



unqork

The Biggest Digital Challenges of 2021 (And How No-Code Solves Them)

Pandemic resilience is only one of the IT challenges today's enterprises face. Advanced no-code platforms may be the perfect tool to address them all.



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By March of last year, businesses of all sizes and sectors were scrambling to meet the technical challenges of a global pandemic that few were preparing for at the beginning of the year. While many of 2020's pandemic-related challenges were unprecedented, the relentless drive towards digital transformation isn't—and if anything, it is only accelerating in 2021.

A [Forrester report](#) found that, over the next year, 30% of firms are planning to increase their technology investments across various areas, including cloud, networks, security, and mobility. Securing the funds for transformation, however, is only the beginning of the journey for tech leaders. While each new technological fix adds new efficiencies or amplifies productivity, they often come with new challenges that must then be addressed. Consider a 2018 [CIO magazine survey](#) which showed that a top challenge was “data overload.” This issue was resolved to a great extent with AI tools and frameworks, but these technologies inevitably led to a new challenge in a 2019 survey: Safeguarding data and assuring compliance within these systems.

This guide highlights some of the major pain points facing today's tech leaders, why traditional approaches to development no longer suffice, and why no-code may be the best path forward.

The Biggest Tech Challenges of 2021



Security

Digital transformation introduces a wide variety of new security concerns to any enterprise. Among the top concerns is an increase in vulnerabilities as more business operations and information move to the cloud.

Cyberattacks aren't new, but they're always evolving. Due to technological shifts, cyberattacks have evolved from tiny hacks created by students to state-sponsored attacks compromising presidential elections. [Kastle Systems](#), a cybersecurity firm, even shows that data breaches and attacks have steadily increased in the last decade. Over the past 15 years, hackers have collected over 4.3 billion records to use for various (usually nefarious) ends.

This problem has only become more pronounced with a distributed workforce. A recent [Pandemic Impact Survey](#) by CSO found that 61% of technology leaders expressed great concern about cyber-attacks targeting their work-from-home employees. Indeed, 26% of respondents indicated that they had seen an increase in volume, severity, and scope of cyberattacks from March as the pandemic disruptions began to take hold.

**4.3
billion**

The number of records stolen by hackers over the past 15 years

26%

Share of executives reporting an increase in cyberattacks during the pandemic

Overcoming the Challenge with Unqork

To protect against cyberattacks and other security concerns, enterprises need to address any possible weaknesses in the organization's security. Furthermore, they should have confidence that any technology you implement is ready to handle security challenges "out-of-the-box." Advanced no-code platforms like Unqork are a great place to start:

- ✓ All Unqork-built solutions are single-tenant and hosted on the cloud provider of your choice. Companies can operate with confidence since only their products, rules, and customers will live inside their instance—your data will never co-mingle with that of any other company.
- ✓ Unqork's no-code platform has all the security features you need from a robust, web-based application platform. Data encryption is always on in-transit and at rest, and you can establish your own encryption keys so that you're the only one who can access your data.
- ✓ We use the best-practice security controls to ensure your solutions are AIPCA-certified and Privacy Shield compliant. The system ensures that data is fully synced for redundancy, with automated backups to ensure resilience in the face of ransomware or other nefarious attacks.



IT Skills Shortage

Specialized areas such as AI, machine learning, and data science are experiencing massive growth, but these technologies are advancing faster than organizations can train people to handle them. This has led to a significant IT skills shortage across many enterprises.

So, how bad is it?

Gartner indicates that the demand for business apps is **five times higher** than current IT capabilities. A different **Forrester** study found that while 74% of enterprises have a digital strategy in place, only 15% seem to have the right skills to deliver it.

The biggest challenge for CIOs is addressing these IT skills gaps while considering the ever-changing technological demands. Your business won't take a time out while you fix the skills gap. Companies need to tackle the issue of IT skills shortage while operating at full speed.

15%

The percentage of enterprises with the IT skills to deliver on their digital strategy

Overcoming the Challenge with Unqork

No-code overcomes many of these challenges. For one, it's faster for programmers at any level to get up-and-running with no-code than a modern coding language. Many of today's most in-demand programming languages can take a year to learn and several more to master, but most users can become proficient in no-code in just a matter of weeks.

Furthermore, since these platforms take on much of the "heavy lifting" of development, less-experienced engineers can produce

higher quality work than their similarly experienced peers working in code. With no-code, organizations can assign top engineers to address high-value projects while allowing newer (i.e., less expensive) engineers to independently handle routine development tasks that previously required an experienced team member. In our experience, this workforce flexibility allows enterprises to achieve the same end-results while lowering the average hourly developer cost overall.

Mounting Technological Debt

With limited resources to address every problem in an expansive digital infrastructure, IT teams are often forced to settle for workarounds that will eventually have to be addressed down the line. This is known as technical debt. And like all debts, the “bill” will eventually come due.

A very public example of the bill coming due can be found in the recurring effects of the millennium Y2K bug, which is still causing problems two decades later due to short-sighted fixes. In 1999, many developers “windowed” the dates in the codebase, which fixed **80%** of Y2K issues. This fix only addressed dates between 2000 and 2019, while anything beyond the “pivot date” would be considered by the system to be from the previous century. This fix was intended to be a short-term one that would surely be replaced before 2020. However, due to changes in staff and people kicking problems down the line, some replacements never came.

On January 1, 2020, many of the “fixed” systems rolled back to the early 20th century and read the “20” in dates as 1920. Utility companies reportedly produced bills with this incorrect date, and thousands of New York City parking meters rejected credit card transactions because of it. The video game WWE 2K20 also reportedly stopped working that day, too, until the developer patched it a few days later. It led to many funny news stories, but for the affected companies, it caused more headaches than laughs—not to mention the costs incurred. One **2018 report** estimated that the cost of technical debt that year in the US alone was around a half-trillion dollars.

The more code you maintain, the more potential you have to fall into technical debt. One analysis by the CAST Research Labs (CRL) analyzed found that the average-sized application of 300,000 lines of code has over \$1 million worth of technical debt. That represents an average debt of \$3.61 per line. This can add up to a considerable amount of money over time and place companies at a disadvantage.

**\$540
Billion**

The estimated cost of technical debt in the US in 2018

\$3.61

The average amount of technical debt per LOC

\$1,083,000

The average technical debt associated with a new enterprise solution

Overcoming the Challenge with Unqork

As technologies, business processes, and workforces evolve, so must the code that supports them. The more complex and sprawling your digital footprint, the more challenging this becomes. Today's enterprise environments evolve so quickly that as soon as any code is sent to production, it's already legacy, which demands additional resources just to maintain.

The most obvious benefit of an enterprise no-code platform like Unqork is that it eliminates the creation of new code that you will have

to deal with, which means your team can focus on building value-adding solutions or maintaining/sunseting existing legacy code without adding code that will eventually have to be updated.

You also don't have to worry about maintaining and updating a codebase with a no-code solution. The no-code takes care of everything "under the hood." That means you design the business logic; we handle all the shifting technologies.

(Post-) Pandemic Transformation

COVID-19 has forced many organizations to undergo massive transformation, reevaluating key elements of their business processes and use of technology to maintain operations while adjusting to a changing landscape of new procedures and guidelines. While new vaccines are bringing “light” at the end of the dark pandemic tunnel, companies will need to adjust their businesses to work around health risks—both real and perceived—for months to come, and possibly with fewer resources.

According to the annual [CIO survey by Harvey Nash and KPMG](#), technology budgets surged during the initial months of COVID-19, but overall budgets are

likely to be reduced in 2021. Last year, enterprises reported an average additional spend of 5% to tackle the coronavirus pandemic.

In addition to external, customer-facing solutions, companies must help their employees adapt to new paradigms. While many workforces will surely return to the relative technological safety of “the office,” the WFH paradigm will continue in some form. One [PWC survey](#) found that 83% of office workers want to work from home at least one day a week, and 55% of employers anticipate that most of their workers will do so long after COVID-19 is not a concern.

5%

Average additional tech spend to address pandemic issues

83%

Amount of office workers who now want to WFH at least once a week

55%

Share of employers who expect most workers to WFH post-COVID

Overcoming the Challenge with Unqork

The current disruption to our usual way of life has revealed that many organizations have yet to realize the full potential of what today’s technology has to offer. Traditional software development techniques do not provide the speed and flexibility a digital enterprise needs to stay resilient and withstand the unexpected—like a sudden shift to remote work—especially during these times.

Advanced no-code platforms like Unqork can help your organization build complex, sophisticated applications that allows you to move from idealization to development and finally to a functional application within a short time frame.

In addition to helping the organization become [digitally resilient](#), today’s no-code platforms can help as a rapid response to a crisis such as COVID-19. Case in point: [Unqork partnered with New York City’s COVID response team](#) to build a variety of Citizen Management Hub (for citizens to report details of their COVID-19 infections), Food Delivery Hub (for food deliveries across the city), Workforce Management Hub (for planning safe reopening of workplaces), Marriage Licensing Hub (for couples), Medical Equipment Application (for PPE donation), and more—all created in a fraction of time it would take with a traditional code-based approach. In some cases, just 72 hours.

Rising User Expectations for Digital Experiences

The digital revolution is quickly changing the expectations of today's tech-savvy customers leading to critical changes in consumer behavior. Younger generations, often branded "digital natives," expect streamlined mobile experiences that merge easily with their everyday technology use. And in the wake of COVID-19, all demographics are demanding more mobile purchasing experiences, with **86%** of people saying they'll continue to shop online even when social distancing measures are lifted.

More than ever, customers want a high level of personalization, self-service, gratification, and human touch. According to Accenture, 61% of consumers stopped doing business with at least one brand last year because of poor customer experience (CX). Low-quality experiences cover much more than poorly trained customer service agents—CX entails every means of interacting with customers,

including providing experiences like self-service functionality or on-demand information access. So when you fail to meet consumer expectations for their digital experiences, you risk losing their business for good.

If your company is lagging in its digital offerings, you expose yourself to new competition: Consider a **PWC survey** of the wealth management industry found that 69% of high-net-worth individuals (HNWIs) use online banking, but only 25% of wealth managers offer digital channels beyond email. Adapting to the needs and preferences of Generation X and Millennials is becoming more crucial as inter-generational loyalty can not be assumed, with studies finding that **80% of HNW heirs** plan to find a new financial advisor after inheriting their parents' wealth.

Overcoming the Challenge with Unqork

Competitive advantage is not only based on meeting customer demands but exceeding those demands is what sets enterprises apart from in today's digital-savvy world.

It's time for businesses to exceed customer demands. But how?

Technology can significantly improve digital customers' experience to make it easier to find products and services designed to fulfill customer needs, increase brand loyalty, and cement relationships.

No-code is an excellent solution to add to the arsenal of vital tools ushering in the digital revolution. No-code tackles the barriers

associated with software development with the help of intuitive visual interfaces and drag-and-drop components to enable teams to bring their ideas into life with ease. With no-code, companies can rapidly build enterprise-grade web-based applications to address the evolving demands of consumers.

B2B and B2C companies are looking to keep up with the rapidly evolving preferences and expectations. Unqork can help them deploy robust, complex, and successful applications within the shortest time possible for a fraction of the cost.



IT-Business Collaboration and Alignment

IT teams operate differently from business units. These differences can result in significant misalignments in the IT team's needs and priorities and those of the business overall.

This misalignment continues to be a challenge for many CIOs, leading to workflow bottlenecks, poor ROI on new projects, and insufficient support for end-users and even customers, [according to BMC](#). And although a recent [Gartner](#) report estimates that half of all organizations worldwide will achieve increased IT-business collaboration by 2022, many companies still have far to go.

Overcoming the Challenge with Unqork

Every organization's digital transformation efforts should be focused on becoming a technology business, no matter the product or service they offer.

[No-code helps bridge the gap between IT and business](#) through an intuitive visual development process that empowers business users to participate in the building process directly.

With no-code, designers and developers can rapidly build functional prototypes, which allow business and IT teams to make sure the product aligns with requirements early in the process.

In Conclusion

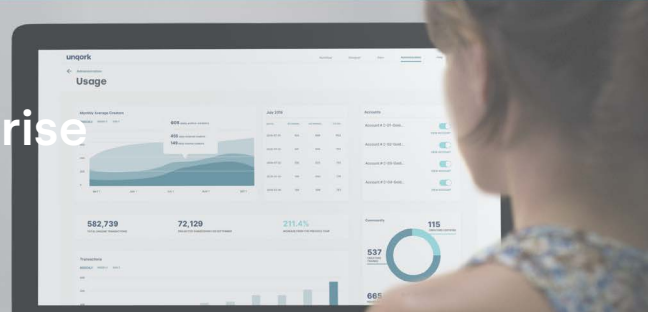
Technology is advancing rapidly and continues to disrupt the way enterprises conduct business in the modern world. In this setting, IT infrastructure leaders, including CIOs, often feel that they're always in catch-up mode, trying to address intensive legacy code maintenance and mounting technical debt while also finding ways to innovate and push the business forward.

The no-code revolution is here to change all that.

Leveraging a no-code platform can be a game-changer because it helps CIOs give their organizations a boost and even drives strategy. While traditional software development techniques may not provide the speed and flexibility a modern business needs, a no-code platform like Unqork can help your organization steer through any type of challenge, no matter the scale, at a relatively low cost.

Ready to know what no-code has in store for your business? [Get in touch](#) for an all-inclusive tour of our system.

Unqork: The World's First Enterprise No-Code Application Platform



Unqork is the first enterprise no-code development platform specifically engineered for the world's most complex and regulated financial service environments. Our platform empowers companies to rapidly build and deploy sophisticated applications without writing a single line of code.

We are backed by some of the most disciplined investors globally, including Goldman Sachs, Capital G, and BlackRock. In just three years, our technologies have been adopted by dozens of leading organizations (including Liberty Mutual, John Hancock, State Street, and the city of New York, just to name a notable few).

Unqork is a cloud-agnostic SaaS platform, so customers can avoid cloud vendor lock-in and deploy applications with the provider of their choice. All customers operate in single-tenant environments, so there is never a mixing of data between Unqork clients.

Our clients can achieve unparalleled speed and flexibility in their development function while requiring a fraction of the resources. We can deliver these benefits through:



A unified SaaS platform: Unqork is a completely unified SaaS platform, which means it provides all the components and capabilities related to crucial areas like **compliance** (up-to-date regulatory and enterprise rules engines for FATCA, CRS, UK CDOT, Dodd-Frank, EMIR, and MiFID II, etc.), **security** (native encryption both in transit and rest, custom RBAC capabilities, and crowd-sourced penetration tests), and **application management** (SDLC governance, application versioning, and module management)¹.



A visual UI: Applications are built via an intuitive, visual User Interface (UI) featuring drag-and-drop components representing user-facing elements, backend processes, data transformations, third-party integrations, and a growing library of industry-specific templates.



Enterprise-grade standards: While there are several business-area-specific or consumer-level no-code systems on the market, Unqork is the only no-code platform designed specifically to build complex, scalable, enterprise-ready applications, which is why it's already being used by some of the world's leading organizations.

¹While Unqork is a SaaS platform, our customers operate in single-tenant environments, which means there is never a mixing of client data between Unqork customers. Unqork is cloud-agnostic, so customers can avoid cloud vendor lock-in and deploy applications in the cloud of their choice.

Unqork allows enterprises to shift all their focus to addressing business challenges instead of technical ones. The platform takes on the “heavy lifting” and frees organizations to invest their resources building operational efficiencies and perfecting the client experience. This streamlined approach helps organizations achieve:

- **Accelerated speed-to-market:** No-code automates many high-volume development tasks so new applications can be built and deployed much faster. In many cases, applications that would take months or years to reach the market can be built in a matter of weeks, or even days.
- **The elimination of legacy code:** Code becomes legacy nearly instantly. With no-code, organizations only need to be concerned with building business logic, even if there is a technical change, the platform handles all that on the backend.
- **Ease of updates and maintenance:** Large enterprises can spend up to 75% of total IT budget maintaining existing systems. One of the reasons is the complexity of making a change in one area requires changes throughout the process. A no-code platform automates many of these cascading tasks and therefore reduces the complexity of making changes.
- **Business agility:** Whether it is a pandemic or disruptions of a smaller scale, no-code can provide organizations with a way to address events quickly.

Curious about how no-code can be applied within your organization? Get in touch to [schedule a demonstration](#) from one of our no-code experts.

unqork

Enterprise application development, reimagined

Unqork is a no-code application platform that helps large enterprises build complex custom software faster, with higher quality, and lower costs than conventional approaches.

[Request a Demo](#)

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