Why Your Legacy Fax Infrastructure Costs More Than You Think

And Why the Answer is the Enterprise Cloud Fax Solution from eFax

consensus
Cloud Solutions

TABLE OF CONTENTS

It's understandable for a company to look at its paper-based fax infrastructure and assume it'll be less expensive to continue supporting that environment rather than upgrade to a modern cloud solution. But as we'll explain below, that quick assessment likely overlooks many hidden costs of on-prem fax environments. In fact, as we'll demonstrate, migrating from a paper-based fax infrastructure to a digital cloud fax solution will likely lower your company's fax costs substantially.

Introduction: Your business almost certainly underestimages the costs of your legacy fax

There's a great story about Pablo Picasso. While the artist is sitting in a park in Paris, a woman recognizes him, runs over to introduce herself, and offers to pay him to sketch her portrait. Picasso agrees. He flips open his notepad, quickly dashes off a sketch, and hands the woman the finished product a minute later.

Of course, she's thrilled at how well the artist has captured her essence. But when Picasso tells her the price — $5,000 — the woman becomes annoyed. "How could you charge so much?" she asks. "That took you one minute!" "No," Picasso says. "It took me 40 years."

Artists and service providers of all types like to tell that story to illustrate the fact that although customers can't see many of the costs that go into the final price of a product, those costs are nevertheless real.

For our purposes, the anecdote offers a helpful jumping-off point to discuss something you probably already suspect: Your company is underestimating the total cost of ownership of your existing fax hardware and software — because you haven't factored in all the costs.

Few organizations grasp the full picture of their faxing costs

When IT professionals and C-level executives at large organizations approach us at eFax® to discuss our digital cloud fax solutions, we often ask how much they think they're paying to send or receive a typical fax using their fax machines or in-house fax servers.

Most can think of only a few of the many costs required to operate their existing fax environment. They cite the individual fax's pro-rated share of the company's overall costs for paper, ink, the telecom line required to transmit the fax, and, if they own fax servers, the cost of the server's software as well.

But like the one minute it took Picasso to sketch that fan's portrait, those are only the surface-level expenses necessary to operate legacy fax infrastructure. There are many other costly inputs required to power an enterprise's fax machines or servers, including:

- Labor Costs, measured in terms of employees waiting at a fax machine, redialing busy numbers, scanning or copying fax docs, filing or shredding hard copies, etc.
- IT resources required to fix trouble-prone machines, reboot crashed fax servers, replace ink or toner cartridges, train employees on using the fax servers, etc.
- Maintenance contracts and the costs of third- party upkeep for aging fax machines and servers.
- Data center rack-space costs for off-site fax servers.
- Energy costs: to power fax servers and the fans needed to keep them cool.

Note: All those hidden costs go away when you migrate to the right digital cloud fax environment.

Yet another reason to migrate to cloud fax

In previous white papers, we've addressed many of the reasons that, given the enormous benefits of cloud faxing — added efficiency, productivity, mobility, security, regulatory compliance, etc. — it is no longer a viable strategy for businesses to maintain their legacy fax infrastructure.

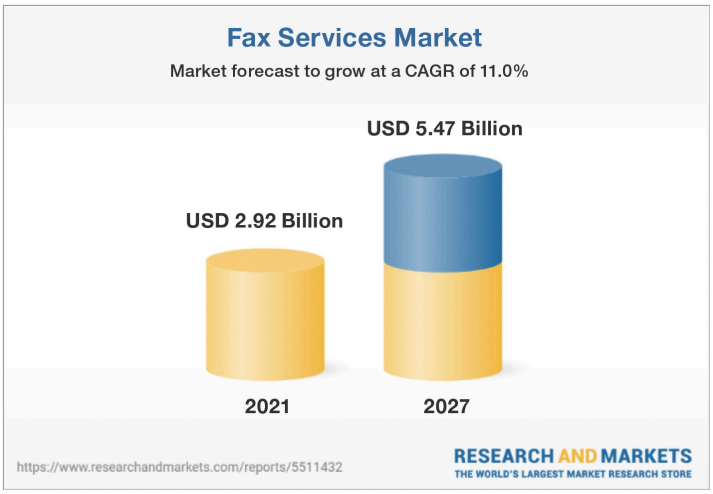
In this paper, we will address yet another reason it is time to retire your paper-based faxing environment and upgrade to an enterprise-caliber cloud fax service from eFax: Doing so will save your organization a lot of money.

Enterprise fax usage is growing, not slowing

Before we delve into the true cost of ownership of traditional fax infrastructure, we should point out that it is probably not an option to simply phase out your organization's faxing capability altogether in favor of email or other communication protocols — no matter how frustrating fax is for your IT team.

This is because, contrary to decades-long predictions of tech experts, fax persists as a leading business communication tool. To cite just one example, a 2021 Bloomberg Law article pointed out that at least 70% of healthcare providers still use faxes to exchange patient information.[1]

And in a recent study, Research and Markets estimated that the fax services market will increase by nearly 100% between 2021 and 2027.[2]



- Business's vendors, partners, or customers demand to communicate by fax.
- Faxing gives organizations a receipt of successful confirmation (important for record-keeping and maintaining audit trails).
- Data privacy laws and regualtions (HIPAA, SOX, GBLA, etc.) view faxing as preferrable to email for secure data exchange.

For the remainder of this paper, we will explain why maintaining your on-prem faxing hardware and processes would be counterproductive — and, thanks to the availability of cost-effective digital cloud faxing, totally unnecessary.

What does your fax infrastructure really cost?

The actual costs of maintaining a fax machine

Many businesses have the misperception that their office fax machines don't cost much anymore because the business has already made the capital investment in the hardware itself. That is true, as far as it goes. But the recurring operating costs associated with fax machines (or the multifunction printers that businesses use for faxing) can add up quickly and in ways you might not have considered.

Let's review the costs of two common scenarios: 1) a business with a single fax machine, and 2) another business with four machines, all supported by analog phone lines.

The table below illustrates some (but not all) of the ongoing costs, to give you an idea of what each organization would be paying to maintain its fax infrastructure each year.

For perspective, 1,000 fax pages per month equates to 10 five-page faxes received per business day, or just over one fax per hour. This represents consistent but light usage.

Table 1 - Recurring Costs of Stand-alone Fax Machines

Paper/Ink/Toner	$20 per 1,000 pages
1 analog POTs line	$60/month, $720/year
1 Fax Machine/1 Line	
1,000 pages/month	$960/year
2,000 pages/month	$1,200/year
4,000 pages/month	$1,680/year
8,000 pages/month	$2,640/year
4 Fax Machine/4 Lines	
1,000 pages/month	$3,840/year
2,000 pages/month	$4,800/year
4,000 pages/month	$6,720/year

Why the real costs will be even higher than this table suggests

There are at least two additional challenges not reflected in the table above, but which you need to consider. First, if you're using a multifunction printer for your office faxing, you'll also need to install and maintain a fax-line card — a very costly expense.

A challenge that could render fax machines unusable

The second issue — and this challenge alone could be reason enough to migrate your company to a cloud fax solution — is that traditional fax machines require analog lines supplied by the phone company.

But an FCC ruling, which took full effect in August 2022, releases telecom carriers from their obligation to continue providing POTS (Plain Old Telephone Service) lines to businesses and residents.

Supporting these analog lines has long been an expensive and unprofitable responsibility business for the telecom carriers, but one they continued to carry out because federal law required these businesses to offer affordable telecommunication services over the traditional phone network.

Now that your carrier has been freed of this regulatory burden, expect them to cease offering POTS services — including fax lines — as soon as they can. And when you can no longer find analog phone lines to support your company's fax machine transmissions, what will you do?

We haven't even factored in labor costs yet

Of course, we can't ignore the labor costs of your employees using your fax machines in their daily workflows. To quantify these estimated costs, let's return to the healthcare industry. A 2019 report cited in the American Journal of Managed Care found that:

- **The average paper-fax transmission takes an employee 8 to 30 minutes.** (This includes printing, walking to the machine, dialing the number, waiting for the transmission to complete, waiting for a delivery confirmation, etc.) [3]

Now, let's assume the employees in your company who'd typically be handling these faxes earn the median hourly wage for "professional services" cited by the US Bureau of Labor Statistics' in September 2022 ($38.39). And let's further assume your company sends and receives a combined 1,000 faxes per month.

Here's the math:

$38.39 ÷ 60 = $.64 (per minute) x 8 (minutes) = $5.12.

That's $5.12 your company is paying in labor costs alone to process a single paper fax. And that represents the healthcare industry's low-end estimate.

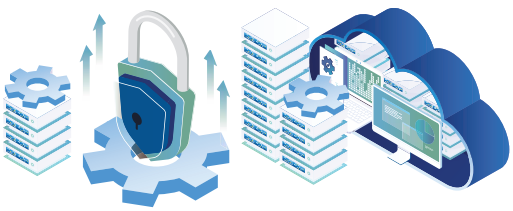
If we assume the high end of 30 minutes per transaction — which factors in the all-too-common fax busy signals, paper jams, ink that needs replacing, etc. — your per-fax labor cost shoots up as follows:

$38.39 ÷ 60 = $.64 (per minute) x 30 (minutes) = $19.20.

Now, assuming your company processes 1,000 faxes monthly, your labor cost for sending and receiving faxes is **between $5,120 and $19,200 per month.** And for every additional 1,000 faxes, add at least $5,120 to your monthly estimate for labor costs.

Cloud fax offers big savings over fax machines

Now let's delve into the specific savings your company can expect to realize when you migrate your faxing capability away from your in-house fax machines and move to the right enterprise-grade digital cloud fax service. The following table shows the obvious labor savings of cloud faxing over continuing to use fax machines.



Labor to send a fax electronically			
activity	**per-minute event**	**% of faxes affected**	**Cost**
Walk to the fax machine	0	0	$0
Return to desk	0	0	$0
Dial fax number	0	0	$0
Redial busy fax number	0	0	$0
Deal with ink/paper outage	0	0	$0
Deal with paper jam	0	0	$0
Wait for delivery receipt	0	0	$0

As the American Journal of Managed Care story pointed out:

"Compared to physical faxing, cloud faxing works like this: An employee creates an email, types in the recipient address, types a cover letter and hits "send." The fax is sent securely, with a confirmation arriving a few minutes later. There is no printing, no scanning, no dialing, no waiting, and no paper to file." [3]

By eliminating many time-consuming elements of using a fax machine, and instead letting users send and receive faxes as PDFs — via email, a web portal, or a mobile app — eFax helps businesses save as much as 85% of the labor-related costs of handling faxes.

And because your enterprise will no longer have any infrastructure to manage, you will also eliminate the costs of paper, ink, maintenance contracts, dedicated fax lines, and the valuable IT resources that you can now redeploy onto more forward-looking initiatives.

The costs of maintaining a fax server

Now that we've reviewed why and how cloud faxing represents a significant cost savings over fax machines, let's discuss how it compares to a server-based fax infrastructure.

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.

Looking at the following table, you'll see a couple of high-ticket items that 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 there is the fax line card needed to connect to the telephone network — yes, they really do cost that much. And you had better stock a spare, because if it dies, your faxing capacity will fall to zero until the vendor ships a new one to your office.

Don't forget the costs of optional feature modules

Table 2 - Fax Server Total Cost of Ownership	
Fax Server Hardware:	**$2,000 to $6,000**
Fax card:	
• Dual analog ports	**$1,500**
• T-1 PRI 23+D channels	**$17,000**
Fax Server Software	**$2,000 to $6,000**
• Enterprise suite/ Server license - single channel	**$17,000 (+ $749 per channel)**
Total Capital Cost	
• Small office	**$7,549**
• Large office	**$56,478**
3-Year Amortization	**$7,549**
• Small office - 2 lines	**$2, 516 per yr.**
• Large office - 23 lines	**$18, 826 per yr.**
Recurring Telco Charges:	
• Dual analog lines @60/month per line*	**$1, 440 per yr.**
• T-1 PRI $400/month*	**$4, 800 per yr.**
Software Maintenance	**@20% per yr.**
• Small office	**$810 per yr.**
• Large office	**$6, 696 per yr.**
Total Annual Cost:	**$2, 516 per yr.**
• Small Office	**$14, 766 per yr.**
• Large Office	**$30, 332 per yr.**
• Telco line costs do not include usage costs of $0.03 - 0.05 per minute when selecting faxes	
Note: *Costs shown are based on discounted prices from leading hardware and software vendors. Your costs may vary by vendor, network size, and configuration with optional feature modules (printer, storage, encryption, etc.)*	

The calculation above assumes only a bare-bones legacy fax infrastructure. Every added feature costs extra. Want to connect multifunction printers? Add $500 for an MFP license, for each printer. Want to archive your faxes? That's another software module with a separate cost. The story is the same for adding encryption modules for security and compliance — more line items on your vendor's invoice. And even with all these add-ons, you'll still have a nonredundant solution that creates a single point of failure for a critical piece of your communications infrastructure.

There are also several other hidden costs — many of which most businesses never factor into their estimates of what they're really paying. These costs include the electricity needed to power your fax servers, plus possible rack space in a colocation facility, as shown below.

Table 3 - Data Center Costs

On-site data center cost for one Windows server	$800-$1,200 per month
Or	
Rented cabinet/cage with power feed at colocation facility	$800-$1,000 per month

Then there are the ongoing costs of IT management, maintenance, and troubleshooting —fax servers are notorious for crashing, requiring IT personnel to reboot the downed server and bring all the individual modules back online, which can take half an hour if all goes well. And you will likely need to dedicate IT support resources, such as your help desk, to field employee questions and complaints about your fax servers.

To sum it all up, the time-consuming care and maintenance of in-house fax systems often ties up IT resources that could be assigned to more productive and valuable projects.

Fax Server Total Cost of Ownership: Small Office

Let's return to our discussion of the total cost of ownership (TCO) of fax servers. Based on the considerations presented above, the small-office version starts at an average cost of nearly **$400 per month** before a single fax is sent. Additional long-distance usage charges will apply to every fax sent unless an unlimited service is selected, which can add 25% or more to the telco line cost.

And don't forget: Simply finding phone service to support your legacy faxing infrastructure will become more difficult each year, because in 2022 the FCC granted telecom carriers the regulatory green light to stop offering analog landlines.

Fax Server Total Cost of Ownership: Large Office

For the large enterprise office, take another look at those two tables above. Once the server has been built, installed in a data center or colocation, and hooked up to T1/PRI lines and electricity, the cost at that point — with **NO redundancy** and **NO disaster recovery** — is over **$2,500 per month per server** over the 3-year license term.

Keep in mind that these costs kick in before your staff sends or receives a single fax. You can expect to pay approximately $30-$50 in telecom usage charges for every 1,000 sent pages.

Yet another cost center: redundancy and reliability

Finally, to build out a reliable infrastructure with full redundancy for a disaster recovery scenario — which legacy fax systems do not give you by default — you'll likely double your costs to approximately **$5,000 per month.**

And consider that if your daily peak-hour fax load exceeds the capacity of a single server, you'll need a second server for load-balancing, doubling the total cost to **more than $10,000 per month** for a redundant N+1 disaster-recovery configuration.

The massive cost-savings potential of cloud fax

You cannot truly compare the hard costs of legacy faxing to digital cloud fax solutions — because most of the hard costs in the hardware model simply aren't part of the cloud fax equation.

Cloud faxing requires no on-prem infrastructure at all, in fact. That means:

- No fax machines
- No multifunction printers
- No fax servers
- No line cards
- No fax gateway software
- No data center expenses
- No electricity or cooling expenses
- No dedicated analog lines

Additionally, you'll find capacity planning far easier with a cloud fax environment because capacity is virtually unlimited, the pay-as-you-go model makes it easy to incrementally increase (or decrease) your faxing bandwidth, and survivability (disaster recovery) is built right into the cloud fax architecture.

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

Table 4 – 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 pay only for:	Fax numbers - flat monthly fee
	Usage – pay as you go

You'll also save most of the hidden costs as well, such as support and maintenance contracts and IT resources to oversee and administer the system.

Hosted cloud fax services also eliminate the need to anticipate average and peak usage and traffic volumes, either for maximizing the return on investment, balancing the load over multiple fax machines or servers, and maintaining adequate capacity to ensure inbound faxes don't encounter a busy signal.

This is a crucial point: Cloud faxing is scalable. You pay for what you use, not for what you think you might need. More importantly, you can quickly scale the actual users in your organization, up or down, as needed. Whether you employ 15 or 15,000, hosted fax services adapt to your enterprise and your day-to- day operations.

The table below shows at-a-glance how eFax eliminates much of the time, hassle, and expense associated with fax servers, while providing more functionality and value.

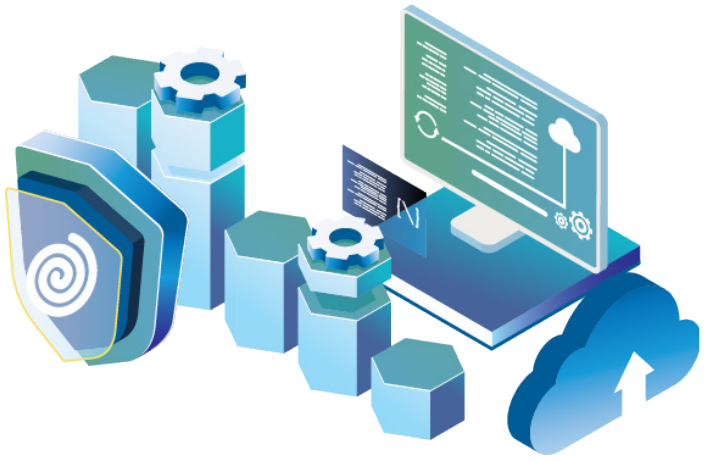


Table 5 – Comparing Fax Servers to the eFax Corporate Hosted Solution

	On-Premise Fax Servers	eFax Corporate
Capital Investment	Hardware, software, telecom equipment	None
Telecom Capacity	Anticipate peak needs, build in redundancy and disaster recovery at extra cost.	None (Use existing Internet access.)
Set-up Time	Variable, but system rebuilds and reconfigurations can take months.	Up and running in hours.
Workflow Integration	Varies by software vendor.	• Email account integration • MFP integration • Centralized account management • Port numbers as needed
Feature Sets	Variable configurations with optional software modules.	Included at no charge.
Compliance	Variable depending on configuration with optional modules.	HIPAA/HITECH, SOX, GLBA, others.
IT Resources	High impact for system maintenance and oversight.	None
Maintenance	Purchase required for software upgrade patches.	None
Reliability	Only as reliable as the extra redundancy purchased and added into the system.	• 99.5% uptime • Delivery times of 2-5 minutes • 24/7/365 system monitoring • BC/DR built into network architecture
Scalability	Inflexible. Additional capacity requires additional capital investment locked-in over multi-year term.	Capacity scalable on demand.
Variable Cost	Telecom per-minute usage charges.	Usage-based pricing (pennies per fax page).
Fixed Monthly Cost	Amortized software license, line card, server hardware costs; recurring annual maintenance and telecom fees.	Fixed monthly fee per fax number.
Document Security	Optional encryption module.	• Email delivery to recipient inbox. • Encrypted storage (eFax Secure, Sfax) • TLS encryption in-transit (optional)
Mobile Apps	None	Available, free feature.
Web Portal	None	Standard feature.
TCO	High. Long-term return on investment.	Low. Short-Term return on investment.

Not all cloud fax solutions are created equal

If this discussion has persuaded you that migrating to a cloud fax solution is the right move for your business, your next step should be to research the industry. After all, not all cloud fax services are created equal.

Specifically, you will want to vet any cloud fax provider to find out how long they've been operating, if they are profitable, how many customers they serve,how robust their network is, and whether they comply with industry regulations.

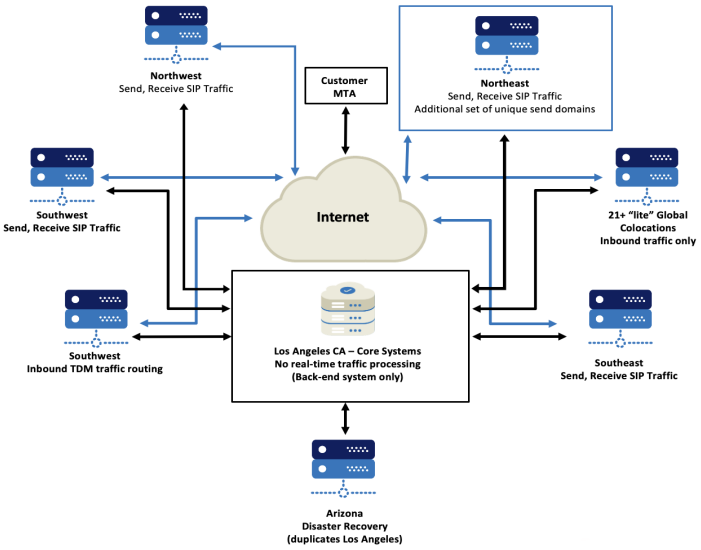
When it comes to transmitting mission-critical data, you do not want to leave anything to chance. That's why finding the right partner to handle your business faxing might be the most important step in your move to a cloud fax solution.

With that in mind, let's review why eFax has been the most successful and trusted cloud fax company in the world for nearly three decades.

Why more businesses trust eFax

When you investigate the cloud fax industry, you will find many small providers. But only one of these companies is the fax partner of choice for nearly half of Fortune 500 firms, 40% of the top law firms in the US, and thousands of organizations in industries regulated by the most rigorous data privacy laws — businesses for whom fax security and integrity are mission-critical. That company is **eFax**, and here's why:

- eFax has been securely and reliably transmitting faxes for enterprises for nearly 30 years, which is why we are the world's leading provider of digital cloud fax services.
- eFax is the only **global fax platform that is truly cloud-native.** This means we can leverage elasticity and instant scalability, robust redundancy, and cloud-native approaches to our platform. It's easier for eFax to be both more reliable and higher-performing than all other "cloud fax" vendors. Our global fax infrastructure has been purpose-built for the cloud since its inception, and that's one reason it remains the most reliable and high-performing fax solution in the world.
  - We have spent millions of dollars over many years to build out the most robust, reliable, redundant, and secure cloud-fax network in the world. **(No other provider's network even comes close.)**
  - Our North American network is spread across multiple geographically diverse data centers. If one data center experiences a problem, our customers' faxes are immediately rerouted through the other centers. Even if two centers went offline simultaneously — an extremely unlikely event — we have sufficient capacity to continue processing customer faxes with no discernable service degradation.
  - Our public data center/colocations are independently audited to meet SSAE-16 Type II and SOC-2 industry standards for operations and security.
  - The level of geographical diversity and redundancy across the eFax data center network allows for even better reliability than most disaster recovery architectures.
  - The level of geographical diversity and redundancy across the eFax data center network allows for even better reliability than most disaster recovery architectures.



- eFax's security processes help keep our customers' faxes in compliance with the strictest data regulations — including HIPAA, SOX, GLBA, FERPA, PCI-DSS, GDPR, and more.
- A pioneer in the cloud fax space for decades, eFax owns multiple patents enabling the secure and cost-effective online transmission of faxes.
- eFax offers the most comprehensive cloud fax solution for enterprises today — including additional security through eFax Secure, integration with existing ERP or CRM systems through our eFax "RESTful" API, and the eFax Messenger desktop and mobile apps.
- Our cloud fax infrastructure employs the most advanced encryption protocols to protect our customers' faxes both in-transit and at rest in our highly secure data centers.
- Our standard service level agreement (SLA) includes a guaranteed 99.5% uptime for all fax traffic for our customers, 24x7x365.

- Unlike many cloud fax providers, eFax employs a highly trained team of tech-support specialists, and we offer 24x7 monitoring of our global network, as well as 24x7 customer support by our award-winning teams based in North America.
- Finally, as we've illustrated throughout this paper, migrating from their legacy fax infrastructure to eFax's cloud fax service often saves our business customers 50% or more on their annual faxing costs.

About eFax

eFax 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 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, manufacturing, finance, and real-estate.

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 26-year history of success by providing advanced solutions for regulated industries such as healthcare, finance, insurance, and manufacturing, as well as state and federal government. Our solutions consist of cloud faxing; digital signature; intelligent data extraction using natural language processing and artificial intelligence; robotic process automation; interoperability; and workflow enhancement that result in improved outcomes. Our solutions can be combined with best-in-class managed services for optimal implementations. For more information about Consensus, visit consensus.com to learn more.

REFERENCES

1. Bloomberg Law: Healthcare clings to fax as US pushes electronic records (2021)
2. Research and Markets: Fax services market: global outlook and forecast 2022-2027
3. American Journal of Managed Care: Cloud fax can lower costs, preserve critical communication infrastructure (2019)
4. US Bureau of Labor Statistics: Average hourly and weekly earnings of all employees (2022)

consensus Cloud Solutions

Worldwide Headquarters

Consensus Cloud Solutions Inc.
700 S. Flower St., 15th Floor,
Los Angeles, CA 90017

Email us at:
corporatesales@mail.efax.com

Web:
enterprise.efax.com

Follow Us

Please Recycle