

# ***From theory to practice:*** Onboarding digital labor in financial services

*Why hasn't there been more widespread adoption of digital labor? The answers have little to do with the technology.*



# Introduction

*Digital labor is rapidly becoming one of our clients' hottest issues. This paper addresses why digital labor hasn't seen more traction despite its obvious benefits. For financial institutions in a challenging market, using automation in repetitive, business rule-driven work to rapidly cut costs, improve quality and scalability, and operate 24/7 is obviously appealing. But there are many more firms stuck in a proverbial "analysis paralysis," perhaps even with multiple successful pilots but little movement toward broader adoption.*

When new technologies hit the market, there's often a moment when high expectations meet real-world challenges. From 3D printing and self-driving cars to wearables and the Internet of Things, there can be a mismatch between great ideas and market needs.

Robotic Process Automation (RPA) and other forms of digital labor are different. For one thing, they're not new—though they are developing rapidly, and are far more

sophisticated than they were even two years ago. Despite the hype, this isn't a theoretical solution in search of a problem. Financial firms "get" that digital labor can be a game changer. Still, few have moved to enterprise adoption (see Figure 1), and many have yet to see the transformative results they had expected.

So, why hasn't there been more widespread adoption of digital labor? The answers have little to do with the technology.

**Figure 1: Few financial institutions have made much progress with digital labor**

Where are firms in their adoption of digital labor?



We're doing a 'proof of concept'.

We're setting up a program for digital labor, but these are early days.

We're taking an enterprise-wide approach to digital labor.

Wait. Robots? In a bank? Like R2D2?

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# The promise and the reality of digital labor

Digital labor is rapidly becoming one of our clients' hottest issues. In response, PwC is preparing a series of papers to help our clients understand how to benefit from digital labor—and how to avoid some common pitfalls. This paper, the second in our series, addresses the big picture: why digital labor hasn't seen more traction at this point.

In our first paper—*Q&A: How can RPA and other digital labor help financial services firms?*—we noted that RPA should really be seen in the broader context of digital labor. Robotic process automation describes logic-driven robots that execute pre-programmed rules on mostly structured and some unstructured data. RPA is a feature of IPA, intelligent process automation. IPA describes a range of automated processing, from RPA all the way to cognitive technology and machine learning systems. At digital labor's highest end, robots can learn from prior decisions and data patterns to make decisions by themselves.

For financial institutions in a challenging market, this is quite appealing: use automation in repetitive, business rule-driven work to rapidly reduce costs, improve quality and scalability, and operate 24/7. And there are success stories, for both administrative and technical applications. Consider a firm that uses digital labor for employment offer letter generation: it replaced a whole set of workarounds that served as a bridge between its Human Resource Information System (HRIS) and a customized applicant tracking system. Or, a bank using the technology to solve a reporting problem, mapping data and reconciling two disparate sources to stay on

top of rapidly changing regulations without much manual intervention.

But there are many more firms stuck in a proverbial “analysis paralysis,” perhaps even with multiple successful pilots but little movement toward broader adoption. We've seen firms get caught up in debating the balance of risk vs. reward for digital labor, including regulatory concerns. And there are cases where financial institutions have invested in digital labor but haven't seen the promised headcount reductions; some even report that they've added hardware and software expense without staff attrition. In a future paper, we will give the economics of digital labor its fuller due, because we remain convinced that there are very real returns to be had from these investments when they are done right.

Firms tend to struggle with three big challenges when implementing this technology:

- By rushing in and looking for quick savings, they're trying to solve the wrong problems.
- By operating in silos, they miss the opportunity to scale.
- By focusing on functionality, they don't build a foundation of support for a broad rollout.

When all three factors apply, it's a safe bet that we're looking at an unsuccessful digital labor program.

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# *Make sure you're working on the right issues*

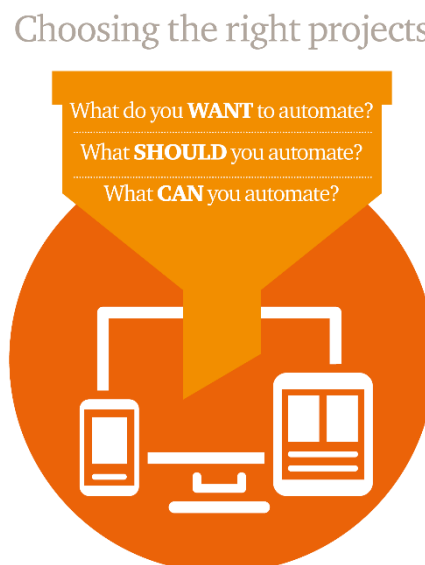
Imagine a room in a small Midwestern city, where several clerks are comparing information from a trading system to information in an operational database. The firm matches most orders automatically, and clerks match the rest manually. At first, this looks like an ideal digital labor opportunity: lightweight software systems can now scrape screens, compare fields, generate reports, flag errors, and so on. But on closer inspection, the reconciliation “breaks” are inconsistent, with one unpredictable edge case after the next. Bill Pappas, a financial services partner and PwC’s Financial Services Operations Excellence Leader, notes that without understanding the errors, the cost of the robotics programming could be substantial and unwarranted. He adds, “When you put a bandage over a reconciliation process that’s not ‘clean’, you may just speed up a new set of problems—and make root cause analysis harder on the ones you already have, too.”

Firms in this situation may jump to introduce digital labor anyway, because it seems like a “quick hit.” And, in fact, they may be able to generate some short-term savings, with some cost reductions in a few months. But the firm is trying to fit a square peg in a round hole—trying to solve the wrong problem with the wrong solution. The broader cost structure hasn’t moved, though there has been a transfer from human to digital overhead. In fact, it’s possible to use digital labor to generate both short-term benefits *and* long-term benefits. To do this, though, firms should stop and think about what they really want in a desired end-state, and *then* apply the technology that’s most likely to get the job done (see Figure 2). Adding new staff to replace existing staff, whether the new team is offshore or robotic, won’t solve structural problems, and may simply introduce a new kind of overhead.

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**Figure 2: Digital labor – choosing the right projects**

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### ***Our recommendation***

Start with the big picture. Even in a tough cost environment, you need to know where the real challenges lie. This doesn't have to be a major undertaking, but you should look at the fundamental data and process flows to get at the root causes of problems affecting quality. At many financial firms, there's a disconnect between operations, risk management, finance, and the front office. They may use different systems for the same activity, drawing from different underlying data sources, with models that don't sync up. This can lead to regulatory concerns – and automated systems won't satisfy them because the problem isn't merely cosmetic.

Digital labor can certainly help where there are a lot of manual or semi-manual repetitive processes. But many firms already have moved a lot of these processes offshore, so cost savings may be less obvious. We encourage firms to think about process improvement first. Even a light redesign can have a more significant effect than introducing automation. We'd then look closely at digital labor for the manual work that remains, optimizing the re-engineering to lead to cost and quality improvements that are more sustainable.

# Share what needs to be shared

Because digital labor is still comparatively new, many IT and operations managers treat it as an experimental offering. Most firms have at least some experience with the technology, drawn from proofs of concept and early testing. At the same time, in a different division, we may see parallel efforts underway, using different vendors and a different governance structure, going over the same ground in a different way. Because each effort is isolated, they can waste precious resources and dilute the technology's perceived value.

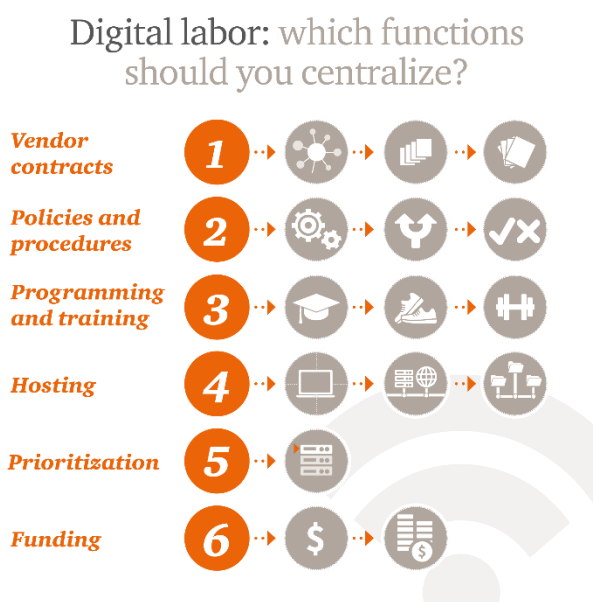
Part of the technology's appeal is that it doesn't require a huge development effort, but there is certainly a learning curve involved. In a bid to extract labor costs quickly, some business lines move ahead independently, even though the lack of coordination with other units could cost them a lot more time and effort in the long term.

## Our recommendation

First, let's be clear that we're not recommending that firms institute a centralized governing body over all digital labor initiatives. Holding on too tightly can stifle innovation, and there is a place for experimentation. But there are some clear ways that coordinated governance can help everyone win, sharing leading practices and removing barriers without adding overhead.

We encourage firms to look at a "center of excellence" (COE) model, strategically shaping how digital labor capabilities are built and how they morph over time (see Figure 3). Grainne McNamara, a Principal in the PwC Capital Markets team who specializes in large transformation programs at top-tier banks, points out that this is often a natural fit with existing efforts. "Many firms already have centers of operational excellence or productivity that can be marshalled to accelerate the change."

**Figure 3: Using a "center of excellence" model, firms can share resources as appropriate without slowing down innovation**



Managing vendor contracts at the enterprise level, for example, can save costs and offer valuable insights gathered across disparate departments. Setting consistent policies and procedures can help overcome security and related concerns. Programming and training can be done in-house or through third parties. Both can work, and both benefit from consistency. Similar decisions apply to hosting, and there may be opportunities to leverage shared resources here. Depending on a firm's culture, prioritization may be handled centrally. This can direct efforts toward some early wins that will inspire others. Finally, while funding is often handled by divisions, institutions may benefit from treating digital labor as a strategic initiative, with the deeper pockets that headquarters offers. Digital labor technology is evolving rapidly, which makes knowledge sharing more important than ever.

The COE approach also offers a more consistent approach to risk and regulatory concerns, which is essential for today's financial institutions. From a risk perspective, this can help firms build in appropriate controls from the beginning. This includes addressing the normal risks in implementing any software: IT compliance, testing, information security, and so on. But it can also address operational risks, such as business resilience or quality control. From a regulatory perspective, taking a central view can help make sure that proper audit trails are in place, especially when regulated processes are involved and firms provide "2-eye" and "4-eye" checks.



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# Define what success looks like

If everyone understands the value of digital labor, why are so many firms stuck at proving the concept? There are many reasons, and they vary by firm, but several themes have emerged. In some organizations, champions haven't gotten the right people onboard early. Some firms charge ahead to solve a transactional issue without really understanding the business case involved. Still others are concerned that digital labor could run afoul of a compliance requirement. Ultimately, these are all change management issues, and change can be hard.

Kelley Mavros, a Principal with Strategy& and Fit for Growth Financial Services Lead, warns that experimentation with digital labor can offer a false sense of progress: "Digital labor technology is now mature enough that there is little doubt it works well in many applications. The heavy lifting is more basic: you should define the financial case, the roadmap, and the governance structure, just as if you were going to make an investment in adding human staff."

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## Our recommendation

Recognize that digital labor already makes up a meaningful part of the financial services industry's staffing model, and that this should increase with time. So, the question isn't "should you use digital labor?" Rather, it's "how can you use it most effectively?" This comes down to planning.

Most financial institutions already rely in part on distributed, automated systems for business operations and decision-making—even a trader with a spreadsheet. Just as firms have built governance systems to address this "end user computing" issue, they should incorporate robotic activity as well. They'll also want to develop consensus around procedures, so that digital labor's activities are consistent with their risk policies. Similarly, there's a danger in creating more 'key person' risk if only a few people in an organization actually know how the digital labor 'bots' behave. At this point, the perceived risks have little to do with digital labor's accuracy or efficiency, so move to focus on tightening up the communication plan, the financial models, and the compliance program.



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# Success, by design

We view the adoption of digital labor in financial services as a step in a larger transition: helping find those capabilities that truly add value, and spending less effort on those that don't. In this way, we're describing a change to a financial institution's operating model. Though this involves software, thinking in terms of technology is short-sighted; understanding its effect on process and on people will be at least as important to the program's success or failure.

Process is largely independent of the tool you choose. All of the various digital labor technologies have the potential to drive down the cost of work that has become automate-able. But what if the work didn't need to be done in the first place? This is where digital labor systems really shine, if they're implemented correctly: a flexibility that lets us rethink what we're working on, and why. Kevin Kroen, a partner in PwC's Banking and Capital Markets Advisory practice, speculates that the role of analysts in the future may be quite different. "Instead of processing trades themselves, they may be managing a team of robots that they've programmed to process trades—and looking for ways to improve the process even further. In a way, this solves a long-standing issue of the 'run the bank' (RTB) vs. 'change the bank' career paths. Using Robotics, you can turn traditional RTB labor into change catalysts. That's good for the staff and good for the firm."

Digital labor is incredibly powerful, *if* everyone is on board and *if* you are using it to solve the right problems. This happens by careful analysis and design. In our view, firms are most likely to succeed if they approach the change systematically: conducting an assessment, understanding what processes should be automated, creating a proof of concept once you know what you want to accomplish, helping the team buy into the long-term vision, and then applying these changes so you can succeed on an enterprise level. Starting small—so you can understand the drivers that influence the return on your investment—will help you bring the program to scale, where the impact can be significant.

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