



In 2020 low-code development went mainstream.

Organizations everywhere have 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 days to weeks. 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.

LCAPs are a better investment, delivering 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.

Low-code allows even the largest organizations to level up in these ways:

- 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.



Appian and AWS customers are hungry to innovate faster. Leveraging a low-code platform built on AWS means customers intentionally choose speed using purpose-built, intelligent, enterprise-grade automation. Since low-code is subjective to the end user, contributing to an existing app or a new app, you can leverage talent across the workforce to achieve better results.

Cloud computing means customers can focus on what they do best, supported by applications that are instantly available, dynamically scalable, and always up to date. Throughout, the shared responsibility of security complements compliance without compromising the user experience.

When working backwards to solve customer needs, leaders can strategically plan for workloads in the cloud leveraging AWS's experience seeing all types of workloads in the cloud at scale. Customers evolve applications in a future-proof way as their business needs evolve.

- Emmelyn Wang, Global Category Leader, DevOps - AWS Marketplace,
Amazon Web Services (AWS)

Which brings us back to low-code development.

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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. Low-code is rapidly gaining traction, and total spending on the category is forecasted to hit \$21.2 billion by 2022¹, representing a compound annual growth rate of roughly 40%.

Bottom line.

Low-code is driving the future of a slow and rigid digital business. With low-code, organizations are leveraging digital process automation and digital transformation in a way that is fast, flexible, and impactful to their business.

Challenges of traditional development.

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.

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 and will leave developers to manage 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.



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

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. 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 that maintaining legacy software does.

This is a serious issue considering a hefty 24% of IT budgets and time is spent dealing with technical debt.² Studies show that in some industries, such as banking, companies are spending as much as 75% of their IT budget just maintaining legacy systems.³

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.

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

- Minimal coding required.
- Minimal necessary upfront investment in setup, training, and deployment.
- Reduce Shadow IT with tools for even non-developers to 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.

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.
- When deployed 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-grade 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.

Fast: Hyper-responsive.

2. "Low-Code Will Rule The World". Enterprise Times. December 4, 2019.

3. "2018 Digital Transformation Readiness Survey". Appian. January 2018.

Do I need low-code?

When it comes to quickly adapting to change and uncertainty, every organization is going to have a different solution. 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, however, the more you embrace it, the more complex your IT architecture can become. 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.

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.
- ☐ **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 need to capitalize on new business opportunities, but you can't build apps fast enough to take advantage of them. The inability to keep pace could have significant impact on the future of your business.
- ☐ **Evolving digital expectations.** The systems that you installed five, ten, or twenty years ago or more simply cannot keep up with the fast pace of digital expectations, making it harder to win new customers, and keep the ones that you already have.

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



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.

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. 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.

Low-code helps every developer.

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

Sure, low-code allows you to harness the power of expert developers, enabling them to create more apps in less time. It can also turn a marketing manager into a creator of apps that can be scaled across the organization and can instantly become a standard piece of your enterprise architecture. If you need a project management application for any department in your organizations, low-code platforms can be used to simply construct the application you need. Seamlessly integrate additional coding and iterate as needed. It's worth noting that low-code platforms don't require you to give up control. 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 an application 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.

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. However, customer data was disconnected and processes were 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.

With the help of intelligent automation in the data unification functionality of Appian Low-Code Platform in the Appian Cloud, powered by AWS, 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.

Aviva simplified 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.

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, enabling 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 four Appian applications.
- Quickly adopt RPA functionality via the Appian highly secure cloud.
- Accelerate customer service response times by 9X.

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.



Gartner noted:



At the core of the Appian Low-Code Platform... 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 multiexperience apps to enable customer and employee experiences...⁴

Forrester said:



Appian cracks the leaders category as a low-code vendor that thrives in complex process environments...⁵

4. Gartner Magic Quadrant for Enterprise Low-Code Application Platforms 2020.

5. Forrester Wave: Software for Digital Process Automation – Deep Deployments, Q2 2019.



Bottom line:

Leveling up to a low-code platform can help your organization get ahead of the curve. When you create apps with Appian deployed in the AWS Cloud, you should expect to build your apps 10x faster, reduce your maintenance costs by 50%, and gain superior functionality as compared to traditional development. With Appian and AWS, speed and agility become a choice and business leaders can strategically plan for which workloads need to be moved to the cloud, all while knowing that applications can be expanded or re-purposed as their organization evolves.

