

White paper

# A guide to building a TCO model for digital fax as a managed service

What you need to consider when deciding how best to deliver the fax capabilities you need

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Fax is rapidly evolving from inefficient, paper-based methods to digital fax services. IDC<sup>i</sup> states that within the next two years, the majority of faxes will be delivered electronically. As fax remains at the heart of document-centric workflows within many industries, companies are looking to replace outdated fax methods with digital fax solutions that meet their process automation and efficiency needs. This provides an ideal opportunity to assess how best to build your digital fax capabilities. This white paper examines what should be covered when creating a Total Cost of Ownership (TCO) model for digital fax as a managed service.

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## Introduction

Organizations continue to rely on fax as a secure method of information exchange, but as organizations consolidate and modernize to digital fax solutions—either in support of digital transformation strategies or as part of process automation projects—there are a number of costs to consider and challenges to overcome. When fax is critical to an organization, and it often is when a business process or workflow depends on it, the complexity of the fax environment rises to meet the needs of the organization.

On-premises, software-based solutions are typically the most complex deployment, requiring significant time and resources to first design, then implement, manage, maintain, and troubleshoot the solution. For an on-premises fax server deployment, telephony connections are often the most complex part of an implementation, requiring additional resources to coordinate with your telephony team. On-site telephony is the most common point of failure for faxing: outdated telephony and some voice over IP networks cause jitter, delays, packet loss and faxing failures for organizations, resulting in lost business, slower business processes, and poor customer satisfaction due to delays or failed fax communications.

Integrations are the most important part of a digital fax solution's deployment and add complexity to an implementation. In order to gain the business benefits of digital fax solutions—speeding time to exchange documents, increasing customer satisfaction, speeding up business processes and reaching new markets faster—digital fax deployments must integrate with back-end systems. Email integrations make faxing fast and easy for users. Secondly, integrating with enterprise applications such as ERP with SAP® or Oracle®, CRM, DM, EMR systems in healthcare, custom, or legacy applications is when process automation and document-centric workflows become digitally integrated workflows to accelerate those business benefits. It's important that these integrations are properly identified, designed and implemented, adding to the complexity of any deployment.

Upgrades, health checks, and monitoring are an ongoing requirement of deployments and often involve significant investment in time and resources.

Finally, making sure that the system remains stable and reliable, with high availability, ensures that faxes continue to flow in and out of the business. However, due to the complexity of an implementation, this leads to a large resource drain on an organization:

- Through a single threaded IT resource with the responsibility of managing and maintaining the deployment
- Competing priorities that distract from digital fax initiatives
- Time away from focusing on other strategic IT business initiatives



## Understanding the role of digital fax solutions

A recent IDC study<sup>2</sup> shows that 91 percent of companies say their digital transformation strategy embraces improving how content is used and managed, including all document-centric workflows. Especially in highly regulated industries, fax is a principal communication method and component when transforming these workflows. According to the research, moving from paper-based to digital delivery for document-centric workflows can produce significant, proven benefits:

- Reducing costs by 35 percent
- Increasing productivity by 41 percent
- Reducing errors by 52 percent
- Reducing paper documents by 42 percent

Additionally, 33 percent of organizations reported increases of customer satisfaction, and 22 percent saw business and compliance risk fall.

Similarly, in the newly published report *Fax Market Pulse: Trends, Growth and Opportunities*, IDC found that fax, as a secure method of information exchange, remains a relevant and important method of communication for organizations across all industries and around the globe—and a critical part of the digital transformation of document-centric workflows.

The key driver to achieve digital transformation is the evolution of fax technology and transforming paper-based faxing to digital, electronic faxing. Electronic fax servers and cloud-based fax services continue to replace standalone fax machines. These digital solutions amplify performance, ease of use and enhanced security. Advanced fax capabilities include integration with email and enterprise applications to enable the automaton of end-to-end document-centric workflows. To achieve fax-to-application integration nirvana, most organizations turn to on-premises fax servers, often the richest deployment type to provide deep integration capabilities and configurability that process automation demands.

However, an on-premises digital fax infrastructure can be complex, costly, and burden IT resource and administration, which can be challenging to overcome.

As companies consider their investment in digital fax capabilities, a managed services approach is designed to offload that complexity to a trusted provider, reduce cost, and act as an extension of your IT resources, so that you can focus on your core IT initiatives. Building a TCO model will help you understand whether managing your own fax capabilities or working with a trusted fax managed services provider is most beneficial for your organization.



## **Key considerations when calculating the TCO of your digital fax solution**

You need to fully understand:

- The capital and operational expenses involved in your current fax infrastructure
- The capital and operational expense of transitioning to a digital fax infrastructure
- The capital and operational costs of managing and maintaining a digital fax infrastructure, including:
  - Data center costs
  - Hardware refresh cycles
  - Software refresh cycles
  - Software upgrades and patches
  - Dedicated IT resources required
  - Telephony network support resources required
  - Ongoing implementation and infrastructure support skills
- The operational expense and net present value of working with a managed services provider
- Whether internal or managed services will most effectively allow you to:
  - Extend digital fax capabilities usage easily within your organization
  - Implement the key integration of digital fax with email applications, making it easier to use
  - Achieve advanced enterprise application integrations for process and workflow automation
  - Supply the skills and resource you need to design, implement, manage, and maintain your digital fax infrastructure
  - Supply the skills you need to ensure the security of your digital fax infrastructure remains compliant with all customer, industry, and governmental regulations
  - Benefit from scalability, high availability, and faster implementations of technology upgrades to improve business performance
  - Enable scalability and high availability
  - Improve the reliability and stability of faxing operations
  - Gain visibility and insight into all your fax communications to improve overall transparency

## **What is digital fax as a managed service?**

Digital fax as a managed service empowers your organization to free up internal resources to focus on core business objectives, eliminate on-premises fax server hardware/software costs and maintenance fees, and fill gaps in internal expertise. It combines digital fax technology with the people, processes, and value-added services necessary to offload complexity from you to the provider, empowering your organization to reach your business automation goals, improve customer satisfaction through faster document exchange and processing, and support digital transformation and modernization strategies.

Digital fax managed services typically deploys complex fax server software within a secure data center and provides the experts, people, and best practice processes to design, implement, manage, and maintain the technology, offloading that responsibility from you to the experts at the provider. Through value-added services and expertise, managed services acts as an extension of your IT team, allowing you to focus on your core and reallocate resources to other strategic initiatives.

To achieve the benefits of digitally transforming document-centric workflows, organizations must find ways to simplify and enhance their digital fax operations. Digital fax as a managed service eliminates the capital expense of on-premises fax server hardware, software and upgrade costs, and provides flexible access to the expert skills of the provider required to take full advantage of the advanced capabilities of digital fax.

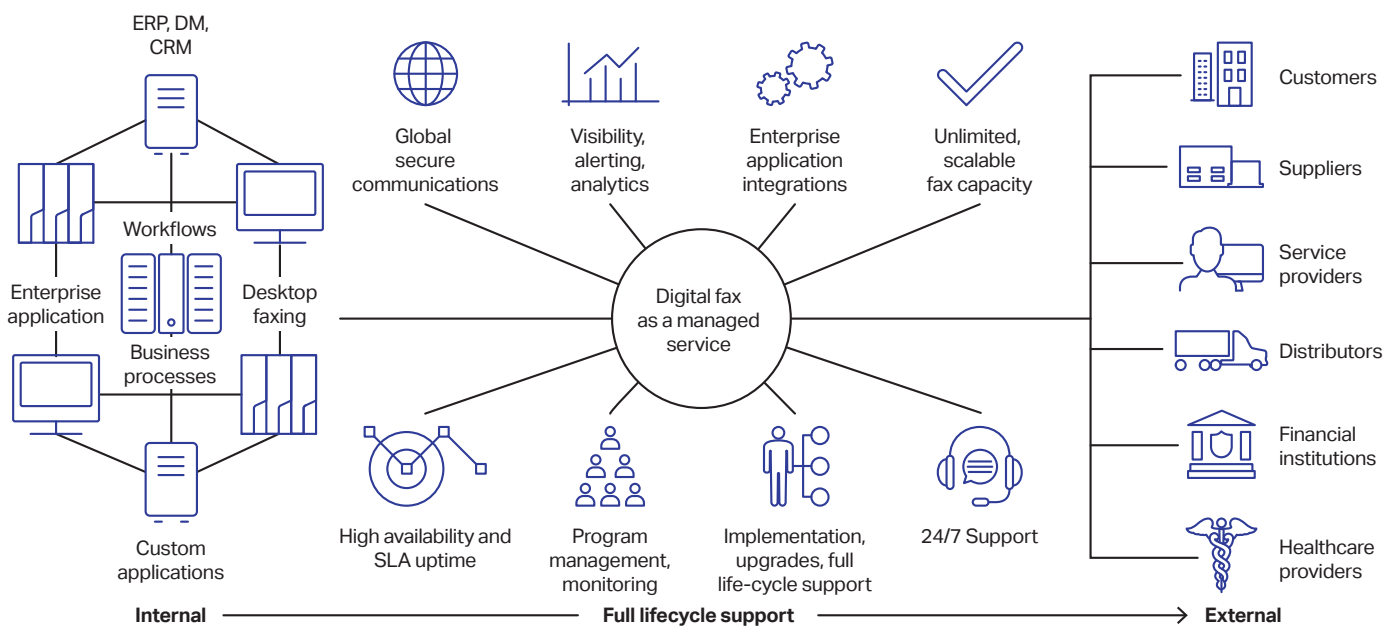


Figure 1: Digital fax as a managed service provides full lifecycle support for digital fax

The potential benefits of digital fax managed services go beyond cutting costs and reducing the administrative burden internally. This approach delivers full lifecycle support across document-centric workflows. To assess whether managed services is the correct approach for your digital fax operations, a TCO model will need to include the costs, resource requirements, enterprise integration capabilities, system performance, business strategy support, and future-proofing for both managed services and delivering your fax capabilities internally.

### Considerations for the TCO

A key advantage of managed services is the ability to replace high capital investments with low cost, predictable monthly payments. However, it can be easy to overlook the combined capital and operating expenditure of maintaining an on-premises digital fax infrastructure.

The capital costs of installing and refreshing hardware and software—including recurring licensing fees—will be dwarfed over time by the operating expense tied up in managing and maintaining the system. In addition to the cost of full-time staff to manage and maintain the system are ongoing costs of patching and upgrading the system. Most organizations also have a five-year technology refresh cycle.



Digital fax managed services replaces all these costs with a single monthly fee. While this appears attractive, it is important to work out the Net Present Value of the contract. That is the total cost of the managed services contract across its lifecycle. Most companies find that managed services delivers major cost benefits over the contract lifecycle. Some find the difference between the two approaches is much closer and other factors are equally important when making their decision.

### Enterprise integration

Organizations are increasingly looking to integrate digital fax into their enterprise applications and communications to enable the end-to-end processing of document-centric workflows. IDC found that integration with enterprise applications and email were two of the key reasons that fax volumes were growing within organizations. These were also the top two ways that respondents were looking to automate fax workflows. Yet, lack of enterprise integration was also seen a major challenge by IDC respondents.

Enterprise application integration requires new skills that most companies don't have internally. You will also need to factor in the costs associated with gaining access to the high level skills required for enterprise application integration. Each application—whether ERP, CRM, ECM, EMR, or some other enterprise application—has its own, constantly changing, technical integration requirements. Few companies will be able to employ staff dedicated to this task, which means sourcing and deploying expensive consultants.

What becomes important is integration capacity at scale. Sometimes there will be little new integration but often a number of applications will introduce upgrades or new releases close to each other, which require significant integration work. Resourcing these projects internally can be extremely expensive—and difficult to budget for.

### Flexible resourcing

IDC's fax trends report showed that companies are becoming increasingly aware of the limitations of managing their digital fax internally. Companies see an on-premises fax infrastructure—fax servers, telephony connections, capacity constraints—as a major challenge to manage internally. Organizations want to free internal resources from complex implementation, maintenance and upgrade-based tasks while effectively filling skill gaps in areas such as enterprise application integration.

Traditionally, companies have dedicated at least one person to administer their fax systems. This 'single threaded' approach is not suitable to today's digital fax networks. You require a flexible, multi-skilled team to deliver:

- Ongoing fax management-Experts to maintain the management of your digital fax infrastructure, including systems-health monitoring, data backup, network management, systems administration, database management, and application support.
- 24x7 support and maintenance-The comprehensive, proactive, and reactive management of your fax infrastructure. Especially for larger, multi-national organizations, technical support has to be global and 24x7, including transaction and systems health monitoring, alerting, and incident management. Global customer support, in local languages, is also a necessary capability.
- Program management-From initial implementation through new service delivery and feature release upgrades, you require program/project managers with experience delivering and running large-scale digital fax deployments.

Employing this level of internal resource can be difficult to justify—in time, resources, and attention away from other strategic initiatives. Digital fax managed services gives access to the correct level of resource and skills as your business requires.

**Digital fax managed services: TCO considerations**

Component	On-premises deployment	Managed services deployment
Digital fax system	High, upfront investment	Paid monthly
Fax server software	You buy, design, install, test, maintain	Included
System installation	You install	Low set-up costs
Annual support fees	Typically 20 percent of software costs	Included
System support	You support	Included
System upgrades	You buy, install, test, maintain	Included
Enterprise integrations (ERP, CRM, ECM, etc)	You develop, install, test, maintain	Included/Low set-up costs
System capacity	You buy, install, test, maintain	Included
System analytics	You buy, install, test, interpret, report	Included
Technology refresh	High, upfront investment (on average five-year cycle)	Included
Dedicated, expert resources	You employ	Included with provider expertise
SLAs	You build a network to support your desired SLA	Included
High availability	You build a network to provide high availability	Included

**A single, consolidated fax infrastructure**

The fax infrastructure for most companies has grown organically over years and, even, decades. The result is a host of different hardware, software licenses, and support contracts. This is costly, inefficient to manage and can cause business continuity issues should a particular system fail.

Digital fax managed services allows you to consolidate your fax capabilities on a single, global infrastructure. This provides a high performance platform for exchanging business information. It facilitates the process of integrating with enterprise applications and extending fax capabilities to new users. The fax infrastructure of some managed services providers goes beyond email integration to allow for anytime, anywhere access via mobile devices. This consolidated infrastructure simplifies the workflow automation that 30 percent of IDC respondents said leads to higher levels of customer satisfaction.

By centralizing and consolidating digital fax on a central infrastructure, you also gain greater visibility across your fax operations. Advanced analytics can draw insight from fax-based performance data for improved productivity and better business decision-making. Digital fax managed services can make this valuable information accessible without the need to employ business intelligence experts.

**Security, scalability, reliability, and high availability**

While security, scalability, and high availability are vital features of a fax infrastructure, each comes with its own costs. As fax is particularly important within regulated industries, it is essential that your digital fax always has the highest levels of security and encryption—both in transit and at rest. It takes time and effort to ensure that your digital fax supports the latest encryption standards or keeping security certificates up to date.

Increasing capacity within an on-premises fax implementation is likely to require fresh investment in fax delivery technology, storage, and server technology. As fax volumes are often hard to predict, organizations either provide extra capacity that sits idle until the rare occasions it's needed or under-provide and create bottlenecks at peak times. Choosing a digital fax managed service provider that operates its own secure global cloud faxing network that delivers instant unlimited, scalable fax capacity with built-in failover and redundancy for fax transmissions across dispersed data centers is paramount to scalability and reliability.



Achieving high availability is expensive for on-premises fax systems. Digital fax managed services providers should guarantee at least 99.5 percent uptime as they are based on stable data centers and a global infrastructure to ensure reach and high availability for supreme business continuity.

### Cost-effective future-proofing

The cost of technology refresh is only one factor when considering the future of your digital fax infrastructure. As refresh occurs on a cycle, your organization can be slow to adopt new fax developments that could bring business productivity and agility benefits.

In addition, regulatory change is complex and continuous. The ability to remain compliant with government legislation, industry standards, and customer mandates on a global basis requires access to a skilled resource that can quickly implement the required changes to your fax infrastructure. Digital fax managed services enables a new degree of future-proofing built into its service. The service provider operates the most up to date technologies within its platform while performing upgrades and new feature releases as part of its service.

### Conclusion

Digital fax technology plays a pivotal role in secure and trusted communications and modernizing and transforming document-intensive workflows. It improves business performance and agility, which have proven to significantly increase customer satisfaction through faster communications. It is also much more complex to manage.

Many organizations are turning to a managed services approach as they begin to transition to digital fax or evaluate the effectiveness of offloading this complexity to experts at a trusted provider. While cost and budgets are key considerations, they are only part of your TCO model. It's worth taking time to evaluate and understand the true business value of delivering digital fax internally or with the experts from a single, trusted digital fax managed services provider.

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1 Fax Market Pulse: Trends, Growth and Opportunities, IDC, 2017

2 Content Workflow Automation Survey, IDC, 2017