

The Value of Cloud Fax for Hospitals and Health Systems

How Cloud Faxing Protects Patient Privacy, Improves Compliance, Boosts Productivity, and Cuts Costs



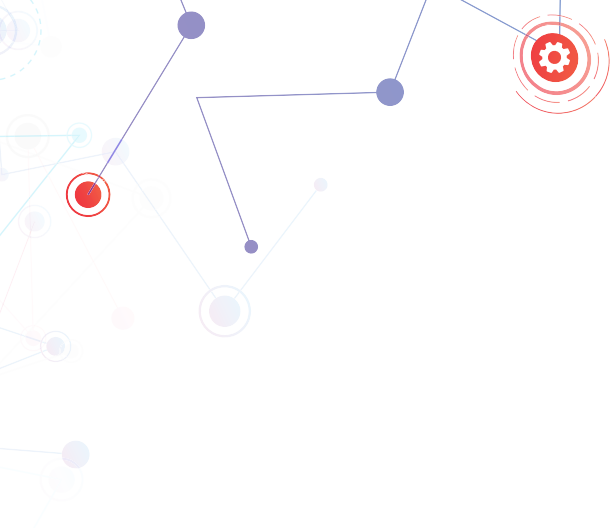
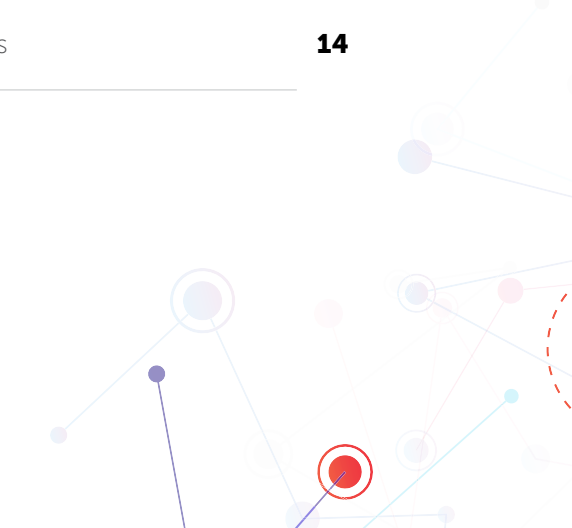


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We're years past the Centers for Medicare & Medicaid's 2020 target for making doctors' offices a "fax-free zone," and it seems healthcare organizations will still need faxing capabilities for the foreseeable future. But that doesn't mean you're stuck with paper-based faxing, or all the maintenance headaches it creates.

In this paper, we'll show you how the right cloud-fax solution can improve your compliance and safeguard your reputation — all while creating massive workflow efficiencies and saving your organization a small fortune.

Introduction: No, You're Not Stuck with Legacy Faxing

"Paper jam!"

As a healthcare IT professional today, decades into the 21st century, you expect to deal with various technical issues on behalf of your company's employees. Maybe your product team needs approval to upgrade the cloud app they use for their roadmaps. Or your business analysts can't access a mission-critical external database. Or an employee lost a laptop containing patient files, and you need to remotely wipe its data ASAP.

But another paper jam? Or an employee alerting you that the fax server is locked up again and needs a reboot? Shouldn't these complaints, like fax itself, have died out 30 years ago?

"Healthcare providers are in a 1990s time warp... where doctors are faxing patient records, medical staff are manually entering results into EHRs, and hospitals are handing out data on a CD-ROM.

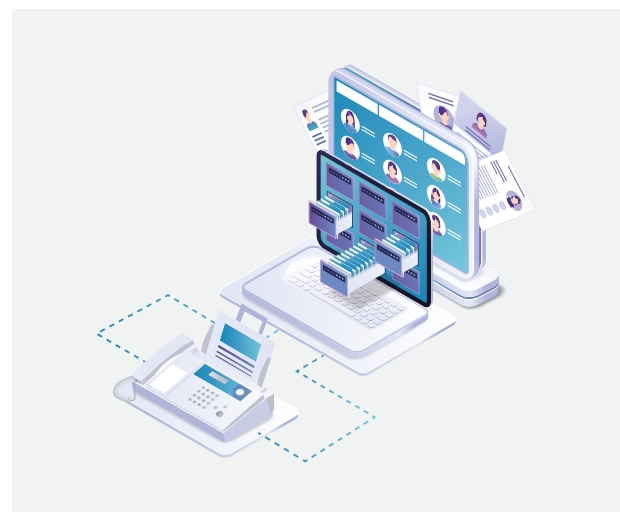
Seema Verma, CMS Administrator

If you're in a part of the healthcare industry that has thankfully moved beyond CD-ROMs, and you can't imagine that Administrator Verma's statement above still holds true, the title of a 2022

Forbes article makes it clear: "The CD-ROM's last holdout: your doctor's office."¹

We mention the CD-ROM only to make the broader point that the healthcare industry has been among the slowest to adopt newer digital technologies — for a couple of understandable reasons.

First, there's the reverse network effect. In the same way that some systems are designed to gain value as more people adopt them (think Instagram or even the telephone network), once we've all incorporated a communication method into our routines, it's difficult to dislodge that method, even as better ones emerge.



Because so many of the labs, payers, and other healthcare entities you communicate with still use fax, your organization needs to maintain the ability to exchange data by fax as well.

Another reason for the persistence of legacy faxing in healthcare is the fact that regulators continue to regard a fax transmission — even a paper-based fax transmission — the same as a phone call (as long as the “conduit exception” applies) and thus largely exempt from key aspects of the HIPAA Security Rule.

But as we’ll discuss below, as long as faxes containing protected health information (PHI) are subject to the HIPAA Privacy Rule, paper-based faxing does indeed pose risks to your standing with HIPAA regulators.

In fact, the compliance risks are only part of the story. You might not realize it, particularly if your organization has been operating a legacy fax infrastructure for years or even decades, but these outdated workflows are almost certainly creating unnecessary operational challenges for your staff and costing your company far more money than you need to be spending to maintain fax capability.

This paper will offer three distinct value propositions for migrating your fax infrastructure to the cloud — value propositions backed both by real-world data and decades of experience in the healthcare industry.

Cloud Faxing Value Proposition #1: Improved Patient Privacy



Most discussions about protecting PHI focus entirely on legal compliance, and for good reason: HIPAA comprises a complex and aggressively enforced set of regulations that play a role in most decisions made by healthcare IT, security, and compliance managers. But there’s an even more fundamental reason to focus on protecting your patients’ PHI — two reasons, actually.

First, it’s the right thing to do. Your patients count on you, after all, to safeguard this highly sensitive data for them. And paper-based faxing introduces risks of mistakenly exposing patients’ personal information to unauthorized third parties.

To cite just one recent example, Canada's CBC News reported that the Saskatchewan Health Authority, the province's primary health entity, has been the subject of multiple investigations since January 2022 for misdirecting patients' medical records by fax.

As Saskatchewan's privacy commissioner, Ron Kruzeniski said in a public statement: "I have serious concerns about the privacy risks that arise from the ongoing use of paper faxes to send personal information and personal health information."²

And as long as we're using examples from Canadian provinces, Ontario's Office of the Information and Privacy Commissioner (IPC) used the country's annual Data Privacy Day in 2023 to launch an initiative called Building Trust in Digital Healthcare. In their launch statement, the commissioner's office included this shocking statistic: "In 2021, 51% of the unauthorized disclosures reported to the IPC were due to misdirected faxes, mercifully down from 58.5% the year before, but still far too high."³

A second, related reason to consider the patient-privacy risks of paper-based faxing is the fact that these missteps with private health data can create terrible publicity for an organization, potentially leading to a damaged reputation and lost business. The fact that the Saskatchewan Health Authority's accidental exposure of private medical records has been covered by the Canadian Broadcasting Company as well as other regional and national news outlets is just one example of this ongoing threat.

According to IBM's 2022 Cost of a Data Breach report — which, by the way, cites healthcare as the industry suffering the highest costs of all — the average cost to a health organization in a data breach was more than \$10 million in 2022. Of this, the report notes, about \$1.42 million in costs were attributable to "lost business," which includes the "costs of lost customers and acquiring new customers, reputation losses, and diminished goodwill."⁴

Nor, of course, is this challenge limited to Canada. The US Office of Civil Rights for the Department of Health and Human Services says that "fat-fingering fax numbers" remains a common cause of complaints. So consider some of the many ways PHI can fall into the wrong hands through the mishandling of a fax:

- The fax is delivered to the wrong fax number.
- A fax is left on the machine where it is picked up by an employee not authorized to view the fax's contents.
- A fax's sender fails to include a cover sheet, exposing PHI to anyone who walks by the receiving fax machine.
- A fax's sender or recipient fails to securely store (or destroy) the hard copy after transmission.
- During a purge of the company's fax server, all stored faxes are printed out — but not destroyed — and are later found in a dumpster and reported by local media.

As these examples illustrate, protecting PHI is far more difficult when employees use a decentralized, paper-based transmission protocol open to human error.



The cloud-fax privacy solution

A cloud fax solution lets your staff fax securely by email, from a desktop computer of the sender to a desktop computer of the receiver. This eliminates the need for printing, scanning, and filing faxes — and eliminates the fax machine itself — so you won't have to worry about stray paper copies being lost, viewed, taken by unauthorized staff, or

forgotten in the fax machine memory when the device is taken out of service.

An inbound fax containing PHI arrives not on a common-area fax machine or multifunction printer, but directly in the intended recipient's email inbox, where it waits securely for that employee to log in and view it.

Cloud Faxing Value Proposition #2: Enhanced HIPAA Compliance



A cloud-based, fax-by-email solution also enables administrators to monitor all fax usage through a web-based admin portal, and easily create full audit trails for all faxes sent and received — one of several necessary conditions for HIPAA compliance that legacy fax infrastructure fails to address.

In fact, perhaps the strongest and most obvious case for migrating from legacy fax infrastructure to cloud faxing is the fact that such an upgrade will immediately and significantly improve your compliance.

For example, the HIPAA Journal reported in 2023 that of the 10 most common HIPAA violations, "Snooping on healthcare records" was number 1. (Additionally, others in the top 10 included "insufficient ePHI access controls," "improper

disposal of ePHI," and "failure to manage security risks" — all of which can also result directly from using a paper-based fax infrastructure.⁵

As you can imagine, a hospital or health system puts itself at far greater risk of these potential violations if its PHI fax process creates the real possibility of a hard copy left sitting on an office fax machine.

And the law's language makes it clear that such a shortcoming in your workflows would constitute a genuine violation. According to section 45 C.F.R. §164.308 of HIPAA, "Organizations must implement policies and procedures to ensure all members of its workforce have appropriate access to protected electronic health information... **and to prevent workforce members who do not have access... from obtaining access to ePHI.**"

Clearly, paper fax handling can fail the tight chain of custody HIPAA requires at all times. For this reason alone, cloud fax — which does provide a tight chain of custody and a full audit report for every fax — makes sense from the perspective of improving your company's compliance with HIPAA.

Nor does this represent the only way your paper-based fax infrastructure would likely come up short in a HIPAA audit. Analog fax machines' failure to encrypt data either in transit or at rest on the machines' hard drives could also represent a violation.

Although the law describes encryption as an addressable measure, rather than required, the HIPAA Journal points out that “The term addressable does not mean the safeguard is something that can be put off until another day. It actually means that the safeguard should be implemented, an alternative to the safeguard that produces the same results should be implemented, or a covered entity has to document (with a justifiable reason) why no course of action has been taken in respect of this safeguard.”⁶

And if we return to the HIPAA Journal’s top 10 violations, one of them is “Failure to Use Encryption or an Equivalent Measure to Safeguard ePHI.”⁵

This means if your company doesn’t encrypt ePHI in transit or in storage, and you suffer a breach, the resulting audit will likely reveal this oversight and you’ll have to document to HIPAA’s enforcers why your organization failed to implement an alternative to this safeguard in place of encryption.

The cloud-fax compliance solution

Now consider enterprise-caliber cloud faxing. The right cloud fax provider will protect faxes in transit and in storage with the strongest access, authentication, and encryption protocols available so you can rest easy knowing hackers won’t easily get

their hands on patients’ data by breaching your fax transmissions or archives.

And in the event of a data breach, you are covered by the “safe harbor” to the Breach Notification Rule [45 C.F.R. 164.408] because the encrypted data had been “rendered unusable, unreadable, or indecipherable to unauthorized individuals, such that there is a ‘low probability’ that patients’ PHI has been compromised.”

A fully HIPAA-compliant, cloud-based, fax-by-email solution will encrypt your transmissions — using the most sophisticated in-transit protocol available, TLS 1.2. It will also protect your archived faxes — with powerful AES-256-bit encryption.

Additionally, the right cloud fax service will help you meet the law’s “Access Control” rules, with unique user IDs, log-ins, and admin privileges, as well as its “Audit Control” demands, with detailed fax meta-data. The right cloud fax partner will also sign a Business Associate Agreement (BAA) to share responsibility for compliance.

Simply put: The right cloud fax service will greatly improve your ability to withstand a HIPAA compliance review.



Cloud Faxing Value Proposition #3 Increased Productivity and Reduced Costs



Beyond putting a protective net around your patients' data, protecting your organization against the loss of business and reputation that a fax mishap could create, and improving your HIPAA compliance, there are other compelling reasons to migrate from your legacy fax to a cloud fax service.

Legacy fax means higher costs for lower productivity

Migrating from legacy fax to a cloud fax service offers benefits beyond protecting patient data and HIPAA compliance. It can save costs and improve productivity, especially when dealing with prior authorizations.

A 2021 study by the Council for Affordable Quality Healthcare found that switching from paper-based faxing to an electronic process reduces per-transaction costs by over 85% and cuts paperwork time by more than half.⁷

Cost Per Transaction

	PLANS	PROVIDERS
Manual (including analog fax)	\$ 3.14	\$ 13.40
Electronic	\$ 0.12	\$ 3.76

Time Per Transaction (Providers Only)

Manual (including analog fax)	20 minutes
Electronic	8 minutes

According to a 2022 AMA study, doctors' practices complete an average of 41 prior authorizations, *per physician, each week.*⁸

Now, if we think about just a small practice, with three doctors, here's the difference in cost and time dealing with just this one communication workflow for that practice over a year.

Money Saved Migrating from Analog Faxing

41 prior authorizations (PAs) per week X 50 weeks = 2,050 PAs for the year, **per physician.**

2,050 X 3 physicians = 6,150 total PAs for **the practice per year.**

\$13.40 — \$3.14 per PA completion = **\$10.26 saved per PA.**

\$10.26 X 6,150 = **\$63,009 saved annually by the practice.**

Time Saved Migrating from Analog Faxing

6,150 total PAs for **the practice per year.**

20 minutes — 8 minutes per PA completion = **12 minutes saved per PA.**

12 minutes X 6,150 = **73,800 minutes or 1,230 saved annually by the practice.**

Cloud faxing boosts productivity

Consider the time your staff spends sending a fax: printing the document, filling out a cover page, walking to the fax machine, dialing, waiting for the transmission and delivery confirmation, and possibly encountering issues like a busy fax number or paper jam. Afterward, your employee must securely file the pages according to HIPAA rules.

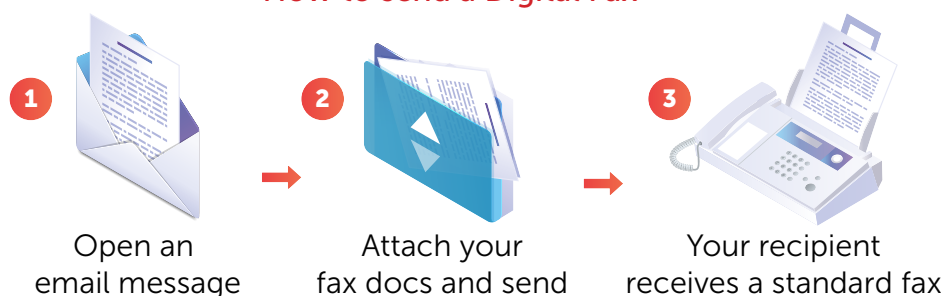
Switching to a secure, any-device cloud fax solution can save time for physicians and administrative staff. Recent statistics from the CAQH and AMA reveal that electronic faxing reduces per-transaction costs by over 85% and cuts paperwork time by more than half. With more time available, staff can focus on caring for patients rather than manually faxing paperwork.

How Cloud Fax Works To Streamline Your Workflows And Save You Money

Cloud fax is quick, intuitive, and accessible from anywhere. An employee sends a fax by opening a new email, selecting the address, typing a cover note, attaching files, and hitting send. Digital confirmation arrives within minutes, and no printing, scanning, or dialing is needed. This process can be

done from a computer, tablet, or smartphone. Cloud fax saves time across your company and eliminates IT maintenance issues. The productivity boost is significant, especially when considering the dozens or hundreds of faxes sent daily.

How to send a Digital Fax



Cloud faxing cuts out-of-pocket costs

When you migrate to cloud fax, you can also eliminate many of your hard faxing costs — from ink and paper, analog fax lines, maintenance agreements, fax-server hardware, software licenses, employee training, and IT troubleshooting — to the surprisingly high costs of rack space and electricity, the list of savings is long.

Let's take a look at how these cost models compare, starting with fax machines or multifunction printers. As the number of machines grows, the operating costs increase linearly; there are no economies of scale.

And if you are using the fax capabilities of a multifunction printer, it will need a fax line card installed — yet another of those hidden costs that could be eliminated by cloud faxing.

Costs of Legacy Fax Machine and Printers

Paper ink toner	\$20 per 1,000 pages
1 analog fax line	\$60 per month \$720 per year
1 fax machine, 1 fax line 1,000-8,000 pages inbound per month	\$960 - \$2,640 per year
4 fax machines, 4 fax lines 1,000-8,000 pages inbound per month	\$3,840 - \$10,560 per year

The costs of maintaining a fax server

What if your company relies on fax servers for high-volume faxing? Let's examine all costs, the obvious and the not-so-obvious, for a single fax server for both small and large office configurations.

Note the following table — a couple of high-ticket items might surprise you. First, in addition to the 3-year software license, each channel is licensed

separately. On a full 23-channel T1 PRI line, that can equal the software cost. Then the fax line card needed to connect to the telephone network can cost over \$10k! And you had better stock a spare because if it dies you'll be dead in the water until a new one can be shipped to your office.

Total Costs of Fax Servers	
Fax server hardware 3-year software license Maintenance contract Telecom/T1 lines	Total cost estimate based on 3-year amortization of recurring and non-recurring costs in a single non-redundant configuration
Small office (2 channels)	\$7,549 per year*
Enterprise (23 channels)	\$56,478 per year*
*Note: Total fax server cost estimate does not include optional printer, storage, or encryption modules. Redundancy, rackspace, and power are also extra.	

Clearly, maintaining a legacy fax environment is expensive. In addition to the basic costs of fax servers described above, every added feature costs extra. And all that is for a non-redundant solution that presents a single point of failure for your communications infrastructure.

The cloud-fax cost model

When comparing the costs of premise-based systems to hosted cloud-based services, the first thing to note is there is no apples-to-apples way to compare the hard costs. Because the items considered in the example above are simply not part of the cloud-fax equation.

There are no fax machines, servers, line cards, or software to buy and upgrade, no in-house infrastructure, power, or data-center expenses, and no need to print. Planning is easier because capacity is virtually unlimited, and survivability is built into the cloud fax architecture.

In other words, with a cloud fax model — assuming you select the right provider — your costs will look more like this:

Cloud Fax Cost Model	
Software costs	\$0
Hardware costs	\$0
Telco line charges	\$0
Printing costs	\$0
Maintenance costs	\$0
Rack-space costs	\$0
Power costs	\$0
You only pay for:	Fax numbers – flat monthly fee Usage – pay as you go

Identifying The Right Cloud Fax Solution for Your Hospital or Health System

If we've persuaded you that migrating to a cloud fax solution is the smart move for your organization, your next question will be, Which one? The answer, we believe, boils down to two issues:

1. What service(s) will best meet our specific business and workflow needs?

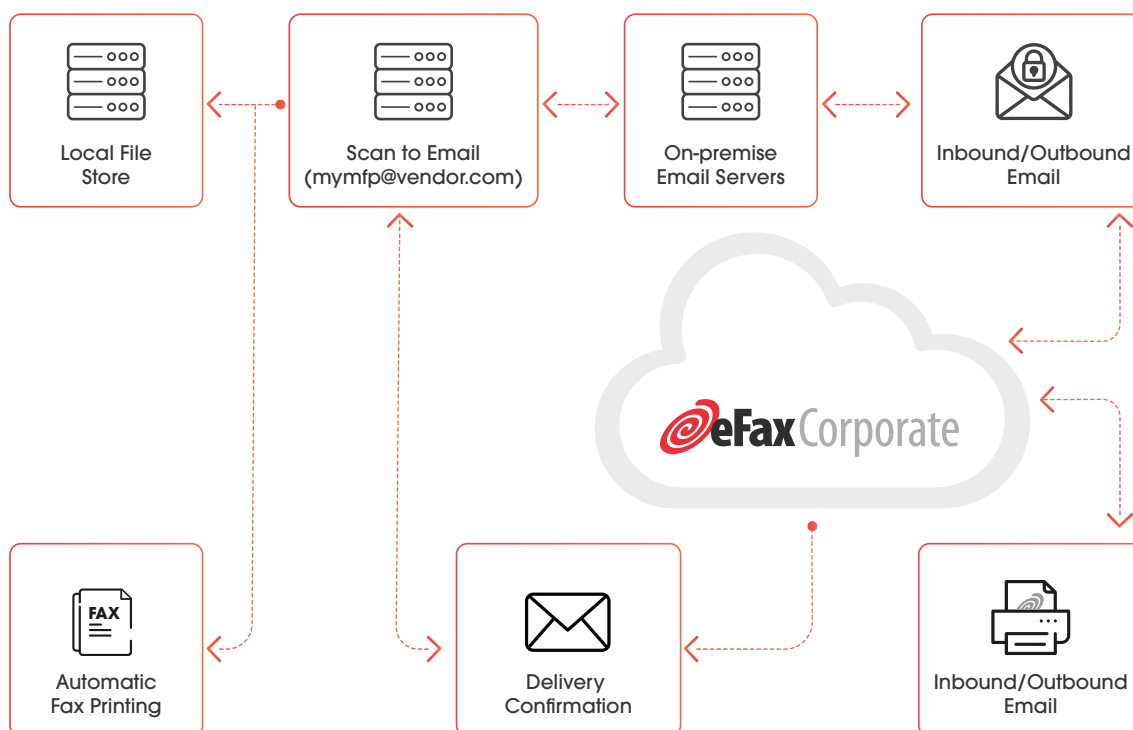
There is no one-size-fits-all model of cloud fax for healthcare companies. So eFax Corporate offers multiple solutions to meet the individualized

requirements of each hospital, health system, or medical practice.

Here are just a few examples of services that can benefit your organization:

eFax Corporate

The world's leading cloud fax service, eFax Corporate allows a streamlined and secure fax-by-email service.



eFax Corporate enables company-wide faxing from any internet-connected device, including email, web interface, or mobile app. It is easy to use, requiring no lengthy training or onboarding. With centralized administrative monitoring and controls, complete

audit trails, and digital fax storage options, eFax Corporate ensures secure transmission via Transport Layer Security v1.2. It is built entirely in Amazon Web Services secure cloud environment.

2. Which cloud fax partner can you trust?

The second question comes down to experience (ideally in your industry), proven track record, longevity, and stability. With that in mind, consider that eFax Corporate is:

- The first and only company to integrate its cloud fax environment fully into the Amazon Web Services infrastructure — giving customers world-leading reliability, scalability, flexibility, and guaranteed system uptime.
- The first major cloud fax provider to achieve HITRUST CSF® Certification, the gold standard for healthcare IT, and a clear indicator that the company's digital transmission and storage processes meet the strictest demands for data security and integrity.
- The longest operating cloud fax solution in existence — for more than 30 years, in fact —

and the only solution of its kind truly born in the cloud (long before it was even called "the cloud").

- The cloud fax service offering by far the most comprehensive customer support — both in terms of the 24/7 availability of our highly trained tech engineers, and our Network Operations Center team proactively monitoring our customers' systems 24/7 and alerting them at the earliest signs of trouble.
- The true pioneer of cloud faxing technology — and even the behind-the-scenes supplier of cloud fax intellectual property to many of the other providers you'll find when you research the industry.

Bottom line: eFax Corporate's industry-leading suite of cloud fax services — secure, compliant, simple, and affordable — is the ideal way to finally upgrade your company's legacy fax infrastructure.



About eFax Corporate

eFax Corporate is the leading HITRUST CSF® certified digital cloud-faxing solution, trusted by five of the top 10 global enterprises and four of the top 10 Fortune 500 healthcare companies. The eFax Corporate product transmits billions of documents annually and is widely used in the USA, Canada, Europe, and Asia-Pacific. Its appeal and success are built around three key features: the widest selection of phone numbers; an easy way to send and receive faxes and voicemail by email; and a fast, reliable and secure communications network. As a core product of Consensus Cloud Solutions' leading interoperability suite, it creates operational efficiencies and enhances communications for paper-reliant industries such as healthcare, legal, insurance, manufacturing, finance, and real estate.

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About Consensus Cloud Solutions

Consensus Cloud Solutions, Inc. (NASDAQ: CCSI) is the world's largest digital fax provider and a trusted global source for the transformation, enhancement and secure exchange of digital information. We leverage our 25-year history of success by providing advanced data transformation solutions for regulated industries such as healthcare, finance, legal, insurance, real estate and manufacturing, as well as technology for the state and federal government. Our solutions consist of [cloud faxing](#); [digital signature](#); [interoperability](#); [intelligent data extraction using natural language processing and artificial intelligence](#); [robotic process automation](#); and [workflow enhancement](#). For healthcare providers, we also offer a powerful integration platform that connects Consensus' products to EHR solutions, legacy systems, and other cloud applications. Our solutions can be combined with managed services for optimal outcomes. For more information about Consensus, visit **consensus.com** and follow **@ConsensusCS** on Twitter to learn more.

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