Bridging the Gap: The Last Mile of Business Automation
The last mile of automation
Process, interrupted
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The last mile of automation

There’s a paradox at the heart of how a modern business uses information technology. The better we become at automating much of what we do, the more frustrated we become at the daily workarounds that still defy automation and slow everything down. The successful expansion of business automation is bumping up against its limitations.

Those limitations are a sign that there’s something still missing from the latest breed of off-the-shelf and on-demand applications and platforms. On the one hand, they make it easier than ever to deliver automation that helps people work better and streamline business operations:

- Cloud-hosted applications are available on demand, with low risk to get started
- Frequent updates to functionality keep automation fresh
- Highly configurable application architectures adapt readily to business needs
- Templates and best practice libraries shorten preparation timescales
- Online communities and app stores promote sharing of pre-built components

The downside of all this instant capability is an explosion of disconnected islands of automation spreading across the enterprise. What’s missing is a way to easily link them together to deliver truly joined-up automation that’s responsive to the real-world, daily operational needs of the business.

Individual applications and online services excel at rapidly automating the 80% of functions that are core to their area of operation – but the automation stops at the edge of each application. There are always a few key tasks and routines that just won’t fit in the off-the-shelf package. Whether it’s overlooked manual tasks or integration between apps and to existing IT, this ‘last mile’ gap often lies in activities that lack visibility or have a low perceived value. But they hamper and slow down every worker’s daily routine. Manifesting the Pareto 80:20 rule, this final 20% of the journey is the source of 80% of the delays, errors and user frustration that mar the success of the completed project.

Understanding how to look for and eliminate those crucial last-mile gaps is the key to fully realizing a modern business automation strategy. Bringing flexible, on-demand automation to these awkward, in-between steps and processes gives workgroups and teams the freedom to evolve their own operations, creating new responses to the fast-changing demands of the modern business environment.

Process, interrupted

From the very beginnings of IT, business automation has centered on individual applications that each handle a specific set of transactions, while a separate set of applications manage documents and communications. At the borders of each of these islands of automation lie troublesome ‘break points’ that individual applications don’t handle well – automating the links between tasks within these different applications and then connecting those tasks with the right people in the organisation at the right time. The main gaps in automation occur in four types of transition:

- Document to person: Bringing a transaction or document to someone’s attention for action or approval
- Transaction to document: Creating or amending a document as a result of a completed transaction
- Activity to activity: Passing data and alerts from one application to the next, or from one role to the next, in a sequence of actions.
- Organisation to organisation: Doing any of the above across the boundaries of one organisation to another.

Examining each of these patterns in the context of specific applications, it’s apparent how frequently they foil the flow of automation. We’ll also explore some case studies showing how some organisations have been able to bridge those gaps without resorting to costly, cumbersome integration or expensive process management technology.
Document to person

Automation gaps of this type crop up most often in online collaboration applications. Platforms such as Google Apps, Microsoft Office 365 and Zoho Documents provide powerful tools for sharing documents in distributed organizations, where geographically dispersed users need to collaborate across distance. At a stroke, these platforms make shared documents instantly available to all team members, reducing scope for errors and speeding decision making. But they typically lack the workflow capabilities to join up document updates to timely actions, especially when processes have to carry over to other applications. So, for example, a shared spreadsheet may help to track bookings of a resource, but may lack the capability to notify affected parties or trigger and track the associated billing processes.

People management is another application area where putting documents in front of the right people for timely action is a huge automation challenge. This slows and complicates many routine actions such as booking holidays, lodging sickness reports, booking training courses and on-boarding staff. Proper approvals must be sought before the transaction can be recorded, which in turn then triggers the creation of documents for interaction with third parties.

An example of the importance of managing document approval flows comes from a French retailer that recently migrated to Google Apps for its employees at several hundred geographically dispersed stores. To fully automate certain processes, the IT team found it needed to add workflow to Google Apps. The validation process for taking on short-term seasonal staff was especially time-critical. Under French law, if new short-term hires had not received and signed their work contract within 48 hours of starting work, they would become entitled to the same employment rights as long-term staff, creating an unintended financial and legal liability. The team added workflow to Google Apps using RunMyProcess to automate the previous manual system. The store manager now enters the required information into an online form, which automatically launches the approval and contract creation process. Once the contract is approved, there are alerts to ensure the new hire signs in good time. The headquarters payroll team now has visibility into each step of the online process and owns responsibility for following up any exceptions or delays, ensuring efficient and compliant recruitment.

Transaction to document

Although this class of breakdown in ‘last mile’ automation can be found in many places, one of the most familiar examples comes in the midst of the prospect-to-fulfilment process, at the interface between online CRM packages and order processing systems. Automation of sales and service operations has vastly improved the efficiency of customer-facing teams at many organisations. But too often the efficiencies cease when it comes to generating contracts and purchase orders – especially in service industries, where a sale may depend on a contract being properly drawn up and executed. Crucial processes at the end of the prospect funnel are left prone to data input and compliance errors as the automation peters out, giving way to cumbersome manual workarounds.

Slow creation of customer contracts was holding back the growth of Poolsure, a Houston, Texas-based US distributor of controllers for swimming pools at hotels, clubs and apartments. While Poolsure’s service was proving popular with building maintenance teams, new sales were being held up by a logjam in administration, with each manually crafted contract giving rise to a series of other manual processes. In just six weeks Poolsure overcome these issues by creating a RunMyProcess application to automate the end to end process, from closing a deal in Zoho CRM, through to creating a contract in Google Docs and tracking follow-up in a Google Sites web page. “We very quickly went from a no-growth mode to a growth mode,” says Poolsure’s CFO Alan Falik. Equally importantly, Poolsure’s management team now has better visibility across the organisation. “We knew we had drawn-out processes but it was difficult for us as a management team for us to see where the hold-ups were,” says Falik. “Now we’ve been able to pinpoint where those hold-ups are and fix them.”

Activity to activity

Many day-to-day tasks and operations in business involve people that work in different roles and contexts. For each of these – especially in cloud computing, where a move back to ‘best of breed’ applications is common – there’s often a
separate application, while different people may fulfil each distinct role. A classic example of this is in the area of spend management, where purchase order requests, expense management, travel requests and many other commonplace activities frequently trip across last-mile gaps that obstruct efficient automation.

With procurement running on an SAP core system, one global pharmaceutical company had long been using paper-based processes for purchase approvals. It was in dire need of automation, but any solution had to be flexible enough to adapt to changing local needs in different countries while still complying with corporate security requirements. With its tight integration into Google Apps authentication, RunMyProcess offered the requisite security without sacrificing flexibility and adaptability. Developed in less than a month, the automated process mirrored the existing business workflow so required no user training. Managers, who want to be able to make approvals on the move, value its availability on mobile platforms such as iPhone and iPad as well as conventional laptops and desktops. Also important for IT is the flexibility to further adapt the workflow to support the organisation as it continues to evolve its business processes.

Another example is in the area of digital marketing. Email management, web content management and e-commerce make it easier to interact with customers and automate order fulfilment. But the automation breaks down when interactions have to pass from one application or role to another, for example linking a website sign-up process into email campaigns and contact management. Today’s rapidly changing online environment is adding to the challenges, with many companies struggling to integrate their established processes with the demands of social media and customer self-service.

Organization to organization

Disparate systems and differences in how organizations have automated their operations internally magnify the headaches when passing actions between organizations. Yet in today’s increasingly connected business environment, such examples are encountered more and more, in activities such as partner management, inbound marketing, supply chain management and harnessing cloud-sourced and outsourced resources.

Consolidating information across 350 different suppliers was a problem for the French retailer mentioned earlier. Although volume discounts are calculated centrally, each individual store is responsible for its own reorders – and some are franchisees with their own separate processes. Previously, sales data was collected by manually emailing spreadsheets to be filled in and sent back. This was replaced by a workflow that sends a link to an online spreadsheet that is downloaded and returned for validation. The streamlined process cut in half the time spent consolidating information and ensures that the correct supplier discount is applied.

Automating the last mile

These many gaps in operational automation have existed for many years, but they have not been easy to resolve. Conventional integration infrastructure, with its expensive, complex BPM or EAI technologies, is too slow and expensive to even consider as a solution. However repetitive and frustrating the daily inconvenience may be, it can never justify the cost profile and operational disruption associated with such technologies. Instead, gaps in the last mile of automation have traditionally been bridged with an ad-hoc blend of manual paperwork, Excel spreadsheets passed around as email attachments and custom applications maintained in Lotus Notes, Microsoft Access or similar platforms.

Today, the cloud offers an alternative means of introducing automation to these last-mile gaps without the heavy cost burden and disruptive impact of older technologies. The lower effort, resources and cost of implementing cloud-based business automation is better suited to filling these diverse gaps in business operations, especially in today’s geographically distributed, highly mobile workforces. Deployment from the cloud makes it possible to introduce automation in a rapid, non-intrusive way that works alongside existing working routines and applications, whether they are running in the cloud or in a conventional on-premise environment.
Once deployed, it is easy and quick to extend, update or adapt the cloud-based automation to changing business requirements and demands. This flexibility allows for a more dynamic approach to automation. Whereas something that has been long, costly and tiresome to set up in the first place is rarely changed, a rapid, lightweight deployment that is easily adapted encourages users to carry on refining and evolving the automation.

This light-touch approach means that last-mile automation can be done with very low friction for end users: for instance, the Excel file they’re already using need not be changed, but simply redirected to take advantage of the newly automated process. The point is to improve rather than disrupt day-to-day operations. The successful way to introduce last-mile automation is to do it quickly, incrementally and without changing users’ habits when there’s no need to change them. Over time many small improvements evolve the way the organization operates, adding up to a serious transformation.

**Closing the gap**

Every organisation is afflicted by painful and disruptive last-mile gaps in automation. You’ll quickly identify them if you take the time to enquire into the workings of approval processes, regular handovers or any form of collaboration between departments on planning, reporting, controls or compliance.

In the past, manual workarounds have been the only option for resolving these gaps, especially in cases where there’s been any likelihood of variation in processes, either between locations or over time. Conventional software has been simply too inflexible to provide a solution. Instead, people have had to fall back on their own creativity, adaptability and brute manual effort.

Now at last, cloud-based solutions offer the mobility, flexibility and economics to bring automation to those parts of the organisation that conventional software has never been able to reach. Delivered in short, iterative projects that can be easily understood by the business workflow owners, this provides lightweight, easy-to-use, highly adaptable automation and integration that simply helps business colleagues to do their jobs better.

As well as enabling better efficiency and more satisfaction at the point of use, online automation gives organisations more consistency and better visibility of how their business operations are performing. At the same time as empowering individual process owners with greater control over the processes they run, there’s better oversight of what’s happening throughout the organisation.

Automating the last mile does more than helping to realize the value of existing investments in business automation. It helps organisations become more adaptable in the face of today’s fast-changing business environment and equips them to transform their operations with new capabilities as they embrace the future.