwavering support and strategic patience regarding sponsorship, budget, time, and cultural transformation. Executive teams must set the vision, motivate their team, and demonstrate the benefits of such a complex endeavor. Strong leadership is needed to ensure that the system deployed will be flexible and scalable to meet future needs.
- **Project Organization** - Bringing people from different business units and functions to collaborate on a single project is challenging for organizations of all sizes. When implementing a digital transformation project, it is critical to set up cross-functional teams into a matrix organization that reports to executives in a steering committee.
- **Communication** - Digital transformation must be clearly understood and communicated to the entire organization via a roadmap. In some situations, this can be accomplished with a pilot project that allows the organization to rally around a step-by-step approach for a successful long-term outcome.
- **Level of Investment** - While the duration and investment levels depend on the initial assessment of the organization's starting point and maturity level, most organizations struggle with visibility to the time, effort, and cost required and lack the resources to implement a digital transformation successfully.

What will Digital Transformation Mean for Your Business

Technological Advances

Keeping up with technological change is the most frequently cited digital transformation challenge. The pace of that change is only going to increase. Advances in AI are leading to a new generation of more powerful solutions. The rise of quantum computing could also drive a new wave of opportunities we cannot yet imagine.

As organizations digitally reinvent their businesses and move to modernize their core operations, many look to independent third-party industry solutions to support critical but non-differentiating functions. This allows them to quickly access innovative technologies, scalability, and resilience while reducing costs and overall transformation risks, accelerating time-to-market. It also frees management attention and other critical resources devoted to different core needs.



Convergence

Convergence is a series of market movements and innovative practices that blend previously separate industries, businesses, and technologies. Convergence is the process of bringing together two or more things. In the business world, convergence is used to describe the trend of companies from different industries working together to create new products or services. Organizations today believe they will be impacted by convergence in the next few years. In fact, [fifty-nine percent](#) of organizations with the highest digital maturity said convergence was the most critical influence on their business. Benefits include:

- Improve efficiency and reduce operating costs
- Drive innovation
- Improve business decision making
- Streamline/ Optimize our supply chain
- Improve customer experience and engagement

Process Convergence: Formerly discrete processes and workflows are now being connected across our business for greater efficiency and integrated goals. It is the typical starting point for organizations as they embark on digital transformation initiatives.

Technology Convergence: Technologies such as Cloud, IoT, AI, Supply Chain, and Augmented and Virtual Reality are converging to create new use cases and solutions. It is the natural progression from process convergence as the tools and software used by different business teams start to integrate and become multi-functional rather than single-use, such as smart devices and business software platforms.

Data/information Convergence: Formerly siloed data/information is now more accessible and used across our business and industry to power a range of new products and services. Data sources may live in different repositories and be managed by different owners, but their convergent use within teams generates value greater than the total of their parts. The driving force is improving the customer experience and engagement.

Industry Convergence: Formerly discrete industries are becoming more similar and connected, finding ways to collaborate for mutual benefit and creating new opportunities for value creation. This collaboration can take many forms, including partnerships, transactional relationships, or shared resources. Examples include electric vehicles, utilities, government, smart cities, and industry organizations.

Technology and process convergence are recognized as having the biggest impact on organizations today. Since industry and data convergence takes longer to impact organizations, it may lower their perceived impact.

Talent & Culture

Effective digital transformation requires more than just next-gen technologies. Firms need the right talent, mindset, and culture. This starts with a consistent digital vision, roadmap, and robust talent acquisition strategy.

Culture

Resistance to change is a problem in many organizations, especially large ones with legacy systems and practices. This resistance can be particularly strong regarding the broad thinking and cross-siloed approach that is the key element of convergence.

Too often, business departments simply do not trust their IT counterparts. The developer/IT relationship hinders most organizations' ability to take advantage of digital transformation (87%). Until this problem is tackled and solved, critical initiatives around digital transformation will stall.

Talent

Convergence requires designers and project planners to have far more expansive and disciplined thinking than before to design for convergence. They also need training and familiarity with the right tools to help facilitate that kind of thinking. [Research](#) shows that the top roadblock to innovation progress is a skills/knowledge gap.

As with any other innovation, hiring people with the right skills to thrive on convergence is challenging, especially since they are scarce and in high demand at the start of the disruption curve. Human resources teams are under constant pressure to find qualified people who can enable convergence, both through their work and their upskilling of coworkers. It's a reminder that no matter how much organizations invest in the best technology platforms, it all comes down to the people that use them.

Key Activities Supporting Digital Transformation Through Talent, Mindset, & Culture

- Clear digital vision and implementation roadmap
- Skills and capabilities around agile working methods
- Defined roles, including a single executive/team to head digital transformation
- Effective acquisition, retention, and development strategy for digital talent
- Culture of continuous innovation
- Digital center of excellence or start-up incubator to foster innovation

Trends Impacting Digital Transformation

Although many overlapping trends are defining enterprise technology currently, here are some key digital forces driving the evolution of business.

- AI, Cryptocurrency, and Other New Technologies
- Cloud-native Platforms (CNPs)
- Composable Applications
- Data and Operational Silo Integration
- Hybrid Workforce
- [Hyperautomation](#) of Processes
- Increased User Experience (UX) Expectations
- Security
- Technology Skills Shortages – Particularly in newer technologies



The Top 4 Digital Transformation Priorities for 2023

Organizations are focusing on keeping the digital transformation momentum from the pandemic. Their focus is on the following top four priorities:

- Customer interactions
- Operations
- Sales & Marketing
- Strategic Planning

Accelerating their application development and modernization projects is important to organizations looking to enable innovation. Embedding security and governance into the development lifecycle early on is of increased importance to these organizations.

To achieve their goals, [42%](#) of organizations rely on third-party providers to help plan and execute digital transformation for business innovation. An additional 45% plan to leverage third parties in the next year.

The use of third-party providers appears to be a smart strategy as it is reported that organizations that use third-party providers appear to be at an advantage for modernization as they tend to be experiencing enterprise-wide transformation at [twice](#) the rate of those with narrower efforts.

Key Activities for the Digital Transformation of Customer Experiences

- Shift from paper to digital communications
- Seamless, omnichannel client experiences across devices
- Digital interactive documents with sections that customers can customize to understand their communications better
- Data-driven continuous 38% improvement of client experiences
- Micro-personalized 36% of marketing and communications

Customer Communication Priorities to Support Digital Transformation

- Personalizing the experience
- Providing relevant content
- Delivering engaging communications
- Communicating how you are protecting their data and privacy
- Letting customers choose how to receive their communications

Key Activities for the Digital Transformation of Workflows

Increased transaction volumes, the growing complexity of regulatory requirements, and the drive for efficiencies make workflow digitization and automation essential.

Key Pain Point: Legacy systems continue to inhibit transformation, and many manual and paper-based processes remain.

- Digitized processes and use of data to improve process efficiency
- Modern IT platform
- Automation through Robotic Process Automation (RPA) where possible
- Use of AI and machine learning for intelligent automation

Key Activities for the Digital Transformation of Data & Analytics

Advanced use of digitized data and analytics is fundamental to all aspects of digital transformation. It fuels strategic decision-making, helping to identify risks and opportunities and ways to optimize processes across the front, middle and back offices and enhance customer journeys.

Data management and analysis are also one of the most challenging aspects of enterprise-wide digital transformation. Most organizations use external providers to access specialized expertise, resources, and visualization tools.

- Centralized data platform with access to data across business departments
- Advanced procedures to oversee ethical and regulatory aspects of data management
- Adoption of advanced systems and tools for data security and privacy
- Use of a wide range of internal and external data sets

The Path to Enabling Innovation and Revenue Generation

Organizations looking to enable innovation and revenue generation expect the following technology initiatives to deliver the biggest impact on their capabilities.

- Optimizing IT infrastructure
- Increasing use of As a Service delivery models
- Leveraging modern networking strategies
- Implementing cloud-native initiatives
- Modernizing legacy technology
- Evaluating optimal/best-fit platforms for infrastructure & applications
- Outsourcing select IT management needs to third-party providers



Tools for Digital Transformation

A digital transformation is a considerable overall change for any organization. To make the process successful, there are different tools that can be used. While digital transformation implies IT tools, IT is a resource rather than the lead in a digital transformation. The function of IT is to support the architecture and infrastructure set by the vision of such digital transformation. A successful digital transformation requires a customized digital foundation solution.

Below is a list of software tools/technologies to consider that will help increase efficiency, productivity, profitability, and customer satisfaction.

- Business Process Automation - Automate data entry and other repetitive tasks for increased efficiency, reduced costs, and improved customer service.
- Cloud Storage – Enable global access to information from any system at any time with an infinitely scalable, secure storage solution that prevents data loss.
- Collaborative Suites - Share real-time information and access tools to manage your data, execute critical business functions, and organize activities for improved communication and collaboration at work.
- Communication – Centralize all vital information and provide a sole source of truth for corporate communications with support for synchronous and asynchronous communication.
- Computer Integrated Manufacturing (CIM) – Computer-controlled machinery and automation systems in manufacturing products.
- Computer-Aided Design (CAD) - Use of computers to aid in designing, modifying, analyzing, or optimizing a design.
- Computer-Aided Engineering (CAE) - Computer Software used to aid in engineering analysis tasks.
- Computer-Aided Manufacturing (CAM) - Software and computer-controlled machinery to automate manufacturing processes.
- Content Management System (CMS) – Create and manage digital content like websites and mobile apps to streamline the buyer’s decision-making process and deliver an exceptional customer experience with a visually attractive, easy-to-navigate platform that enables the delivery of targeted, relevant information and answers to frequently asked questions.
- Customer Relationship Management (CRM) - Process in which a business or organization administers records of customer interactions, typically using data analysis to study a large amount of information.
- Digital Adoption Platforms (DAPs) - Create customized in-app guidance such as walkthroughs, task lists, smart tips, and tutorials that help users to navigate the app for a better employee, customer, and user onboarding and the collection of interaction data.
- Document Management/Enterprise Content Management - Reduce the time it takes to find information and documents, control document versions, and eliminate document loss through a central repository to store, organize, and retrieve documents.
- Enterprise Resource Planning (ERP) - Integrated management of major business processes in real-time and mediated by software and technology.
- Intranet Platform - An intranet platform can help to store, collect, and centralize all corporate information. This can significantly improve employee engagement and self-service and increase daily productivity. In addition, such a platform can help to build a strong corporate culture by facilitating employee collaboration and knowledge sharing.
- IT Asset Management (ITAM) - Oversee the entire lifecycle of IT assets, from planning and implementation to updating and replacement, including hardware and software.
- IT Service Management (ITSM) Dashboard - Eliminate information silos to support cross-functional collaboration and improve the user experience for the workforce with a single system of action that combines all your IT services.

- Manufacturing Execution System (MES) - Computerized systems are used in manufacturing to document and track raw materials' transformation into finished goods.
- Product Data Management (PDM) - Business function often within the product lifecycle management responsible for managing and publishing product data.
- Product Life Management (PLM) - Management of the data and processes used in a product's design, engineering, manufacturing, sales, and services.
- Project Management – Provide holistic project visibility for team members and managers with a tool that enables teams to create and schedule tasks, share documents, stick to project timelines, track progress, and increase efficiency and responsiveness.
- Recruitment Management – Make informed and collective hiring decisions with a system that identifies and shares resumes with team members and hiring managers, comments, posts interview feedback, and organizes the next steps in the recruitment process.
- Warehouse Management System (WMS) - A software application that supports and optimizes warehouse functionality and distribution center management.

Funding the Process of Digital Transformation

CFOs and CIOs now share a common and pressing objective of meeting business needs through a digital transformation while maximizing the value of investments and containing costs. A study recently found that inflation and other macroeconomic factors have steered digital transformation to the forefront of CFOs' priority list. The 2022 Global CFO survey, conducted by Everest Group and supported by business process management organization WNS Holdings Limited — found that CFOs are identifying digital as a key priority. 70% of surveyed CFOs pointed to implementing digital technologies that can improve efficiency, effectiveness, and stakeholder experience as their main priority.

Investing in automation or other key technologies amid forecasts of recession means CFOs can operate more strategically, lower costs, and increase productivity. Overall, finance executives are more willing to invest in 2023 than in past

years, with approximately 70% of organizations stating their willingness to invest compared with 47% who said the same in 2020. Economic concerns are also putting a focus on governance, risk, and compliance.

At the organizational level, digital transformation differs from typical IT investments. It is always an emergent occurrence, and metrics such as profitability are not relevant. In organizations where digital transformation projects are



met with skepticism, starting small with self-funded projects opens opportunities for seed funding once more people are on board with the initiative.

Leasing options allow CFOs and CIOs to align strategic growth plans with cost-effective, innovative, and flexible IT investment – enabling swift digital transformation through immediate, affordable access to the right advanced technology from a range of IT vendors, particularly where hardware investments are concerned.

Some organizations look to investor funding as the path to accomplishing digital transformation projects. Investors in digital transformation projects also tend to come with previous project experience that can provide valuable guidance and support during projects.

Grants provide another source of funding for certain projects or organizations. Exploring the wide variety of grant programs and project types can benefit critical projects.

Others may find that categorizing the types of digital investments needed to fund digital transformations provides transparency and clarity for obtaining financial support. There are three categories of digital investments. The first category is maintenance-related investments, such as website security and compliance projects. The second category is foundational investments, such as core systems and platforms, enterprise resource planning (ERP), customer relationship management (CRM) systems, and increasingly cloud-based infrastructure. The third category is exploratory investments, such as digitizing products or developing innovation-driven new services.

Top IT innovation funding strategies at over [40%](#) of organizations include using business-critical transformation funds, restructuring IT teams, and reclassifying projects to fit funded budget areas.





Best Practices to Ensure Success

Due to the nature and scope of digital transformation and the differing environments, statuses, and goals at different organizations, these best practices should serve as a guide when embarking on a transformational journey.

Digital transformation initiatives should start with and be driven by customer needs. These unmet needs allow us to reimagine and rediscover how technology can solve problems and deliver value, allowing for an improved customer/user experience. Every decision must be made with the customer in mind while keeping the need for continuous transformation, as what delights today may not be tomorrow. The latest and greatest product or tool will not be transformative if the ecosystem within which it operates (people, process, and technology) cannot take advantage of it.

General

- Do not focus solely on automating processes; instead, focus on automating away redundant steps, approvals, etc., and simplifying the experience for customers and users.
- Digital transformation is not just about technology and should include looking at ways to improve customer and user-facing processes (through business process reengineering). Moreover, an organization must ensure they have the staff capacity, skills, and competencies to support the new and more efficient process. Optimizing a strategy without considering what needs to be done internally (investing in additional staff, training, development, etc.) will negatively impact the accessibility of services.

- An organization's digital transformation goals should include building a high-performance environment and key elements on all levels of the organization (processes, people, technology, culture, etc.)
- Digital transformation should also include providing secure services, enabling a diverse mission, and propelling creativity and innovation.
- Digital transformation efforts should use the full power of the cloud, work to simplify processes and technology, and leverage data as a strategic asset.
- Building on-demand, scalable capacity (in terms of staffing and technical resources) is crucial. Leaders must invest time, funding, and resources to ensure the transformation work is sustainable over the long term.
- Ensure change management practices are embedded into the organization, focus on the end user, and engage and elicit end-user support.

Leadership

- Leaders play a crucial role in influencing behaviors and the overall culture. When leaders believe in the transformation and back it up with tangible action, they can propel the next level of change forward.
- A single leader like the CIO does not just drive digital transformation; business leaders must be on board and part of the process; understanding stakeholder (e.g., user and customer) needs is key, and it includes answering questions, addressing challenges, and following through with commitments for users and customers; Leaders need to make sure teams have clearly defined roles and responsibilities in support of a larger vision.
- Communicate early and often (using plain language that everyone understands); Having patience in how quickly the organization can change is key; Developing resilience, persistence, and persuasion skills are important, as is allowing teams to take risks.
- Vision and metrics guide the entire effort and must be carefully crafted, transparently measured metrics, and communicated across many different channels and to all levels of the workforce.
- The best transformation efforts involve leading with the value we deliver to customers and users.

Customers and Users

- Customer needs and user experience should drive any digital transformation efforts. The key focus should always be on how we can improve services for customers and users. Make every decision with the customer in mind.
- Working in an agile fashion with a customer-centric lens and receiving frequent feedback from customers and users is critical for digital transformation success.
- Do not lose the human element amidst increased digital capabilities; traditional service delivery is still necessary to benefit many customers and users.
- The people who do the work daily know how to improve things. Front-line citizens are also a great resource as they are end users and can provide valuable feedback and ideas. These groups must be involved at the start and throughout any transformation effort.
- Maintaining a focus on organizational agility and delivering Minimum Viable Products (MVP), getting MVPs into the hands of customers and users, and getting their feedback is critical to success. Transformation requires relationship building.



Conclusion

There is no perfect roadmap to plan and implement a digital transformation successfully. A full commitment from the leadership and qualified internal and external resources are required to envision, plan, execute, improve, and sustain. The time for action is now. Understanding the functional and overall operational value added by a digital transformation and how it impacts your competitiveness in the market is critical. Reimagine how you use technology to steer your operations, train and enable your people to drive competitive advantage, and strengthen your leadership position in your industry. Take time to understand convergence and make it work for your organization to gain an under-leveraged competitive advantage.

Although technology is a major underlying element of convergence, it comes down to people. Having the right culture and leadership will be the primary drivers of success.