

Fax Market Pulse: Trends, Growth and Opportunities

IDC Opinion

What do you think of when you hear the word "fax"? Outdated, 1980s technology? Fax is a thing of the past, and no one uses it anymore? The *perception* of fax is that it's a technology of bygone decades and that it's incomprehensible that companies are still faxing. The *reality* is that fax remains a vital communication tool, is relied upon by businesses of all sizes and in all industries, and has an important role within organizations as they embrace digital transformation (DX).

IDC defines digital transformation as enterprises' use of 3rd Platform technologies (cloud, mobility, data analytics, and social business) to create value and competitive advantage through new offerings, new business models, and new relationships. In addition to gaining critical operational efficiencies, a principal outcome of digital transformation is improved customer experience. A cornerstone of DX is transforming document-centric workflows, especially those related to interactions with customers as well as other stakeholders (e.g., employees, investors, partners, and suppliers).

During the past three decades, technology has evolved to fundamentally change how organizations interact with these important stakeholders. Fax technology has similarly evolved, providing the market with software- and cloud-based digital solutions that are easy to use and cost effective and that enable the integration of fax with enterprise applications while maintaining secure, trackable, and auditable information exchange. That integration supports the automation and optimization of document-intensive business processes, contributing to the transformation of those processes. Today's digital fax server–based systems and cloud fax services eliminate the standalone fax machines of old and enable integration with users' desktops, email, back-end applications, and multifunction peripherals (MFPs).

Why is fax a trusted and secure method of information exchange? Fax securely transmits documents using the telephone network and requires peer-to-peer direct connectivity prior to transmission of data. Therefore, a document doesn't get transmitted unless the outbound fax transmission has a secure and direct connection with the receiving fax device. Digital fax



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Fax remains a vital communication tool, is relied upon by businesses of all sizes and in all industries, and has an important role within organizations as they embrace digital transformation. servers and cloud-based fax services further enhance the security of faxed documents by eliminating the risk of lost, misplaced, or misfiled paper faxes — often containing sensitive or confidential information — associated with standalone fax machines. Furthermore, fax documents are legally binding documents.

This document discusses the results of a recent IDC survey that assesses the state of fax usage within organizations. Interestingly, the majority of respondents told us that their fax usage was steady or had grown over the past year. Fax usage grew an average of 27% year over year among those who reported increased use. The document also examines why organizations continue to use fax, projected usage trends in the coming two years, and what will continue to drive demand for fax use within digital transformation initiatives.

Key findings include:

- Among respondents who indicated year-over-year growth, fax usage grew by an average of 27% and is expected to grow by an average of 25% over the next two years.
- >>> Simplifying fax processes and making fax more accessible drive usage up.
- Organizations continue to use fax because customers and suppliers require it.
- >>> Fax is a trusted method of secure information exchange.
- During the next two years, fax volumes will shift to fax cloud services.
- 90% of fax users have already integrated or are evaluating integration of fax with other technologies or applications.

Digital fax technology will play a role in transforming an organization's document-centric business workflows by integrating with the document-intensive workflow automation ecosystem, enabling new connections, streamlining secure communications between stakeholders, and contributing to overall digital transformation initiatives.

Methodology and Definitions

This white paper reviews the state of fax usage within organizations. It considers both paper-based and digital fax technologies with four methods of exchange: paper-based, manual faxing with standalone fax machines; fax-enabled MFPs; digital faxing with fax servers; and digital faxing with cloud fax services. This document ranks the four methods of exchange based on the volume of documents sent and received and how fax volumes are expected to change in the future. It answers questions regarding why organizations continue to use fax and what will drive demand for fax use in the future.

To assess these trends, IDC conducted a survey of 200 organizations that have a minimum



Among respondents who indicated year-over-year growth, fax usage grew by an average of 27% of 500 employees. Participants included in the survey were individuals that had knowledge of fax usage within their organization. Participating organizations were located in North America, Europe, and Asia/Pacific. Respondents represent four industries: financial services, healthcare, government, and manufacturing.

Definitions

- Fax servers are systems installed in a local area network (LAN) that connect to the cloud or on-premises telelphone lines and allow users to send and receive faxes as digital documents. A single fax server can replace multiple standalone fax machines, thereby reducing infrastructure overhead as well as the need for paper-based workflows. In addition, fax servers can provide a higher degree of automation.
- Cloud fax services are services that use the internet to send and receive faxes. Cloud fax services transmit email messages with attachments as faxes to actual fax machines or other digital fax services. The services can be hosted onsite as a private cloud solution or can be fully hosted offsite, or an organization can deploy a hybrid model. Messages are encrypted before they are sent, during processing, and during transfer, making this option as secure as a standalone fax machine. As with fax servers, this model reduces infrastructure overhead and paper-based workflows.

Situation Overview

Fax Continues to Play an Important Communications Role

The influx of standalone fax machines within organizations during the past two to three decades provided easy document sharing capabilities between customers, suppliers, and business partners. In today's market, there are four main types of fax technologies: traditional standalone fax machines and fax-enabled MFPs support paper-based faxing, while fax servers and cloud fax services support digital faxing.

The introduction of the internet and the growing use of email provided organizations with alternative methods of exchanging information. While standard office email may have evolved to be the most common communication method, it is not without its vulnerabilities, ensuring that fax technology continues to maintain a strong presence within organizations that require a highly secure solution for sharing documents, particularly between business entities. Research further shows that as digital workflows continue to evolve, organizations are not planning to eliminate fax. Instead, organizations expect to add digital fax solutions such as fax servers and/or cloud fax services to support the automation of document-intensive workflows and digital transformation strategies.



Fax is used for a number of important reasons, such as a trusted method of secure information exchange or as part of a fax-dependent workflow or business process. As we discuss in the sections that follow, fax is used for a number of important reasons, such as a trusted method of secure information exchange or as part of a fax-dependent workflow or business process. The following are some common examples of fax usage within organizations where content security is essential:

- Finance and financial services: Delivering trade confirmations, receiving mortgage or other loan applications, processing claim forms, and dispensing collection notices.
- >>> Healthcare: Exchanging protected health information (PHI) in a HIPAA-compliant manner, transferring patient information to another physician, and processing claim forms.
- **Government:** Accepting contract bids, changing property records, tracking expenses, and transmitting emergency information.
- Manufacturing: Transmitting purchase orders and shipping notices, processing RFIs/RFQs/RFPs, and processing invoices.

Fax Has Deep Roots in Organizations

A majority of respondents to our survey have seen fax usage remain steady or grow during the past year. The future for fax also looks promising — the research shows that fax will continue to be a critical document communication technology in the next two years, with 43% of respondents indicating that fax usage is expected to grow.

We asked respondents: Compared with the prior year, has fax usage increased, decreased, or stayed the same? Figure 1 shows that 82% of respondents indicated that fax usage increased or stayed the same from the previous year (i.e., 43% of total respondents indicated that fax usage has increased, and 39% indicated that fax usage will remain steady). 51% of respondents from North America indicated a year-over-year increase in fax usage. Certainly, some of this growth can be attributed to the recent economic recovery and the growth in the sheer volume of business being conducted. But the numbers also attest to the staying power of fax within organizations.

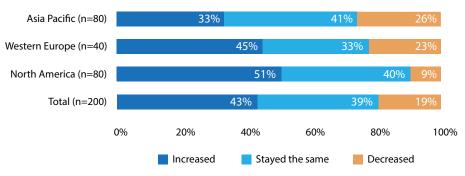


82% of respondents indicated that fax usage increased or stayed the same from the previous year.

43% of total respondents indicated that fax usage has increased, and 39% indicated that fax usage will remain steady.

Fax Usage Compared with the Previous Year by Region

Q. Compared with one year ago, has fax usage in your organization ...



Growth was seen across all industries and business sizes, with the strongest growth seen in the manufacturing sector. This data indicates that fax is deeply integrated within business workflows and continues to expand its user base and usage.

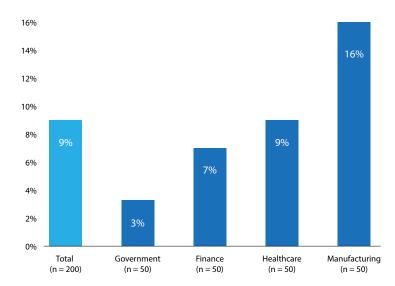
Source: IDC's Fax Survey, February 2017

To further understand how deeply rooted fax is within organizations, we asked respondents who indicated that fax usage grew to quantify that growth. The mean year-over-year growth rate for fax usage was 27%. Furthermore, the net growth in fax usage for all respondents (including those who indicated that fax use would decline) was 9% (see Figure 2). Growth was seen across all industries and business sizes, with the strongest growth seen in the manufacturing sector. This data indicates that fax is deeply integrated within business workflows and continues to expand its user base and usage.

FIGURE 2

Average Net Year-to-Year Fax Usage Growth

Q. Compared with one year ago, by what percentage did your organization's fax usage increase/decrease/stay the same (net average)?



Source: IDC's Fax Survey, February 2017



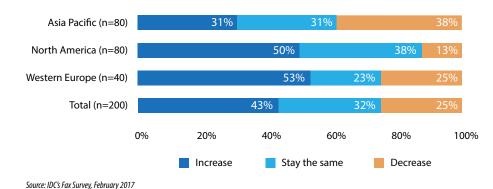
What is the future for fax, especially considering that businesses are in the process of transforming to digital workflows? To answer that question, we asked survey participants to provide insight on their anticipated fax usage over the next two years. Users were asked whether fax usage will grow, decline, or remain the same.

Results from this question show that 75% of total respondents expect fax usage to grow or remain the same in the coming two years (see Figure 3). In North America, 88% of respondents expect fax usage to grow or remain steady. Respondents were also asked about the expected fax usage growth rate during the next two years, and while the net growth of fax usage is 6%, results show that among those who expect fax usage to grow, that growth will average 25% (see Figure 4). As discussed in subsequent sections, this growth will likely be fueled by making fax more accessible to employees, business growth, investments in fax infrastructure, and security considerations.

FIGURE 3

Growth of Fax Usage by Region

Q. Over the next two years, do you expect your organization's fax usage to ...

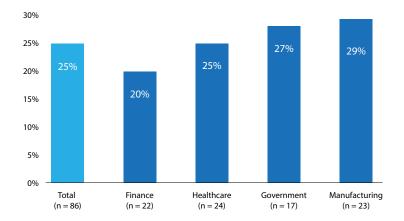




75% of total respondents expect fax usage to grow or remain the same in the coming two years. Among those who expect fax usage to grow, that growth will average 25%

Average Net Projected Year-to-Year Fax Usage Growth

Q. Over the next two years, by what percentage will your organization's fax usage increase?



Fax is a trusted communication method in this era of almost daily news about security breaches.

Source: IDC's Fax Survey, February 2017

Why Fax?

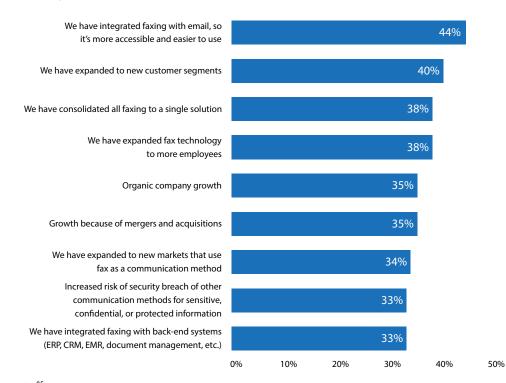
Given that many organizations are planning or have developed a digital strategy, one would expect the future for fax to be a bit gloomier than what the data is showing. So why is fax usage expected to grow? When respondents were asked why fax usage had grown, 44% of respondents indicated that it was a result of integrating fax with email, which makes faxing easier for the user (see Figure 5). Many respondents indicated that fax usage has grown because of growth in their business — that is, increase in customer base (40%), organic company growth (35%), or expansion to new markets (34%).

That said, organizations are clearly making investments in fax infrastructure. 38% of respondents indicated that they had consolidated all faxing to a single solution, and 38% indicated that they have expanded the number of employees who have access to fax. Perhaps more importantly, one-third of respondents attributed fax growth to integration of fax technology with enterprise applications such as enterprise resource planning (ERP) and customer relationship management (CRM) systems.

Finally, fax is a trusted communication method in this era of almost daily news about security breaches. One-third of respondents attributed growth of fax to security concerns.



Top Reasons for Fax Volume Growth



Q. Why have fax volumes increased?

n = 85

Source: IDC's Fax Survey, February 2017

The fact that fax use continues to grow in today's organizations raises the following questions: Why does fax remain a key part of business workflows? What are the benefits that organizations obtain from using fax?

There are three key factors driving fax usage within organizations (see Figure 6):

- Fax is an integral component of business workflows. Customers and suppliers use fax, fax is an important component of business processes, it is universally accepted, and it is frequently integrated with back-end applications.
- Fax technology is evolving and is a component of modern digital workflows including availability of solutions such as fax servers and cloud fax services. Also, digital fax integrates with email, making it easy to use.
- Fax supports enterprise security and compliance. Fax provides an easy means of tracking documents, providing a high level of confidence that a document is sent and received with an auditable trail. It offers proven, secure document transmission. Faxed



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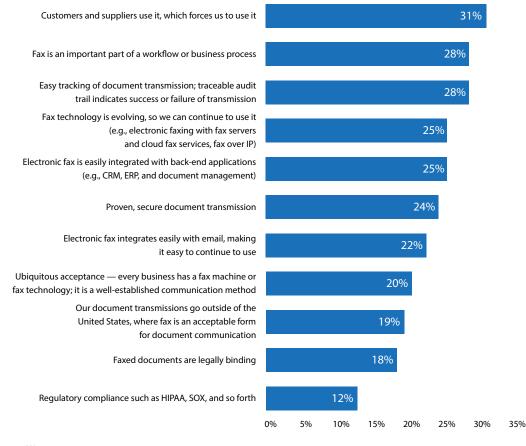
Any disruption to fax use within faxdependent, businesscritical workflows could have detrimental outcomes for a process that could ultimately impact a business' bottom line. documents are legally binding, and fax supports compliance with industry regulations (e.g., HIPAA and SOX).

These results show that usage growth is the result of both internal (employee) adoption and external (customer, partner, and supplier) growth, indicating that fax is not only entrenched in businesses but also is a critical part of conducting day-to-day business. Any disruption to fax use within fax-dependent, business-critical workflows could have detrimental outcomes for a process that could ultimately impact a business' bottom line.

FIGURE 6

Drivers of Fax Usage

Q. Overall rank — You indicated fax is used in your organization today for the following reasons. Please rank the three most important reasons.



n = 200

Source: IDC's Fax Survey, February 2017

Fax provides organizations with a number of additional benefits beyond maintaining inherently secure communications with customers or providing an easy way to maintain



Usage growth is the result of both internal (employee) adoption and external (customer, partner, and supplier) growth, indicating that fax is not only entrenched in businesses but also is a critical part of conducting day-to-day business. documentation for future audits. According to survey results (see Figure 7), the top 5 benefits respondents obtain from fax are:

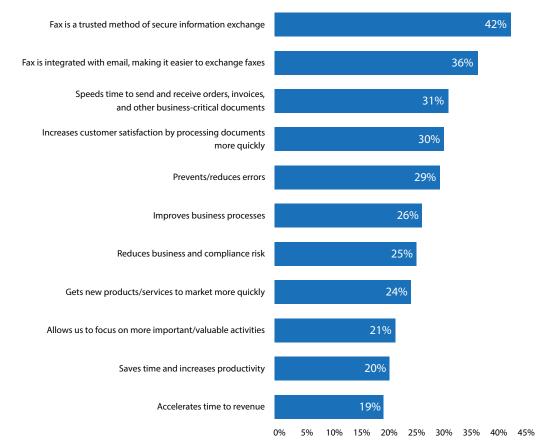
- >> Security: 42% of respondents indicated that fax is a trusted method of secure information exchange.
- **Ease of use through integrations:** 36% believed that integrating fax with email makes it easy to exchange faxes.
- Increased speed: 31% indicated that fax speeds time to send and receive critical documents.
- >>> Higher customer satisfaction: 30% noted that processing documents more quickly provides higher levels of customer satisfaction.
- **Prevention of errors:** 29% indicated that fax reduces and/or prevents errors.

These benefits make a strong case for the sustained and growing use of fax technology. However, many of these benefits can also be obtained using digital solutions such as email. Security is one critical area where fax surpasses email. As stated previously, fax securely transmits documents using the telephone network and requires peer-to-peer direct connectivity prior to transmission of data. Therefore, a document doesn't get transmitted unless the outbound fax transmission has a secure and direct connection with the receiving fax device. Email is vulnerable to interception as once the "send" button is selected, the email begins to flow freely through firewalls, ISPs' servers, and other security applications until it reaches its final destination. During the transmission period, email is at the highest level of vulnerability for unauthorized access, whereas fax transmissions are not.



Top Benefits of Fax Usage

Q. What are the top benefits your organization obtains when using fax?



n = 200

Source: IDC's Fax Survey, February 2017

Although the future picture for fax technology indicates that fax will maintain its position in business workflows, there are a number of challenges that fax users face. The top concern focuses on the productivity and cost associated with paper-based fax workflows (see Figure 8): 42% of respondents indicated that employees spend too much time faxing, and 39% of respondents indicated that the cost of paper and manual labor associated with faxing is too high. It is important to note that digital alternatives such as fax servers and cloud fax services address these identified pain points, as well as pain points associated with the integration of fax with enterprise applications. Cloud fax services also address infrastructure concerns.

Other challenges reinforce the fact that some business-critical workflows are heavily reliant on fax. Results from the survey show that 31% of respondents indicated that they are forced

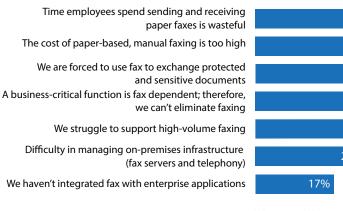


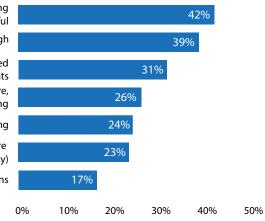
to use fax because of the security it provides to protect information, and 26% of respondents indicated that a business-critical function is dependent on fax.

FIGURE 8

Challenges Organizations Face When Dealing with Fax

Q. What are the top 2 challenges your organization faces when dealing with fax?





n = 200

Source: IDC's Fax Survey, February 2017

Transforming Fax Workflows

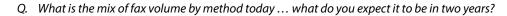
Figure 9 shows that today, 36% of fax volume (monthly pages) is sent or received using standalone fax machines, which is more than the fax volume sent or received using all other fax technologies. However, when we asked for the expected volume mix in the next two years, we see that value is reduced to 28%, while cloud fax services volume grows from 20% to 29%, exceeding the volume sent on standalone fax machines. The volume of faxes sent and received via MFPs and fax servers will remain steady. Today's number is consistent with IDC research that shows that paper-based, manual document-intensive workflows are still common within organizations. However, the transition to cloud fax services is a clear example of 3rd Platform technology — cloud — fundamentally transforming these workflows.

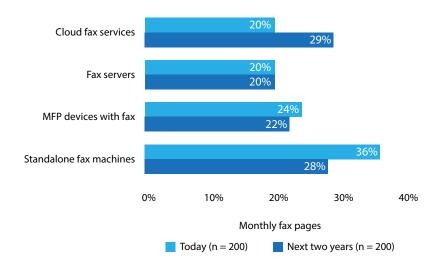


It is important to note that digital alternatives such as fax servers and cloud fax services address these identified pain points, as well as pain points associated with the integration of fax with enterprise applications.

Cloud fax services also address infrastructure concerns.

Current and Future Fax Volume by Technology





Source: IDC's Fax Survey, February 2017

Further evidence of fax's established role in business workflows is that 50% of respondents to IDC's Fax Survey indicated that their organization had integrated fax with other technologies and/or applications (see Figure 10). An additional 40% are evaluating the opportunity, and only 10% have no plans to integrate. Integration of fax technology with enterprise applications and other technologies is critical to link fax to the document workflow automation ecosystem, supporting the transformation of document-intensive workflows.



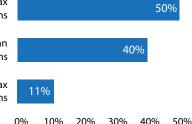
Integration of Fax with Other Technologies and Applications

Q. Has your company integrated electronic fax with other technologies/applications (e.g., ERP, CRM, EMR, document management, and capture technology) to automate and/or optimize any document-intensive business workflow?

Yes, we have already integrated our electronic fax solution with other technologies/applications

We are currently evaluating our options of integrating an electronic fax solution with other technologies/applications

No, we have no plans to integrate electronic fax with other technologies/applications



Source: IDC's Fax Survey, February 2017

We asked the 90% of respondents who stated they have integrated or are evaluating the opportunity to integrate fax with other technologies how they planned to automate fax-dependent workflows. The response was "all of the above," with respondents giving almost equal weight to all the options provided. At the top of the list is integration with enterprise applications including enterprise resource planning (ERP), customer relationship management (CRM), document management, and vertical applications such as electronic medical record (EMR) systems. Email is also a high priority for integration. Respondents also plan to leverage capture technology to extract fax content for integration within workflows. Standalone fax machines will be replaced with fax servers and cloud fax services (see Figure 11).

These responses clearly indicate that there is a growing demand to support integration and automation of fax-dependent digital workflows, which can only be achieved with a digital fax solution.

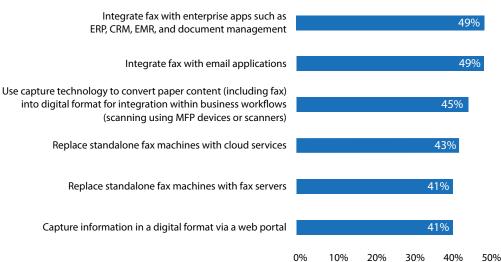


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n = 200

Solutions Used to Automate Fax-Dependent Workflows

Q. Please choose the solutions that your company plans to incorporate or has already incorporated to automate fax-dependent workflows.



n = 179

Source: IDC's Fax Survey, February 2017

Conclusion

Digital Transformation of Document Workflows

As we noted previously, a cornerstone of digital transformation is transforming documentintensive workflows, especially those related to interactions with customers and other stakeholders. Innovative technologies are enabling new approaches to deploying and managing these workflows, offering organizations opportunities to drive competitive differentiation and bottom-line results. This research indicates that digital fax technologies will play a role in transforming document-intensive workflows and can thereby contribute to the overall digital transformation strategy of an organization.

Although the transformation of document-intensive workflows is not limited to the transition of paper-based workflows to digital (and, in fact, simply converting paper-based workflows to digital is not necessarily transformative), the fact remains that paper-based workflows are costly, inefficient, error prone, and not secure. Digital transformation strategies will require the elimination of paper-based faxing.

It is also critical to stress the importance of integration in automating and transforming document-centric workflows, between both the core technologies that drive the workflow itself and these technologies and other enterprise applications and/or industry systems



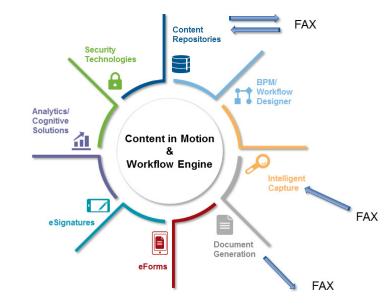
Digital fax technologies will play a role in transforming document-intensive workflows and can thereby contribute to the overall digital transformation strategy of an organization.

Digital transformation strategies will require the elimination of paper-based faxing. including productivity and collaboration tools, ERP, CRM, supply chain management (SCM), and human resources management (HRM). Digital fax technologies enable fax to be integrated as part of the overall document-centric workflow ecosystem.

Figure 12 describes IDC's view of the document-centric workflow automation ecosystem and the role of fax within that ecosystem. At the heart of the ecosystem is "content in motion" and the rules-driven workflow engine that is orchestrating that motion. A number of participating applications provide essential workflow services (some type of content repository to store "content at rest"). These services can be combined in a variety of ways to provide specific, purpose-built solutions that solve particular business problems. Fax can play a role as an on-ramp and off-ramp to/from the ecosystem as well as function as a key communication component of the ecosystem.

FIGURE 12

Document-Centric Workflow Automation Ecosystem and Fax



Source: IDC, 2017

So what do you think of when you hear the word "fax"? Modern, 21st century technology. A technology of the digital era. Fax remains a vital communication tool, is relied upon by businesses of all sizes and in all industries, and has an important role within organizations as they embrace digital transformation.



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