Digitization at work

A study of the digital enterprise — and how to turn talk into action in 2016
How is digital transformation working for you?

The digital age promises so much: a world where people, process and technology come together to make everything effortless.

When work flows, the results can be powerful:

- **Electronic hospital records** make it easier to save lives.
- **Helicopters stay airborne** because digitized documents are instantly accessible.
- **Intelligent call-center software** makes our day a little brighter with the answers we need.

But this report, *Digitization at work*, shows that while organizations have ambitions for a lean and agile digital future, their present is still badly weighed down by paper.

Not only does this undermine productivity by perpetuating slow and expensive manual processes, it’s oh-so wasteful: easily half of the paper we print at work is used once, then thrown away.

Surely we can do better.
How is digital transformation working for you?

**Insight must come before action.**

If you have big ambitions for becoming a digital enterprise, but a long way still to go in freeing your organization from paper-based processes, you wouldn’t want to skip the step that sets you up for success.

Which is why the biggest surprise of the survey is that many seem to be doing just that. They’re digitizing before the data is in; automating without first analyzing where they are at.

In short: they’re failing to make a level-headed assessment of paper use and the flow of documents before throwing themselves into the digital race.

The message of this report is simple. Start with data.

Analyze and assess before you optimize or automate. Use insight to inform your digitization choices, because that’s how you make better choices. And why wouldn’t you want to do that?

**Who did we ask?**

In the second half of 2015, Coleman Parkes Research surveyed 600 IT decision-makers and influencers from organizations in the United States and Canada as well as Western Europe (Benelux, France, Germany, UK).

All respondents had responsibilities that included digital technology strategy, solutions and infrastructure.

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**Respondent roles in digital decision-making**

<table>
<thead>
<tr>
<th>Role</th>
<th>Total</th>
<th>Western Europe</th>
<th>North America</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead decision-maker</td>
<td>41%</td>
<td>36%</td>
<td>51%</td>
</tr>
<tr>
<td>Part of a team of decision-makers</td>
<td>33%</td>
<td>32%</td>
<td>34%</td>
</tr>
<tr>
<td>Key influencer</td>
<td>26%</td>
<td>32%</td>
<td>15%</td>
</tr>
</tbody>
</table>

**Sector breakdown**

<table>
<thead>
<tr>
<th>Sector</th>
<th>Total</th>
<th>Western Europe</th>
<th>North America</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public sector</td>
<td>33.3%</td>
<td>35%</td>
<td>30%</td>
</tr>
<tr>
<td>Financial services</td>
<td>33.3%</td>
<td>30%</td>
<td>40%</td>
</tr>
<tr>
<td>Corporate (excl FS)</td>
<td>33.3%</td>
<td>35%</td>
<td>30%</td>
</tr>
</tbody>
</table>
Stuck in the past
Fewer than 50% of respondents can point to processes that are mostly or fully digitized.
Stuck in the past

Reflecting on our personal lives, it’s easy to believe that we live in a digital age.

But at work, paper-based processes are still the rule. Less than half of our respondents work in organizations where processes are mostly or fully digitized* (see figure 1).

The picture is similar for other key digital initiatives: there’s been lots of progress, but there’s still some way to go. We found that:

- 37% still don’t have strategies in place for social media.
- 40% haven’t yet implemented solutions for mobile working.
- 45% have not yet incorporated or improved predictive analysis through big data.

* We asked about seven activities that involve one or more processes and are broadly representative of document-intensive processes in large organizations. Product/service development is the only one that is mostly/fully digitized for a majority of respondents.

Figure 1. To which extent are the following paper-based or digitized now?*

<table>
<thead>
<tr>
<th>Category</th>
<th>Mostly/Fully Digitized</th>
<th>Partly Digitized</th>
<th>Still Paper-Based</th>
<th>Not Applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product/service development</td>
<td>50%</td>
<td>38%</td>
<td>10%</td>
<td>2%</td>
</tr>
<tr>
<td>Invoice processing</td>
<td>47%</td>
<td>37%</td>
<td>14%</td>
<td>2%</td>
</tr>
<tr>
<td>Customer engagement</td>
<td>47%</td>
<td>38%</td>
<td>13%</td>
<td>2%</td>
</tr>
<tr>
<td>Vertical-specific processes</td>
<td>44%</td>
<td>38%</td>
<td>12%</td>
<td>6%</td>
</tr>
<tr>
<td>Operational processes</td>
<td>44%</td>
<td>41%</td>
<td>11%</td>
<td>4%</td>
</tr>
<tr>
<td>HR onboarding</td>
<td>43%</td>
<td>39%</td>
<td>16%</td>
<td>2%</td>
</tr>
<tr>
<td>Contract/procurement management</td>
<td>42%</td>
<td>40%</td>
<td>15%</td>
<td>3%</td>
</tr>
</tbody>
</table>
The pressure is on
Process automation is on the agenda for 71% of respondents.
The pressure is on

But our respondents are ambitious. 71% of them have identified processes that would benefit from intelligent automation technologies.

And in two years, almost two-thirds expect to be working in digital enterprises, compared with less than half today, and on average less than 10% of processes will be entirely paper-based.

What benefits do organizations expect to derive? Figure 2 shows that the main drivers for digitization are cost, information security, agility, speed of service, and data management.

71% of respondents are thinking about process automation. The lead candidate processes are:
- Accounting (38%)
- Expenses (37%)
- Accounts payable (36%)
- Customer relationships (35%)

Figure 2. Digitization drivers

Top challenges of paper-based processes

| Challenge                      | Percentage
|--------------------------------|-------------
| High costs                     | 42%         
| Information/document security  | 42%         
| Data management                | 34%         

Top benefits of digitizing

| Benefit                             | Percentage
|-------------------------------------|-------------
| Cost reduction                     | 41%         
| Agility (respond faster/better)    | 29%         
| Information/document security      | 25%         
| Speed of productivity/service      | 28%         

Ranked #1, 2 or 3

Ranked #1
Are you a leader or a laggard?
Only 10% of respondents are digitized across major process areas.
Are you a leader or a laggard?

It’s unlikely that 40-50% of organizations are doing all the digitizing, and the rest not at all, as suggested by figure 1. In reality, there are leaders and laggards (figures 3 and 4).

- Only 10% are essentially digitized across the board.
- More than half (55%) are still mostly paper-based across more than half of their processes (digitized only in 0-3 areas). 15% are still essentially paper-based across the board (0 process areas mostly/fully digitized).
Are you a leader or a laggard?

Financial services lag behind public sector.

62% of financial firms are still mostly paper-based, compared with 55% for public sector and overall. 17% of financial firms are essentially paper-based, compared with 13% for public sector and 15% overall.
Mind the gap.

Jump forward two years and the outlook seems good: there are fewer laggards, with those that are paper-based in more than half of the process areas dropping by a third from 55% today (figure 3) to a projected 37% (figure 5).

But look at those that haven’t digitized any of the processes we asked about. Today they are 15% of our sample (figure 3); in two years they are 12% (figure 5). That’s a more modest expected improvement among the worst of the laggards.

Compare that modest improvement with the impressive rate of growth among the leaders in figure 5.

If the biggest laggards don’t get a move on, they risk falling further and further behind and losing out on the competitive advantages derived from becoming a digital enterprise.

Are you a leader or a laggard?

Figure 5. Leaders and laggards in two years’ time: All respondents by number of process areas mostly/fully digitized

- 7 areas: 30%
- 6 areas: 10%
- 5 areas: 10%
- 4 areas: 12%
- 3 areas: 10%
- 2 areas: 8%
- 1 area: 7%
- 0 areas: 12%

In 2 years, those expecting to be mostly/fully digitized in 0-3 areas has dropped to 37%.

Almost 3x as many as today

Almost 2x as many as today
Why print analytics are key to success

90% of respondents believe they have good print analysis tools — but only half are fully using them.
Why print analytics are key to success

The biggest surprise of the survey is illustrated in figure 6. While 90% of respondents say they have good tools to analyze employee print habits, only half of them (45%) are using those tools fully.

In other words: organizations are missing a major opportunity to deliver on the expected benefits of digitization. Here’s why:

Most documents today start their life on a computer, a tablet, a smartphone — devices that offer easy sharing and storage. Why would anyone print them? Yet they do. Large organizations typically print hundreds of millions of pages every year. How can you hope to pull down paper-based barriers if you don’t understand where, when and why all this printing is happening?

Figure 6. Do you have the tools to assess and analyze employee print habits inside your organization?

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Public sector</th>
<th>Financial services</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes – we have good tools which are fully utilized.</td>
<td>45%</td>
<td>42%</td>
<td>50%</td>
<td>44%</td>
</tr>
<tr>
<td>Yes – we have good tools but they are not fully utilized.</td>
<td>45%</td>
<td>44%</td>
<td>44%</td>
<td>45%</td>
</tr>
<tr>
<td>Yes – we have some tools but they are lacking in some areas so utilization is limited.</td>
<td>7%</td>
<td>9%</td>
<td>4%</td>
<td>10%</td>
</tr>
<tr>
<td>No – we do not have any tools available.</td>
<td>3%</td>
<td>5%</td>
<td>2%</td>
<td>1%</td>
</tr>
</tbody>
</table>

Financial services use print analytics more than public sector.

50% of financial firms are fully utilizing their print analytics tools, compared with 42% for the public sector.

Only 6% of financial firms have poor tools or none at all, compared with 14% for the public sector.
Why print analytics are key to success

Listen to the data, it knows more than your gut.

By analyzing employee print habits you can see hidden opportunities for digitization where paper use is unnecessarily high. Without such insight, all you can do is guess at the best candidates for process digitization or workflow automation. And guesses are never as reliable as well-analyzed data.

Here’s an example. A professional services firm noticed a big drop in print volumes for one of its centralized print rooms. It identified the ‘missing’ print as training documents. The firm knew that training was still happening, so it assumed that the documents were being digitally distributed rather than printed — an excellent result.

When Xerox analyzed the firm’s printing, they got a nasty shock. The training documents were now being printed on office devices.

Not only was paper use as high as before, it was costing more (since office print was more expensive than centralized print). Additionally, sensitive internal documents could potentially be exposed on unsecured printers.

We identified that 72,000 pages were printed every month just for training. And that 80% of these pages were thrown away at the end of the course. Understanding and overcoming the barriers to digitization was an obvious priority in this case. And one that was hidden until we did the analysis.

Do you have the right tools?

So why does our survey show that half of those with print analysis tools aren’t using them?

We believe that mostly it’s because their tools are of limited value in identifying inefficiencies in paper-based processes. When respondents say they have ‘good’ print analysis tools, we suspect they mean:

- We can count the number of pages we print.
- We know if it’s black-and-white or color.
- We can drill down to a certain level of granularity.
Why print analytics are key to success

But they can’t get specific about who is printing what — and why.

There are good tools to measure print volumes. And there are good tools to extract meaningful insights from print data. These are two very different beasts.

Organizations may have the first; few have the second. Most are unaware that basic print analytics has evolved into sophisticated document and workflow analytics.

And are the tools in the right hands?

The other factor is one of resource: in-house or through a third party.

In the digital age, the data keeps coming. To use it well, you need expertise and focus — the right kind of resource, and enough of it.

Luckily, today a little can go a long way. When the right people use the right tools in the right way, people, technology and process come together with amazing results. Not too long ago it took time-consuming, resource-intensive consultancy engagements to uncover why people were printing. Not anymore.

It doesn’t have to be expensive.

In the right hands, today’s sophisticated document analytics tools reveal most of what you need to know quickly and clearly. If consultancy is still called for, it can be better targeted, shorter and less expensive.

Imagine you’re the professional services firm we referred to earlier. Quantitative document analytics and a small amount of interviewing have identified training and some other processes as big paper users. It’s been quick and cost-effective. Before you spend a penny on a detailed workflow study, you know which processes are causing headaches. And because your further investment is targeted, you’re more likely to put the right digitization solutions in place.
Three steps to better digitization results
65% of respondents say they print documents to have a hard copy for reference/files.
Three steps to better digitization results

Is paper entering your organization from the outside and not being scanned?

Do employees find scribbling on paper more efficient than digital annotation?

Do you have people typing data from documents into databases — without the benefit of two screens?

Is a training room not set up to use documents electronically?

Learning these things about your organization before digitizing will multiply your chances of success many times over.

We find it helpful to think about digitization in three stages, each of which delivers increasing value for the given investment. It won’t surprise you to discover that the first stage starts with taking stock through measurement and analysis.

“Organizations foresee a lean and agile digital future, but the present is still badly weighed down by paper. The disconnect between the vision and the steps required to achieve it has stalled the promise of digitization.”

Andy Jones, Vice President, Workflow Automation, Xerox Large Enterprise Operations
Three steps to better digitization results

1. Assess and optimize

Start by auditing, tracking, measuring, analyzing your use of paper. ‘Optimize’ might mean digitizing; or it might mean first re-engineering paper-based processes. But it should follow assessment — and be based on its insights — to assure results.

2. Secure and integrate

Never forget the bigger picture. Cost, security and agility are the key drivers of digitization (remember figure 2). You won’t get the results you want if you don’t build in security and make absolutely sure that technology, process and people can play together happily.

3. Automate and simplify

If you’re like the large majority of our respondents you’ll be eyeing up candidates for workflow automation. As you should — it’s where so much of the benefit will come. All we’re saying is: don’t forget that stage 1 comes before stage 3. Assess before you automate, and better results will follow.

Steps 1 and 2 might happen in parallel, but step 1 should definitely precede step 3.
Further information

If you like this report, you might enjoy:

**Quocirca, MPS Market Landscape, 2015**
How managed print services are tackling the paper-to-digital workflow, addressing security issues and innovating through analytics, with an analysis of the key vendors.

**Paper-based working without the paper**
Often people have good reasons for preferring paper. This paper examines how better digital alternatives can simplify workflow digitization.

**Three flow killers**
What to do about the forces that slow business down, clog processes and inhibit growth.

As well as the case studies and articles linked to in the report above:

- Luton & Dunstable University Hospital digitizes medical records
- AgustaWestland digitizes parts documents
- New Mexico Medicaid Management Information System uses intelligent software in its call center
- Blog: How to Create Intelligent Documents
- Blog: Transforming the Workplace: Managing your Digital and Paper Worlds
- Blog: Five Signs Your MPS Provider Understands Document Analytics

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