WHITEPAPER

SCALING AUTOMATION WITH CITIZEN DEVELOPMENT

ProcessMaker

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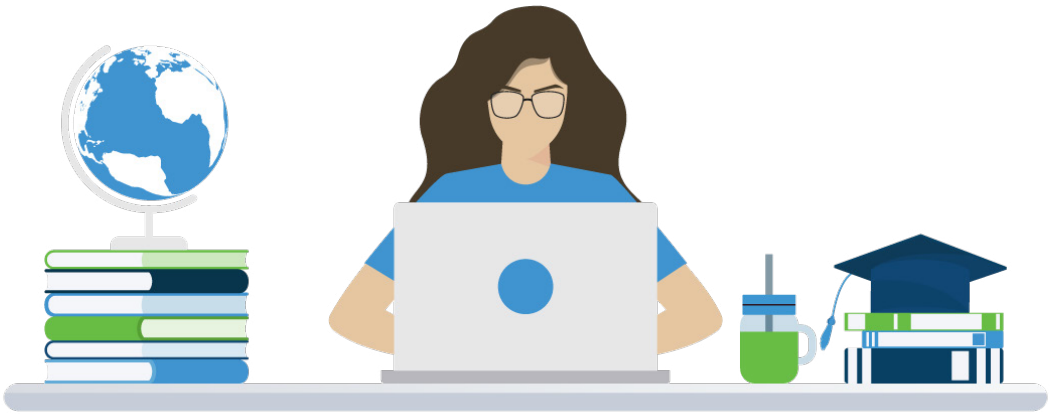

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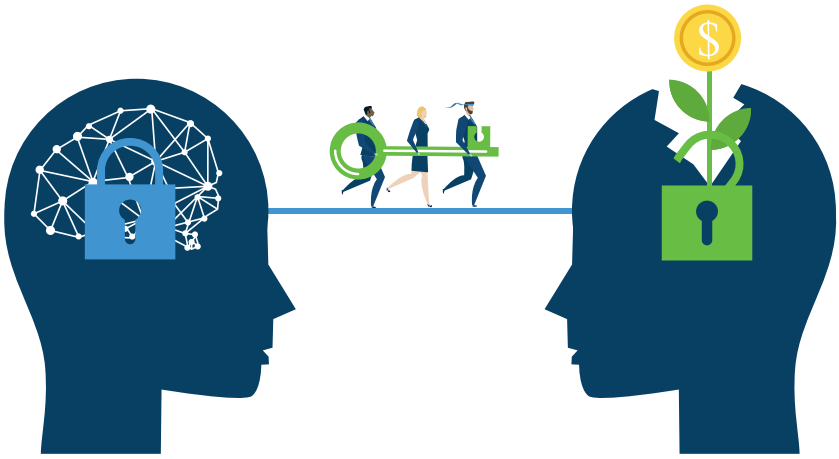


Introduction

Application development used to be a secret society, ruled by a small circle of experts specializing in recondite programming languages like C#, Java, and PHP. To bring an application from concept to deployment required a keen understanding of thousands of lines of complex code. Now, user-friendly tools are breaking down these barriers of automation and application design, welcoming newcomers into the development fold.

Whether it's used in banking, higher education, manufacturing, or other industries, automation technology is now a central tentpole of how every business serves its customers. Automation has infiltrated so many facets of modern business that **Satya Nadella, CEO of Microsoft proclaimed that today, "all companies are software companies."** Siloing development within a small, intimate group is no longer an option. The answer? Modern development tools are upending the programming paradigm to give more and more team members the key to the development city. These non-IT greenhorns blazing a new trail are known as citizen developers, able to design and create powerful applications. Smart organizations find many benefits to deputizing this new squadron of tech-savvy business users:

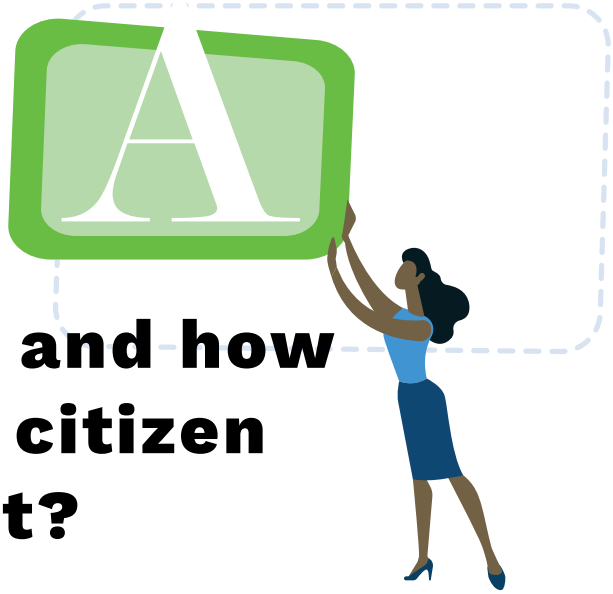
- Reduce IT costs, as citizen developers can take on less complex tasks and free up IT teams to focus on more sophisticated, high-value projects and applications.
- Accelerate your digital transformation by establishing an "all hands on deck" mentality for building novel, customer-attracting experiences.
- Promote collaboration between experienced developers and those that understand the frontlines of your business.

The term citizen developer was a shot heard around the world in 2012, when Gartner analyst John K. Walters famously proclaimed "we're all developers now." The future of your business relies on a collaborative partnership between your IT team and this new fleet of citizen developers. Here's how you can get started.

First, what is a citizen developer?

Gartner defines a citizen developer as any non-IT user who "creates new business applications for consumption by others using development and runtime environments sanctioned by corporate IT."[1] The citizen developer movement empowers line of business (LOB) managers and subject matter experts (SMEs) to build the very solutions to the problems they experience on the customer-facing frontlines. A citizen developer can be a marketing manager or customer service associate; a trustworthy and tech-savvy problem solver excited to play an increasing role in the future of your organization.

1 https://www.gartner.com/en/information-technology/glossary/citizen-developer



What is “low-code” and how has it propelled the citizen developer movement?

Low-code tools were the battering ram at the door of digital transformation, eventually breaking down the gates to allow citizen developers access to the traditionally walled off city. These easy-to-use, visual-based tools democratized development by upending the need for code.

Consider the evolution of even the most common tech you use every day. Computer operating systems used to require lines of complicated commands to even launch a program—now even the most elementary user can launch an app with a simple tap. If you wanted to launch an online storefront, you needed the help of a highly trained virtuoso masterful in HTML and MySQL. Now, you can open up a dazzling shop rich with images and video as quickly as you can fill an Amazon cart. “Low-code tools” pull back the curtain on lightweight software development and grant the ability to create automations to a wider spectrum of employees.

What are the features that enable citizen developers to design advanced automations?

- **Visual-based platforms** that replace complicated development environments with tools that look more like a whiteboard or an artist’s canvas.
- **Drag-and-drop designers** let users easily add and rearrange elements without rewriting source code.
- **Libraries of pre-built blocks and modules** allow citizen developers to add complex elements in the same way you can slide an image into an email newsletter.

Instead of requiring a computer science degree, citizen developers can now build simple automations with user-friendly, low-code tools.

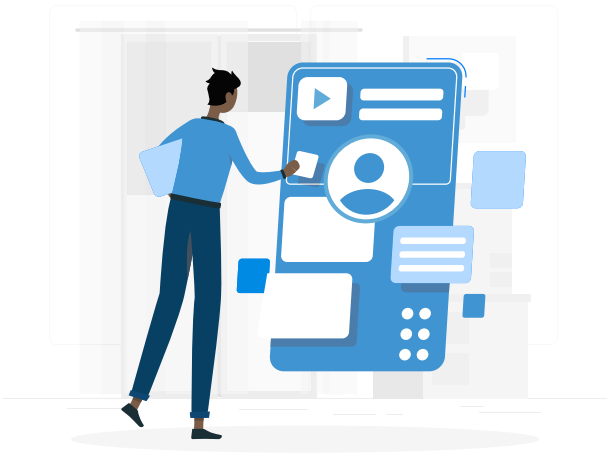
How can citizen developers accelerate your organization's digital transformation?

The citizen developer movement is the secret ingredient to scaling your digital transformation projects. Instead of relying on a select group, you can appoint a larger contingent of your team to support your digital initiatives. Here's how you can benefit from the citizen developer movement:

Untether your tech team from their toilsome to-do lists

As digital experiences become more and more important to the success of your business, IT departments become more and more overwhelmed by incoming tasks. This puts undue pressure on your tech leaders, and often pushes much-needed initiatives to the back burner. Instead of packing their queue with easy softball tasks, you can shuffle these over to your squadron of citizen developers. This frees up your IT team to tackle more complex and sophisticated projects better suited to their expert skill set.

Lure new customers with more captivating user experiences



Think modern customers still stick with brands out of sheer loyalty? Think again: the allure of technology has dethroned 'brand loyalty' as the kingpin of customer drivers. From banking to higher education, wooing new customers demands a fresh focus on innovation. Customers want businesses to move at the speed of an Amazon Prime delivery and expect user experiences to mirror the sleekness of their iPhone. In fact, nearly **60% of customers refuse to buy**[2] from businesses that fail to deliver top-notch digital experiences.

Creating a customer-centric experience requires a close connection with customers. Marketing and sales professionals are often the LOB managers with the most face-to-face interactions with your customer base. They have an inside track on customer challenges and have a solid understanding of your competitors' offerings. By providing these customer aficionados with the tools they need to solve the very problems they experience day in and day out, you can open doors to a new level of customer-centric apps and experiences.

2 https://a.sfdcstatic.com/content/dam/www/ocms-backup/assets/pdf/misc/socc-2016.pdf

Reduce employee turnover and retain your best talent

Open floor plans, free lunch, and generous time-off policies. Look like the list of top employee perks? The truth is, the secret to retaining top performers is ownership. Hard working and creative problem solvers in your organization want to learn new skills and are waiting for the opportunity to make a lasting impact. By deputizing them as citizen developers, you not only secure their loyalty, but boost morale over the long run. Plus, businesses that fully engage their best employees are not only more productive, but are **21% more profitable than those that do not**.[3]

3 https://blog.smarp.com/employee-engagement-8-statistics-you-need-to-know

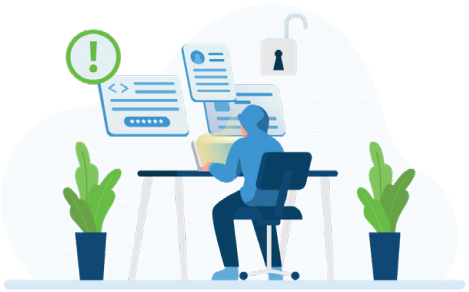
Why do some companies feel threatened by the rise of the citizen developer?

Despite the obvious benefits, many organizations still feel threatened by citizen developers. Here are some of their top concerns:

They believe citizen developers will replace software engineers

Citizen developers are not meant to replace highly trained software engineers, but serve as a complement to them. Citizen developers can share some of the burden by handling their own issues and resolving less complicated IT tickets. They allow IT to focus on the more high-value projects that lay the technical foundation for the future of your organization.

They perceive citizen developers as a security threat



Some software professionals view citizen developers as an enemy at the gates who will make personalized changes to source code without consulting IT. The citizen developer movement is the opposite of a “shadow op,” it actually codifies the involvement by business users to prevent rogue behaviors. Citizen developers stick to IT-authorized tools and follow a distinct set of rules and procedures.

Just like any transition, deputizing a new band of citizen developers requires a shift in your organization’s mindset. By viewing citizen developers as a partnership as opposed to a threat, your organization can quickly push aside any hesitations and start soaking in the benefits of the low-code movement.

What is the future of the citizen developer movement—and why is it good for your company?

The era of locking digital innovation inside a secret society of a select few has passed: it's time to welcome citizen developers into the programming fold. Low-code tools will continue to evolve, unlocking new doors of even more sophisticated opportunities for citizen developers. Soon, the level of coding required for common workflows will dip so low, that we'll transition into a new era—one known only as "no code." By positioning your most talented team members at the forefront of this technological revolution, you'll be able to scale digital automation initiatives at blazing new speeds.

About ProcessMaker

ProcessMaker is low-code BPM and workflow software. ProcessMaker makes it easy for business analysts to collaborate with IT to automate complex business processes connecting people and existing company systems. Headquartered in Durham, North Carolina in the United States, ProcessMaker has a partner network spread across 35 countries on five continents. Hundreds of commercial customers, including many Fortune 100 companies, rely on ProcessMaker to digitally transform their core business processes enabling faster decision making, improved compliance, and better performance.

Ready to learn more about how intelligent process automation can serve your organization? Learn more at **processmaker.com**

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