mimic human action. Robots can be seen as a virtual workforce assigned to middle- and back-office processing centers. There are also applications for which software assists front-office staff—for instance, prompting contact center agents during customer interactions and automatically capturing call close notes, a mode known as "attended automation."⁵

The emerging trend we are highlighting here is the growing use of cognitive technologies in conjunction with RPA. But before describing that trend, let's take a closer look at these software robots, or bots.

RPA's potential benefits are manifold. They can include reducing costs (by cutting staff), lowering error rates, improving service, reducing turnaround time, increasing the scalability of operations, and improving compliance. For instance, a large consumer and commercial bank redesigned its claims process and deployed 85 software robots, or bots, running 13 processes, handling 1.5 million requests per year. As a result, the bank was able to add capacity equivalent to around 230 full-time employees at approximately 30 percent of the cost of recruiting more staff. Additionally,

the bank recorded a 27 percent increase in tasks performed "right first time."

Beyond automating existing processes, companies are using bots to implement new processes that would otherwise be impractical. For instance, UK retailer group Shop Direct used RPA to identify flood-affected customers and automatically remove late payment charges from their accounts. Financial services providers have also used such "one-off" RPA implementations to comply with regulatory requirements in areas such as remediation processing, monitoring, and reporting.

Figure 1 depicts a typical back-office process before and after implementing RPA.8

RPA tools interact with existing legacy systems at the presentation layer, with each bot assigned a login ID and password enabling it to work alongside human operations employees. Business analysts can work with business operations specialists to "train" and to configure the software. Because of its noninvasive nature, the software can be deployed without programming or disruption of the core technology platform.

Figure 1. Manual vs. RPA

