

### Tech Innovation with Power Business Solutions Enabled through Zoho Creator's Low-Code Platform

Zoho Corporation

Best Advance in Business Strategy and Technology Innovation

February 2023

#### **Company Background**



# **ZOHO** Creator

Company-at-a-Glance	Company-at-a-Glance					
Headquarters	Zoho Corporation is a privately held and profitable company headquartered in Austin, Texas, with international headquarters in Chennai, India, and offices across the globe.					
Year Founded	Previously known as AdventNet, Inc., Zoho was founded in 1996.					
Revenue	As Zoho is a privately held company, total revenue is not disclosed. As per publicly available information, some indicative numbers shared are — US\$700-\$750 million.					
Employees	14,000+ (2022)					
Global Scale (Regions that you operate in or provide services to)	Zoho has 17 offices operating in nine countries around the world. The company operates in India, the US, Europe, the Middle East and Africa, Asia-Pacific, and Latin America.					
Customers/Output, etc. (Key customers and services offered)	Zoho Creator's low-code application development platform provides custom-built business applications that automate business processes, aid in digitization, and enable legacy modernization. Zoho Creator's services are utilized by over 14,000 paying customers that include well-known brands such as Amazon, Saint Gobain, CBRE, University of Michigan, Comcast, MTN, and more.					
Industry	Technology					
Stock Symbol	Privately held, bootstrapped					
Website	www.zoho.com/creator					



#### Value Proposition

#### 1) How it began:

Zoho Corporation is a privately held and profitable company that's been successfully providing web-based business software for 500K+ customers spread across 180+ countries for over 25 years.

Building over 60 cloud-based SAAS products for various business challenges, Zoho's portfolio of products has constantly been evolving, owing to its strong investment in R&D. Zoho Creator is Zoho's cloud-based, low-code application platform. Other well-known products include Zoho One, Zoho CRM, and Zoho Mail.

#### 2) About low-code:

Low-code application development platforms are characterized by a graphical user interface that allows for Agile implementation of business solutions. Low-code capabilities also enable businesses to build customized applications that can automate their operations, go remote, and scale up as the scope expands.

As a low-code development platform, Zoho Creator has an easy-to-use drag-and-drop interface and comes equipped with powerful features, such as API integrations with legacy systems, online self-service portals, analytics dashboards, AI data modelling, and more. A key driver for Zoho Creator's adoption has been that, irrespective of their technical skills, business users and IT decision-makers can build custom applications for their needs.

#### 3) Zoho Creator's value proposition:

# Zoho Creator's value proposition is to empower everyone to build powerful applications 10X faster than other traditional development methodologies.

More power to the user: The value proposition arises from the desire to enable users of varying technical skills to create long-tail web applications for their businesses. Catering to both business owners with minimal coding knowledge and professional developers who play a key role in the evolution of technical capabilities, Zoho Creator aims to bring together both business usability as well as technological sophistication.

**Multi-device compatibility:** Apart from web applications, Zoho Creator allows for native mobile and tablet app creation. It can instantly generate apps and layouts for all device types. Zoho Creator also comes with Android SDK and iOS SDK, to help users build custom Android/iPhone/iPad apps with multiple features and functionalities.

**End-to-end business solutions:** The objective was to provide a simplified low-code platform that could build complex, end-to-end business solutions to run day-to-day



operations. With functionalities like drag-and-drop builders, visual workflow builders to automate processes, codeless third-party integrations and powerful AI/ML dashboards, Zoho Creator is the unified platform for businesses.

**The Zoho universe and vertical tech stack:** A crucial element that helps Zoho Creator achieve its value proposition is that, unlike other competitors, Zoho Creator has the added advantage of the entire Zoho ecosystem, and gains strength from its vertically integrated tech stack.

The tech stack, starting with Zoho-owned and operated data centers, networking, hardware, and services and continuing all the way to the application layer, means that the company has complete control of the technical decision-making and user experience across the full spectrum of their applications and infrastructure. This also ensures that enterprise-grade data security and data privacy can be provided.

Zoho Creator strives to nurture digital transformation in organizations that run the gamut from smaller, family-run businesses to mega corporations relying on legacy systems. The aim is to make what seems to be difficult, easy, and what seems to be complicated, possible.

#### 4) Here are a few business needs that Zoho Creator helps organizations with:

#### • Digital transformation:

Zoho Creator has been designed to meet different aspects of digital transformation by empowering users to digitize, automate, and analyze business problems in a shorter amount of time. By focusing on developer experience and education, users can quickly see tangible results for their efforts, leading to starting more initiatives.

#### • Workflow/business process management and automation:

Business process management and automation is one of the primary use cases driving the design of the platform. This starts with the *process blueprint* feature, which helps users visually map out the most complex business processes offering absolute clarity on the number of steps involved, the sequence of execution, the criteria for moving to the next stage, and more. After mapping the process, Zoho Creator offers visual and non-visual builders for users to convert the process blueprint into AI-powered applications. The platform also provides a basic level of optimization insights.



#### • Legacy modernization:

Legacy modernization, especially for organizations that have been in business for a sizable period of time, is a challenging endeavour. With features such as smart import, developers can include data from different legacy sources and extract the underlying data models and functionalities. Zoho Creator also offers connections to legacy systems that allow organizations to build apps on the platform that extend the capabilities of legacy systems without breaking things. These are typically around integrations, automation, and real-time analytics and reporting.

#### • Security:

A crucial element of building applications is enterprise-grade data security and data privacy. Zoho Creator holds certifications for international security standards such as ISO/IEC 27001 and ISO/IEC 27701 for privacy compliance. Zoho Creator is also GDPR compliant, SOC 1 (SSAE 18 & ISAE 3402 - TYPE 2) compliant, and SOC 2 + HIPAA compliant.

#### 5) Here are a few examples of how customers leverage Zoho Creator:

As a technology solution provider, Zoho Creator has helped customers worldwide automate their business processes, reduce manual dependencies, and limit paper-based processes, achieving operational efficiency and increasing profits.

#### 5.1) Kumi Motors, Mexico

#### 5.1.1) Who they are:

Kumi Motors, based in Mexico, sells new and preowned KIA vehicles, while also providing mechanic services. They have roughly 800 employees spread across 8 branches.

#### 5.1.2) The business problem:

<u>Scattered data sources</u> — With so many varying data sources, they needed to streamline information and establish an efficient way to process all the collected data. Initially, they had most of their information on paper before adopting online spreadsheets. They chose Excel and MS Access to host their data when they did. However, they soon realized that their Excel spreadsheets were prone to errors because they allowed anyone to make up their criteria for managing data. Not only were inconsistencies rampant, but other similar software solutions had their issues — too many complexities for a growing business like Kumi Motors.



#### 5.1.3) The solution:

<u>Cloud-based business-critical applications</u> — Shifting to the cloud was their best bet for business process automation and they had to overcome questions regarding data privacy and resistance to embracing Zoho Creator. The chief developer at Kumi Motors, had to convince their CEO that keeping data on the cloud was safe. With Zoho Creator, he built multiple business-critical applications. These are:

- Human Resource Management: This application maintains information on employees and hiring staff members and provides necessary access to key stakeholders.
- **Demos:** This application lists demo vehicles that sales representatives can test drive and refer to when preparing for sales interactions.
- Seminuevos (Spanish for "preowned"): This app lists second-hand vehicles for sale.
- **Training**: An app that calculates and manages the approximate cost involved in selling, maintaining, and servicing vehicle parts.
- **Expenses**: A travel expense management app records all expenditures incurred by the company at large.
- **Commerce:** An analytics-based app that reports car sales across the country, categorizing sales and revenue by state and district.

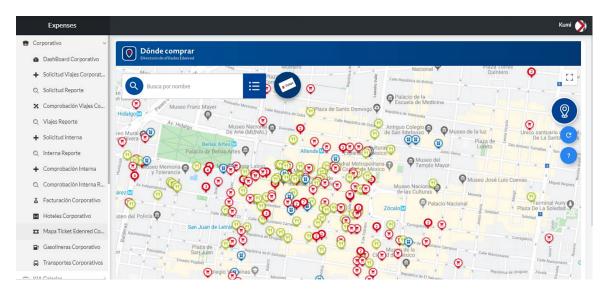
"The biggest impact is that the majority of employees can interact on the platform; we started to create more metrics that help management make better decisions." — Eduardo Sebastian, Chief developer at Kumi Motors



Here's a peek into Kumi Motors Mexico's Commerce app, built with Zoho Creator:



Kumi Motors' travel expense management app records all expenditures incurred by the company at large.





This application maintains information on sales employees and staff members, and provides necessary access to key stakeholders.



#### 5.2) Briotix Health

#### 5.2.1) Who they are:

Briotix Health, established in 1979, is a leading occupational health company providing world-class services in industrial sports medicine, office ergonomics, and specialized solutions in workforce performance. Based in the United States, the company serves SMEs to Fortune 500 companies in over 63 countries.

#### 5.2.2) The business problem:

<u>Need for multitenancy solutions</u>: When Briotix Health started experiencing rapid growth, they were in a situation where the off-the-shelf solutions they used were underperforming, failing to meet their needs, and beginning to prevent successful future development.

Their CTO felt their main problem was that their solutions couldn't provide a segregated and controlled multitenancy environment. Briotix Health serves different clients, and while each program follows a general model, they differ in workflow, SLAs, operating parameters, and billing models — among many other variables — that need to be customized and configured. The solutions forced programs into a standard operating model or required setting up separate databases and client-to-client front-ends.

The off-the-shelf solutions they used created a lot more overhead in management layers, on top of data quality and knowledge management problems—and they completely lacked real-time analytics.



#### 5.2.3) The solution:

**200+ production applications:** Briotix Health has gone from a small POC to more than 10 full-scale commercial products and 200+ production applications built and managed on Zoho Creator — with plans to reach 300 applications.

Their CTO developed the first couple of products and then trained their technology team to become certified Zoho Creator developers. Since then, they've hired several developers and now have a well-staffed internal development team.

Taking steps towards legacy modernization, Briotix Health has needed to scale its technology applications as clients grow with them. Also, due to a robust M&A growth strategy, they have numerous technology platforms they're migrating from. They're pulling data from Salesforce and Quickbase — among many other platforms — and bringing it into Zoho Creator.

"Every business leader is looking for a solution that'll help them get ahead and solve critical pain points, and Zoho Creator has been the most transformative solution I've encountered in my 20 years of business. It has completely revolutionized the way we think about what we do and how we do it." — Shelby Spencer, CTO Briotix Health

#### 5.3) Yellow, Africa

#### 5.3.1) Who they are:

Many of the people living in Malawi and Uganda rely on candles and torches as sources of light at night. Yellow is a tech startup based out of Africa, providing solar-powered electricity to 161,000 off-the-grid households across these two countries. Yellow distributes solar and smartphone products to customers living in areas without formal logistics and proper retail channels.

#### 5.3.2) The business problem:

**Difficulty in automation of data:** They wanted last-mile solutions to manage the performance and incentives of sales agents, automate tasks, and ensure customer satisfaction by tracking customer calls, tasks, and more. Initially a third-party CRM and Google Sheets was used for their needs, however this made automation of data pipelines and measurement of productivity difficult.

#### 5.3.3) The solution:

**<u>Customized ERP solution</u>**: Yellow's use of Zoho Creator is extensive. They built their entire ERP solution — called Ofeefee — and customized it for their business needs and industry.



Zoho Creator enables their agents to earn commissions on products sold, help customers with technical queries, track product deliveries, run payroll, and more. Their entire agent operations are run on Zoho Creator.

The custom ERP system has digital solutions for the entire product journey, starting from procurement, delivery, billing, account management, logistics, rewards, and more. Ofeefee is also integrated with a third-party loan management system.

"Most importantly, we are profitable and sustainable, being able to raise sufficient funding to reach our goal of making life better for 10 million households by 2030. We wouldn't have been able to get to this scale without Zoho Creator!" - Ben Walwyn, CTO, Yellow

#### 5.4) SmartLam North America

#### 5.4.1) Who they are:

SmartLam North America is one of the first commercial manufacturers of cross-laminated timber (CLT) in the United States. They started in 2012, and since then, they have provided innovative construction solutions for customers globally.

They provide end-to-end project management services — from design to engineering to producing custom solutions — with premium-grade CLT, and supply it to the project site on schedule. Each CLT component is individually manufactured and cut to the project's design requirements, allowing buildings to be erected 75% faster and in a block-like way. This process creates immense value in reducing on-site construction labor, time, and waste.

#### 5.4.2) The business problem:

**Inefficient traditional systems**: SmartLam used Excel spreadsheets and paper to manage its production and inventory data. As the company grew and expanded to a second location, the old way of managing systems proved insufficient.

Recognizing the inefficiency of their system, SmartLam evaluated a few material resource planning (MRP) systems, as well as a couple of off-the-shelf construction management solutions like Epicore and Procore. But they realized these were rigid and more suitable for commodity-type production settings that wouldn't suit their process, as it can be very complex.

In 2018 SmartLam realized that, to scale their business, they needed a manufacturing solution that would be flexible enough to accommodate their business model and keep up with company growth.



#### 5.4.3) The solution:

<u>Customized manufacturing ERP</u>: SmartLam evaluated other enterprise-level suites, but decided that, with Zoho Creator, they could build their own customized manufacturing ERP solution to manage their entire production process. They wanted a solution that they could build, from the bottom up, based on their unique production process and organize and store all their data.

Their strategic business analyst, Charles B. Gale, has developed two comprehensive custom applications in-house, with zero dependencies on developers.

Recently, Gale also developed an inventory management application for their production facilities, as they realized they lacked real-time inventory visibility. They didn't have an accurate account of what was in stock, what needed to be ordered, the size (both quantity and type) of that order, and what needed to be replenished, which often resulted in inconsistent inventory levels and wastage.

With these applications, SmartLam has more time to focus on improving its sales growth and innovating ways to improve.

Here's a peek into SmartLam's application built with Zoho Creator: They've built multiple applications, like a lumber procurement app, operations task list, purchase orders app, HRM, inventory solution, and more.

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"If I were to estimate our benefit, it would be close to a quarter of a million dollars over the last two years. The savings are hard to quantify but tremendous. Just the amount of staff we haven't needed to hire, reduction in manufacturing errors, supply efficiency, and cross company communication alone could account for this. We have over 100 employees, and two recently built state-of-the-art manufacturing facilities of which Zoho is and was integral in our success." — Charles B. Gale, Strategic Business Analyst

#### **Product or Program Innovation**

#### 1. Product innovation:

Zoho Creator was one of the first few products to be built in the Zoho suite of products. Zoho Creator's journey began as an online database with web-based forms in 2006. The next year, the platform was fine-tuned to have script-based workflow engines built with Zoho's proprietary language, Deluge. Data Enriched Language for the Universal Grid Environment, or Deluge, is an online scripting language that links many products in the Zoho suite. By minimizing the use of technical jargon and complex code, Deluge makes it easier to adopt low-code.

A crucial development happened in 2008 that facilitates building components and configurable workflows with the platform's drag-and-drop functionalities.

In 2014, Zoho Creator modernized user experiences to run natively on any mobile device by providing a multiplatform experience to their customers.

In 2018, the focus was put on decreasing the time it took to build custom applications.

Over the next few years, the goal was to evolve into an all-encompassing platform that would help users in the journey of developing low-code business solutions—with the ability to utilize visual business process automation, integrate with existing third-party systems, and allow users to easily build insightful analytics dashboards.

In 2021, Zoho Creator evolved into a unified platform that combines the power of building low-code applications with codeless integrations, visual workflow builders, and powerful analytics functionalities.

All applications built on the Creator platform leverage Zoho's proprietary in-house technology stack. Zoho Creator owns all nonfunctional aspects of the platform, like security, performance, and scaling, which enables users to focus on the business logic.



#### **Rapid application development:**

 UI development: Zoho Creator's low-code platform has abstracted design components within the platform to help users effortlessly build apps with great UI/UX. These include 10 WYSIWYG point-and-click graphical builders, 6 guided non-graphical builders, prebuilt elements that can be utilized across components, and preconfigured themes, layouts, and color customizations.

Zoho Creator offers a rapidly growing library of 300+ customizable components and application templates for design flexibility. These are handcrafted templates for different form factors, like web, mobile, and tablet, and we also support various gestures, such as right-click, long-press, and swipe. Each UI customization action configured by the user offers a real-time live preview. In addition, users can customize UI/UX for different devices from within the app builder. The platform has also incorporated popular design standards in the system for users to leverage in application design, including material design.

- Automation tools: Form workflows allow for actions to be triggered upon loading, user input, or submission of a form at each stage: creation, modification, and deletion. Actions can be configured with point-and-click, such as notifications, data manipulation, and integrations. Blueprints allow users to design, automate, and optimize business processes in detail. Schedules enable a user to execute actions at a set interval or relative to any date field within the app. Approval processes establish preconfigured hierarchical role-based processes with notification triggers, and the Payments module facilitates easy configuration with various gateways.
- Insightful data visualization: Once vast amounts of data are captured, reports are generated to measure, monitor, and manage information. This helps to improve decision-making and optimize various business processes. Using the *pages* feature, users can aggregate and extract values from the data collected, convert it into manageable chunks of visual information, and create a detailed overview of their business on a single screen.

**2. Mobile:** Tech-forward businesses have to choose whether to build a mobile app, a mobile website, or both. Zoho Creator's native mobile apps enable businesses to provide a mobile presence plus a customized end-user experience. When accessed from mobile browsers, Zoho Creator apps become progressive web apps (PWAs).

A progressive web app enables a native app-like experience on a mobile browser. This technology offers a dual advantage. For the business-app owner, this offers a quick and



platform-independent means of app distribution. In other words, the end customers of the businesses will be able to access the apps from any mobile device that supports browsing the internet. For the end customer, the business apps will enable a native mobile app-like experience on their mobile browsers. The native mobile apps are readily available without any separate coding required. These can be hyper-customized to utilize design elements of the app owners' choice. The mobile apps built with Zoho Creator are compatible with iOS and Android and can be white-labelled.

**3. Coding languages**: Creator's built-in IDE functionality allows you to edit and update the application codebase and modify the underlying model and logic using programming languages like Javascript, Node.js, or ZML (Zoho Markup Language), along with Deluge. The platform also provides widgets at various levels of applications for developers to host on Zoho servers. Zoho Creator supports round-tripping, which allows professional developers to leverage the graphical builders and IDE as they please. The most common scenario involves using the visual builders to form the base app and then using the IDE to enhance the functionalities.

**4. Application development lifecycle management:** Zoho Creator also has built-in measures to assure application quality across different environments (building, staging, and production) without any additional setup. Developers can execute preliminary testing in staging and publish changes at will with a single click.

The platform supports testing from the persona POV of an admin, developer, or user, to ensure functional QA. Administrators can also set up environment-specific permissions for developers to control application quality in the live mode.



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DEPLOY	Asset Management Changes available	5.0 Jul 28, 2021	<b>5.0</b> Aug 03, 2021	
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ි Portal	Vendors Changes available	<b>7.0</b> Jun 10, 2021	<b>7.0</b> Jun 12, 2021	
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**5. Integrations:** Zoho Creator also has an end-to-end collaborative tool (Zoho Cliq) built into the platform to support collaboration across the development process, including design. This tool supports text, audio calls, video meetings, and screen sharing seamlessly across devices and environments, within the same platform.

In addition, Zoho Creator has prebuilt connectors to over 85+ popular agile project management tools, including Jira, Trello, Asana, and Basecamp. These work via a unified data model (UDM) service, which acts as a wrapper for different service REST APIs for data input/output. The process for integrating external data sources is simplified through a visual drag-and-drop data flow builder. Alternatively, Zoho Creator also partners with integration platforms like Zapier and Workato for customers to leverage when needed.

Specifically, Zoho Creator allows for an Agile methodology of application development.

The platform has nested Zoho Sprints, Zoho's online agile project management software, inside the builder to help business and IT developers collaborate.

This also means that organizations have the flexibility to build a minimum viable product (MVP), test with real-world data and easily make changes to the application based on any unforeseen challenges.

**6. Advanced functionalities:** Zoho Creator's breakthrough innovations are enabling automation of complex workflows, setting up APIs for integrations with 600+ third-party



apps, facilitating developer environments for staging and publishing changes, providing access controls based on user roles, and more. Acting as a function as a service, or FaaS, Zoho Creator's cloud platform provides the infrastructure for serverless development and deployment of application functionalities.

The Zoho Creator platform supports a variety of pre-integrated AI, ML, and analytical capabilities. App developers can make use of these predictive and cognitive services to power their apps with AI capabilities, without writing even a single line of code. It also doesn't need developers to have prior knowledge of niche AI capabilities, such as neural networking, modeling, training, or testing.

**AI** - Zoho Creator supports the following pre-modeled AI operations: keyword extraction, sentiment analysis, optical character recognition, object detection, language prediction, phone number parsing, named entities identification, and address parsing.

- **Prediction technology** The platform allows advanced prediction technology to propose the next possible value of a field/column based on the historical data available in the table. By selecting the field to be predicted and the factor fields that influence the prediction, the system creates the AI model for the specified configuration automatically in the backend. This model can help the system predict the value of any new data entered into the form.
- Forecasting The platform comes with a powerful built-in forecast engine to process historical data. Auto-filling of missing values, periodicity detection, identifying trends, seasonality, and residual components, forecasting by regressions, and hind-casting using additive and multiplicative models are some examples.
- Zia Insights The Creator platform supports Zia Insights, by which users can derive actionable insights in natural language from the data residing inside your apps. This feature can be applied across individual reports or from reports embedded in the dashboard, using prebuilt AI features such as predictive analytics to deliver insights.

All these functionalities ensure complex business use cases work seamlessly with lowcode, thereby accruing time and cost benefits.

**7. Ease of use:** Zoho Creator's value proposition is to empower everyone to build powerful applications faster. Compared to traditional software development, building a custom application has been made easier with Zoho Creator's low-code features, such as form builders, reports, visual dashboards, automating notifications, and more.



The ease of use of Zoho Creator's low-code platform, with its drag-and-drop UI, has enabled business users with minimal coding expertise to build custom applications for their requirements. This ease of use has led to a further democratizing of technology, meaning even non-IT departments within organizations quickly embrace digital transformation.

**8. Market positioning:** Over the years, Zoho Creator's research and development capabilities, futuristic technology vision, and customer-first approach have made product development and iterations part of the product positioning strategy. The market positioning has been that Zoho Creator facilitates building business-critical applications faster. Though priced lower than competitors, the advantage showcased to customers is that they can leverage numerous other Zoho suites of products for their business. Platform enhancements are rolled out every year to evolve with the users' needs.

**9. Human touch:** The product has continued to evolve and sees interest from businesses across industries, irrespective of their size. However, transitioning from a legacy system or adopting a low-code platform afresh is not an easy decision for businesses. For this reason, Zoho Creator's technical solution experts build a tailor-made proof of concept for customer requirements. The proof of concept allows potential customers to envision how the platform can address their business requirements. As a strategy, this helps customers understand the capabilities of the platform as well as trust that their business is in safe hands. The support experts render their services spanning different support plans, with the zenith being 1-hour response time and up to 24/7 live support.



#### **Unique Differentiators**

**1)** Leveraging the power of the Zoho ecosystem: Zoho has more than 50+ SaaS products used by 75 million users globally. This allows Creator users to utilize various other solutions, such as accounting (Zoho Books), office suite (Zoho Workplace) collaboration (Zoho Mail, Zoho Cliq), and more. Belonging to the same ecosystem, Zoho Creator customers can seamlessly integrate their business apps with a wide range of these apps as well. This is precisely why Zoho Creator has been able to leverage its many capabilities from within this low-code spectrum. No other low-code vendor does what Creator does organically.

Early in its journey, one of the biggest strategic decisions taken as a company was to invest in the **Zoho Stack**, our ground-up full-stack infrastructure (including data centers, networking, hardware, and software) where all the products are built and hosted. This decision was driven by the need to control all aspects of the product experience Zoho Creator can deliver to clients. This also ensures that enterprise-grade data security and data privacy can be provided. This company-wide strategy is one of the biggest differentiators that sets Creator apart from other competitors.

**2)** Developer-friendly features: Zoho Creator caters to citizen developers and professional developers alike. Citizen development is a rising phenomenon where business users build tech tools for their or their department's use. While citizen developers may not be experts in technology, their business logic is sound and they have a passion for learning the tech platforms that make their lives better.

Zoho Creator also sees traction from professional developers who are proficient with multiple coding platforms. Zoho Creator attracts the patronage of coding and IT professional with its extra features dedicated to developers, such as its CSS editor, application IDE, Deluge scripting, APIs, SDKs, and more.

Implementing low-code applications also helps avoid shadow IT, as IT departments are happy to be able to build business-critical applications with faster turnaround times.

Understanding the business use case and ensuring the transition of business requirements into custom-built applications is crucial, and that's where expertise plays a major role. Zoho Creator is equipped with intelligence within the builder to help developers create optimized applications. This includes auto-generation of reports with each form, automated naming assistance, and design suggestions. The platform also offers intelligent guidance for developers to explore platform capabilities and conversational AI for users to generate complex multi-layered dashboards using NLP for



analytics.

**3)** Completely embedded AI/ML capabilities: Compared to other competitors, Zoho Creator has a completely embedded and powerful business intelligence (BI) and analytics engine. This capability provides functionality like conversational analytics, predictive analytics, data alerts, and what-if analysis, and enables business users to not only build apps but leverage the data those apps collect and generate to make better and more rapid business decisions—all without requiring any additional tools. Zoho Creator also provides features such as AI-powered data cleansing during data import that are not present in other solution providers.

Further features, such as geofencing, captcha, address and location coordinates, NFC readers, and QR/barcode scanning are available out of the box; however, these are available only as plugins in other products.

Zoho Creator is armed with application lifecycle management (ALM), a feature that allows the implementation of continuous development and deployment. It's an applicationfriendly environment that helps track and version changes, validate user flows or workflows before publishing, test user privileges, and more.

**Extensive reports:** A key differentiator for Zoho Creator is access to readily available, extensive reports that help users incorporate these data intelligence components to achieve the goal of their application. Zoho Creator offers a point-and-click report builder that helps visualize data easily; other tools need the use of complex widgets for the same feature. The low-code platform also allows publishing specific reports for decision-making, rather than publishing entire modules.

A *report* collates and presents information to help the user analyze, track, or record data. Reports are made up of text, figures, graphics, and/or audiovisual information. Zoho Creator comes equipped with different reports that can transform data into actionable pointers for the audience. These are list reports, calendar reports, timeline reports, Kanban reports, map reports, pivot tables/pivot charts, and spreadsheet reports.

*List reports* enable the user to present or view their data records in a traditional list format. They organize records in different layouts that make the data comprehensible. *Kanban reports* help to visualize records capturing a process flow, the progress of a process, or status of the process. One of the most often-used reports, *Map reports* display records with specific geographical locations. Since this report is based on the location field type, and allows the recorded locations to be plotted on a typical map, this benefits organizations that rely on logistics, travel, warehouse management, and more.

### TECHNOLOGY FALL PROGRAM





**4) Online self-service portals:** Among Creator's most popular features are its online self-service portals. Online client portals are secure application gateways designed to provide customers, vendors, and partners with a single point of access to a company's products, services, and information. Self-service portals are also readily available as progressive web apps and even native mobile apps, downloadable with a click.

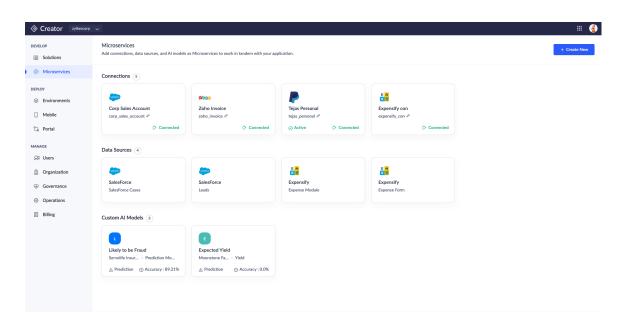
**5)** Enterprise-friendly: Specifically for enterprises, Zoho Creator has built-in hosting infrastructure, automatic data backup, and one-click secure sharing. Built-in integrations with Zoho Flow and Zoho Analytics make this a comprehensive platform that allows visualization of workflows and gathering key insights via data dashboards.

Zoho Creator enables businesses on legacy software to modernize their systems by extending their capabilities using powerful features. Zoho Creator can easily integrate with existing systems using its APIs while providing avenues to build new modules and components. This way, Zoho Creator can integrate with 600+ prebuilt third-party apps.

Features such as built-in monitoring, application instance management, and selective automatic upgrades — that allow users to choose the enforcement of major feature updates — are unique to Zoho Creator.



Finally, Zoho Creator's white-label feature allows customers to maintain their brand identity across client-facing applications.



**6) Ironclad approvals and security:** Zoho Creator provides single sign-on (SSO) through its in-house identity and access management (IAM) service. This cuts across all the apps created by the developer on our LCAP, and for all Zoho other services.

Zoho Creator also supports role-based access control through a centralized user management console for developers. These controls are split into roles and permissions. Based on the role assigned to them and the organizational hierarchy, users will have record visibility in addition to bonus controls, such as sharing data with peers.

Permissions are used to control the actions a user can execute within an application, such as CRUD operations, importing/exporting, and any other custom criteria defined by the owner. Permissions can be configured to control development rights at a granular level, like access and/or publishing rights to integrations, development, sandbox, analytics, and more. Different applications can have the same developers with different access. Also, different developers with varying sets of permissions can work simultaneously across environments.

**7) UI- and infrastructure-independent:** As a low-code platform, Zoho Creator is a unique product catering to both hardcore IT developers and business users with limited coding expertise. Zoho Creator's user-friendly UI is modern and intuitive, allowing users to build apps for their requirements easily.



Zoho Creator is platform-independent, requiring only a browser and an internet connection, compared to competitors requiring a browser and an IDE or virtualization software. Zoho Creator is a complete, serverless SAAS platform where the product takes care of server maintenance.

#### Measurable Result

Here are some key measurable results that Zoho Creator's customers enjoy:

#### 1) Kumi Motors, Mexico:

**1.1)** Biggest impact: For Kumi Motors, Mexico, the biggest impact is that Zoho Creator helped change employees' perspectives about using computers and software.

**1.2) Improvement in efficiency:** Automated processes at Kumi Motors help staff carry out their daily activities and manage their time more effectively. Access to real-time information and economical use of resources are bonuses for implementing Zoho Creator.

**1.3)** Cost savings: Kumi Motors chief developer Eduardo found that purchasing an employee management system for 400-500 employees would cost them \$16,000 on average. That's a massive amount, considering the company had other priorities to invest in. Zoho Creator has almost eliminated that expense. Moreover, now that they have a comprehensive vehicle database, customers require fewer test drives. This has helped reduce the company's fuel usage by about 70%.

**1.4) Increase in revenue:** As for preowned vehicles, Kumi Motors, Mexico had a 20% increase in sales, largely because their Zoho Creator app functions as a complete inventory management system, tracking vehicles more efficiently than their previous systems. Sales representatives have around-the-clock access to vehicle details, enabling them to initiate conversations with customers at any time. Kumi Motors now makes about 500,000 Mexican pesos per dealership yearly—roughly \$26,000 USD.

**1.5) Facilitating better decision-making:** Because most employees can interact with the platform, Kumi Motors has generated more metrics to help management make better decisions.

#### 2) Briotix Health:

**2.1) Time & money savings:** Zoho Creator's drag-and-drop interface allowed Briotix Health to build database-backed mobile and web apps faster, and with fewer developers, than traditional software development. Couple that with not having to take care of



hosting costs, platform maintenance, and security updates, and they saw massive savings of time and money.

Zoho Creator has made a huge difference. One of Briotix's acquisitions was in the middle of developing an ASP.NET platform before they came on board. They let that project finish and compared its progress to a nearly identical build they had underway in Zoho Creator. By the end, they'd saved 68.8% on the product built out in Creator—a savings of over \$300,000.

**2.2)** Multi-app architecture with single sign-on (SSO): A key benefit Briotix is happy about is the single sign-on feature in Zoho Creator, which enables users to log in once and access various services and apps managed by fine-grained access controls. From the same single point of secure entry, the developer can begin to configure and customize applications to any degree they require.

**2.3)** Agility and flexibility: With Zoho Creator, Briotix now better understands its customer needs. Briotix Health has clients searching for solutions to problems they've been unable to solve effectively. Their team can build a program around the solution in weeks and can combine their understanding of the industry with the speed of development provided by Zoho Creator.

**2.4) Enterprise-grade security:** Briotix Health works with Fortune 100 companies and federal and state governments. Security is an extreme concern of their clients and theirs—and Zoho Creator has enterprise-grade security. Zoho Creator has the benefit of the Zoho security team and Zoho's security investments. Everything about how Zoho is organized—securing the network, data center decisions, capacity—is done with the customer in mind.

#### 3) Yellow Africa:

**3.1) Growth**: Yellow Africa has 161,000 customers, 900+ agents, and onboards 10,000+ customers every month. They are now the largest solar provider in Malawi and growing at 30% per month in Uganda.

**3.2)** Sustainable business: Zoho Creator enables Yellow to scale up, and as a profitable organization, they've been able to raise sufficient funding. Their CTO, Ben Walwyn, hopes to reach their goal of making life better for 10 million households by 2030.

**3.3) Efficiency:** Their productivity metrics increased by 100%, and they've been able to scale at low cost, which has increased revenue many times over.

#### 4) SmartLam North America:



**4.1) Better data visibility:** After implementing Zoho Creator, SmartLam can now identify major business KPIs to help drive efficiency, accuracy, and confidence in their processes. Zoho Creator captures all production-related recipe volumes, scheduling, completion dates and times, and QA/QC data for each item and project. This data is invaluable and feeds finance, operations, and QC departments across the company to monitor daily/monthly/yearly manufacturing patterns and goals.

**4.2) Inventory transparency:** Once SmartLam built their inventory management app, it was able to utilize better inventory transparency. They now know the exact inventory that they're using monthly, stock on hand, and can order materials much more accurately. Plus, they can precisely price their products with better insights into material and production costs.

**4.3)** Increase in production through automation: When a cross-laminated timber panel is built, it takes a certain "recipe" of the number of boards required to complete the configuration. The total number of lamellas (top layer of an engineered wooden floor) varies depending on the specified panel's thickness, length, and width. Before Zoho Creator, the calculations for the panel recipe were done manually. Now, all product recipes are created in half the time and passed on to the production teams much faster. This has helped increase communication and decrease delays in information transfer from engineering to design to production.

With Zoho Creator, SmartLam is projecting cost savings of \$250,000 over 2 years. The custom-built manufacturing applications also ensured a nearly 90% reduction in errors, a 90% increase in productivity, and a 10% increase in profits.

#### Conclusion

Zoho Creator is a low-code platform that has an easy-to-use drag-and-drop interface armed with powerful features, such as API integrations with legacy systems, online selfservice portals, analytics dashboards, AI data modelling, and more.

## Zoho Creator's value proposition is to empower anyone to build powerful applications 10X faster than other traditional development methodologies.

A key driver for Zoho Creator's adoption has been that, irrespective of their technical skills, both citizen developers and proficient IT developers can build custom applications for their needs.

Leveraging the Zoho ecosystem, owning the entire tech stack from data centres to the application layer, sets Zoho Creator apart from other competitors. This is a distinct advantage, as this gives the company complete control of the technical decision-making



and user experience across the full spectrum of applications and infrastructure. Customers also benefit from the enterprise-grade data security and data privacy that this provides. Since Zoho products share the same frameworks, interoperability between services is seamless.

Zoho Creator is platform-independent, requiring only a browser and an internet connection, compared to competitors who require a browser and an IDE or virtualization software. Zoho Creator is a complete, serverless SAAS platform where the product takes care of server maintenance.

Zoho Creator strives to help a spectrum of businesses — from smaller, family-run organizations to mega-corporations — looking to solve their business problems with technology. Our R&D-oriented approach keeps Zoho Creator in tune with ever-changing user needs and the tech ecosystem as a whole. The platform is armed with capabilities that include business process automation, rapid application development, intelligent data analysis and visualizations, integrations, multi-device compatibility, hyper-customization, and more. These capabilities help the low-code platform aid firms in meeting their digital transformation needs, automating business processes, legacy modernization, and much more. These business needs help to improve operational efficiency, reduce reliance on pen-and-paper methods, optimize labor, and save costs.

When it comes to product innovation, Zoho Creator continues to make strides in rapid application development (RAD). R&D is done to implement newer features and fine-tune the UI, intuitive workflow automation, and the built-in full-fledged analytics and BI engine.

Zoho Creator is the only low-code platform that has a powerful, completely embedded business intelligence (BI) and analytics engine. This capability provides functionalities like conversational analytics, predictive analytics, data alerts, and what-if analysis, and enables business users to not only build apps but leverage their data to make rapid business decisions. Zoho Creator's extensive report features, such as Kanban reports, calendar reports, and map reports help users represent data in a more actionoriented manner.

Zoho Creator's mobile compatibility ensures that customers are able to access and make business decisions on the go.

Online self-service portals provide Zoho Creator customers with a secure application gateway designed to provide customers, vendors, and partners with a single point of access to their company's products, services, and information. Self-service portals are also readily available as progressive web apps and even native mobile apps, downloadable with a click.



All these and more help nearly 14,000+ paying customers that include well-known brands such as Amazon, Saint Gobain, CBRE, University of Michigan, Comcast, Kumi Motors, and more.

Zoho Creator aims to empower everyone, irrespective of their technical expertise, to build business-critical applications faster, with minimal coding. The aim is to make what seems to be difficult, easy, and what seems to be complicated, possible.

So, the most important reason why we think Zoho Creator is a strong contender for the category "Best Advance in Business Strategy and Technology Innovation" is that Zoho Creator empowers users across the technical skills spectrum to build powerful, end-toend solutions for their business needs — whatever they may be.



### **About Brandon Hall Group**

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