Business Process Automation

Over the past thirty-odd years, computer technology has helped make businesses in Windsor/Essex far more efficient. Typewriters have been replaced by word processors, desktop adding machines by spreadsheets, letters and fax by email. Virtually every business has benefited from the computer revolution, but there is plenty of room for business to do more with less.

It might surprise some people that I often try to talk potential clients out of custom software solutions. Software is an expensive asset that, like any asset, requires constant maintenance to preserve its value and extend its life. Most of the time, the expense and risk associated with custom software, especially on a larger scale, is not justified. The potential returns are often far smaller than the costs of custom software, especially for small business.

One exception to this rule is business process automation. Automation code can often be built to complement or automate existing off-the-shelf software, saving valuable employee time and providing solid return on investment at a fraction of the cost of custom software.

One of the most fruitful opportunities for greater efficiency is to look at automating away repeated tasks that drain employee time without giving them scope to use their skills and talents to benefit the business. These productivity-sapping tasks are everywhere. Office tasks like routing expense reports or developing quotes for products or services can often be sped up significantly with automation. In the shop, CAM processes and inventory control tasks are prime targets for automating away repetitive tasks.

Most modern software provides automation tools in the form of scripting languages or APIs (Application Programming Interfaces) that allow software developers to extend the functionality of these products. For smaller companies or startups, this type of automation can be a cost-effective alternative to specialized business software.

Microsoft Office is one of the most commonly used commercial software products in the world, and it's also one of the most automated. From traditional Excel macros and Visual Basic for Applications scripts to the newer Microsoft Graph tools for extending modern cloud-based Office solutions, there are a world of options for developers to automate repeated tasks.

The Google Suite of applications is similar to Microsoft Office in overall functionality, and it has its own set of automation tools in Google Script. Both Microsoft and Google offer automation tools using JavaScript, one of today's most popular programming languages.

Both Microsoft Office and Google Suite can be automated with third-party tools like Zapier, which reduce the need for custom code even further.

One use case for these tools is sales process automation. The process of moving a sales lead through the pipeline can involve plenty of manual steps for your sales staff. Automation can

reduce errors and free up sales talent to do more selling. One simple example of the possibility is automatically adding leads from social media into an Excel spreadsheet for later follow-up, or sending a follow-up email automatically.

Outside of the office, many pieces of industrial software and equipment have their own APIs that developers can extend. Want to get statistical information from your shop floor to the office? Automate routine tasks to free up CAM designers for higher value tasks? Take inspection or maintenance processes off paper and into the cloud? More than likely your vendor has an API that a developer can extend for you.

As Principal Consultant at Parallel 42 systems, I've helped clients large and small realize significant gains from automation. From generating quote documents from an Excel worksheet to automating CAM software, the opportunities to drive efficiency using the power of modern software APIs are endless.

In Windsor, driving business efficiency with technology is part of our DNA. Our manufacturing sector is constantly working at doing more with less on the shop floor. Business can benefit by considering a sometimes-overlooked option in the efficiency toolbox: software and business process automation.