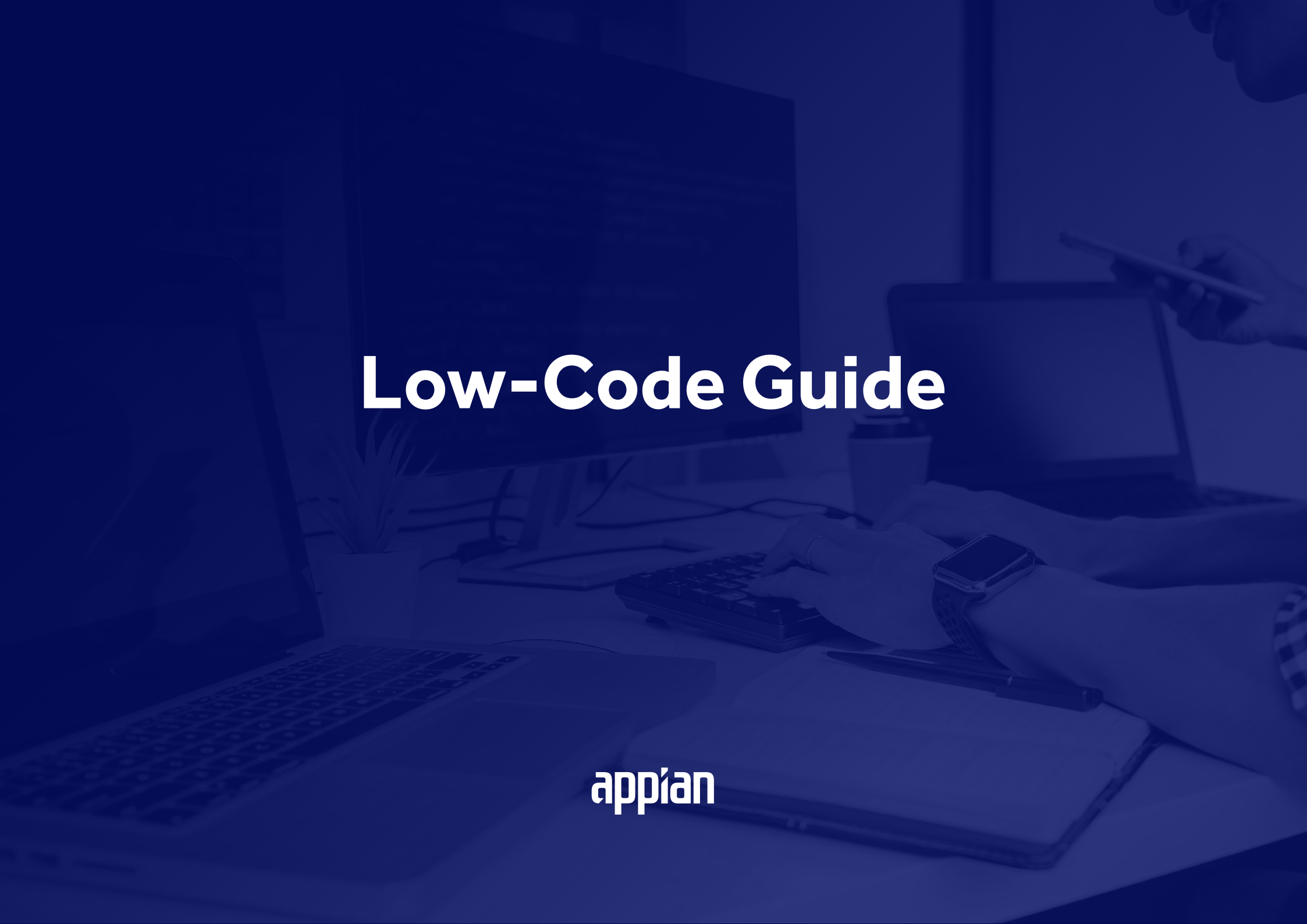
Low-Code Guide



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We're in a time of crisis – a maelstrom of uncertainty and change in which the next business application you write might be an application you only have weeks, or even days to deliver.

Look around. COVID-19 has pummeled the global economy – shredding the equivalent of 400 million jobs world-wide, 13 million in the US alone, according to the Wall Street Journal. Adaptability is essential to surviving and thriving in the age of COVID. But the pandemic exposed the inflexibility of many legacy business systems, and with it the inability of companies to adapt.

This is where low-code development comes in.

In 2020, low-code development went mainstream. Organizations everywhere prioritized the ability to adapt to rapid change, making the low-code application platform (LCAP) an essential part of the enterprise technology stack. LCAPs allow businesses to deploy applications faster than ever before, often in a matter of one to three months. In contrast, third-party applications can burn through way more time and money depending on the size of the organization and the complexity of the system involved.

Much better to invest in a platform that can deliver fast results such as a 20% savings on IT spend, a 45% boost to productivity, and an ROI in less than five months, according to the 2020 LCAP Technology Value Matrix from Nucleus Research. The true value of LCAP, says Nucleus Research, lies in its ability to improve organizational agility, flexibility, and cost efficiency.

The best platforms deliver powerful process automation capabilities in addition to low-code speed. They cater to developers and non-technical users alike. They also enable rapid change by allowing users to create complex business flows in an artificial intelligence-assisted, visual, drag-and-drop design environment.

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Low-code allows even the largest organizations to level up by:

- Creating new workflows faster than ever before.
- Quickly connecting data and automating systems across the enterprise.
- Orchestrating digital and human labor more efficiently.
- Minimizing technical debt (the burden of upgrading and maintaining legacy apps).
- Quickly adapting to massive change.

Case in point: A top 10 healthcare provider built a low-code application for their doctors to submit COVID patients for clinical trial treatments with a new drug. The company built the application with low-code in just 24 hours, deploying it to thousands of doctors and medical centers.

In a crisis, it's easy to focus on playing it safe. But amid business lockdowns and the blistering pace of digital business transformation, the stakes are too high for that. A better strategy might be to quickly adapt to the current crisis and be better positioned for the next.

Which brings us back to low-code development.

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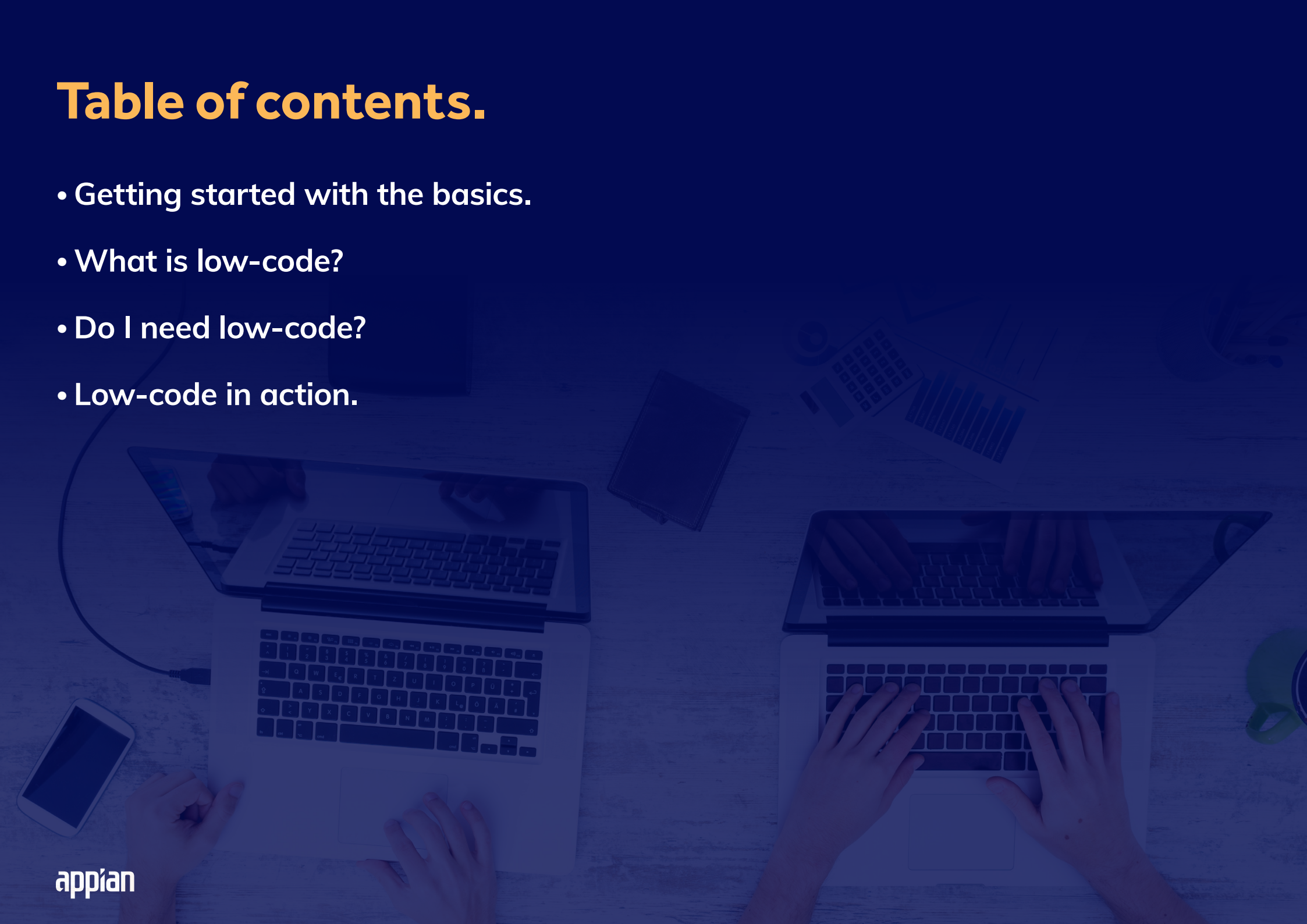

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Getting started with the basics.

Low-code development is a way to build apps faster by reducing the need to code.

With minimal hand-coding and quick setup and deployment, low-code can help large organizations adapt to massive change by quickly combining human and digital labor in the same workflow. Perhaps this is why total spending on the category is forecasted to hit $21.2 billion by 2022[1], representing a compound annual growth rate of roughly 40%.

But why did low-code come about in the first place?

1. "What You Need To Know About The Low-Code Market". Forbes. February 17, 2019.

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In a word, mobile.

The explosion of mobile apps, and the resulting change in consumer and even employee expectations, was the catalyst for a revolution in application development. The sheer demand for digital services is growing faster than ever, and it does not appear to be slowing anytime soon.

And considering the hundreds, if not thousands of disjointed processes, systems, apps, solutions, etc. at any given organization, even long-standing brands are struggling to keep pace.

Sound familiar?

So, how do you get ahead of ever rising digital expectations?

And how can you possibly stay there, with the astonishing pace of change?

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It's all about **speed.**

The need is urgent; new applications for the business must be delivered quickly. IT teams are under enormous pressure to deliver it **faster** with **limited resources.**

In the past if you had told a team they had to build a critical application in three to four weeks, they would have thrown in the towel. Back then, digital transformation was mostly talk. Today, the life of an organization may depend on its ability to deliver business impact with that kind of velocity.

The good news is, low-code platforms offer speedy, iterative delivery of new business applications. The best can pull data from a wide range of systems and add the intelligence needed to search and present actionable information on any workflow. This includes intelligent document processing (IDP), which uses AI to quickly extract and classify data from huge quantities of incoming documents.

Superior platforms also offer the capability to orchestrate workers, bots, and artificial intelligence, with powerful case management, governance, security, and seamless integration of robotic process automation tools.

What is low-code?

Low-code is unified and model-driven application and process automation which enables rapid delivery of business applications with a minimum of hand-coding and minimal upfront investment in setup, training, and deployment.

In retrospect, low-code emerged from the convergence of cloud, business process management, and mobile development technology. It caught on as a component-based way to interface with underlying business logic and back-end data, which creates a shared view of your applications for IT and business.

In short, low-code is a better, faster way to build hyper-responsive systems, compared to using off-the-shelf software or coding applications from scratch.

Bottom line? Low-code is driving the future of digital business, digital process automation, and digital transformation.

Low-code mojo.

If your IT organization is like most, you have a seemingly never-ending backlog of projects and initiatives. The business has needs, and your team is focused on mission-critical operations to keep the business running.

Yes, you can buy off-the-shelf solutions to meet business needs. But integrations may become an issue, or silos of data and process may start to build up. Before you know it, you may have a bigger problem than you had in the first place.

On the other hand, you can choose to build your own software. But this has equal challenges, with developers managing an ever-growing queue of demands. Of course, you could try to add more developers, but the speed to market from traditional coding is notoriously slow.

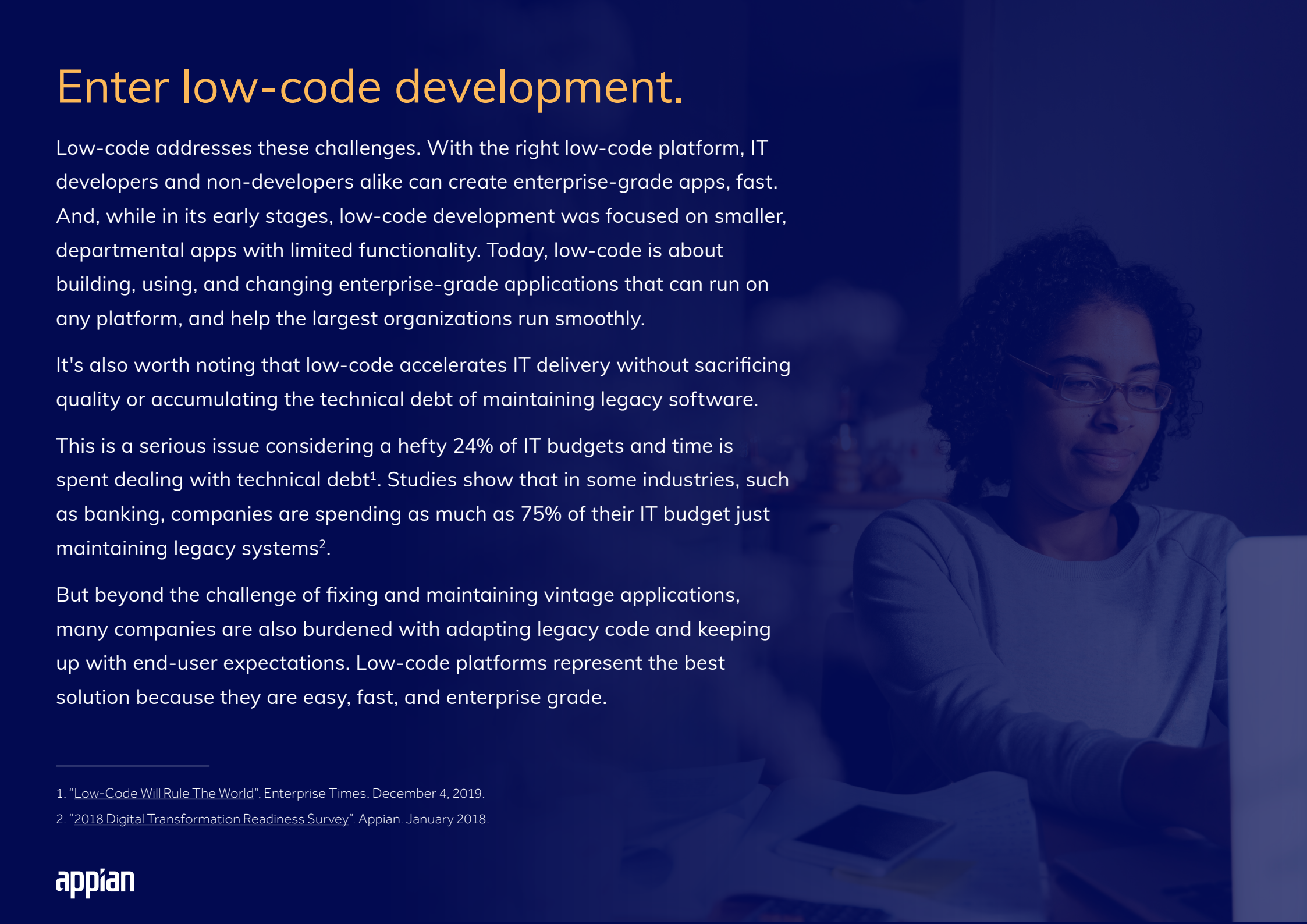
Enter low-code development.

Low-code addresses these challenges. With the right low-code platform, IT developers and non-developers alike can create enterprise-grade apps, fast. And, while in its early stages, low-code development was focused on smaller, departmental apps with limited functionality. Today, low-code is about building, using, and changing enterprise-grade applications that can run on any platform, and help the largest organizations run smoothly.

It's also worth noting that low-code accelerates IT delivery without sacrificing quality or accumulating the technical debt of maintaining legacy software.

This is a serious issue considering a hefty 24% of IT budgets and time is spent dealing with technical debt[1]. Studies show that in some industries, such as banking, companies are spending as much as 75% of their IT budget just maintaining legacy systems[2].

But beyond the challenge of fixing and maintaining vintage applications, many companies are also burdened with adapting legacy code and keeping up with end-user expectations. Low-code platforms represent the best solution because they are easy, fast, and enterprise grade.



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1. "Low-Code Will Rule The World". Enterprise Times. December 4, 2019.
2. "2018 Digital Transformation Readiness Survey". Appian. January 2018.

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Easy: Minimal coding, visual, drag-and-drop functionality.

- Minimal coding required.
- Minimal necessary upfront investment in setup, training, and deployment.
- Removal of barriers between Business and IT to support continual collaboration and improvements.
- Reduced Shadow IT, with tools so easy even non-developers can create apps – with safeguards – that play nicely in the IT environment.
- Instant, native mobility with no extra time, effort, or resources required.
- Seamless integration unifying all data, processes, apps, and existing systems.
- Apps are simple and intuitive to use, providing a streamlined experience and working as expected on any device.

Fast: hyper-responsive. Go from idea to app in a flash.

- Rapidly deliver applications in collaboration with business users to increase IT's strategic impact.
- Speed at the core allows you to launch apps in minutes, not months.
- Adapt quickly to evolving market conditions, customer expectations, new technologies, and more.
- Stay ahead of the evolving expectations of prospects, customers, employees, and constituents.
- In the cloud, low-code helps you shed the IT maintenance burden.
- Visual, drag-and-drop development tools make creating and changing enterprise apps easy and fast.

Enterprise grade: Powerful, secure, scalable functionality.

- Expand departmental apps to address enterprise-wide challenges, no matter how large.
- Roll out enterprise-apps across the organization, with no limits to number of users or geography
- Leverage security certifications, like PCI, HIPAA, SOC 2 and 3, and many more.
- Evolve ideas and apps into sophisticated, powerful solutions tailored to customers, employees, and constituents.
- Transform your organization, achieve competitive advantage, and become a digital leader.
- Scale instantly for any project, program, or line-of-business, no matter how large.

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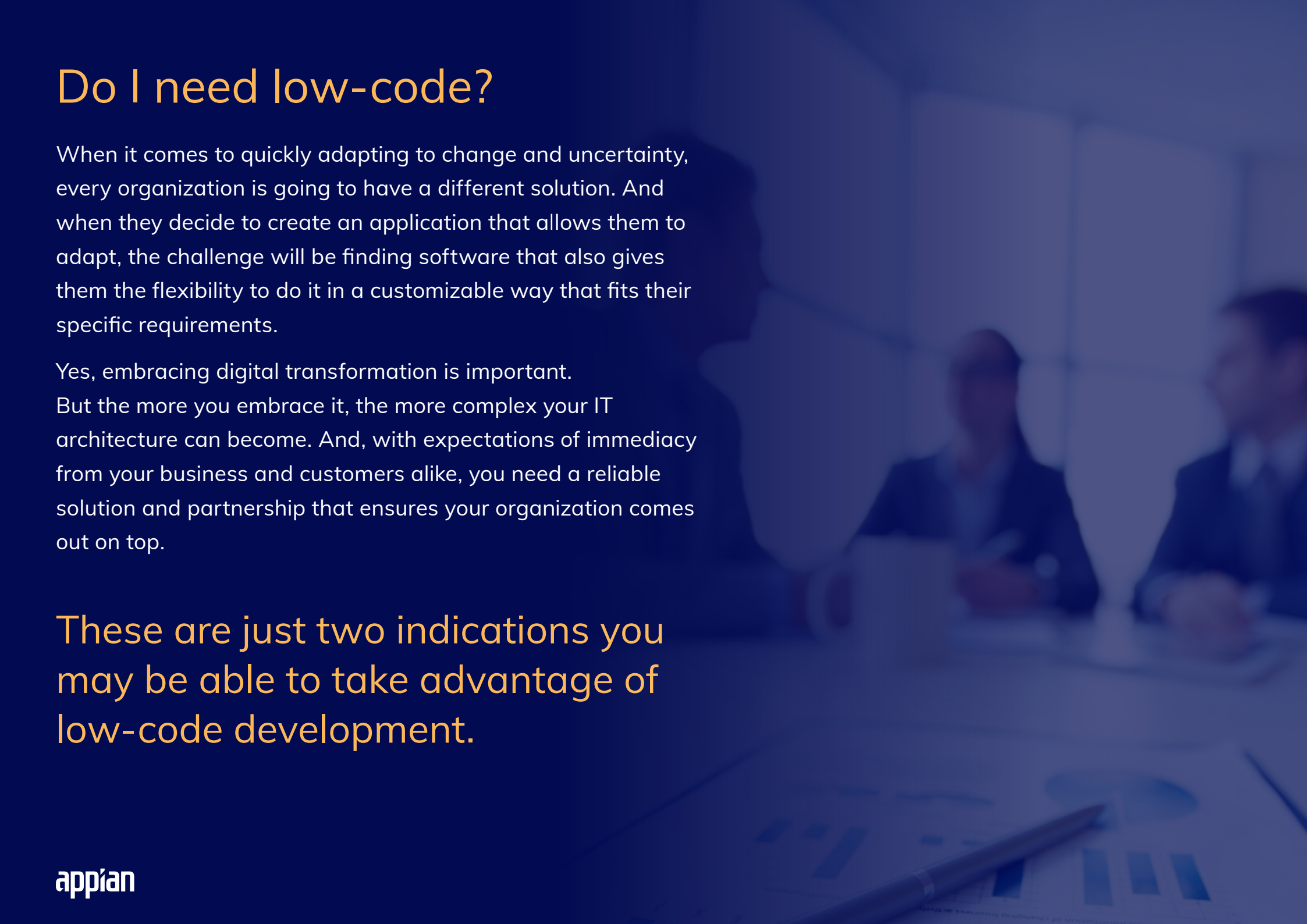
Do I need low-code?

When it comes to quickly adapting to change and uncertainty, every organization is going to have a different solution. And when they decide to create an application that allows them to adapt, the challenge will be finding software that also gives them the flexibility to do it in a customizable way that fits their specific requirements.

Yes, embracing digital transformation is important.
But the more you embrace it, the more complex your IT architecture can become. And, with expectations of immediacy from your business and customers alike, you need a reliable solution and partnership that ensures your organization comes out on top.

These are just two indications you may be able to take advantage of low-code development.



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More signs you could benefit from using a low-code platform:

- **Keeping up with demands from the business is difficult**
  Your IT organization is constantly slammed with demands from the larger organization. The IT backlog is large...and perpetually growing. IT is falling behind.
- **Reliance on legacy apps**
  Legacy applications drain efficiency and your IT resources. They keep talented IT resources in a continual state of updates and fixes. Which leads to...
- **More time spent on maintenance than innovation**
  With the need to keep legacy systems and applications operating properly, most IT teams spend nearly 80% of their time on maintenance, and only 20% on innovation. Too little time focused on innovative solutions leads to...
- **Shadow IT**
  Employees don't wait for IT. They're creating their own solutions – that are not a part of your architecture – in a world of Shadow IT that adds even more complexity to your business.
- **Scarce development resources**
  You urgently need top-notch software developers. But it's getting increasingly harder to find and retain them.
- **Inability to keep pace**
  You're on the hook to capitalize on new business opportunities. But you can't build apps fast enough to take advantage of them. This is a real headache. And not the kind you want to deal with when the future of your company is at risk.
- **Evolving digital expectations**
  All those systems you installed five, ten, twenty years ago? They simply can't keep up with fast-changing digital expectations, making it harder to win new customers, and keep the ones you already have.

Does any of this sound familiar?
If so, a low-code platform could be right for your organization.

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In the digital economy, the name of the game is speed.

Short delivery times can force your developers to cut corners to meet your business priorities. But what if your business apps were easy-to-build and quick-to-deploy? Sounds simple enough, right?

With low-code development, it is.

Speedy app construction helps developers meet cutthroat deadlines without sacrificing quality. And the speed and scalability of low-code also allows you to build applications for complex processes to manage thousands of data points across an entire organization.

This remarkable scalability has fueled the rapid rise of the low-code platform in the digital marketplace.

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Low-code helps every developer.

The leading low-code platforms are designed to support any app throughout its life cycle. But this also makes low-code extremely useful for the CIO looking to inject agile development processes into her IT organization.

Sure, low-code allows you to harness the power of expert developers, enabling them to create more apps in less time. But it can also turn a marketing manager into a creator of apps that can be scaled across the organization. And they instantly become a standard piece of your enterprise architecture.

If you need a project management application for your [insert any department in your organization here], low-code platforms can be used to simply construct the application you need. Seamlessly integrate additional coding and iterate as needed.

Worth noting: you don't give up control with a low-code platform. Instead, you can put your app administrators in the driver's seat. And allow them to set permissions. That way, information is only shared with those who need it.

7 reasons to choose a low-code application platform and how you can profit from it.

1) Visual modeling

Application development expedited with visual representations of processes. These visual models are easier to understand than traditional displays. Which allows non- developers to grasp application design easily.

2) Drag-and-drop interfaces

Typing out long strands of code to produce is not only difficult, but also extremely time consuming. Low-code allows simple drag-and-drop so developers can create applications visually, resulting in faster time-to-launch.

3) No-code options

No-code means just that...zero code required. Empower citizen developers to quickly transform ideas into business apps with no-code app-building functionality.

4) Agile development

Accelerate time to value by rapidly creating and launching applications... then enhance and expand them over time. Low-code development means you can iterate apps and release them as soon as functionality is built. Since change is so fast with low-code development, agile transformation is made easier.

5) Instant mobility

Build once, deploy everywhere. With the explosion of mobile devices like cell phones and tablets, applications must have cross-platform functionality standard in their design. With true low-code development, it all happens behind the scenes automatically, with no extra effort, coding, or resources.

6) Declarative tools

With low-code software, declarative tools are implemented through things like visual models and business rules. Removing the need to write custom-coding for these mitigates the difficulty of future changes or additions. And speeds development times.

7) Security and scalability

Initially, low-code development was focused on smaller, departmental, and less critical capabilities. But today's low-code is enterprise-grade. The best platforms have all the necessary security certifications in place, and proven experience with large-scale initiatives as well.

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Low-code in action.

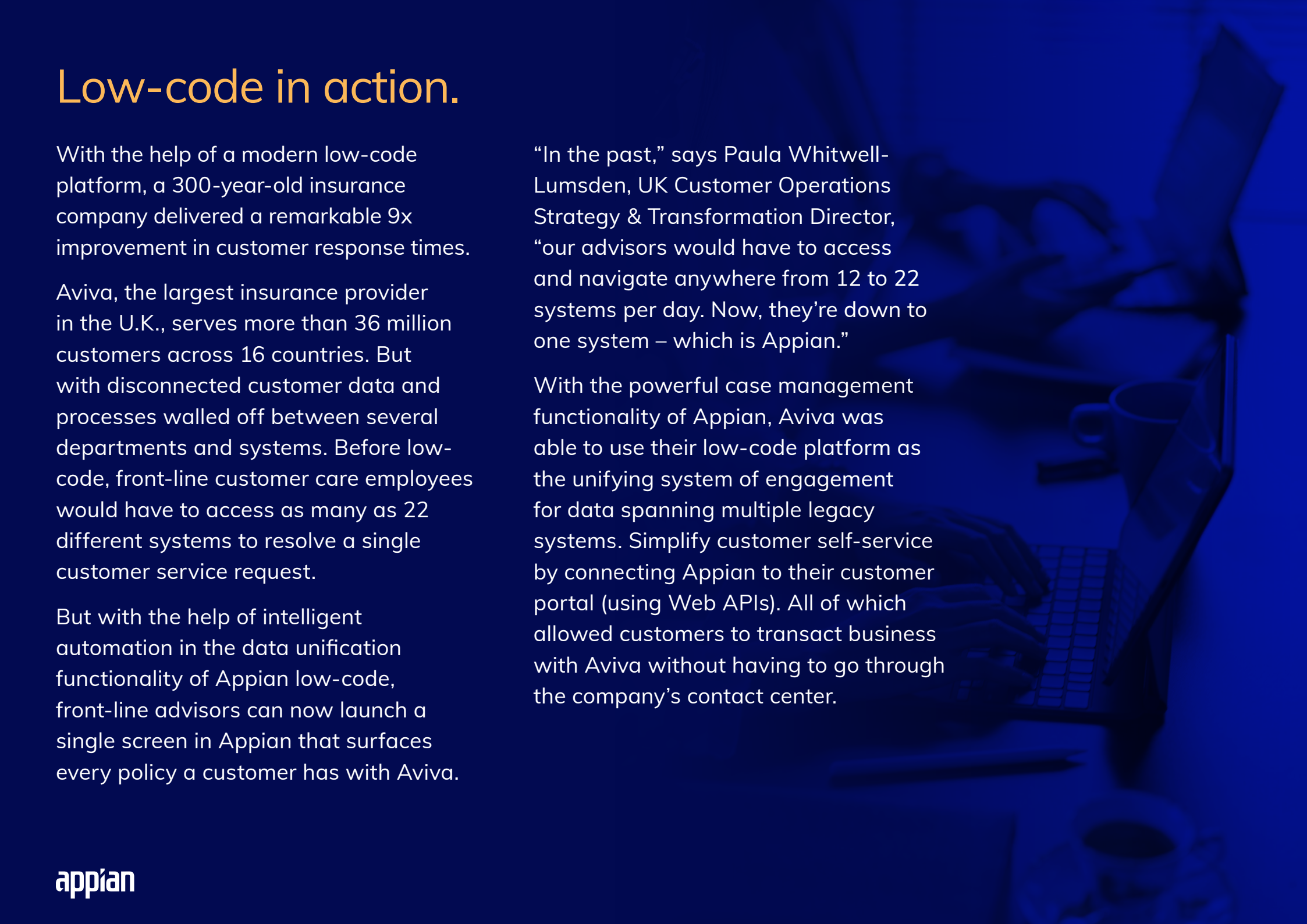
With the help of a modern low-code platform, a 300-year-old insurance company delivered a remarkable 9x improvement in customer response times.

Aviva, the largest insurance provider in the U.K., serves more than 36 million customers across 16 countries. But with disconnected customer data and processes walled off between several departments and systems. Before low-code, front-line customer care employees would have to access as many as 22 different systems to resolve a single customer service request.

But with the help of intelligent automation in the data unification functionality of Appian low-code, front-line advisors can now launch a single screen in Appian that surfaces every policy a customer has with Aviva.

“In the past,” says Paula Whitwell-Lumsden, UK Customer Operations Strategy & Transformation Director, “our advisors would have to access and navigate anywhere from 12 to 22 systems per day. Now, they’re down to one system – which is Appian.”

With the powerful case management functionality of Appian, Aviva was able to use their low-code platform as the unifying system of engagement for data spanning multiple legacy systems. Simplify customer self-service by connecting Appian to their customer portal (using Web APIs). All of which allowed customers to transact business with Aviva without having to go through the company’s contact center.



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9X increase in service delivery speed.

By leveraging the secure, cloud-based robotic process automation functionality of their low-code platform, Aviva was able to:

- Boost productivity of customer advisors. Enable them to spend more time with customers, and less time doing routine work.
- Reduce operational service costs by more than 40%.
- Consolidate 22 systems into just 4 Appian applications.
- Quickly adopt RPA functionality via the Appian highly secure cloud.
- Accelerate customer service response times by 9X.

Another case in point: A major brand in the pharmaceutical industry wanted to accelerate the speed of it clinical trial start-ups, a key competitive advantage for getting new drugs to market. Digital transformation leaders at the company decided to approach this challenge by automating the numerous steps involved in starting clinical trials.

With the help of a low-code platform, company officials reduced clinical trial startup time from six months to just two months. Officials also reduced the company's exposure to risk by ensuring the streamlined new process complied with the strict filing deadlines of regional governing bodies.

Crisis, change, and adapting when it matters most.

There's tons of vendor hype about “best-in-class” app development and “market leadership” in low-code. Cutting through the smoke and mirrors isn’t easy.

But it’s worth considering what independent analysts have to say.

Industry analysts reported Appian technological differentiators include complete automation capabilities, prebuilt no-code integration with various AI services, and end-to-end life cycle support for DevOps...and that the company’s 2020 roadmap includes enhancements to AI-service integration, DevOps capabilities, RPA, and expanded AI support for application development.

Gartner noted:

“At the core of Appian’s low-code application platform (LCAP) strength is its rich process-driven application development. Appian’s ability to offer a complete stack of low-code automation tooling that can handle complex workflows, business rules, and case management along with RPA is a key differentiator. Added to that, it offers low-code tools to build multi-experience apps to enable customer and employee experiences...”.[1]

Forrester said:

“Appian cracks the leaders category as a low-code vendor that thrives in complex process environments...”.[2]

1. Gartner Magic Quadrant for Enterprise Low-Code Application Platforms 2020.
2. Forrester Wave: Software for Digital Process Automation – Deep Deployments, Q2 2019.

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Bottom line: It doesn't make sense to waste a crisis. So, if you're considering leveling up to a low-code platform that can help you get ahead of the crisis curve and stay there, Appian is the perfect solution.

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