

# Practical automation of accountancy (3/13/20)

Today's accountancy is moving towards a robotised future, as we are automating data exchange, data processing, and drafting of documents. It may seem that undertaking such automation requires some complex and expensive automation software, such as UiPath or BluePrism. That is not the case, though, as manual tasks can be automated with available tools without incurring any extra cost, but using those solutions requires at least a basic set of programming skills.

## Google

If you normally work in the G Suite environment, then Google App Script is a very robust solution that helps you automate practically anything because it is integrated with all G Suite services – Drive, Docs, Sheets, Forms, Gmail, Calendar, Slides.



Such an extensive integration allows you to combine multiple Google services to create the solution you need.

To better understand the App Script features, below we list a few solutions you can create in the G Suite App Script environment:

- Automated mail reminders. The script reads a Sheets file from Google Drive listing the tasks, the persons in charge, and the reminder date. In the morning of each working day, the script emails a reminder to those persons with information from the relevant Sheets entry.
- Automated preparation and sending of regular reports. On a user-friendly Google Form, a customer enters the required details, e.g. of advance payments. Each month the script aggregates the data in a specified format designed for importing into the ERP system, and emails it to the person in charge.
- Automated business trip orders. A customer/employee completes a Google Form with details of a business trip. Once the form is completed, a document ready for signing is emailed to the person in charge.
- Automated AML/CTPF questionnaire. PwC as an entity subject to the AML/CTPF Act is required to identify customers, and so we have created our AML/CTPF questionnaire as a Google Form that makes it easy to complete for the customer. Once the required data is entered, a document ready for signing either physically or with a secure electronic signature is emailed to the client's address in a matter of seconds.

With Google App Script, the biggest restriction is the developer's imagination and programming skills because the opportunities are countless – you can process and create various documents, send and read email messages, and even automatically gather data from external resources/websites (web scraping). A limiting factor is the time you are willing to invest in development.

## Microsoft Office

The Microsoft Office working environment also offers a free tool that helps you automate various manual tasks: Visual Basic for Applications (“VBA”). VBA is a programming language built into all Microsoft Office products and designed for creating various extensions and automations. The well-known Record Macro function is based on VBA. After recording a Macro, you can view the VBA code of the Macro you recorded and modify it if necessary. This tool, just like the Google solution, allows you to create scripts and functions that help you automate data processing. VBA also allows you to combine Microsoft Office apps. Compared with Google App Script, VBA has a few restrictions, e.g. a function cannot be set to run automatically at a stated time (monthly, daily, hourly). The App Script functions are performed in Google Cloud and can therefore be provided whether or not your computer is on. VBA has these restrictions because its functions are performed locally, not in cloud.

Both VBA and Google App Script are widely used solutions, and the web offers many usage samples and training resources to improve your skills in using them. These tools make an accountant’s daily work much faster, more efficient and more pleasant, so these skills are very valuable. If you have previous programming experience, then you should consider mastering these solutions to optimise work not only for yourself but also for your colleagues.