THE STATE OF CITIZEN DEVELOPMENT REPORT

SEPTEMBER 2015

SUMMARY

The previously distinct worlds of business users and internal IT are beginning to converge. Where these two functions were once at odds with one another over just about everything—always battling over time, resources and strategy—new technology is now enabling new and productive ways for the two groups to collaborate. As a result of this shift, a new class of individuals is rising within business organizations of every size called "Citizen Developers". It's a paradigm shift in the way applications get designed, built, customized, and ultimately maintained and IT requires a specific type of low-code platform designed for Citizen Developers.

Citizen Developers are empowered problem-solvers from the various lines of business who have the drive and determination to engage in app development even though they lack traditional coding skills. Although the term Citizen Developer has been around for a while, it has become apparent there is a divide between those platforms that offer true Citizen Development and those that offer a more abstract, easier way for existing coders to develop their applications more rapidly. These true Citizen Developers are forming strong bonds with IT personnel, who are encouraging their emerging interest in building self-service applications by acting as strategic counsel to the process rather than just as a resource for writing code. A 2015 Gartner report titled *Citizen Development is Fundamental to the Digital Workplace* predicts, "by 2020, at least 70% of large enterprises will have established successful Citizen Development policies, up from 20% in 2010."

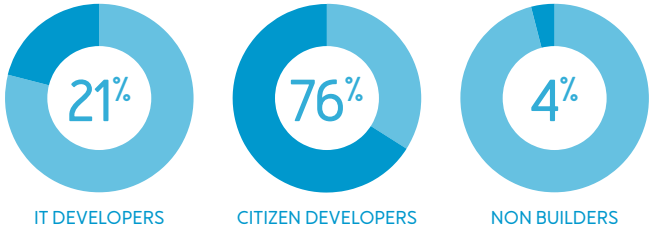
While much of the technology on the market has been focused on accelerating the application development process within IT, low-code platforms for Citizen Development enable business Citizen Developers - with support from IT - to offer expertise around application architecture, governance, and controls to reduce risk. In this model, the right resources are deployed to drive maximum agility, speed, and operational efficiencies throughout the organization through the application prototyping process that occurs between IT and the business. In this new model, IT can offer the keys to their business counterparts to build and prototype apps quickly while keeping the master key for transparency and governance.

To learn more about the critical role that Citizen Developers are playing inside forward-thinking organizations in continuously improving workplace productivity, Intuit interviewed over 140 customers who had self identified as either Citizen Developers or as those in IT who have supported Citizen Development types of processes.

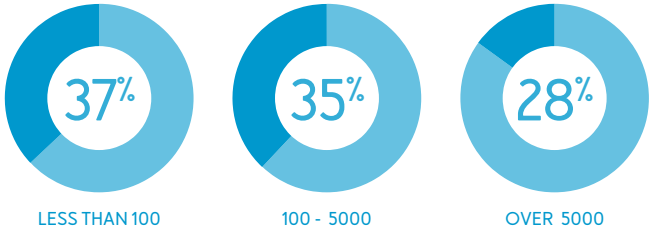
In the end, the results have shown that Citizen Development is here now and widespread throughout organizations of all sizes. In fact, these citizen developers are having a profound effect on their organizations by taking a leadership role in the development process, creating better workflows and solving the business challenges faster because they are much more attuned to the problems being solved than IT. As a result, data-intensive applications are getting created faster and are helping solve the traditional "telephone problem" by uniting IT and business process leaders with a prototyping process that allows each group to play to their strengths. IT can create the governance, controls and administration of the application, while the Citizen Developer focuses on solving for the unique challenges and nuanced processes.

WHO TOOK THE SURVEY

148 Attendee Survey Participants*



Number of Employees in the organization



*The Intuit QuickBase product marketing team conducted the survey during its annual user conference, Empower 2015, and also compiled the results.Survey participants are all attendees of the conference held May 26-28, 2015.

Demographics

The vast majority of survey participants self-identified as application builders vs. non-builders *(96% vs 4% respectively)*, thus the focus on developers for this particular study. App builders were further segmented into Developers in IT *(21%) (Rapid Application Developers)* and Developers in the Line of Business *(76%) (or Citizen Developers)*.

Organizations

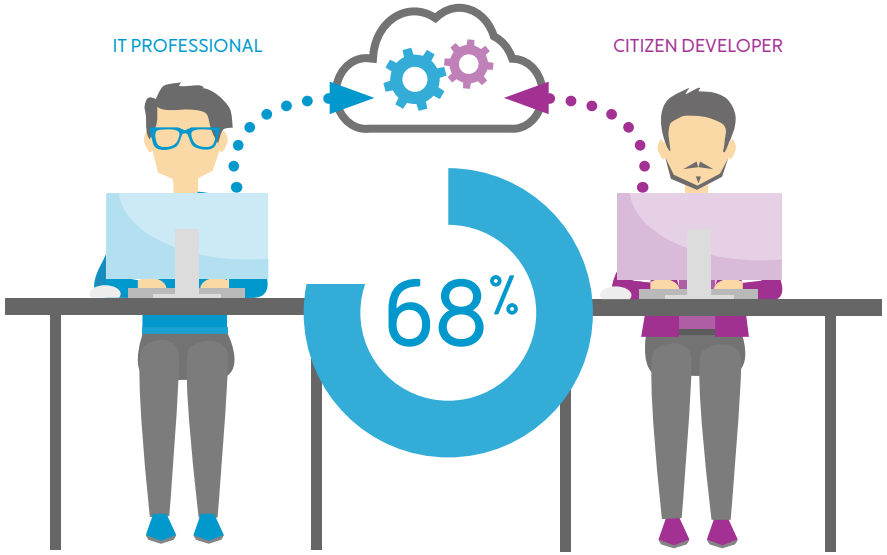
Organizations leveraging Citizen Development ranged from small and mid-sized to large enterprises. Of the respondents, 37% were from companies with less than 100 employees, 35% were from companies with 100 - 5000 employees and 28% were from organizations with over 5000 employees. As far as the overall number of users for the organizations' development platforms, 47% had 0 - 50 users, 38% had 51 - 500 users and 15% had more than 500 users.

We also wanted to understand how Citizen Developers within the lines of business were defining their roles. While the majority identified simply as line of business knowledge workers, a sizable 26% had specific titles/roles that closely tied to business operations or operational excellence *(captured via a write-in section)*.

A UNITED FRONT FOR DIGITAL TRANSFORMATION

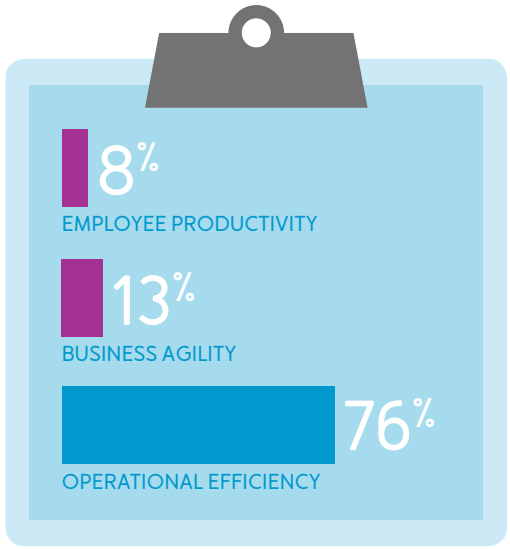
There is growing demand for new applications that don't fit in the typical categories of ERP, CRM, etc. The apps are focused on solving ad hoc or nascent workflows and processes that may still be evolving inside an organization. Many of these processes have been difficult to control since they haven't been organized or repeated by the organization in any meaningful way. Typically, the information is resident in emails, spreadsheets or even rogue online or paper documents. Citizen Development can accelerate Digital Transformation by empowering those in the business who are closest to the problem to build the last mile of the app to fit their unique requirements.

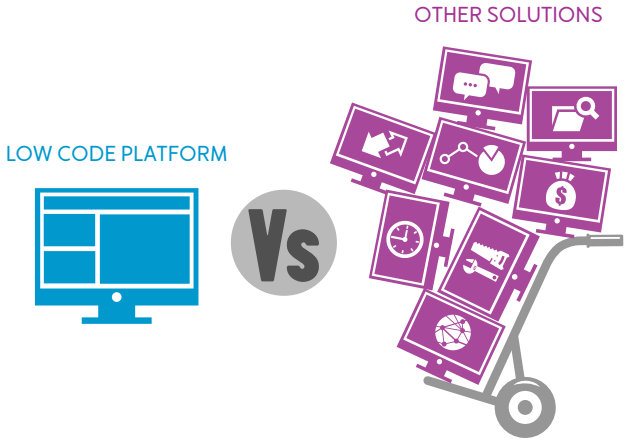
CIOs ultimately want to eliminate this chaos with processes that are very secure, organized, and manageable. Meanwhile, IT is struggling to keep up with the demand for different types of applications, especially applications that should be created and maintained outside of their Tier 1 platforms. This pain is felt most profoundly by rapidly growing companies in periods of fast expansion with evolving or nascent processes. Compounding this issue is that true digital transformation requires connecting disparate islands of applications with silos of data. This is critical to ensure that they can enable stakeholders with actionable insights based on accurate, real-time data across different departments and geographies to drive better decision-making.



68% of respondents built apps with somebody outside of their functional area.

What is the primary reason for using a low-code platform for digital transformation?





On average, **8 point solutions** are required to replace the low-code platform for Citizen Developers!

Seamless business process with low overhead costs.

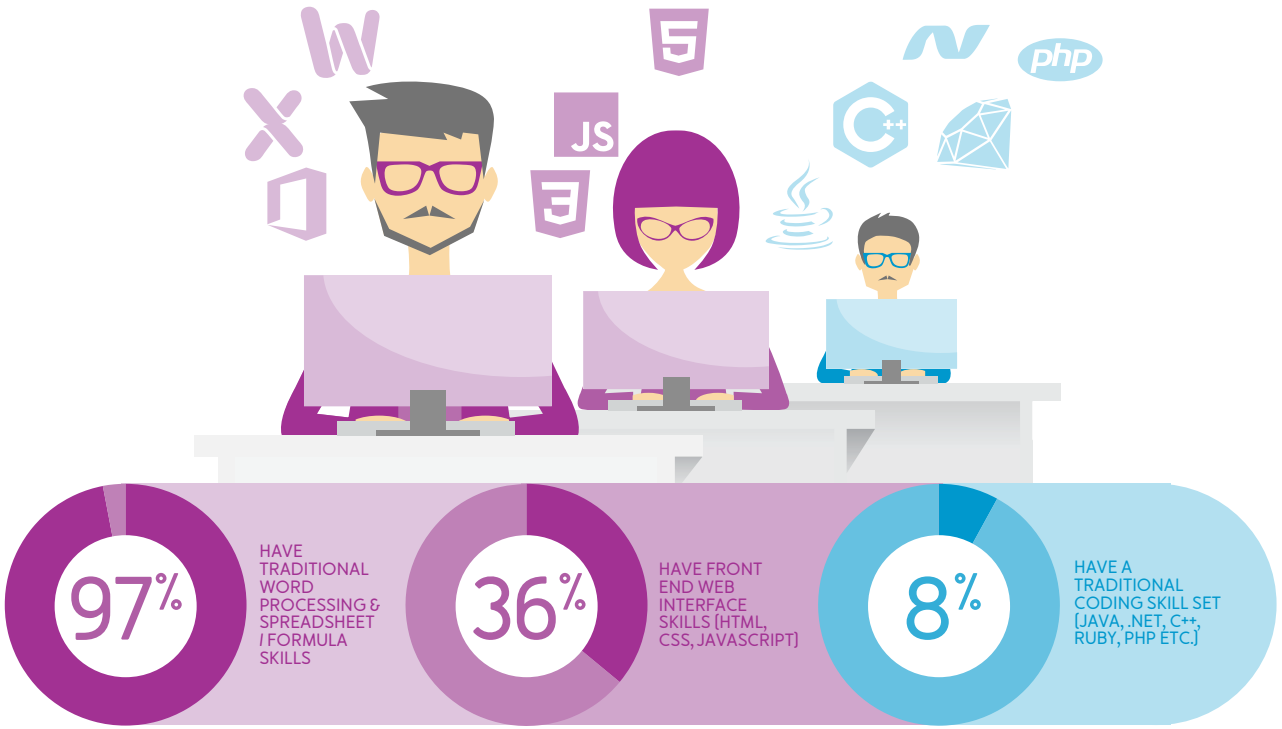
Buyers of the platform are typically responsible for workflows that create seamless business processes that lower operational costs and improve productivity. Low-code and no-code integrations make it easy to get apps talking and draw out insights that inform better decisions and lead to operational excellence. They also empower Citizen Developers by providing a wide range of options to create connected cloud apps—from codeless integrations in a few clicks to robust APIs. Citizen Developers of all levels of technical ability should help get their apps talking to other apps—from data integrations that centralize insights across data silos to deeper app-to-app integrations for automating workflows.

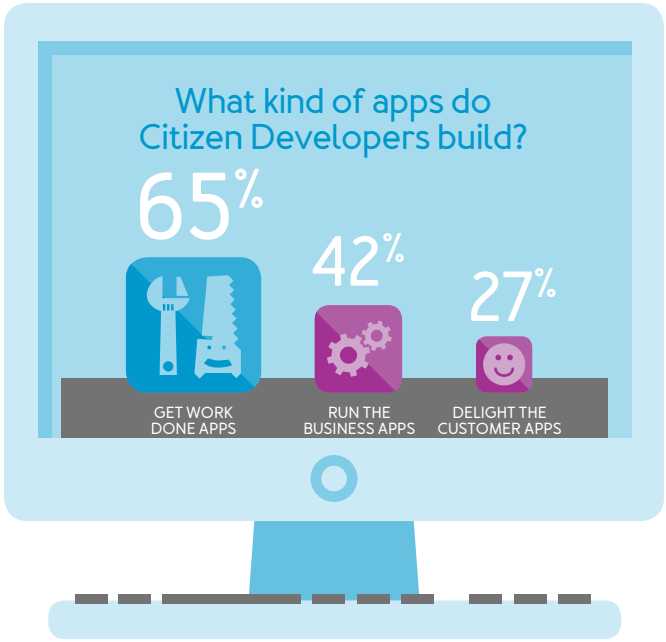
Drive instant insights anywhere.

Create cloud apps that give teams the latest information on any device, anywhere in the world. Updates to records are instantly available in a shared repository in the cloud, creating a single source of truth to ensure that important information is accurate, consistent and available on any device with Internet access.

FOSTERING TRUE NO-CODE CITIZEN DEVELOPMENT

The survey also set out to uncover if non-coder Citizen Developers are able to build, roll out and configure cloud applications without writing a single line of code. What we found was that true "no-code" Citizen Developers do exist and they are actively prototyping new solutions with IT counterparts enabling a larger, less expensive talent pool to deliver applications faster.





On-demand cloud app delivery.

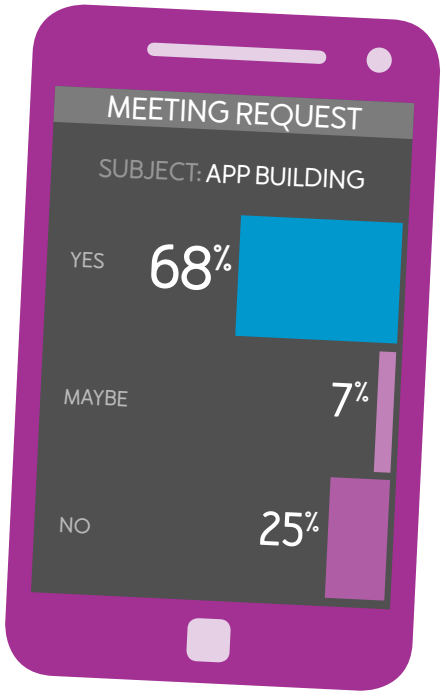
Avoid technology procurement bottlenecks by providing a single platform for rapidly developing, deploying and iterating on scalable, secure cloud applications for their own ecosystem of apps. Pre-approved rapidly delivered applications built on a low-code platform enable Citizen Developers to cut through red tape and reduce the app request backlog as they expand their ecosystem of apps faster than ever.

True low-code and no-code ease-of-use.

Enable non-coder Citizen Developers to build, roll out and configure cloud apps without writing a single line of code. Building an app can be as easy as uploading a data set. Empower a larger, less expensive talent pool to deliver more cloud apps faster, making their organizations more efficient, agile and productive.

Empower a culture of rapid problem-solving.

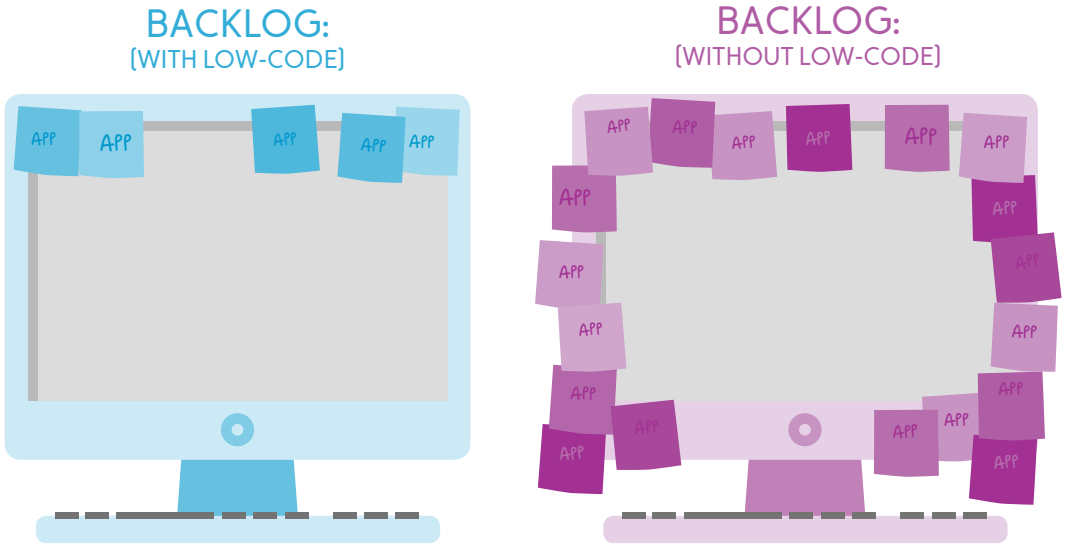
Empower citizen developers in the business to rapidly deliver cloud apps without programming a single line of code. Draw on a broader pool of app builders who understand challenges faced by the business enabling organizations to avoid the bottleneck of the IT request backlog and increase operational excellence faster than ever.



68% of respondents consider developing apps part of their day job.

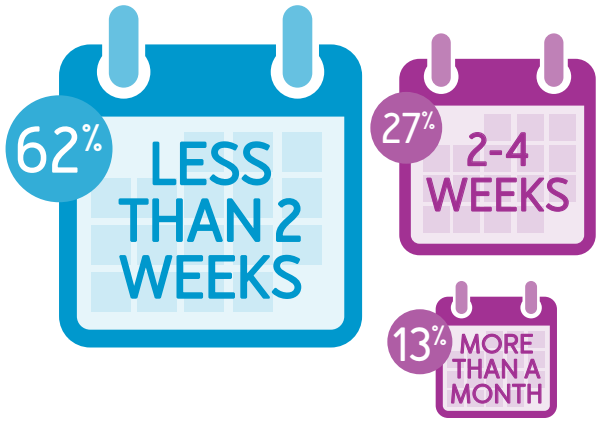
MAXIMIZING THE ROI OF YOUR APPLICATION DEVELOPMENT AND DELIVERY PROCESS

Organizations are increasingly interested in driving a higher ROI from application development and delivery to enable lean IT. Today's traditional programming methods and application development platforms are too slow. Iterating the processes that underlie applications often results in miscommunications (sometimes known as The Telephone Game) about core business requirements and processes. Often, customizing applications requires hand-coded programming by expensive, scarce developer resources. The cost of programming talent and internal resources to develop applications using traditional programming methods and application development platforms is just too high.

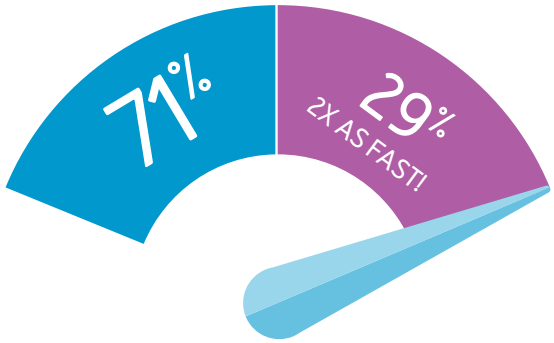


90% of the IT developers surveyed currently had **less than 5 app requests** per month in backlog.

How long does it take for an app to be **completed by Citizen Developers**?



71% of all Citizen Developers have increased their application delivery speeds by at least 50%!



29% have seen a **2X or more** increase in application delivery speeds!

Accelerate app creation and lower your cost per app.

Drive down costs by broadening the pool of potential app builders with Citizen Developers without the traditional programming skills of programmers who are hard to find and expensive to hire. Citizen Developers can quickly build, customize and deploy multiple applications with a single set of user fees for the platform, as opposed to paying multiple sets of fees for a variety of point solutions. Rapid delivery of perishable applications that traditional core systems can't service, or where standing up new apps on core systems is time or cost prohibitive, is also ensured.

Drive high ROI, cost-effective solutions.

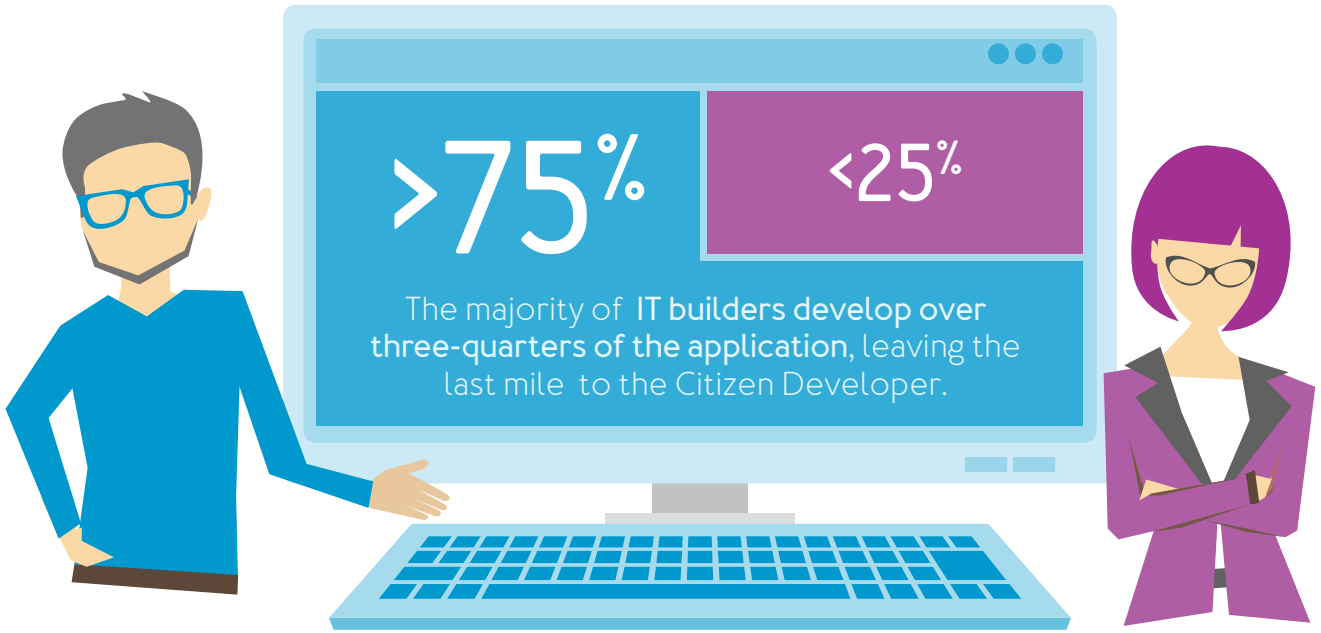
Lower operational costs by saving time on building new applications, money spent on a growing number of point solutions, and time lost on cumbersome technology procurement approvals. Citizen Developers can build, customize and connect pre-approved cloud apps mapped to their business challenges without writing a single line of code.

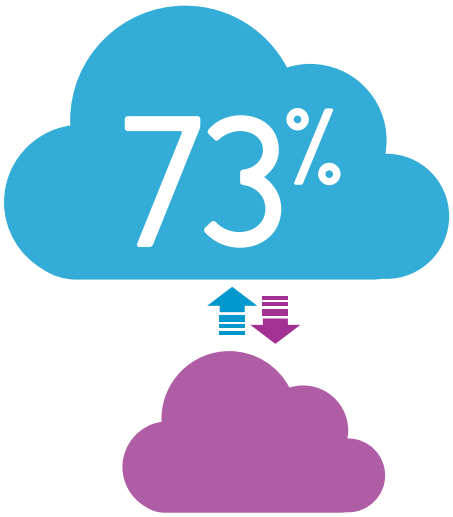
Rapid prototyping for app design optimization.

Enable teams of Citizen Developers to customize and deploy changes to apps without any downtime for the apps' users. App builders and business stakeholders can rapidly prototype, test, analyze and iterate applications on the platform, allowing them to efficiently optimize both the applications and the processes the apps support.

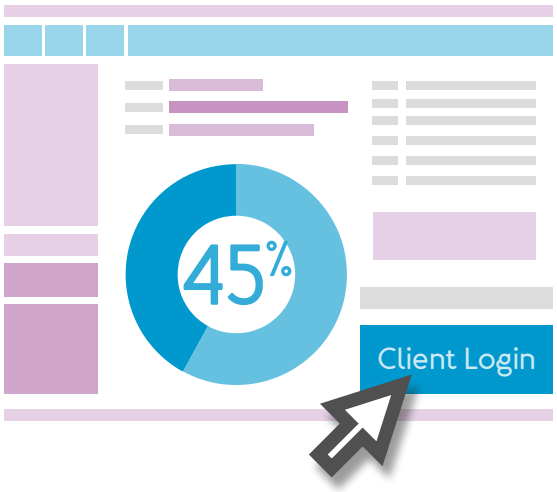
EMPOWERING APPLICATION SELF SERVICE WHILE MAINTAINING CONTROL

Finding the right balance between productivity and control is difficult for IT leaders when selecting platforms for developing and delivering apps. Most low-code platforms with powerful application expressiveness tend to require too much code-intensive development to enable self-service IT, resulting in similar challenges to those faced in traditional development. At the same time, business stakeholders are becoming increasingly digital-savvy and are procuring their own technology solutions without IT's knowledge ("shadow IT" or "rogue IT"). The balance required is achieved by uniting app builders and business stakeholders so they can work together to efficiently optimize both the applications and the processes that the apps support.





73% of respondents plan to integrate their apps into existing cloud-based systems.



45% of respondents indicated they have shared apps with customers and partners as dashboards and reports.

Organizations require real-time insights for data-driven teams.

Give data-driven executives and teams visibility into real-time insights from previously siloed information unlocked from islands of applications. Improved line-of-sight to the most important information enables better daily decision-making that leads to operational excellence.

Glue together disparate systems.

Connect interdependent data and workflows to create seamless business processes that lower operational costs and improve productivity. Low-code and no-code integrations make it easy to get apps talking and draw out insights that inform better decisions and lead to operational excellence.

Roll out self-service for application requests.

Empower Citizen Developers in the lines of business to build their own cloud apps on a platform pre-approved by IT without a single line of code. Powerful no-code capabilities make every employee a potential Citizen Developer and enable them to contribute to building solutions that are right for them and their teams. Business users can tailor apps to fit their unique processes—from creating forms and fields to configuring roles and permissions.

Right-size your application governance & controls.

Map levels of governance for apps built to their value and users' needs with the platform's highly configurable governance and controls capabilities. Take advantage of no-code development for sharing data, authenticating users and enhancing security to ensure that apps have right-sized levels of governance. Give the business keys to create the applications they need to run fast, while offering IT the transparency of maintaining control of the master key.

CONCLUSION

IT is now faced with managing an ever-broadening spectrum of applications. Once focused primarily on deploying and maintaining mission-critical applications *(e.g., ERP systems, CRM systems, and websites)*, modern IT departments now also need to focus on Digital Workplace applications relating to employee productivity or operational efficiency *(e.g., ticketing, project management, budgeting apps, and customer portals)* which are increasingly being requested from IT by internal stakeholders.

But not all technology leaders are ready for this change. As digital transformation continues to heap an ever-growing backlog of application requests on their doorsteps, using existing legacy applications and high priced IT professionals and coders is not sustainable. This is why organizations are starting to turn to internal resources, true Citizen Developers, who have been trained to solve business problems rather than learn programming languages. These proactive organizations are beginning to reap the benefits of this culture of problem solving that comes from an army of Citizen Developers working with IT. Together, they can create better purpose-built applications faster, meet both their needs and improve their ROI to digitally transform organizations.

Learn more about QuickBase and request a Demo.

Quickbase.intuit.com/rapid-application-development-platform

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About Intuit QuickBase

Designed with the business user in mind, Intuit's QuickBase is the fastest, easiest and most flexible way to help teams work together. QuickBase provides one platform from which workgroups can easily create applications to automate business processes and improve communication and collaboration online. QuickBase applications solve critical business problems and help improve productivity and efficiency by tailoring to the user to match the exact workflow and unique needs of their team—something complex point solutions or generic spreadsheets simply can't match. QuickBase is a proven team collaboration platform that's perfect for business users—regardless of size, location or industry—while delivering the visibility and control IT executives need to manage enterprise-wide deployments in large companies.

The inaugural State of Citizen Development Report for September 2015 compiled and published by Intuit QuickBase is an analysis of more than 140 survey responses from both business and technical professionals who are currently active in citizen development inside their organizations.