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We often hear about robotic process automation (RPA) in the same circles where other consultant-friendly buzzwords like blockchain, artificial intelligence, and machine learning are mentioned.

RPA is not an entirely new technology – in fact, many concepts included in RPA are descendants of older technologies like optical character recognition (OCR) of scanned documents, zonal OCR, the "screen scraping" tools used for decades to extract data from legacy applications, and macro-based automation scripts. Current

RPA tools take those capabilities to the next level by allowing non-programmers to

processes.

Where customizing first generation tools used OCR engines, screen scrapers, and required expensive consultants with programming skills, second generation "low code/no code" RPA suites extend those basic tools to allow the software to observe and record a human doing the work, and the RPA application uses these observations to create a modifiable script which reperforms the task – without having to write code (although coding is available if you want to use it).

When a script is created and can do a repetitive task formerly done by a person somewhat autonomously, it is referred to as a "bot". Just as a "service" on a computer network does a repetitive task over and over (e.g. copying files), a "bot" does more sophisticated tasks normally performed by a human. For example, a scanned invoice might be placed in a folder by a scanning application, and a "service" on a computer network might automatically upload it to an accounts payable workflow service. A bot might be used by the A/P workflow service to extract the vendor name and address, invoice amount, due date, and invoice number for the invoice, and then use a scripted routine to enter the bill into accounting software like QuickBooks or Sage 50.

While both automation tools did work, the computer "service" did a low level task, like copying a file, while the "bot" did a much higher level task, including using OCR to extract data from an image of an invoice and enter the data through the accounting software application on a personal computer. Some RPA suites even allow bots to do work inside systems using their own usernames – and not the account of the human who supervises their work.

If accountants are to be successful in this new real-time world, they must be working in systems which receive data well before they end up as recorded transactions in the general ledger system. Executives must work with current data from CRM systems,

HR databases, operations management tools, and e-commerce platforms if they want

My next column will move beyond this basic introduction and will focus on the stages of RPA implementation, and help you understand how it can change your work now and in the future.

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