The No-Code Solution to Your Digital Transformation
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Abstract

Calling all innovation leaders! You may be interested in achieving the right digital transformation or learning about the more recent development, no-code. This whitepaper explains how to approach your digital transformation if you are a CIO looking to change your organization or how to make amendments if you have already made changes that have turned out to be ineffective. We introduce no-code development and the benefits of this technology for the people behind all organizations, of any industry, any size and any level of digital experience.

Businesses could previously reach success by setting a clear vision and working towards their goals. However, a vision is no longer the main driver of business. The customer is redefining all aspects of business, from current operations to future growth. As a result, adapting to the people and undergoing digital transformations are now necessary for long-term value optimization.

Technology would seem to be the motivating force behind a digital transformation but more importantly, it’s a means to an end. Employees want more efficient processes to handle customers that are digitally-oriented and gaining more decision-making power. The importance of digital transformations is focusing on the people, who are using the technology.

According to the market analyst firm Gartner, innovation starts with the people saying yes to change. There is never complacency in business so organizations should always proactively strive to improve their internal processes for employees, and customer engagements.
Introduction to Digital Transformation

The star of the show, digital transformation! Yes, digital transformation, digital enterprise, and innovation are the buzzwords you keep hearing about. However, these are more than just words to throw around during a company meeting. In today’s fast-paced, digital world, every organization has to revise their goals and processes to achieve them, in order to be a viable business.

Fortunately, the expected timeframe for companies without an existing digital transformation strategy to adopt one is within one year. The practical definition of digital transformation is a process of adapting business to changing markets, transforming both traditional core and contextual operational methods to new and better processes. Now, what was previously deemed as context is as important as core. Trends, disruptions and the relationships between business and humans are part of the context of business that is becoming increasingly important. It is necessary for all organizations to make changes that better address people’s demands and put themselves in a competitive position.

In fact, 80% of companies on the Forbes top 500 list are at risk of falling out of the competition in 10 years if they do not innovate, according to former Cisco CEO John Chambers.

Often, this involves the evolution of company culture, the implementation of digital tools and closer alignment with the end-user. To take actionable steps towards achieving an effective transformation, organizations must primarily understand the changing needs of employees and customers, before revising their business models and investing in the right technology.

People, Not Technology, Drive Digital Transformation

From the invention of the wheel to the drone, human processes have been transformed by technology. Let’s look at the history of mail delivery. The familiar image of the postal worker, driving in his or her mail truck, wheels come to a stop, the driver steps out to deliver the package to a home and greets the recipient; this no longer fits the outlook of the future. The process can now be automated by an unmanned aerial vehicle. Digital disruptors such as Amazon, have begun the service of delivery drones and have made various groundbreaking steps to digitize processes that change the way humans live. While this transformation sounds extreme, the intention behind continuous digital advancements is to facilitate the roles of humans, both in business and as consumers.

It’s common for humans to turn to technology as a solution in streamlining tasks and activities. This has opened numerous possibilities for businesses to digitize manual tasks. Internal processes can be operated through applications, facilitating employees in any department. Technology provides ease for companies internally, but it has also made it easier for other companies in the same industry to improve their product and service to customers. As a result, this has increased competition, enabling companies to work more efficiently and react to industry changes faster and better. Competition is an increasing pressure for companies to transform and innovate.
The use of technology has multiple facets in business, dictated by the demands of the customer. The reality is that customers have gone digital and expect the same of the service they use. Applications have drastically changed the way people live. With both web and mobile, users are constantly seeking the most efficient method to take care of all daily activities. From checking their health care status online to signing into mobile banking, all are now possible and further, expected, to be digitally accessible.

Why Traditional Digital Transformation Projects Fail

The challenge with digital transformations is that the full strategy cannot be planned in advance. Organizations often face problems when they attempt to make one large effort at once, facing expensive setbacks and a difficulty to examine what aspect went wrong. This is primarily due to the great extent of changing the culture of an entire organization along with their existing processes and systems. "Out of 70% of companies that attempt to transform digitally, only 30% of those succeed," Former Cisco CEO John Chambers further stated. There are various circumstances leading to this statistic but more often than not, the reasons are common.

According to MIT Sloan Management, legacy IT systems are viewed as the third biggest obstacle to achieving digital transformation. As a significant challenge to digital transformations, many organizations are burdened with existing infrastructure that are difficult to make changes to. In a study conducted by Couchbase, 84% of organizations reported to have had digital projects cancelled, delayed or reduced in scope due to limitations of their legacy systems. The rigidness of these systems can further deter organizations from initiating an organizational change. Not only is the initial thought of changing the system a hindrance but the whole process of replacing an entire system is a complex, risky endeavor.

Another factor inhibiting digital transformation is that IT projects are expensive and time-consuming, created as large-scale projects with unforeseeable results. One in four businesses have experienced failed IT projects that have cost them an average of $655,000. Large-scale IT projects are costly but the more significant setback is the inability to measure the success or failure of the project until after creating it and seeing the results. In other words, when it’s too late.

IT projects do not always deliver based on the goal, posing as a risk for organizations. Enterprise applications for example, can be built for an employee’s specific use or for the whole organization but in the same Couchbase study, 86 percent of organizations reported a lack of agility when developing new applications. Understanding the needs and behavior of the end-user is a critical consideration when developing an application. This is where the misalignment between business and IT often takes place. Without a developing method such as design thinking, it is possible to lose track of the goal and get too caught up in the technology while building digital solutions that are centered on the user.

Along with misalignment with user needs, a lack of programmers is also a challenge for most companies. Less programmers are available in the workforce, while the demand is increasing. As a result, organizations face the difficulty of finding and hiring the

“Out of 70% of companies that attempt to transform digitally, only 30% of those succeed”
right software developer, which is among the top 5 hardest tech positions to fill. The lack of programmers and overall tech-skills in the workforce is causing a wide gap for organizations to fulfill. Without a strong team of programmers, you won’t have the opportunity to build effective solutions.

Yet, even having a team of programmers does not always guarantee you the right solutions. The need for business solutions is ongoing and creating all the solutions you need is a challenge for just the IT department to take on.

Ultimately, finding solutions is difficult because building applications through code requires extensive training and additionally, it is time consuming with unpredictable results. To deliver the correct, final product, traditional coding takes continuous testing in the back-end to make sure the solution is free of bugs and is operating as scheduled. With a high learning curve and uncertain results, coding has always been a necessary yet inefficient process to develop IT solutions.

The process of creating IT solutions needs a layer of abstraction to broaden the roles and possibilities of application developers and problem-solvers

Chris Obdam - CEO of Betty Blocks

Digital Transformation Starts with Small Steps

It is important to realize that a transformation cannot be accomplished in one project. Instead, it requires an ongoing process of formulating new ideas and testing them before implementing any solution. The most effective transformation takes place through experimentation and with that, the process is conducted in steps. Learning from failure and continuously improving the strategy this way is much more efficient.

Making steps in your digital transformation involves understanding what your organization needs to innovate. Before making any investments and carrying out any changes, it is crucial to evaluate the needs of the people in your company and the consumers, as well as the realistic possibilities for improvement in your organization. Look back at the company vision and see how you can adapt the vision to involve a people-focused outlook for the organization.

Contrary to popular belief in business, think small at first. A micro approach is much more effective in making a change that affects the entire organization. Consider the options in changing processes and existing systems, and find out which areas of the business are lagging behind. Then comes the technology, which poses many questions and uncertainties.

If you aren’t asking yourself the right questions before you take action, you can follow the path to an ineffective digital transformation strategy. Some questions to get you thinking include: How much learning and training is required to utilize the technology? What is the value of the technology for the organization, and more specifically, the employees and the customers? How much return on investment does this technology provide? To better answer your own questions about technology, remember that the person is the center of digital transformation. Make sure you are planning a strategy that truly fits the people inside and served by your organization before taking on an unpredictable technology behemoth.
Once you establish the renewed vision and consider what tools would be effective for the organization, you can also ensure that the company culture is in line with the expectations and goals. A significant yet often overlooked aspect of digital transformations is the need to align your team with the innovation strategy.

Aligning company culture can be difficult for large companies but in finding the right vision that fits your company, you can revive the drive in employees to be more efficient, progressive and effective. Most employees are open to technology when tools truly facilitate their work and don’t require extensive knowledge or training.

**Most employees are open to technology when tools truly facilitate their work and don’t require extensive knowledge or training.**

**The Key to Your Digital Transformation is Customization-Through-Experimentation**

Every company is at a different stage in their digitization and has different steps to take in their digital transformation. As a result, there is no standard digital transformation package for all companies. The endeavor requires more calculated experimentation to test methods that suit each organization. With the universal shift in business, there are now tools, such as no-code platforms, to help companies make educated steps in the transformation process and deliver the most value. Overall, you won’t know what your company truly needs, until you experiment with solutions.
Why No-Code is Your Solution

Customize Your Digital Transformation with No-Code
Once your organization sets new goals based on a revised vision, you can start the customization-through-experimentation process. To start experimenting, using a tool that enables all employees to be involved in the process offers the most value. Taking risks is inevitable in experimentation, and in turn a necessary part of digital transformations. But, addressing risk strategically can eliminate setbacks and help companies thrive.

By testing each idea on a small scale, every organization’s digital transformation can be incrementally achieved with no-code. No-code application development platforms empower all employees with or without a technical background to experiment with ideas, iterate projects efficiently and create solutions that transform organizations, while also having the adaptability to the industry as it changes.

Instead of coding, users build applications intuitively through a layer of abstraction, with visual models. Visual modelling with a flexible UI-builder also makes it easy for all users to collaborate on and complete projects effectively, with the simplicity in sharing feedback and making adjustments. The ease-of-use and efficiency of the tool enables all users to create solutions as fast as the organization needs. Beyond the direct solutions, everyone using a no-code platform can directly drive innovation within the organization.

No-Code Outperforms Low-Code
The means to quickly and easily develop IT solutions are here as application development has gone through an evolution, from using a written programming language to visual building blocks. To address the factors hindering a digital transformation, these platforms enable organizations to develop solutions much more efficiently.

From traditional coding, came low-code platforms. Low-code platforms reduce the amount of coding needed to build an application. To further increase ease of developing, no-code platforms were created to eliminate the need for any coding. Now the discussion turns to distinguishing no-code and low-code. What’s the significant difference and which one is better?

<table>
<thead>
<tr>
<th>Feature</th>
<th>No-code</th>
<th>Low-code</th>
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<tbody>
<tr>
<td>No coding</td>
<td>✔️</td>
<td>✗</td>
</tr>
<tr>
<td>Speed compared to traditional coding</td>
<td>8 times faster</td>
<td>max. 2 times faster</td>
</tr>
<tr>
<td>Ease of use</td>
<td>★★★</td>
<td>★★★★☆</td>
</tr>
<tr>
<td>Start without installing software</td>
<td>✔️</td>
<td>✗</td>
</tr>
<tr>
<td>Prone to hand-coding errors</td>
<td>✗</td>
<td>✔️</td>
</tr>
<tr>
<td>No deployment to servers</td>
<td>✔️</td>
<td>✗</td>
</tr>
<tr>
<td>For citizen development</td>
<td>✔️</td>
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The benefits of no-code extend beyond the benefits of low-code. To put it even simpler, think about all the benefits of using code without the need to write a single line of code.
With no-code, users can begin without installing software, building is not prone to hand-code errors, no deployment to servers is needed and citizen developers are enabled. Taking home the efficiency title, a no-code platform is the solution to build better solutions faster. Gartner predicts that no-code platforms will be used for over 50% of all software development by 2022.

Citizen Developers and No-Code Platforms Accelerate Each Other

Citizen developers create applications to provide businesses with solutions while following the development guidelines of IT. As creative solution builders, citizen developers aren’t set back by technical obstacles and instead, they are leading the no-code development movement.

Citizen developers are an essential component of digital transformation. According to Gartner, by 2020, at least 70% of businesses will have established successful citizen development policies, up from 40% in 2017.

Unlike a typical programmer, citizen developers do not build solutions by coding. They use tools that can be operated as quickly as ideas are created, which make no-code platforms the ideal resource for a rapid solution builder. Citizen developers also have a more general scope of the organization’s needs and an open-minded perspective. Citizen developers focus on building a prototype quickly and delivering it early. With a faster initiation, the idea can undergo the testing process more effectively. Throughout the building process, the citizen developer builds with the entire organization and the end-users in mind.

However, citizen developers have their challenges as well. While citizen developers build with a more flexible approach, they still need structure in terms of following the organization’s systems and existing IT infrastructure. At least 50% of businesses without formalized citizen development policies will face substantial data, process integrity and security vulnerabilities by 2020. One of the most important aspects of citizen development is the need for business to ensure IT provides development guidelines. Through this path, innovation starts with business and then it transfers to IT.

Read all about Gartners predictions in our Gartner Whitepaper

[Read here](#)
The Benefits of No-Code... Go Beyond the Platform

No-code platforms can make a digital transformation even more valuable for your organization. While the use of a no-code platform serves in the direct process of building applications, the platform further enables organizations to experiment with and build their digital transformation strategy. The benefits extend beyond the experimentation process as well, to bring multiple aspects of your organization to a new level of digitization, including the people involved, the existing infrastructure and the service to an end-user.

**Drives Innovation**

Implementing no-code can be a small step for your organization, but it has a significant impact. No-code development can drive innovation by enabling the realization of creative ideas and by implementing new technology.

Creating an application through no-code requires creative thinking, one of the main ingredients of innovation. Using creativity, employees can develop ideas that provide solutions to their direct work or to organizational problems. After formulating ideas, users can test them and create prototypes rapidly.

This process in itself drives innovation. While starting on a small scale, the user creates and tests the application him- or herself. When the application requires a more robust infrastructure, IT steps in to implement and scale the application to the organization’s needs.

No-code encourages the entire digital transformation process, from idea to experimentation to solution to innovation. Therefore, option to innovate is not only possible but fully enabled with a no-code platform. The flexibility, ease and universal usage can help any organization reach a new level of digitization and remain a competitive force in the industry.

**Enables Rapid Application Development (RAD)**

Using a no-code platform can increase application development productivity by 8-10 times more than with traditional coding. Because applications are built through visual modelling instead of coding, the entire process is much more simpler and efficient. Applications are also built in the cloud, for multi-device and cross-platform. Rapid application development has been a process used throughout history, but more recently, no-code has further facilitated the rapid aspect of application development.

While building and discovering the right solution, the process requires experimentation and no-code enables this. Instead of creating one large IT project that poses risks and no guarantee on the ROI, building with a no-code platform lets you start small, test possible solutions, see results quickly, and in turn, iterate until the best product is created.

Building on a no-code platform, you create the application from the perspective of the end-user - visually. No-code developers build with a graphical user interface (GUI) that includes a drag-and-drop functionality, so the process is intuitive for anyone. While no-code eliminates the need for hand-coding, it is still possible to change the configurations with coding.
Closes Technical Skills Gap

Rather than spending time on the hiring process and being confronted with the lack of programmers available in the workforce, organizations can utilize no-code platforms. Citizen developers do not need a formal technical background and they can be trained to use no-code platforms in a business environment within a few days.

Additionally, while programmers are necessary, organizations no longer need to hire an extensive IT team. IT was previously in charge of building solutions and is an essential department in every organization but it is not the only team to seek solutions from. Now, there are more possibilities to create solutions because they can be built without a high-level knowledge of coding. In turn, organizations can gain solutions from every employee using no-code. Once you equip your organization with the tool, the next step is getting your employees excited about building solutions easily, efficiently and effectively.

Empowers All Employees to Build Solutions

While closing the skills gap, a no-code option encourages all employees to think creatively and turn ideas into solutions. When an employee without a technical background has a new idea about a process or system to improve in the organization, they can create a proof-of-concept (POC) with a no-code platform. After the application has been tested and verified as an effective solution, IT gets involved to secure, implement and scale it.

Due to the low-learning curve, anyone can learn how to use a no-code platform and build solutions independently. Employees can feel more ownership and connected to their work while undertaking a project that can benefit the organization. With a greater connection to work, employees can enjoy their work more and feel accomplished in building a practical solution.
Using a flexible no-code platform can further empower the employee by eliminating the use of outside software providers that micromanage changes to the infrastructure. Employees can be in full control of their applications and make changes easily and freely. Overall, organizations can gain back control to build solutions and innovate more easily.

**Boosts Company Culture**

A no-code platform impacts employees and the organization beyond the direct benefits of the product you build. Company culture can be difficult to change but taking small steps to address digitization can help shift the collective mindset. Some employees are resistant to change itself, and avoid technology due to the fear of overwhelming training and security doubts.

However, encouraging small changes with a no-code platform can introduce the overarching idea of change to the company. As more small changes are made, the company culture shifts to a shared vision of constant improvement in processes and operations.

Collaboration is facilitated by the use of visual models with a no-code platform. Departments can work together because a technical background is not needed to understand the concepts and users can more easily communicate their ideas about solutions without any confusion over technical jargon. The extended benefit of collaboration is the alignment of employees on the organization’s vision and goals.

**Aligns Business and IT**

No-code not only provides the benefit of collaboration for better results but further for business. Using no-code straightens the alignment between Business and IT by enabling more employees to create solutions and involving IT throughout the process.

No-code platforms engage all lines of business in the solution-making process and in building applications as new ideas flow. While business users can create an application, IT’s oversight ensures the application is robust, maintained and secure. The application eventually is handed over to IT, to be implemented and scaled. By engaging IT throughout this process, organizations can prevent shadow IT and in turn, create better alignment between business and IT.

**Increases Operational Efficiency**

Many redundant tasks can be digitized through an application. Using no-code applications, organizations can digitize and automate processes, reducing manual labor and greatly streamlining tasks. If you have tasks that are constantly occupying your time, you can think about creating an application that facilitates your work.

No-code platforms enable employees to build applications quickly and improve their workflow. These applications are customizable to the employees’ or organizations’ needs. Organizations can move all processes to a digital system. From a CRM system to automated workflows, organizations can improve operational efficiency with no-code.

**Modernizes Existing Legacy Systems**

Rather than rebuilding your digital infrastructure, you can modernize it. Applications built on a no-code platform can be easily connected to existing legacy systems, making it simple to add to and change software without a long, expensive process. Many software providers dictate organizations’ ability to amend their infrastructure and in turn, limit their ownership over their applications. With an application development platform to supplement your legacy system, you can increase productivity without losing the control to an external provider.
Supports Design Thinking and Agile Methods

Businesses change with the market, and with technology also giving the consumer more decision-making power, the organization must focus on the needs of the consumer. **Design thinking** is the ideology-based process one uses throughout the development process to continuously confirm the consumers’ needs are met. Rather than aiming to solve a problem, Design Thinking intends to reach a goal.

With Design Thinking and a no-code platform, organizations can build applications with an emphasis on creating the right solution. There are six phases consisting of empathize, define, ideate, prototype, test and implement. The main element of design thinking is making the end-user the golden thread from project conception to delivery. This ensures that throughout the process, the project is catered to the customer, risk is reduced and the product provides its full value as an effective solution.

Delivering projects based on cost, time and elaborate technology are not effective strategies for the organization nor the client. With the ease of experimenting with no-code, organizations can easily implement design thinking in application development to efficiently deliver a product that suits the end-user. Business Process Management is also transforming, with changes in industry, technological advancements and diversifying customer demands. Now, agile processes are necessitating no-code development.

The purpose of business agility is to prepare organizations for changes in the industry. A digital transformation isn’t just one process, ongoing changes in the industry push organizations to constantly adapt. While building your applications for the current demand, it is necessary to follow agile processes.
Applications built with a no-code platform are more flexible so you can be agile in a constantly-changing industry. Whether you need to adapt to customers or change internal processes, no-code allows you to make any adjustments without a high cost or external service, unlike with legacy systems.

**Improves Service to Customers**

To come full circle, customers are the center of business and the force behind digital transformations. With no-code platforms, organizations can build applications that form and maintain better customer relationships, such as a customer portal. Using a customizable portal, organizations can create a system that not only fits their processes but also better adapts to customers as they change. In turn, organizations can provide optimal customer service.

As the possibilities for solutions are completely in your hands, you can experience even more benefits than listed in this whitepaper. Overall, by using a no-code platform, organizations can save time, money and work while undergoing a digital transformation.
Use Cases of Betty Blocks’ No-Code Platform

Using the Betty Blocks no-code rapid application development platform, many organizations have successfully made steps into a digital transformation. Whether the users of your services are direct customers or citizens, it is important to optimize the processes for all the people within any industry. While all industries can benefit from digitized processes, examples of Betty Blocks’ customers that have experienced success with the no-code application platform belong to the industries: government, health care and insurance.

**Government**

With citizens going digital as well as national government mandates requiring digitization, municipal governments are facing the need to change from inside out. In the Netherlands, the City of Amsterdam, Zaanstad and 12 surrounding municipalities in the region were manually processing their data to manage services from youth care providers. The municipalities wanted to improve internal processes with health care service to youth citizens. However, it was difficult to reach alignment on a common goal among the multiple municipalities. The City of Zaanstad took the initiative to find a new way of processing information more efficiently. With the speed and ease of Betty Blocks’ no-code platform, they created a prototype with QNH in a few days. Using the prototype, they were able to convince the surrounding municipalities of the value of the application, the no-code platform and of digitizing services. With Betty Blocks, they were able to take control of their innovation, change the status quo in government, and build a digital solution easily and effectively.
Healthcare

Healthcare institutions are familiar with the benefits of experimentation in the medical field but experimenting with digital health services can also provide value. eHealth is a growing industry, with the European market making up the largest in the world, worth $7.1 billion. The Digital Health Center (DHC), is an organization that brings together professionals and companies that seek to enter the eHealth market for the first time and need support in the process. DHC wanted to enhance the delivery and accessibility of healthcare to better serve digitally-native patients. Using the Betty Blocks’ no-code platform, they built the Digital Health Tool, an application that provides health care resources digitally. The platform made it easy to build a library of resources including digital brochures and e-Books. With the Tool, DHC could educate and engage patients while driving innovation both internally and in the health care industry. The application also collects the feedback of users to enable the organization to further improve service and spark innovation in health care.

Insurance

The insurance industry is also facing a need for customer-centric digital transformation. Proteq, an insurance provider, created a customer relationship management application with Betty Blocks’ platform to optimize the company’s workflow. This application automated the management of data for potential customers and enabled the company to evaluate signups, online navigation, lead conversion and user-friendliness as possible leads. With a customizable tool, Proteq could nurture leads from qualification to succession until closing the customer deal. Prior to building the tool, Proteq had information about leads without having the means to measure the value of them. Now, all their potential customer contact moments and data could be organized in one application. The benefit of the application was clear for Proteq, facilitating and advancing the nurturing of new customers.
About Betty Blocks

Betty Blocks is the leading no-code application development platform in the world. As the only, truly no-code platform based in the cloud, Betty Blocks enables you to build complex, enterprise-grade applications efficiently and effectively. With the focus on the people, Betty Blocks’ no-code platform empowers any organization to experiment towards the right solution and take control of their digital transformation.

With an annual growth of 210% in 2017, Betty Blocks has reached triple digits each quarter. Also included in Gartner’s hPaPaaS Magic Quadrant, the winner of the Holland Business Award and the first ever no-code platform to have obtained the ISO 27001 certification, Betty Blocks is validating its platform in the areas of security and customer satisfaction. As rapid as Betty Blocks makes application development, they are rapidly expanding internationally. They currently have offices in the Netherlands, Germany, US, UK, Japan and South Africa.

Greetings from the team!

Hannah Park
Content Marketer for Betty Blocks