

Customer Story



365 ARCHITECHS

A mobile app provides a 90% increase in productivity

A combination of Microsoft 365 and Azure technologies as delivered significant improvements to the workflow of an Australian small business, enabling them to achieve more with a much faster response time for their clients.

Company
Consulting
Organisation

Location
Brisbane, Australia

Sector
Small Business

Employees
30

Technology
Power Platform
Azure SQL DB
Azure Functions
Logic Apps

Existing Processes

When performing certification inspections, a series of photographs are taken by consultants, together with a list of notes to categorise various aspects of the images and ultimately whether or not the items in the photos pass the inspection. Notes regarding requirements for rectification are included. Photos, annotations and notes are then assembled by administrative staff into a report which is then emailed to the client. Photos require resizing and re-orientating. It's all a very manual process.

Challenge

The existing process comprised of approximately as much administrative time as consulting time, resulting in time-consuming and non-value-adding processes with delays to delivering reports to clients. There had to be a better way.

Approach

A series of workshops analysed existing processes and identified opportunities to streamline and automate steps in the process. Options were identified and a variety of technological solutions were considered. As consultants use smartphones while on-site to capture photos, a mobile app was selected as the most appropriate and cost-effective solution to digitally-transform this workflow.

Technology

Microsoft PowerApps provides a low-code development environment for creating mobile apps. This provided the user experience for consultants to capture images and store them against customer and project records in a cloud database powered by Azure SQL DB. This is a highly-scalable, enterprise-grade database suitable for small and large datasets available in a robust and redundant, highly-available scenario.

Azure Functions provides an ability to write very complex application components rapidly within a serverless application framework. Traditionally, an application would require a server to be running constantly waiting for a request. Serverless technology allows for application functions to be developed but remain available at no cost without servers. They are billed on execution only, making this an extremely affordable solution for low transaction volumes.

Logic Apps provides integration and automation between services such as PowerApps, Azure SQL Database and Azure Functions.

Solution

A mobile app was developed using PowerApps, part of the Microsoft Power Platform. A database of clients, projects and inspections was created with data stored in Azure SQL DB. Administrative staff set up new clients and their projects, allowing consultants the ability to conduct inspections, capture images with annotations and notes, directly in the mobile app. Gone are the days of sending information to the office, waiting for reports to be collated, checking the reports and sending out to clients. Now the consultants complete the inspection on site, generate the report and issue it to clients in real time.

One challenge with using a variety of different smartphones to acquire images, is the way that different devices rotate images when saving. The Azure Function that was developed completes this image analysis and modification, by analysing the raw image and resizing and rotating them accordingly.

Benefits

Client Experience

Clients receive their reports much faster than before

Streamlined Processes

Several non-value-adding steps have been removed from the workflow with less administrative time required in the process

Cost Savings

Significant improvement in productivity and reduction in costs

Future

A series of improvements are planned for the application. These include using artificial analysis to categorise images based on a machine learning algorithm, reducing the amount of time required in analysing information captured by the mobile app.

An augmented reality solution, together with drones for capturing data and voice-controlled completion of annotations are on the horizon for this solution.

As some would say, "the sky's the limit".

What happened next?

This solution was so successful, a new business was launched using the technology developed to add an additional revenue line to the organisation.

The solution was offered to competing organisations, many of which have adopted the solution. Feedback continues to be received generating updates to the software.

About 365 Architechs

Specialists in digital transformation, artificial intelligence and cybersecurity, 365 Architechs provide consulting and project management services to small businesses, corporates and non-for-profit organisations globally. As a Microsoft Gold-certified partner, 365 Architechs have the expertise, experience and support to deliver solutions that provide value across cloud, mobile and social environments.