

# Role of Paperless Procedures in Achieving Working Style Reform

A shift to paperless document handling is essential to implementing new working practices free from constraints of time and place. As the elimination of paper documents affects all areas of a business, implementing it requires the entire company to work together, with top-down measures in particular being necessary. Furthermore, holding more information digitally rather than on paper opens up possibilities for RPA and other forms of workplace automation. This article describes the importance of paperless procedures and the utility of RPA, using case studies to explain the keys to success.

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## 1. Introduction

Using paper documents as the basis of running a business imposes numerous constraints. These become a drag on productivity, with specific problems including that the cabinets and repositories used to store documents take up office space that staff might otherwise put to good use, not being able to leave the office because of the need to review or approve paper-based forms, not knowing where to find required documents, and the time taken to circulate them. On the other hand, eliminating the use of paper for business documents enables flexible working practices by freeing workers from constraints of time and place. This is why paperless document handling is said to be the most important thing to do first for working style reform.

## 2. Faster Introduction of Paperless Procedures Made Possible by Legislative Reforms

As part of its 2001 e-Japan Strategy aimed at fostering Japanese information technology (IT) society, the government of Japan embarked on legislative reforms designed to strengthen international competitiveness by giving all citizens access to IT. The Electronic Document Law was introduced in 2005 to allow documents for which there had previously been a legal obligation to hold paper copies to instead be stored electronically. With approximately 250 laws permitting electronic storage, the Electronic Ledger Storage Law was amended to allow tax documents other than those relating to settlement to be scanned and stored as an electronic file. Unfortunately, the strictness of the requirements for scanned document

storage meant that most companies were unable to stop keeping paper documents. Subsequently, the requirements of the Electronic Ledger Storage Law were loosened in 2015 and 2016 to create an environment in which it was easier to adopt paperless document handling, with changes that included permitting the storage of images captured by portable devices such as smartphones.

Storing tax documents electronically requires the permission of the tax office, with applications for this initially running at only about 10 per year. That the number of applications over a three month period in 2018 exceeded 100 indicates that the switch to paperless document handling is picking up pace. While all this has been happening, it is government agencies and financial institutions that have been slow to act. The reason is that these institutions need to keep detailed records of their daily activities, with strict requirements for ensuring the evidence of these records. Hitachi Consulting Co., Ltd. helps customers delineate where and to what extent paperless document

handling can be implemented without compromising this need to maintain evidence of records.

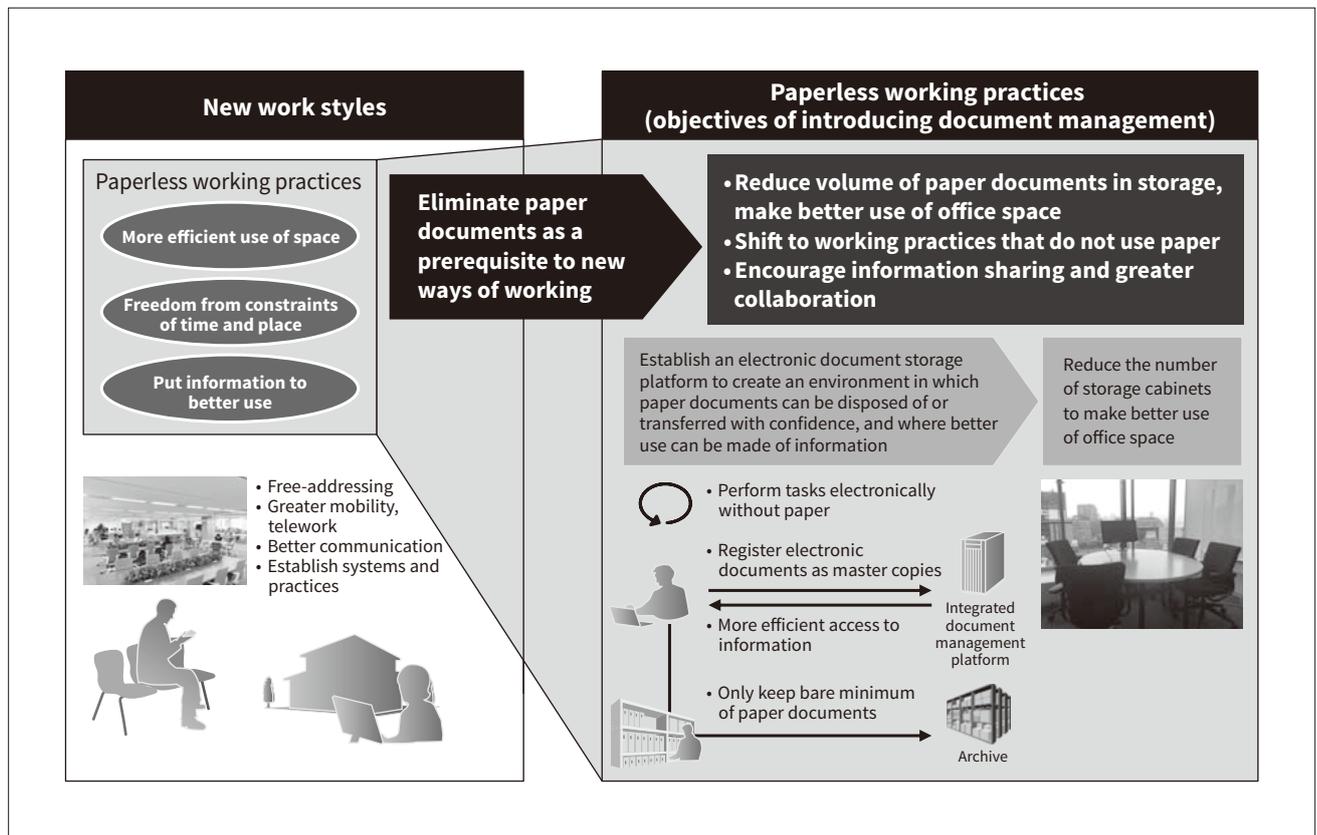
## 2.1

### Sustaining Paperless Procedures and Managing Documents

With legislative reforms having created an environment in which paperless procedures can be adopted, many companies are now looking at doing so. However, the requirements for managing paper and electronic documents are very different. Changes to document management are needed if paperless procedures are to be used to operate more efficiently without compromising the legally mandated requirement for evidence of records. Simply providing the necessary infrastructure for paperless procedures and establishing workflows for electronic approvals risks resulting in a limited and temporary shift to paperless operations unless proper operating rules for document management are in place. Accordingly, document approval workflows, how long documents are to

**Figure 1 — New Work Styles and Paperless Working Practices**

The elimination of paper documents is a key prerequisite to new work styles in areas such as making good use of office space, creating flexible working environments (including telework), and encouraging the sharing of information.



be kept, and other storage rules need to be established. To sustain progress on the shift to paperless procedures, management practices for electronic documents need to be put in place in ways that take account of what the next steps are to be.

## 2.2

### RPA for Maximizing Benefits of Paperless Procedures

**Figure 1** lists the benefits of paperless procedures. Firstly, a reduction in the amount of paper means less need for storage space and also serves to minimize the load on the environment through a reduction in pages printed. Next, administrative efficiency can be achieved because documents can be processed on electronic devices rather than on paper. In addition to facilitating telework and enabling flexible working practices, this also has the potential to energize organizations through greater internal information sharing. It also leads to stronger governance of information security.

When staff at a financial institution leave the office carrying paper documents about clients, they need to go back to the office afterwards to put the documents away and their work is not complete until they do so. In contrast, if the documents are held electronically rather than on paper, they can be viewed from anywhere using a tablet and there is no need to worry about their being lost. When combined with techniques such as biometric authentication, security risks such as the tablet being lost or left behind can also be reduced.

Furthermore, because routine work can continue regardless of location in the event of a pandemic or other disaster, paperless document handling also has benefits for business continuity. As a backup, servers can be duplicated in a remote location.

While these many advantages of paperless procedures exist, perhaps the greatest benefit of all is that they enable the use of robotic process automation (RPA). RPA is a way to use software robots to perform tasks such as data entry or information retrieval in place of people and can be used to automate routine work that was previously done manually. Unfortunately, attempts to introduce such automation have in some cases come up against the problem of

paper-based administrative tasks still remaining part of business processes. The response to this has been to convert documents to electronic form and use them with RPA to overcome the problem (see **Figure 2**). When use is also made of artificial intelligence (AI), it becomes possible to automate non-routine work that includes dealing with exceptions, something that has been considered difficult in the past.

One example can be found at Hitachi Document Solutions Co., Ltd., a company that is making extensive use of RPA. A provider of multi-function printer services to other companies, including contracts and arrangements with equipment vendors and handling the invoicing of monthly usage fees to the relevant departments, Hitachi Document Solutions found that tasks such as the visual checking of paper forms tended to be concentrated in the run-up to deadlines. In response, it adopted RPA whereby vendor contracts, invoices, and other documents were scanned and optical character recognition (OCR) used to automate tasks like sorting or data entry. This enabled work to be split between automatic processing by software robots and work done manually, with service improvements made possible through greater equipment reliability, such as having the software robots check the settings on the printers remotely.

Ultimately, while it makes sense to use the same formats across industries so that companies can exchange forms as electronic data, the path to achieving this is a long one. It is necessary to get on with eliminating paper from familiar tasks first.

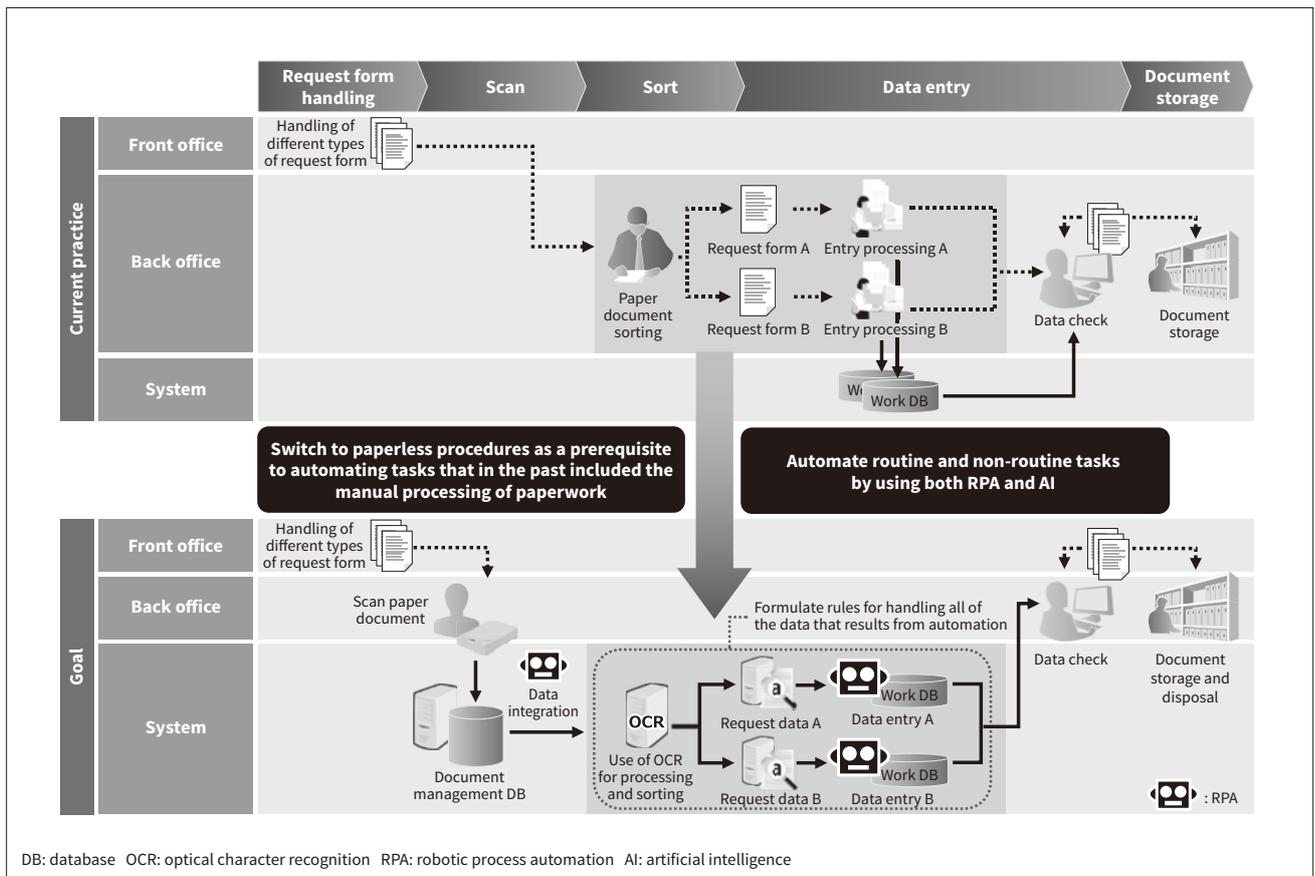
### 3. Examples of Paperless Document Handling

This section presents examples of how Hitachi Consulting has gone about switching to paperless document handling.

At one company, the decision approval process involved circulating documents around different sites, requiring as many as more than 20 people to sign off on particular decisions, with the result that approval took several weeks on average. Furthermore, paper copies of the circulated documents were kept for a long time. The first step was to develop rules. An electronic “ringi” (approvals) process was established

**Figure 2 — Use of RPA for Business Improvement**

Benefits are maximized by combining the switch to paperless (digital) documents with RPA.



with rules for document preparation and for their circulation and approval, such that the electronic documents could be managed in a way that guaranteed their evidence. Management criteria were also stipulated to cut back on the large number of existing documents dating from the past up to the present day. Manuals were produced and a presentation given to explain the changes to staff. As working without paper will impact all departments, the presentation drew approximately 100 staff from across all departments.

The paperless procedures developed through this process shortened decision-making times from several weeks to just a few days. It also succeeded in eliminating about 70% of the existing paper documents held in the offices, representing about 1,000 cabinets. A large number of new meeting rooms were installed in their place. The project also installed a videoconferencing system that reduced expenditure on travel to other offices. Although there were some complaints that the ability to give approval with a single click would make people lax about checking documents, what they

found was that, compared to before the changes, the risk of approvals being skipped or falsified was less than when using paper. Whereas there was a potential with paper for some approvers to be temporarily bypassed, there was no such scope for error in the approvals route when reviewing documents on electronic devices. As the new procedures included specifying the retention period for documents, they also eliminated the risk of document being destroyed too early or the leaking or loss of documents that no longer needed to be kept. This ensures the reliability of document lifecycle management.

At a bank, paperless procedures were adopted as a way to improve the overhead ratio (OHR), an indicator of work efficiency. The project was led by senior management based on the idea that making document-related tasks more efficient would provide benefits across all activities, not just certain systems or processes.

One of the key factors in the successful elimination of paper was that the actions taken to make paperless

procedures routine within the company were directed from the top down. Because a shift to paperless procedures brings changes to how work is done, it will be seen negatively by some staff. What is important is to encourage people to recognize how the process goes beyond merely eliminating paper and also allows them to work more efficiently. Storing electronic documents (or scanned paper documents) in a particular place saves time that would otherwise be spent looking for physical documents. The aim of shifting to paperless document handling is to change how people work so they can put their time to better use on creative activities.

#### 4. Conclusions

Paperless document handling is intended to provide more efficient working practices through the reliable management of electronic documents and the establishment of workflows that are based on their use. Achieving this requires that all staff work together to put document management rules in place that are standardized across the company, and also to set detailed rules such as having different management practices for internal and customer documents or setting dates for when files are to be deleted.

Through consulting services for paperless working practices and document management, Hitachi Consulting intends to continue contributing to working style reform as one of the outcomes of the elimination of paper documents.

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