



Digital
Strategies for
Future-Proofing
Your Business in

2017

In today's competitive business environment, enterprise leaders are under constant pressure to innovate, overcome technology challenges, and adapt to rapidly changing market conditions. They are also responsible for anticipating their organization's future needs and building solutions that enable long-term growth, or "future-proofing."

Successful future-proofing initiatives break down traditional communication silos and give way to a more modern, agile enterprise – one that can compete with industry disrupters not shackled by traditional business models or corporate bureaucracy. Future-proofing should not be an afterthought, but a strategic consideration in any purchasing decision that involves a significant digital investment.

Of course, no organization can completely protect itself against change and innovation.

There's also no single miracle pill or one-size-fits-all-solution that will address the unique needs of every company. As we explore future-proofing, we're aiming to build a foundation that minimizes replacement and maintenance costs, reduces long-term risk, and makes it as easy as possible to offer exceptional products or services that can evolve with the marketplace.

In the following guide, we explore three key, interconnected concepts that can act as the basis for future-proofing initiatives at any enterprise organization: **digital infrastructure, customer experience, and employee satisfaction**. Though each business leader will have his or her unique priorities, and there are many more factors that contribute to an organization's long-term health, these are three areas where thoughtful digital investments can yield incredible results.



● Digital Infrastructure

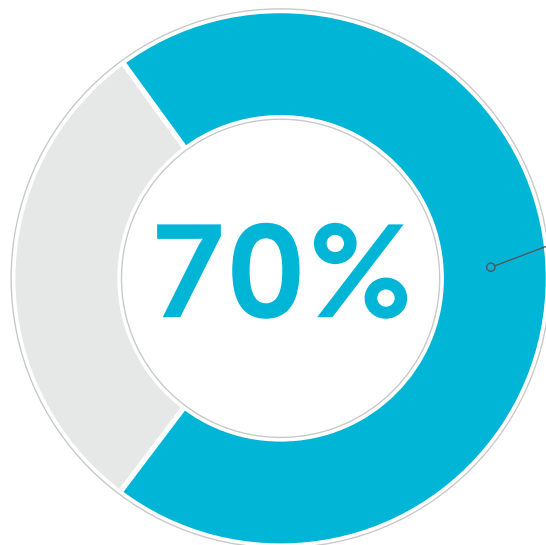
● Customer Experience

● Employee Satisfaction

DIGITAL INFRASTRUCTURE

Most enterprise organizations still run on “legacy” infrastructure involving software, applications, and languages that are years – if not decades – old. According to [Informationweek](#), 70% of business transactions are still processed in COBOL, a language designed in 1959 and patched in 2002.

But the startups and services responsible for digital disruption are typically working with new and more advanced technology. Investing in modern digital infrastructure should be a priority for any enterprise that wishes to remain competitive today and continue to evolve in the future.



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Source: [Informationweek](#)

Strategy Before Tactics

It's been said this year's IT investment becomes next year's maintenance expense, and while that is technically true, it is also possible to reduce maintenance costs with careful planning. Likewise, most of us would prefer a maintenance expense over a replacement expense – strategic choices can reduce the need for complete overhauls.

Today's digital ecosystem consists of an unprecedented and constantly increasing number of tools, solutions, and best practices. Ad hoc implementations can provide a quick fix to tactical problems, but often lead to technological complications, limited benefits, and business complexity, which ultimately hinder long-term success.

To maximize the value of modern technology, it's important to build a technology stack that exhibits several key attributes, including scalability, security, configurability, interoperability, reliability, and extensibility. While these all play an important part in the selection process, two attributes are essential consideration for future-proofing, scalability and security.



What is scalability and why is it important?

The “textbook” definition of scalability is the ability of an IT system to maintain a specified level of performance as the workload on the system increases. So, in essence, scalability is what enables a technology system to meet growing demands without sacrificing performance.

The workload on an IT system can grow for a variety of reasons, including:

- an increase in the number of individuals who access and use the system,
- an increase in the number of operations or “requests” the system processes,
- an increase in the complexity of the operations the system processes.

Scalable infrastructure won’t require frequent updates or changes and has the capacity to meet an organization’s needs for the foreseeable future.

Because scalable infrastructure has the flexibility to accommodate an enterprise’s future needs, it mitigates the risks associated with acquiring and implementing a new solution and protects the organization’s investment.



Scalability and the Cloud

Scalability often goes hand-in-hand with Cloud technology. The benefits of Cloud solutions include decreased time-to-market, reduced costs, improved efficiency, and an increase in agility. Cloud offers the potential to transform the design, development, and deployment of next-generation technologies and represents a new way to architect digital solutions.

Ironically, most hesitation regarding Cloud adoption is rooted in misconceptions surrounding Cloud security and an enterprise's ability to protect critical data.

Security is the second essential consideration for future-proofing an organization's digital infrastructure, but it's important to note that the Cloud is not inherently less safe than an on-premises or hosted solution or more prone to attack. In fact, the Cloud is arguably more secure than the alternative.

Information Age editor Ben Rossi [writes](#), "...both do as good a job as they can to protect from attacks. But in terms of human risk, which is often the most damaging of all, employees with potentially malevolent intentions will find it more difficult to locate certain data in the Cloud."



How does security enable future success?

Enterprise organizations are now responsible for vast and growing amounts of data that are proprietary or confidential and highly valuable, both to the organization itself and potentially to malicious third parties. At the same time, the number of employees who need access to this data is larger than ever before, and the access needs of users often vary significantly, even within departments.

The consequences of flawed or inadequate security can be significant; just ask the executives at countless enterprise organizations that have faced [data breaches](#) over the last several years.

Not only can businesses experience short-term revenue loss coupled with unexpected costs related to damage control, the long-term ramifications to public perception can be catastrophic to an organization's health.

For this reason, when changing or developing any piece of their digital infrastructure, business leaders must understand what security capabilities are needed and how each prospective solution addresses those capabilities. Typically those capabilities fall under three core dimensions known as the "CIA Triad."



Understanding the CIA Triad

There are three core dimensions of information security: confidentiality, integrity, and availability. Security professionals refer to these three essential elements as the “CIA Triad,” and luckily all three are relatively easy concepts to master or at least understand.

- In the information security context, **confidentiality** means that only authorized individuals or systems can access specific data on a “need to know” basis.
- **Integrity** refers to the accuracy of all or some information and the prevention of unauthorized modification of data or other system components. The primary mechanisms for protecting both confidentiality and integrity are user **access controls** and **data encryption**.
- **Availability** means an information system and the data it contains are readily accessible to authorized users. Systems and data can become unavailable because of accidental occurrences (natural disasters, power outages, etc.) or intentional attacks.

Attacks that specifically target availability are known as **denial of service attacks**. Maintaining availability is typically more complex than integrity or confidentiality and requires a wider variety of strategies.

For example, using redundant hardware components and having an effective disaster recovery plan can minimize the effects of hardware failures and natural disasters. The primary mechanisms for dealing with denial of service attacks typically include a combination of detection, diagnosis, and remediation.



CUSTOMER EXPERIENCE

It's been more than 10 years since Don Peppers and Martha Rogers declared the customer experience the single most important factor for business success in *Return on Customer*.

And yet, many leading enterprise organizations still struggle to prioritize the customer experience or confuse it with customer marketing — that is, the communications and promotional activities used to attract and retain customers.

The truth is, marketing activities represent only a fraction of the interactions that exist between company and its customer. Perhaps more importantly, what an organization **says** in its **advertising** has far less impact on customer perception than what it **does** in **reality**.

The customer experience is the sum of all interactions a customer has with a company. Like digital infrastructure, investing in a memorable customer experience now can instill the sort of loyalty that will ensure an organization's future success. This is why we consider it a key consideration for future-proofing.

The first step toward improving the customer experience is building a successful customer experience strategy that combines an organization's unique brand identity with research, analytics, and careful planning.



Building a Digital Experience Strategy

Brand Identity

Delivering on the brand promise, expressing the brand personality, and bringing the brand attributes to life should be top priorities when designing the customer experience.

First, an enterprise and/or its partners must define or reaffirm the overarching ideas that represent the brand. REI's brand platform is infused with the excitement and adventure of the outdoors; Chick-fil-A's is exceeding customers' expectations through service with a servant's spirit.

Segmentation

The next step is to break down customers into unique personas. Different target segments have different needs so their desired experiences will also vary.

Most organizations will begin with demographics, but it's also a good idea to consider other factors that can influence brand perception — some customers may value convenience over price, for example. Others want to do business with an organization they relate to or that provides a source of entertainment.

Persona mapping requires an organization to describe each segment with a common profile, key drivers for their purchase decisions, and an understanding for each group's unique needs from an experience perspective.



Experience Design

Once an organization has defined its brand identity and researched its customers' values, it can begin determining how to meet the segment-specific needs of each group, either by improving existing approaches or by developing entirely new experiences.

These needs are often uncovered using advanced, quantitative data analytics in conjunction with qualitative customer interviews. All the factors that make up the digital customer experience — including product, service, content, channels, pricing, and platforms — should be considered and addressed as part of the design.

Building compelling customer experiences requires business leaders to break down traditional silos and alter the perception of the customer experience as solely a marketing responsibility, but developing the process and strategies that contribute to a memorable customer experience is a competitive advantage that can transcend price and ensure an organization's future success for years to come.



EMPLOYEE SATISFACTION

Finally, employee satisfaction is a critical but often overlooked consideration for future-proofing within an organization, but as the workforce continues to shrink, attracting and retaining the brightest and most productive workers will become a top priority of every major enterprise. Of course, these workers will be members of what is now referred to as the millennial generation.

Contrary to popular belief, millennials are some of the most productive people around, but they are unique in that they pride themselves on “working smarter, not harder.” And while much has been said about the preferences tomorrow’s workforce, recruiting and retaining millennial workers will take more than a ping pong table in the breakroom or a keg in the kitchen.

Millennials and subsequent generations will actively seek out tools that enable efficiency and increase productivity, and they will one day consider the digital experience provided by their employers as a factor in where they decide to work.

Successful organizations understand they must begin investing in resources today that will support tomorrow’s business leaders and that more user-friendly tools will not only improve employee satisfaction; in many cases, it will improve the customer experience, as well.



The Consumerization of Work

In the early 2000s, businesses were the primary users of technology, so they naturally set the rules for how technology should be built. The result was clunky, feature-rich software that no one apart from a few power users knew how to use.

Today, almost everyone has the ability to become a power user, from the infant who understands the act of “swiping” on a tablet but not flipping a page in a book to the grandmother who posts social media updates from her phone.

The “consumerization” of enterprise software took off in 2014. Software companies catering to enterprise organizations began redefining the user experience to make technology more closely resemble consumer applications.

Improved experiences have multiple benefits, from an increase in productivity to enabling and motivating employees to deliver a better customer experience.

This trend will continue as developers move away from a purely utilitarian approach toward the creation of software that’s more intuitive, more user-friendly, and able to cater to users’ changing needs.

More importantly, enterprise business leaders will no longer just consider these features in enterprise purchasing decisions; they will begin to apply these concepts to the entire digital experience provided to their employees.



Improving the Digital Experience for Employees

There are multiple ways for enterprise business leaders to improve the digital experience, but the following three trends are three of the most popular ways to mimic current consumer expectations and ensure future employees are satisfied with tools provided to them to meet business goals.

1. Mobile Access

Most jobs require teamwork, which is difficult for a workforce that is becoming increasingly more remote. At the same time, workers often find themselves at events or with customers and unable to quickly connect to the resources they need to work off-site.

While many companies are making great strides in intuitive and collaborative desktop tools, mobile tools still lag far behind. As time goes on, more people are going to start using their personal mobile devices as supplementary – if not primary – work tools.

The most innovative business leaders will invest in mobile applications that leverage real-time data analytics and enable their employees to work on-the-go.

2. Streamlined Collaboration

The consumer world is seeing an explosion in popularity among sites such as Quora and Yelp, which allow users to benefit from someone else's experiences. Corporations are now recognizing the potential of similar tools for business, such as leveraging other people's knowledge for customer support or employee training or a resource hub that catalogs institutional expertise.



The natural evolution of this collective knowledge will be for enterprises and the software companies that cater to them to develop similar solutions that make knowledge sharing more efficient in a work environment.

3. Frictionless UX/UI

Most importantly, enterprise leaders need to focus on developing tools that are intuitive, fast, and remove common bottlenecks.

For example, enterprise systems that employees use are often quite different from the systems built for customers. As a result, customer service centers suffer long wait times and customer service representatives are often unable to sync their applications with the customer's interface, frustrating both the employee and the customer.

Gone are the days of employees putting up with unwieldy enterprise software. Future employees will insist on solutions that mimic the simple, easy-to-use tools they've come to expect as consumers, and investing in those tools today will ensure the success of an enterprise tomorrow.



Protecting the Enterprise's Legacy

Digital initiatives like the ones discussed in this guide represent a major investment for any enterprise organization.

In addition to the substantial financial costs and the effort it takes to research and build a comprehensive strategy, an organization's employees or partners will invest a significant amount of time installing and configuring the new solution(s), populating it with existing data, and training relevant users. It's not a small undertaking by any means.

That being said, the risks associated with not planning for the future are too great to ignore. Currently a culture of innovation, advanced infrastructure, memorable customer experiences, and best-in-class employee resources are competitive advantages. They are the exception – not quite the norm.

But one day soon that will no longer be true, and modern business leaders must be forward-thinkers that embrace change if they hope to cement their organization's status in the marketplace and legacy as market leaders.





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