Automating Pexion's data capture and shop floor processes
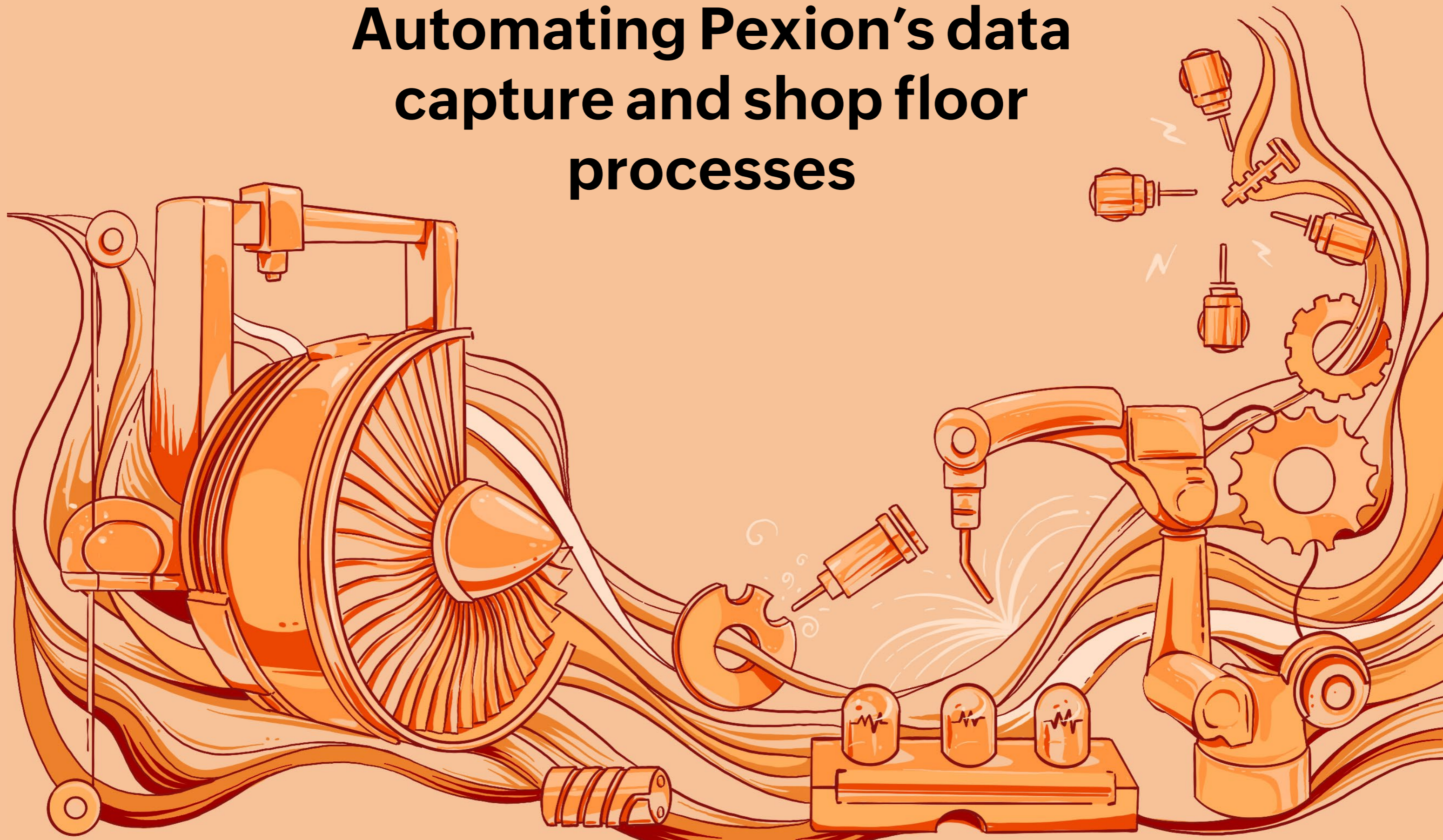
# Index

The company

The Pexion Group is an 18-company manufacturing organization based out of the United Kingdom, providing custom manufacturing solutions for multiple industries. They specialize in the design, development, and prototyping of four main manufacturing engineering services: Precision engineering, toolmaking and moulding, electronics manufacturing, and sheet metal fabrication.

Their business model includes engineering parts in aerospace and defense, automotive, medical, oil and gas, and marine industries, electronic subassemblies and electronic boards for component manufacturers, and press tools for plastic injection moulding, among other examples.

Reg Horman, director at The Pexion Group explained their business model, and spoke about their need for a low-code platform and how they saved over £175k in three years using Zoho Creator.
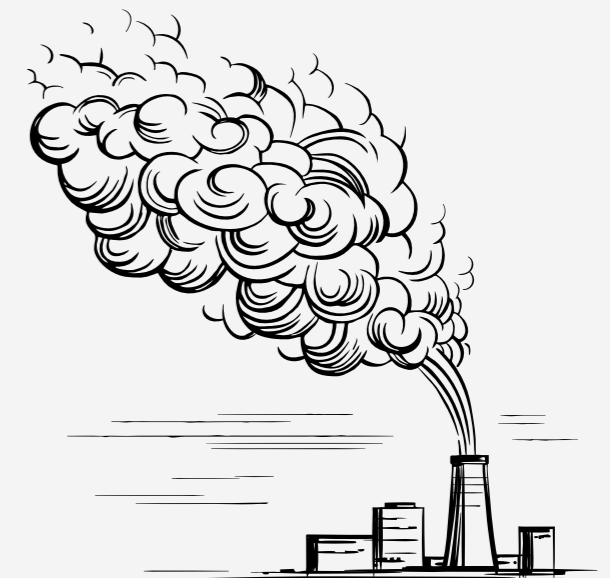
The challenge

One of the biggest challenges they had was to connect disparate paperwork and legacy systems into a unified information management solution.

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Acquiring companies generates a plethora of disparate systems and processes. It's quite impossible to migrate whilst operational, so we had to find a cloud-based data management system that would connect with and extract legacy data to deliver timely and relevant operational, managerial, and group-wide data.

- Reg Horman, Systems and IT Director, Pexion

Moreover, most of their processes—inspection, shop floor processes, and reports—were manual. They had a basic ERP for their accounting functions and had one or two MRP databases, but there was little consistency for compliance and reporting processes.

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Our businesses used technology for basic operational requirements like payroll and accounts. But everything else, from getting the products sourced to finished goods, was managed either manually or using spreadsheets; which was very inefficient. So we needed an environmental platform to automate those processes.

- Reg Horman, Systems and IT Director, Pexion

They also wanted to capture real-time information from the shop floor, and manage all the different tasks and areas of their business in one place. Their business nuances demanded they create a system and data management environment to:

Capture data at the point of generation

Automate workflow and communication across departments

Enforce compliance in areas like health and safety, KPI reporting, and forecasting

The solution

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I have a strategic vision of how and where technology should change organizations, and have kept my eye on Zoho Creator for many years. Zoho's platform for business is capable of helping me deliver that strategy.

- Reg Horman, Systems and IT Director, Pexion

In 2012, they started using Zoho CRM and, in 2015, Zoho Creator was brought on as an alternative to Microsoft Visual Studio. Horman asked his developers to give it a shot.

They first built an app to track accidents and their details with proper inspection and audit trails built in. They wanted to not just log accidents but also record the video or image and append it to the system. This way, when the problem was resolved, they could prove it by adding a post-incident photograph.

Horman says developing on Creator "is faster, quicker, more agile, and doesn't need a huge amount of time or expenditure to get to a solution that users can work with."

Pexion has built 30 applications for different purposes, like data capture, prototyping, lean manufacturing, health and safety, evacuation management, and IoT machine integrations, among many others. Moreover, given the nature of their apps, most of them are used on mobile devices. Here are just a few examples:

Group contract review:

An app and workflow with approval signatures to review incoming orders and check the specifics, like sizing kits, drawings, and manufacturing capability

Attendance, visitor management, and evacuation control system:

Integrated with existing time and attendance technology, and extended to accommodate COVID-specific requirements for staff and visitors

Branding project control:

Manages all the different brands of Pexion; handling factors like branding strategies, approval for document releases, and more

Lean manufacturing application:

The Six Sigma app assists users and management by collecting, analyzing, and providing real-time feedback across organizations

Pexion recently delivered an application that took only 3 days to build; an app for evacuation tracking. Every business in the organization has a fire or terrorism alarm system that could cause the building to be evacuated.

This app uses a real-time data feed from the time and attendance system to know who is on site. They've also built a visitor system to know who visitors are. If and when the fire alarm is triggered, the people go to a muster station and group themselves by department.

The data feed automatically comes into the app, by department, so that they can check that all people are present. If anybody is hurt in the building, they'll find out in a matter of minutes.

The application took three days to develop, two weeks to train users, and went live in less than a month.

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That's the kind of impact Zoho Creator has. Now, if there's an evacuation for whatever reason, the system delivers, even if there's no internet connection!

- Reg Horman, Systems and IT Director, Pexion

ROI and benefits

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Last year we deployed a complete COVID health and safety application in three days. It allowed us to quickly add accountability to our operations while protecting us from any potential liabilities that could spring up in the course of normal, day-to-day activities.

- Reg Horman, Systems and IT Director, Pexion

When COVID hit, they already had health and safety inspection applications where they could take real-time video or images of whatever event they needed, and then look at the actions to resolve the problem.

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We'd already had all that, so we just applied it to what we thought we needed to do to manage COVID, and have passed with flying colors. We were able to set a new standard at the start of the problem and not as an afterthought.

- Reg Horman, Systems and IT Director, Pexion

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As engineers, we make highly complicated parts from drawings. And as IT developers we should build from system drawings, and not over-complicated text, within which ambiguity and interpretation are the enemy. With Zoho Creator, we could actually draw solutions on the user interface. Users don't always know what is possible, so asking them to define system futures is often problematic.

- Reg Horman, Systems and IT Director, Pexion

As of today, they have end-to-end visibility across all of their departments. From QA and sales, to finance and service engineering, they gather all data from 18 businesses, in real time. **" We can now look after a much larger group of companies because of Zoho Creator."**

They've also automated all their documentation processes, and no longer use paper to ideate app requirements, instead prototyping them on Creator.

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If you're developing solutions that need to sit across a multimodal platform—for any device, from anywhere, on any platform—then you only have to develop it once on Zoho Creator.
And the development process is 10 to 20 times faster than what you've been used to in the past.

- Reg Horman, Systems and IT Director, Pexion

About us

At Zoho Creator, we study the past, observe the present, and envision the future of how software communicates with businesses. To empower business owners, we've infused Zoho Creator with modern functionality like low-code and rapid development. With Zoho Creator, users can cater to custom requirements, with apps that automate day-to-day tasks, and let them tackle tomorrow's problems. Just sign up, pick a plan, and start building!

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ZOHO Creator

www.zoho.com/creator/

We'd love to talk! Reach out to us:

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