

American Bar Association  
Section of Family Law  
2014 Spring CLE Conference

*Cloud Computing and Its Impact on the Practice of Law—  
Five Trends Lawyers Can't Ignore  
Thursday, May 8, 2014*

Speaker: Christopher Anderson, Esq.

# Total Cost of Ownership: Cloud vs. Premise-Based Software

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For the first time ever, a majority of individual attorneys (50.2%) now indicate that they are more likely to use the cloud. For firms as a whole, the percentage is even higher: 72.4%<sup>1</sup>.

With cloud use being considered by more attorneys than ever before, it's essential that anyone considering a change dig deeper into the issues to answer the question: Will your firm benefit more from sticking with traditional premise-based, installed practice management software, or using software from the cloud, also known as software-as-a-service (SaaS) or web-based software?

For most firms today, the answer is a loud and resounding "It depends". To arrive at the correct answer for your firm, you have to examine three issues:

1. Risk
2. Management
3. Cost of Ownership

## Comparative Risk

While anyone with a surface-level understanding of cloud-based software immediately thinks of the risk to confidentiality of information stored on the cloud, today's most advanced cloud-based programs have effectively mitigated many of those risks. With entirely new approaches to security, data in the cloud can be better protected from hackers than premise-held data is to thieves that might break into your office. Take a look at the recent article written by Jeffrey Taylor, aka The Droid Lawyer, "How Serious Are You About Security?" to read more about security issues right under your nose at your office (<http://thedroidlawyer.com/2014/01/how-serious-are-you-about-security/>).

In other, less obvious ways, cloud-based software makes it easier for attorneys to meet their legal and ethical obligations. Following are a few such examples:

- **Communications** – At the top of legal clients' concerns about representation is their lawyers' failure to properly update them on the status and facts of their cases. Advanced cloud-based practice management programs today give even the smallest firms the option to set up secure, simple and inexpensive client portals, without the necessity of unlimited server space or large IT departments. Such portals effectively give legal clients anytime, anywhere access to matter details at their own convenience, without interrupting the attorney's workday.
- **Diligence** – The cloud puts essential information at an attorney's fingertips, improving the ability to effectively conduct required diligence.
- **Safekeeping** – For smaller firms, property kept by the firm during and after representation can be difficult to keep up with. Use of the cloud removes that responsibility from the firm, putting safekeeping in the hands of the much larger cloud service to look after your firm's data. Most cloud services have data backed up across multiple locations to ensure that your data will always be there when you need it.
- **Privilege** – Cloud services such as WatchDox®, available with LexisNexis Firm Manager®, allow firms to protect confidential shared files through the entire lifecycle, so you can:
  - Define who is allowed to access a document
  - Control how a file is viewed and duplicated, including allowing or blocking printing, editing, copying and forwarding
  - Set expiration dates, or revoke permission to view a document

1. "Cloud Technology in the Legal Industry," 2013 LexisNexis® Survey  
<http://businessoflawblog.com/2014/01/law-cloud-survey-2014/>

- Create an audit trail of where documents were viewed, on which devices and at what times
- **Conflict of interest** – While paper files make it almost impossible to conduct thorough conflict of interest searches, files stored on the cloud can be easily and quickly searched for conflicts, no matter how many attorneys in the firm.
- **Competence** – Recent Model Rules updates requiring attorneys to “stay abreast of changes in the law and its practice, including the benefits and risks associated with relevant technology” become easier to keep up with in the case of cloud applications, which keep your software updated automatically.

## Management

Both cloud and premise-based software require a learning curve, though many cloud-based solutions are more intuitively designed to make them instantly familiar, so attorneys can jump in and get started without taking up valuable time starting over on each new task.

Recovering from a disaster requires having a complete backup to restore your files in short order. While premise-based software requires constant attention by an employee or contracted service to ensure that backups occur at regular intervals, having software in the cloud requires less attention because back-ups are performed continually, in the background, with no effort required on the part of the law firm.

In either case, due diligence is needed from any firm to ensure that internal or external sources have clear service level agreements that include roles and responsibilities, disaster recovery planning, guaranteed availability, data ownership and security assurances.

## Cost of Ownership

When calculating the total cost of ownership of premise-based or cloud-based programs, it's important to include all costs over the normal lifecycle of a product or service, including:

- a. The initial investment. Cloud service software often requires a lower upfront investment (in money) than premise-based solutions.
- b. The human resources cost. For premise-based software, you'll need to count the time required to implement your in-house solution. Cloud-based programs, on the other hand, require time to vet reliable vendors and negotiate expected cloud-service levels
- c. The ongoing maintenance cost to sustain your premise-based software or cloud solution.

For large firms, having software installed in-house can allow them to take advantage of economies of scale, whereas cloud-based software generally requires a monthly fee for each licensed user. There's no one definitive answer as to which type of software will cost your firm more. Over time, in fact, the costs can be very similar.

For smaller firms, especially those just starting out, paying a small monthly fee for cloud-based software can soften the sticker shock from the upfront cost of premise-based software, along with the annual maintenance plans that generally go along with installed software, which is typically incorporated into the cloud service cost.

Premise-based software may also require larger expenditures for servers, networks and firewalls, along with a larger IT staff investment to maintain the additional hardware.

In the end, what's important is that you study both options carefully to weigh the pros and cons of each for your particular situation. Sometimes cost will be the deciding factor. Other times, security or freedom to access information may be your first priority.

Whatever weighs heaviest in your decision, it's important to dig below the surface to get the full story about the total costs of both cloud and premise-based solutions.

# Cloud Computing and the Impact on the Practice of Law

## Five Trends Lawyers Can't Ignore

*Presented by:*

*Christopher T. Anderson  
Product Manager, LexisNexis Firm Manager  
Lawyer/Dad/Pilot*

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**American Bar Association, Section of Family Law  
Spring CLE Conference**

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**What are some urgent issues facing law firms that are forcing change?**

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# Disruptions Forcing Change

- **Electronic Discovery**
  - Predictive Coding
  - Cloud storage
- **Clients wanting transparency**
- **Social Media**
- **Big Data/Predictive Analytics**
- **General Recession**

## What is Predictive Coding?



Predictive Coding has three components:

1. **Predict** - Case experts use Predictive Analytics to find key documents quickly and irrespective of keywords
2. **Code** – Keyword-agnostic machine learning finds other relevant documents
3. **Process** - Proven workflow with integrated sampling delivers results to a statistical certainty

(Source: <http://predictivecoding.com/predictive-coding-explained>)

*In Lay Terms: It makes electronic discovery more economical*

# The Age of Instant Information



**Mi-fi/Hot Spots/Web searches**






## Social Media is being used as Business Development tools

Most Recent Public Web Reviews  
<http://www.demandforce.com/b/ber...>

Your DF Business Profile

★★★★★ As always, excellent!   
henryc, San Diego, CA

As a regular patron, the service is excellent from the front desk to the back. Always courteous and a warm smile. The staff is very professional and the customer service always brings me back.  
- 5 days ago

[Click to add business comments](#)

★★★★★ Well done!   
curtisb, San Diego, CA


Happy with this service, on time, on budget. We'll be back.  
- 6 days ago

[Click to add business comments](#)

★★★★★ Thrilled!   
elenas, San Diego, CA

I love your new email appointment reminders and the profile setting Calendar feature - I hope this will be also sent out when we make  
- 6 days ago

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★★★★★ You are awesome   
jamesh, San Diego, CA

The staff is so friendly and helpful. The waiting area is clean and  
- 1 week ago

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★★★★★ Excellent   
kevinm, San Diego, CA

You are great, enjoy talking with you. It's always a good experience  
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Gina Bongiovi

## Big Data

- Big Data: “Collection of data sets so large and complex that it becomes awkward to work with” Wikipedia

### IMPACT:

- New **FRCP Revisions effective December 1<sup>st</sup>** – Changing the way lawyers who practice in federal courts comply with e-discovery.
- Higher use of forensic specialists, e-discovery experts, data analysts

## Predictive Analytics

- Early case assessment (ECA) refers to **estimating risk to prosecute or defend a legal case**. Global organizations deal with legal discovery and disclosure request for electronically stored information “ESI” and paper documents on a regular basis.”

### IMPACT:

- Use of ECA Tools is changing the landscape for competition
- More business are selecting legal representation based on RFP

## General Recession



- Competition from above – Large law is shedding lawyers
- Competition from below
- Newly minted attorneys are not finding jobs

- **Unbundling of services** being accepted in some jurisdictions
- **DIY services** are eating some traditional bread and butter
- **Client expectations** changing due to other industries
- **24/7 Instant Response**



# Why Cloud?

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**Security.** Is This Safe?

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## For Starters ... What is IT??

**Gartner:** Cloud computing is a style of computing where **massively scalable IT-related capabilities** are provided ‘as a service’ across the Internet to multiple external customers”

**Forrester:** “A pool of abstracted, **highly scalable, and managed infrastructure** capable of hosting end-customer applications and billed by consumption”

**Wikipedia:** “A style of computing in which **dynamically scalable and often virtualized resources** are provided as a service over the internet. Users need not have knowledge of, expertise in, or control over the technology infrastructure ‘in the cloud’ that supports them.”

**(n.) A style of computing in which**

- **Software**
- **Storage**
- **Processing Power**
- **Other Computing Services**

**are:**

- **provided over the internet and**
- ***usually* accessed via web browser or mobile application.**



## Cloud Computing Features

- Service turns on & off
- No expertise needed
- Updates automatically
- Scalable
- Defined and understandable costs
- Backup of data
- Guarantees offered
- Governed





## Two Worlds: BC & AC

### Before Cloud

- Application Service Providers (ASP)
- Web Hosting Services
- Managed Hosting Services

### After Cloud

- Software as a Service (SaaS)
- Platform as a Service (PaaS)
- Infrastructure as a Service (IaaS)

## Applications (SaaS)

- Google Apps, Quickbooks Online, Microsoft Online/Office 365, LexisNexis FirmManager™

## Platforms (PaaS) – Environments in the cloud

- Amazon, Microsoft Azure, App Engine, GreenCloud, AppScale, Cloud Foundry, Salesforce.com

## Infrastructure (IaaS) – Computers in the cloud

- Amazon, Cloud.com, Google Storage, GreenCloud, IBM SmartCloud, Carbonite

## Technologies

- Networking, Security, Datacenters, Internet, Web services

# Popular Cloud Solutions for Lawyers

## Time, Billing and Invoicing

- Bill4Time
- Chrometa

## Electronic Signatures

- RightSignature
- DocuSign

## Case and Client Management

- LexisNexis Firm Manager®
- Clio
- Rocket Matter

## Document Management

- WatchDox®
- Box
- NetDocuments

## Virtual Law Office Services

- DirectLaw
- Total Attorneys

## Project Management

- Basecamp
- Onit

## Online Document Storage and Backup

- Mozy
- Carbonite

## Remote Access (IaaS)

- GoToMyPC
- Legal Workspace

## Encrypted Email & Document Exchange

- Sendengine™
- Rpost (PaaS)

# Why might cloud computing be good for you?

**HARD DRIVE CRASHES**

**Vintage computers**

**NEW  
HIRES**

**ENTITY CHANGE**

**LACK OF I.T. SUPPORT**

**NO ESTABLISHED OFFICE PROTOCOLS**

**DISCIPLINARY ACTION**

**NEW EQUIPMENT**

**VIRUSES**

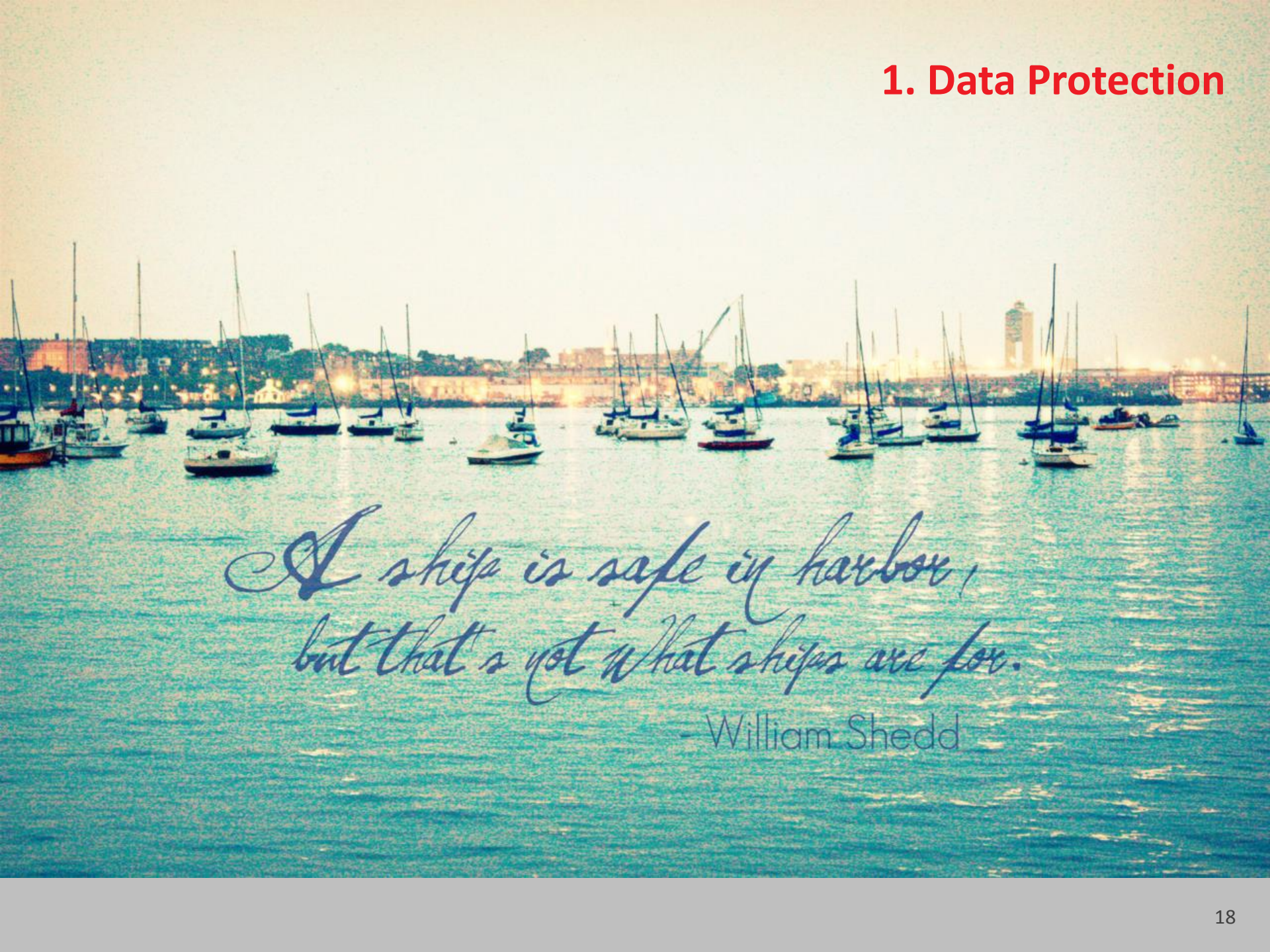
**The product, offering or application should help you *solve* important problems or jobs.**

**But it requires due diligence on:**

- 1. Data Protection**
- 2. Data Ownership**
- 3. Availability**



# 1. Data Protection

A photograph of a harbor filled with numerous sailboats. In the background, a city skyline is visible with various buildings and structures. The water is a deep blue, and the sky is a pale, hazy blue. The overall scene is peaceful and scenic.

*A ship is safe in harbor,  
but that's not what ships are for.*

- William Shedd



# 1. Data Protection

**“The only truly secure computer is the one unplugged from the wall and locked in a vault.”**

At *bare minimum*, vendors should provide “better-than-yours” data security. Ask them about:

- Encryption type?
- Environmental security?
- Testing methods?
- Real-time intrusion monitoring?
- Third party certifications?
- Internal controls?

*A ship is safe in harbor,  
but that's not what ships are for.*

- William Shedd

## 2. Data Ownership

**Above all, your confidential client data belongs to *you*.**

**Questions to ask:**

- **What are your contract terms/conditions?**
- **Policies on Government requests?**
- **Data return procedures?**
- **What happens when you cancel?**
- **How are third parties vetted?**
- **Use of my data internally?**
- **Is any anonymized information used?**



## 2. Data Ownership

### Actual Terms and Conditions from (non-legal focused) Cloud Vendors...

- BRAND X will have no responsibility for any harm to your computer system, **loss or corruption of data**, or other harm that results from your access to or use of the Services or Software
- BRAND X: If you add a file to your [Brand X] that has been previously uploaded by you or another user, **we may associate all or a portion of the previous file** with your account rather than storing a duplicate
- BRAND Y: When you upload ... content to our Services, **you give Brand Y (and those we work with) a worldwide license to use**, host, store, reproduce, modify, **create derivative works** ... communicate, **publish**, publicly perform, **publicly display** and **distribute** such content.
- BRAND Y: Your domain administrator may be able to ... access or retain information stored as part of your account [and] **restrict your ability to delete or edit information... or privacy settings.**

### 3. Data Availability

**Bottom line: Your cloud provider should be there when you need them.**

Questions to ask:

- Uptime guarantees?
- Financial penalties?
- Number of data centers?
- Testing?
- Backups?



## Who to trust?



**U.S. Data Centers**

**Financial Security**

**Experience**

**But, What About...**



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## **Ethics.** Is This Really Allowed?

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“The American Bar Association is cautiously wading into the waters of cloud computing.

An ABA ethics panel recently issued proposed rule changes to the Model Rules of Professional Conduct designed to assist attorneys in safeguarding confidential and sensitive client data while using remote internet servers to store, manage and process data.”

*—The Minnesota Lawyer*

- Minnesota
- North Carolina

**Question:** Is it ethical for lawyers to store and access confidential client data in the "cloud" using computers or mobile devices?

**14 States Issued Opinions, all Say Yes:**

- Alabama
- Arizona
- California
- Iowa
- Maine
- Massachusetts
- New Hampshire
- New Jersey
- New York
- Nevada
- North Carolina
- Oregon
- Pennsylvania
- Vermont

## Two Proposed Advisory Opinions

### Proposed Advisory Opinion 12-3

[https://www.floridabar.org/\\_85256AA9005B9F25.nsf/0/F495A00B73DA47B785257BBA0042D11B?OpenDocument](https://www.floridabar.org/_85256AA9005B9F25.nsf/0/F495A00B73DA47B785257BBA0042D11B?OpenDocument)

### Proposed Advisory Opinion 12-4

<https://www.floridabar.org/tfb/TFBETOpin.nsf/basic+view/Ethics+-+Proposed+Advisory+Opinion?opendocument>



### A new kind of law firm is emerging.

1. Virtual offices and virtual staff
2. Outsourced work
3. Engages in online collaboration as an easier way to obtain and deliver information vs. email
4. Uses tablets and iPads
5. Embraces mobile apps
  - Device specific vs. Web-based app
  - Native application integration

# Updated Ethical Guidelines

## **Model Rule of Professional Conduct 1.6: Confidentiality of Information**

(a) A lawyer shall not reveal information relating to the representation of a client unless the client gives informed consent...

(c) A lawyer shall make reasonable efforts to prevent the inadvertent or unauthorized disclosure of, or unauthorized access to, information relating to the representation of a client.

## **Model Rule of Professional Conduct 1.1 on Competence:**

“To maintain the requisite knowledge and skill, a lawyer should keep abreast of changes in the law and its practice, including the benefits and risks associated with relevant technology.”

# New Thinking on Old Standards



## **Model Rule of Professional Conduct 1.15: Safekeeping Property**

A lawyer shall hold property of clients or third persons that is in a lawyer's possession in connection with a representation separate from the lawyer's own property. ... [P]roperty shall be identified as such and appropriately safeguarded. Complete records of [the] property shall be kept by the lawyer and shall be preserved for a period of [five years] after termination of the representation.

# The World At Your Fingertips ... and Theirs







# Discarded Devices





## **Model Rule of Professional Conduct 1.4: Communications**

***(a) A lawyer shall:***

- (1) promptly inform the client of any decision or circumstance with respect to which the client's informed consent, as defined in Rule 1.0(e), is required by these Rules;***
- (2) reasonably consult with the client about the means by which the client's objectives are to be accomplished;***
- (3) keep the client reasonably informed about the status of the matter;***
- (4) promptly comply with reasonable requests for information; and***
- (5) consult with the client about any relevant limitation on the lawyer's conduct when the lawyer knows that the client expects assistance not permitted by the Rules of Professional Conduct or other law.***

***(b) A lawyer shall explain a matter to the extent reasonably necessary to permit the client to make informed decisions regarding the representation.***



# Benefits: Client Portals

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### What to look for

- Secure File Sharing
- Secure File Sync
- Digital Rights Management
- Secure Web Access
- Mobile Productivity

## Forecast: Clear Skies for Cloud Computing

*“It is ethical for lawyers to store client documents in the cloud and use cloud-based applications, provided the lawyers take reasonable safeguards to ensure the safety and security of the data.” – Bob Ambrogi, Catalyst*

- The ABA Commission on Ethics 20/20 published its recommendations on amending ethics rules regarding [Client Confidentiality Issues Raised by New Technologies](http://www.americanbar.org/groups/professional_responsibility/aba_commission_on_ethics_20_20.html), and state bar associations came out with ethics opinions in favor of lawyers use of cloud computing.  
[http://www.americanbar.org/groups/professional\\_responsibility/aba\\_commission\\_on\\_ethics\\_20\\_20.html](http://www.americanbar.org/groups/professional_responsibility/aba_commission_on_ethics_20_20.html)
- ABA Reports 14 State Bars have weighed in. All said “Yes”  
[http://www.americanbar.org/groups/departments\\_offices/legal\\_technology\\_resources/resources/charts\\_fyis/cloud-ethics-chart.html](http://www.americanbar.org/groups/departments_offices/legal_technology_resources/resources/charts_fyis/cloud-ethics-chart.html)
- Florida has issued positive guidance in Opinions 12-3 and 12-4

## Contact information:

**Christopher T. Anderson**

LexisNexis

2000 Regency Parkway, Suite 500

Cary, NC 27518

[firmmanager@lexisnexis.com](mailto:firmmanager@lexisnexis.com)