
NICOLE BLACK*

I. INTRODUCTION

Cloud computing is changing the way that lawyers provide legal services to their clients. In fact, I would argue that cloud computing—where data is stored on servers owned by third parties and accessed using the Internet—is one of the most important technological advancements driving change in the delivery of legal services.

At first blush, the effects of cloud computing on the legal profession might not be readily apparent. After all, the essence of legal representation itself has not changed; lawyers continue to provide trusted counsel and advocacy to—and on behalf of—their clients just as they have always done. What has changed, however, is how and where lawyers and clients interact.

Emerging legal technologies have affected every aspect of the delivery of legal services—from when and how lawyers communicate with their clients to how information and documents are shared with everyone involved in a case. There is no doubt about it, cloud computing has been instrumental to that change.

* Nicole Black is the Director of Business Development at MyCase.com, a law practice management software company based in San Diego. She is also of counsel to Fiandach and Fiandach, in Rochester, New York, is the author of “Cloud Computing for Lawyers” (2012) and co-authors "Social Media: The Next Frontier" (2010), both published by the American Bar Association. She also co-authors “Criminal Law in New York,” a Thomson West treatise. She writes a weekly column for The Daily Record and has authored numerous articles and has spoken at many conferences regarding the intersection of law, mobile computing and Internet-based technology.
For example, for some lawyers, cloud computing has eradicated the need for a physical law office and all of the associated costs and expenses. For others, it has increased access to case-related information, making it instantly available with just the touch of a button, no matter where the attorney is located and regardless of whether it is day or night. And last, but certainly not least, cloud computing technology has greatly simplified and improved case-related communication and collaboration. Using a web-based platform with online collaborative portals, information can be shared instantaneously and anyone connected to a case can quickly and easily access case-related information and documentation from any Internet-enabled device.

Carolyn Elefant, lawyer, author ("Solo by Choice" and "Social Media for Lawyers"), and noted solo practice expert, explains how cloud computing has completely transformed the delivery of legal services:

It makes the practice of law so much easier. 20 years ago I worked with lawyers in other states and we communicated by phone, email, and snail mail. But the cloud makes it seamless to pair up with a lawyer in a different jurisdiction. And e-filing has slashed the costs of filing a case. You can dash something off your desk at 10 minutes before midnight rather than making 30 copies, packing them, and then sending them off in the mail days ahead of the due date. So all of these things have given solos so much more power and the resources to get things done.¹

Thus, while cloud computing might initially seem as if it is simply part of the natural progression of computing, it is anything but. Instead of being evolutionary, it is in fact revolutionary. This technology has paved the way for the law office of the future—one that is not confined within four walls but instead follows lawyers wherever they happen to be. Likewise, it empowers legal clients by allowing them to fully participate in, and contribute to, their legal representation. Simply put, as I discuss more fully below, cloud

computing has revolutionized the delivery of legal services and is helping to, at long last, usher our profession into the 21st century.

II. THE MOBILE LAW OFFICE

One of the technology trends most embraced by lawyers is mobile computing, something that would not be possible but for cloud computing. Without the cloud, it would be impossible to utilize the vast majority of programs that run on these hand-held devices. This is because these portable devices have limited amounts of memory, thus necessitating storage and processing in the cloud.

It is no wonder that mobile devices are so popular with lawyers. Traditional law practices and procedures necessarily limit lawyers to practicing in a brick and mortar office where their desktop computer and law firm servers are located. Mobile computing is just the opposite: instead of reducing options, it increases flexibility, allowing lawyers to accomplish an array of tasks using a smart phone or tablet. Mobile computing is also a more affordable alternative to the traditional model, permitting lawyers to use just their mobile devices to accomplish tasks that once required the use of large, costly machines, such as copiers, scanners and fax machines. Lawyers can even replace administrative functions with their mobile devices, such as using voice-to-text transcription apps instead of similar transcription services once provided solely by secretaries.

Although historically lawyers have been slow to utilize new technologies, mobile computing, much like the fax machine, is the rare exception. Smart phones have been available for less than 10 years and yet the vast majority of lawyers now own one. In fact, according to the American Bar Association’s 2012 Legal Tech Survey, 89% of lawyers now use smartphones. Tablets are also increasing in popularity with lawyers, with that percentage nearly doubling over the period of one year: in 2011, only 15% of lawyers surveyed used tablets for law-related tasks whereas in 2012, that number increased to 33%.

It is not surprising then that more and more lawyers are using their mobile devices to manage their law practices on the go. This increase in numbers makes sense. After all, most lawyers bill by the hour and as a result, making the most of their time, no matter where they are, is a priority. Mobile tools—in particular law practice management apps—are one of the most convenient and efficient ways
to manage a busy law practice from any location, whether it's court, home, or even the beach.

This conclusion was supported by a user survey recently conducted by a legal cloud computing company. The end goal of the survey was to learn more about the features that were most important to lawyers and to gain a better understanding of how lawyers use mobile apps to run their law practices. According to the mobile survey, lawyers do indeed manage their law practices at any number of locations. 44% of lawyers use their mobile apps in court, 24% while traveling, 24% at home, 1% in the office, 1% while on vacation, and 16% use their mobile devices in a variety of other unspecified locations.

Other interesting results from the survey center around the features that lawyers accessed most frequently while mobile: the calendar 59%, time and expense 39%, documents 33%, messaging and commenting 30%, contact information 28%, case information 24%, tasks 11%, other 7%, invoices and bills 2%, reporting 2%, client intake 1%, and trust accounting 1%.

The survey results support the conclusion that one of the greatest benefits of mobile access for lawyers is the ability to access case-related information and documents on the go. By using cloud computing and mobile interfaces, forgotten files or misplaced documents become a thing of the past. With cloud-based law practice management systems and mobile devices, lawyers always have instantaneous access to information and documents related to their cases, no matter where they are.

For example, Erin Levine, a California lawyer, explains how beneficial it is for her to have access to her documents while in court:

---


5 Ibid.

[W]hen I’m in court and someone claims I never filed an order, I can pull out my iPad and access a copy of the filed order right in court.7

Samantha Thomas, a North Carolina attorney, reports similar experiences:

No matter where I am, I can log in and access my files. So if I’m at court and a judge tells me an Order isn’t in their file, I pull out my iPad, log in, and show the judge the time-stamped order. The judges love this.8

Another interesting finding from the survey was that one of the most frequent ways respondents reported using the mobile interface was for communicating—whether it was to send or reply to a message or comment left by a client or other contact. This too was not a surprising finding, since lawyers who use client portals in their law practices often report how useful it is to be able to quickly and easily access case documents using their mobile devices.

So, in addition to mobile lawyering, another tremendous change in the delivery of legal services that has been ushered in by the cloud computing phenomenon is how lawyers and their clients can interact and collaborate online through web-based portals. Using client portals, lawyers and their clients can now communicate in a secure environment, in addition to accessing and sharing information in the cloud.

In the next section, we will examine this trend to better understand how it is helping to transform the delivery of legal services, both from the perspective of the lawyer and the client.

---


III. Client Portals

In 2008, in his book “The End of Lawyers,” Richard Susskind predicted that the future of legal services would include 24/7 access for clients through web-based portals:

The astute lawyer of tomorrow . . . will want to have a more or less full-time presence, day and night, on the network . . . . [L]aw firms will need to put in place practices and processes that ensure 24-hour-a-day availability of some form of client contact. In the future, the winners in the legal world may succeed by dint of survival of the most responsive.9

Historically, Susskind has been incredibly accurate in his predictions about the future of the legal profession, especially when it comes to the effects of new technologies on the delivery of legal services. It is not surprising then that his predictions about client portals are quickly becoming a reality.

This is because web-based portals are becoming increasingly familiar to consumers, both legal and otherwise. These portals are already commonplace in many industries, including banking and mortgage financing, and, for that reason, legal consumers are starting to expect instant access to information through web-based portals in legal matters as well.

Client portals empower legal clients by giving them control over their case and expanding their access to information. Web-based portals also offer flexibility and convenience by providing 24/7 instant access to case-related information, making it easy for them to quickly find answers to many of their most common questions. Instead of having to call during office hours to ask about their next court date or obtain a copy of a document from their file, they can simply log in whenever they would like and access the information they need.

In other words, as Susskind predicted, client portals are the key to effective and efficient representation of legal clients and lawyers who incorporate this 21st century tool into their law practices have an unprecedented business advantage over their competitors.

For example, Mark Metzger, a Chicago-based business law, elder law, and real estate attorney is a perfect example of this phenomenon.

---

in action. He explains that using cloud-based law practice management software with a built-in client portal has resulted in happy clients and has even brought in new business:

The MyCase portal [client portal] is phenomenal. It has driven everything to that one location, which has dramatically reduced phone calls. Clients just sign in to get up to speed. They don’t have to call and ask where the closing is because they get the information right from the online platform, including access to Google maps, which tells them exactly where to go. And, realtors love it. They can log in and access everything related to a transaction. In fact, they like it so much, they’ve even started sending me new referrals because of MyCase.10

Another attorney, Angela Sigman, describes how using a client portal improves client communication immensely.

The feedback from clients has been great in terms of communication. Also helpful is that they’re able to upload documents and share them across the system . . . . And from my perspective, it’s much easier to communicate using the client portal. I especially like that I can see when a client logs in. That way I know the client saw the document, which is such an improvement over email, where you never know if they received it or looked at it. And I love that they can comment on it as well, so we can go back and forth about the document and it’s all in one place.11

But client portals are not just convenient; they offer increased security over other methods of electronic communication, including


email. Cloud computing platforms that incorporate some form of encrypted client communication into their platforms provide a ready-made solution to this problem, offering a much more secure method of communication that easily trumps unencrypted email.

This is because standard email is inherently unsecure and, surprisingly, many lawyers are unaware of this disconcerting fact. As emails travel to their intended destinations, they traverse an untold number of servers and can be intercepted and viewed by virtually anyone with the proper technological know-how and desire.

As such, most emails are more like mere postcards written in pencil, their contents readily viewable by anyone with an interest in doing so. This inherent security flaw in email, as it now exists, arguably places confidential client data at risk. This can be problematic since lawyers have an ethical obligation to ensure that confidential client information remains confidential.

Currently, even though email is inherently unsecure, it has been given the green light by the American Bar Association and state bar associations, but this was not always the case. Lawyers first grappled with the issue of the ethical use of electronic communications in the mid-1990s when email was a fairly new phenomenon. At the time, a number of state bar associations discouraged lawyers from using email to communicate with clients. For example, ethics committees in both South Carolina (Opinion 94-27, 1994) and Iowa (Opinion 96-01, 1996) concluded that the use of email by lawyers to communicate with clients breached confidentiality unless precautions were taken to prevent interception or client consent acknowledging the risks of using email was obtained.12

A few years later, in 1999, the American Bar Association's Standing Committee on Ethics and Professional Responsibility reversed this trend when it issued ABA Formal Opinion No. 99-413. In this opinion, the Committee concluded that client consent regarding the use of email was unnecessary:

Although earlier state bar ethics opinions on the use of Internet e-mail tended to find a violation of the state analogues of Rule 1.6 because of the susceptibility to interception by unauthorized persons and, therefore, required express client consent to the use of e-mail, more recent opinions reflecting lawyers' greater

understanding of the technology involved approve the
use of unencrypted Internet e-mail without express
client consent.\(^{13}\)

The American Bar Association’s Committee on Ethics and
Personal Responsibility is not alone in this conclusion. In fact,
following the issuance of the American Bar Association’s opinion,
ethics committees in multiple jurisdictions reached the same
conclusion, holding that, in most cases, attorneys may use
unencrypted email to communicate with clients without violating their
ethical obligations to maintain client confidentiality.\(^{14}\)

In doing so, these ethics committees gave their blessing to the use
of email for communications with clients and implicitly condoned
attorneys’ use of unencrypted electronic communications with their
clients.

Recently, however, because of the rapidly changing technological
landscape and the availability of newfound means to encrypt and
protect electronic communications, the issue of attorneys’ obligations
to protect confidential attorney-client communications may have to be
revisited. This is especially so since, pursuant to a recent amendment
to the comments to the American Bar Association’s Model Rule 1.1,
lawyers have an obligation to learn about and stay abreast of new
technologies, which includes new forms of communicating with
clients.\(^ {15}\)

Accordingly, because email is outmoded, inherently unsecure, and
there are now more secure forms of electronic communication
available, I predict that within two years or so, lawyers in most
jurisdictions will choose to, or be required to, communicate and
collaborate with clients using encrypted communications. And, the
platform of choice will be encrypted communication through cloud
computing systems. Of course, only time will tell whether my
prediction comes true, but the fact that remains even in the present

---

\(^{13}\) American Bar Association Standing Comm. on Ethics and Prof'l Responsibility, Opinion No. 99-413 (1999).


\(^{15}\) ABA Model Rule 1.1.
day, the convenience of client portals and their secure features make
them appealing to both lawyers and their clients.

Similarly, the ease of outsourcing through web-based platforms is
another benefit of cloud computing that is equally revolutionary in
terms of its impact on the provision of legal services. In the next
section I will examine how cloud computing platforms level the
playing field by reducing overhead and allowing lawyers to affordably
outsource certain types of legal work and thus compete with larger law
firms on a scale never before seen.

IV. EASY OUTSOURCING

A decade ago, before cloud computing technology became
commonplace, launching a law practice required significant up-front
investment. Monthly rent had to be paid and furniture purchased.
Expensive office equipment was a necessity, including copy machines,
fax machines, servers, desktop computers, phone systems, and more.
Employees, such as receptionists, secretaries, paralegals, and office
managers were required to run an office. In other words, opening a
brick and mortar law office was no small undertaking.

Enter cloud computing, a technology that redefined the concept of a
“law office” and greatly reduced operating costs. In addition to
increasing flexibility and mobility, cloud computing has made it
possible for lawyers to outsource a variety of costly job functions.

First, and most obvious, by using cloud computing, lawyers are
able to outsource the costs of IT, including completely eradicating the
need to purchase and maintain costly servers and pay the expensive
annual licensing fees charged for traditional software programs. Cloud
computing technologies essentially replace the need for full-time in-
house IT staff or costly IT consultants, thus greatly reducing IT costs.

Of course, that is not the only type of cost-saving outsourcing
facilitated by cloud computing services. An assortment of cloud-based
smart phone apps and online services facilitate the outsourcing of an
assortment of tasks once performed by legal assistants or secretaries.
So, online digital dictation services replace the need to have in-office
staff transcribe and type dictated documents. Alternatively, there are
voice-to-text dictation apps built in to today’s smartphones that
eliminate the time-consuming step of having have speech transcribed
by a human being. Instead, a cloud-based server instantaneously
translates speech into text.

Costly in-office phone systems, receptionists, and answering
systems can also be outsourced using cloud-based services. One
option is to use Google Voice as an answering service and message
management system. Another is to outsource phone answering services and receptionist functions to a virtual receptionist service such as Ruby Receptionist.

The outsourcing benefits of cloud computing don't end there. Legal work can be outsourced as well, offering an affordable way to utilize the services of legal assistants without incurring the costs of hiring a full-time employee. Outsourcing legal work is not a new concept, but traditionally it involved bringing part-time employees into the firm to handle work overflow. Their presence at the firm was often required since all documents and files were paper-based and located on the premises. And even when firms began to create digital versions of documents, allowing contract attorneys to remote in to the system to access documents, it was often impractical. Not only did the process of allowing remote access often fail, it also created confidentiality issues since it granted the person who was accessing the system remotely full access to every file in the system; rather than just the files he or she was working on.

However, with the advent of the paperless office and the ability to collaborate through online portals, outsourcing has been turned on its head. The location of the paralegal or contract attorney becomes irrelevant, since the cloud-based practice management systems can be accessed from any Internet-enabled device. Similarly, confidentiality issues are solved since well-designed systems allow law firms to set permissions and thus grant users access to only select cases and/or files associated with a case.

Because cloud computing facilitates outsourcing in so many forms it saves lawyers time and money. It reduces overhead related to costly office space and also allows lawyers to communicate and collaborate more effectively with outsourced assistants.

For an example of this, consider what Florida attorney Patrick John McGinley has to say regarding how his law firm takes advantage of technology and outsources legal and administrative tasks, both locally and overseas:

Instead of increasing the number of employees, my goal is to increase my client base and my firm's revenues. One of the primary ways that I achieve this is by outsourcing . . . . Much of my staff is in Singapore. Things I used to hire staff for I now outsource, such as dictation. But it's not just limited to back office tasks. I also outsource legal work for less important matters . . . . Outsourcing IT just makes sense . . . . When I made the move to MyCase, I stopped being the tech guy. My
clients don’t hire me because I’m a great tech guy—they hire me because I’m a great lawyer.\textsuperscript{16}

Of course, the outsourcing benefits of cloud computing are not limited to attorneys who outsource their work. Those to whom the work is outsourced benefit greatly from cloud computing as well. For example, as Alexia Pittas, an lawyer who provides litigation consulting services to other attorneys explains how cloud computing helps make her services much more affordable, thus making her services more appealing to the attorneys for whom she works:

My practice is truly outside the box in terms of traditional outsourcing. I don’t get hired on an hourly basis. Instead, I work by the project and remotely, something accomplished most effectively through technology. Everything I do is in the cloud—case management, billing and email. Using the cloud allows me to provide very efficient and economical services in real time without burdening my clients with the expense of having to bring me on site to work.\textsuperscript{17}

As she explains, gone are the days of exchanging multiple red-lined document versions and comments through email:

I draft a document and upload it into MyCase. My clients can then review it and make revisions and comments about it. I am also able to view all of the file documents within the program without my clients having to scan and email them to me and without having to use external file programs.\textsuperscript{18}


\textsuperscript{18} Ibid.
To sum up, the outsourcing capabilities ushered in by the widespread availability of cloud computing have made it possible for lawyers to save time and money by reducing overhead and outsourcing many different functions that could only occur onsite in years' past. In fact, between outsourcing, mobile tools and cloud portals, the entire office has been "outsourced" for some firms. So, some lawyers have used these tools to abandon brick and mortar offices and are now practicing law solely through an online portal, as discussed in the next section.

V. THE VIRTUAL LAW OFFICE

The last piece of the cloud computing innovation puzzle involves virtual law practices, which are defined as "a legal practice that does not have a bricks-and-mortar office, but operates from the homes or satellite offices of its lawyers, usually delivering services to clients at a distance using technological means of communication."19

Virtual law practices, once an impossibility, are now a reality—brought to you by cloud computing technologies. And, as Stephanie Kimbro, the author of "Virtual Law Practice: How to Deliver Legal Services Online" (ABA 2010), states their numbers are increasing quickly:

Completely web-based virtual law offices and those that are integrated into a traditional brick and mortar law firm are growing in number. In the next five to 10 years, most firms will have some form of delivering legal services to clients online. Trends in outsourcing, globalization of law firms, and the increasing demand from the public for online legal services are driving the growth of virtual law practice.20

---


In other words, cloud computing has completely altered the concept of a "law office." As mentioned, up until very recently, in order to hang a shingle, lawyers had to invest significant monies before opening a traditional law office, with all of the requisite expenses and overhead that this concept necessarily entailed.

But that is no longer the case. Now, cloud computing has paved the way for virtual law practices, which are particularly conducive for transactional law practices. Nowadays, it is much easier to launch a solo practice with minimal up-front investment. All that is required is a small amount of savings, a laptop, a smart phone, and an Internet connection. Using just a computer, a smartphone, the Internet, and cloud computing, lawyers can start a virtual law practice and effectively run their law offices using cloud-based law practice management platforms. Web-based services and smartphone apps can be used in lieu of fax, copy, and answering machine systems. And instead of hiring full-time office staff, lawyers can rely on virtual assistants and/or receptionists.

Another advantage offered by virtual law practices and made possible because of cloud computing is increased flexibility. A web-based law practice permits lawyers to practice law from just about anywhere, as long as there is Internet access. So, connecting with current or potential clients requires nothing more than a computer or mobile device. But it is not just lawyers for whom virtual law practices are convenient. As discussed above, online portals are also appealing to their clients and other people with whom lawyers work and interact. This is because web-based technologies allow lawyers to communicate and collaborate with clients, co-counsel, investigators, paralegals, virtual assistants, and more through online web portals.

Increasingly, this type of access is something that legal consumers expect. So by using web-based online portals, virtual law practices have a competitive advantage over more traditional law practices—especially since 21st century legal consumers want 24/7 access to information. Virtual law offices deliver this by offering them convenient and instantaneous access to case-related information through online portals. Of course, not all law practices are well-suited to virtual practices, but for transactional lawyers, virtual law offices offer a cost-effective, flexible way to deliver legal services to their clients.

In summary, virtual law offices would not be possible but for cloud computing and cloud computing has made virtual law practices a reality, thus leveling the playing field. Opening a solo practice no longer entails the expensive and cumbersome start up process of yesteryear. Instead, entrepreneurial attorneys can start a law practice on a dime and then expand their practice as needed.
VI. CONCLUSION

Because of cloud computing, hanging a shingle in 2013 is a much more economical and simple proposition than it was in 2002. That is the beauty of 21st Century lawyering: increased flexibility and choices create opportunities never before seen and lawyers who take advantage of these cutting edge tools reap the benefits. And in doing so, they provide superior and more responsive and cost-effective legal services to their clients.

So while the connection between cloud computing and innovation in the delivery of legal services might not be readily apparent at first glance, there is indeed a strong correlation between cloud computing and the next stage in delivering legal services. Cloud computing technologies have revolutionized the ways that lawyers can deliver legal services.

While some might view cloud computing as just one of many technology advancements, I would respectfully disagree. Cloud computing is not evolutionary technology; it is a revolutionary technology that is allowing lawyers to deliver legal services in innovative ways never before seen.
Please Visit the I/S Website to Subscribe Electronically:

moritzlaw.osu.edu/students/groups/is/

Please subscribe me or my organization to:
I/S: A JOURNAL OF LAW AND POLICY FOR THE INFORMATION SOCIETY

Name:__________________________________________________________
Organization:____________________________________________________
Address:________________________________________________________
City:____________________State:____ Zip Code:____Country:___________
Telephone:_________Fax:_________Email:_____________________________

Annual Volume Subscription Type (please circle one):

<table>
<thead>
<tr>
<th>Domestic ($45) - Student w/ID ($25)</th>
<th>Foreign ($100)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutional ($100)</td>
<td>Supporting ($150)</td>
</tr>
</tbody>
</table>

To make payment now, please enclose check in separate envelope payable to: "I/S JOURNAL"
A Journal of Law and Policy for the Information Society

Published by

Center for Interdisciplinary Law and Policy Studies

The Center for Interdisciplinary Law and Policy Studies
The Ohio State University
Drinko Hall
55 West 12th Avenue
Columbus, Ohio 43210

Please Visit the I/S Website to Subscribe Electronically:

moritzlaw.osu.edu/students/groups/is/

---

BUSINESS REPLY CARD

I/S: A JOURNAL OF LAW AND POLICY FOR THE INFORMATION SOCIETY

ATTN: I/S JOURNAL
The Ohio State University
Moritz College of Law
55 West 12th Avenue
Columbus, OH 43210