Walking from Cloud to Cloud: The Portability Issue in Cloud Computing

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ABSTRACT

Cloud computing has become popular among businesses that see information technology as outside their core competencies, demand a highly flexible computing environment, and seek to achieve more predictable costs. In some ways, cloud computing resembles IT outsourcing arrangements used in the financial services industry for many years; therefore lessons from financial services IT outsourcing agreements may prove helpful to parties interested in adopting cloud computing. This article considers the use of “data hostage” clauses in combination with arbitration or litigation clauses by service providers and the problems these clauses can cause outsourcing businesses. These two clauses together can insulate service providers from liability for material breaches and be used to coerce non-breaching customers into paying hefty termination fees. Although careful analysis shows that data hostage clauses may not always be enforceable, few customers are likely to litigate these cases. This Article considers regulatory and contract drafting strategies for reducing the risks to outsourcing businesses arising from the use of such clauses.

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INTRODUCTION

Today information technology (IT) is exploring a new frontier: the cloud. Cloud computing is the enticing alternative to do-it-yourself, in-house information technology solutions. In the cloud computing model, data is initially captured by the outsourcing business, transmitted to the service provider, processed by the service provider, stored within the service provider’s computers, and then remotely accessed via a network. (In some cases, the data is partially and periodically downloaded to local servers at the outsourcing business for local viewing or customized reporting.) Simply put, “plugging into the IT cloud . . . [is] browser access to an application hosted on the Web.”

3 Id. at 30. The U.S. Government’s more comprehensive working definition of “cloud computing” expands upon the simple definition:

   Cloud computing is a model for enabling convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction. This
For instance, Amazon Web Services, a leader in cloud computing, now offers data storage and data processing and database management services—all via the Internet. Rather than using on-premises software and systems and data storage, a user employs those of a vendor specializing in “cloud” services. The familiar “software as a service” (SaaS) is one of several service models for cloud computing.

Critics of the cloud raise concerns over the portability of cloud computing because the cloud computing model requires that data reside with the service provider. The outsourcing business experiences the negative impact of this lack of portability, or “vendor lock-in” phenomenon, when it wants to migrate to another cloud computing service provider and is confronted with a data hostage clause in its outsourcing agreement requiring the business to pay an applicable termination fee in order for the data to be returned. This Article will examine the portability dilemma faced by outsourcing businesses and propose two possible strategies to resolve the portability dilemma for future outsourcing businesses.

I. THE PORTABILITY DILEMMA

For years, IT service providers have included a “data hostage” clause in their outsourcing contracts to discourage customer defections. Such data hostage clauses might include the following language:

Customer consents and agrees and authorizes Service

cloud model promotes availability and is composed of five essential characteristics, three service models, and four deployment models.


4 Hoover & Martin, supra note 2.

5 See Mell & Grance, supra note 3.


Provider to retain Customer files until (i) Service Provider is paid in full for (A) all services provided through the date such Customer files are returned to Customer; and (B) any and all other amounts that are due or will become due under this Agreement; (ii) Service Provider is paid its then standard rates for the services necessary to return such Customer files; (iii) if this Agreement is being terminated, Service Provider is paid any applicable termination fee; and (iv) Customer has returned to Service Provider all confidential and proprietary information received from Service Provider.

When a customer seeks to terminate an outsourcing agreement, the service provider typically denies that any material breach of contract has occurred or that a customer has any basis to terminate for cause, and demands payment in full or a large termination fee, representing liquidated damages for lost business. The service provider may simply hold the customer’s data hostage until payment is made. To the extent that outsourcing businesses realize there is a risk of opportunistic behavior on the part of service providers, they will be less likely to adopt cloud computing; to the extent that outsourcing businesses do not recognize the risks up front, outsourcing IT with services such as cloud computing creates traps for the unwary.

One possible strategy to mitigate this risk, currently used by the financial industry, is for the outsourcing business to seek shorter service contract durations. In the past, financial institutions and their IT service providers have committed to long-term outsourcing relationships ranging from five to even ten-year terms. More recently it has become uncommon for service contract terms to exceed five years; and some are as short as three years. Even renewal terms in current agreements are narrowing. Renewal terms were often the same as the initial term; now many are for a single year. Rapid developments in information technology resulted in Federal bank regulators to issue this cautionary note:

[C]ontracts need to be flexible, and therefore, should not be long-term (over five years). It is difficult to foresee and contract for every possible contingency that
may arise. Also, business needs change or the market may evolve in unexpected directions. For these reasons, OTS discourages long-term contracts. Shorter contracts may provide more flexibility to meet the challenges of a changing environment.\(^8\)

Anecdotal evidence suggests that some cloud computing providers, probably sensitive to the data portability issue and the barrier it erects to business migration to the cloud computing model, have shortened required contract terms or even eliminated them altogether. Such concessions are, however, unlikely when there are substantial front-end costs; parties will therefore likely continue to engage in high-stakes disputes.\(^9\)

II. Case Study

Because there are no reported decisions that offer a clear solution to the data portability dilemma, anecdotal evidence of an actual dispute may be a helpful guide for analysis. The following case study is based on an actual dispute that settled before going to trial. While the names are fictional, the parties represent real players in the financial services IT outsourcing space.

In 2007, when Happy Valley Bancshares renewed its IT outsourcing contract with Nifty Data Processing for a second five-year


\(^9\) The author’s experience in this field spans the last decade. As legal counsel for IT service providers, he has prosecuted the collection of liquidated damages in over ten such disputes, many involving more than a million dollars claimed against a serviced business. In every case except two, the serviced business conceded payment of liquidated damages in order to secure its data. In the two exceptions, the serviced business filed preemptive actions in state courts that ultimately forced the service provider to relent rather than suffer negative publicity. Alltel Info. Svcs., Inc. v. Fed. Deposit Ins. Corp., 194 F.3d 1036 (9th Cir. 1999), is the only reported decision addressing termination of an IT services outsourcing contract and payment of liquidated damages for the termination. The Alltel claim for $1.4 million demonstrates the high-stakes nature of such disputes.
term, Nifty agreed to improve its service to remain competitive. There were four significant provisions included in the IT outsourcing contract: (1) Happy Valley retains ownership of the data after transmittal to Nifty and Nifty acknowledges that such data is Happy Valley’s exclusive property; (2) Nifty accepts possession of the data subject to the agreed upon restrictions on use; (3) any claim arising from the agreement is subject to arbitration; and (4) data is subject to a hostage clause.  

When Nifty failed to meet the newly negotiated service level agreements because, unlike its competitors, it was unable to meet emerging performance standards, Happy Valley claimed that Nifty had materially breached the new IT outsourcing contract.  

Happy Valley entered into negotiations with a different IT vendor and demanded that Nifty surrender Happy Valley’s customer data in its most portable or native format so the change in vendors could proceed. Nifty denied any contract breach and refused to turn over any of its data unless Happy Valley paid four million dollars in liquidated damages for contract termination.  

Analysis of the outsourcing relationship

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10 Provisions such as “Nifty further acknowledges and agrees that all confidential data described in this Agreement is and constitutes information that belongs wholly to and is the exclusive property of Happy Valley” and “Confidential data will at no time be used by Nifty directly or indirectly other than as necessary to carry out its obligations under and for purposes authorized in this Agreement” are typical for financial institution IT services outsourcing contracts. See FED. FIN. INST. EXAMINATION COUNCIL, IT EXAMINATION HANDBOOK, OUTSOURCING TECHNOLOGY SERVICES BOOKLET 13 (2004) [hereinafter OUTSOURCING TECHNOLOGY SERVICES], available at http://www.ffiec.gov/ffiecinfobase/booklets/outsourcing/Outsourcing_Booklet.pdf.

11 Service level agreements (SLAs) are metrics prescribed in an IT services contract used to measure the service provider’s performance. Depending upon the contract’s terms, failure to meet an SLA may constitute a material breach of the contract, or it may simply give rise to a nonperformance monetary credit against the contract’s service charges.

12 PCMag.com Encyclopedia, http://www.pcmag.com/encyclopedia_term/02542,r=native+format&i=47655,00.asp (last visited Nov. 17, 2009) (defining native format as the most complete and portable data file format that a computer application reads and writes).

13 Early contract terminations usually invoke liquidated damages clauses that require payment of all or a large portion of the payments that would have been made if the contract had continued. These payments are almost always a substantial sum.
and terms of the agreement suggests Happy Valley may have not only contract claims against Nifty, but also tort claims.

A. Tort Claims Arising from Contracts

A tort is “a breach of a duty that the law imposes on persons who stand in a particular relation to one another.”\textsuperscript{14} Happy Valley satisfies the three requirements for an action in tort by demonstrating: (1) the existence of Nifty’s duty to Happy Valley, (2) Nifty’s breach of that duty, and (3) damages proximately caused by the breach. Happy Valley claims the IT outsourcing contract created a bailment for hire in which Happy Valley entrusted its property to Nifty for specific and limited purposes and for which Happy Valley paid Nifty. Nifty, a bailee, rightfully came into possession of the property, but owed Happy Valley a duty to return the data upon demand.\textsuperscript{15} Because Nifty breached its duty as a bailee by failing to return the property upon demand, Happy Valley was prevented from transferring to a new service provider and therefore suffered non-economic damages and incidental economic damages.

At common law, Happy Valley would have had a remedy against Nifty in either detinue or replevin for return of personal property that was lawfully obtained but wrongfully detained after Happy Valley’s demand for its return.\textsuperscript{16} Because section 78.01 of the Florida Statutes provides a remedy of replevin,\textsuperscript{17} and the action of detinue is

\textsuperscript{14} Black’s Law Dictionary 1526 (8th ed. 2004).
\textsuperscript{17} Fla. Stat. § 78.01 (2009). Florida breaks with the line of cases exemplified by S. Cent. Bell Telephone Co. v. Barthelemy, 643 So. 2d 1240 (La. 1994) (holding computer software recorded on disks, tapes, or hard drives have a physical form and are thus subject to tangible personal property tax) and instead decides that “the physical components of software—the same discs, tapes, hard drives, etc.—discussed by the Louisiana court, are only ‘tangential incidents’ of the program” and, thus, are not tangible personal property subject to taxation. Gilreath v. Gen. Elec. Co., 751 So. 2d
considered obsolete in Florida, Happy Valley chose to sue Nifty pursuant to the Florida replevin statute.\textsuperscript{18}

The legal remedy of replevin arises out of a tort claim rather than a contract claim.\textsuperscript{19} However, the Restatement (Second) of Torts suggests that either a tort claim or a contract claim may be appropriate: “an act and its consequences may be both a tort and a breach of contract. . . . When this is so, the injured person, although barred by a statute from maintaining an action of tort may not be barred from enforcing his contractual . . . right or vice versa.”\textsuperscript{20} Florida follows this rule, at least when the tort is independent from the underlying contract.\textsuperscript{21} Therefore, Happy Valley may recover on a tort claim arising from a contractual relationship “if the defendant’s conduct constituted a separate and independent tort.”\textsuperscript{22}

\textit{Williams Mgmt. Enter.,} 489 So. 2d at 163-64 (footnotes omitted). Because Happy Valley’s ownership of the underlying customer was not in doubt, Happy Valley could have replevied physical objects containing the data.

\textsuperscript{18} See generally \textit{Williams Mgmt. Enter.,} 489 So. 2d at 161 n.1 (noting that “[o]riginally detinue was purely an action to recover goods in specie, if obtainable, and if not, their value at the time of the verdict, in cases where there was no wrongful taking. . . . [A]lthough the action of detinue has never been formally abolished, it is usually said that the action of detinue is obsolete because in Florida, now by statute, replevin relates to property both wrongfully taken and wrongfully detained.”).

\textsuperscript{19} Id. at 161.

\textsuperscript{20} \textsc{Restatement (Second) of Torts} § 899 cmt. b (1979) (emphasis added).


\textsuperscript{22} Michael Dorff, \textit{Attaching Torts Claims to Contract Actions: An Economic Analysis of Contort,} 28 \textsc{Seton Hall L. Rev.} 390, 406 (1997). But see id. at 408-10 (noting this
The “contort” dilemma, and the analysis of whether an action should be brought in contract or in tort, can also be explained this way:

Ordinarily, a breach of contract is not a tort . . . . However, a contract may create a state of things which furnishes the occasion of a tort, so that the negligent performance of a contract may give rise to an action in tort, if the duty exists independently of the performance of the contract. The contract then creates the relation out of which grows the duty to use care in the performance of a responsibility prescribed by the contract.  °  

While this formulation seems much broader than, and possibly at odds with, Florida’s rule, these approaches can be reconciled:

There are, however, a few situations in which failure to perform a contract may amount to a tort . . . . [One] type of exception arises where the contract results in or accompanies some relation between the parties which the law recognizes as giving rise to a duty of affirmative care. The typical case is that of a bailment, where the bare fact that the defendant has possession of the

“straightforward” rule has spawned competing analytical frameworks).

° 57A AM. JUR. 2D Negligence § 110 (2004) (footnotes omitted). Much of the discussion of contorts, and whether a plaintiff who is in contractual privity with the defendant should be barred from maintaining a tort claim, centers on money damages and application of the economic loss rule, which “is designed to prevent parties to a contract from circumventing the allocation of losses set forth in the contract by bringing an action for economic loss in tort.” Indemnity Ins. Co. of No. Am. v. Am. Aviation, Inc., 891 So. 2d 532, 536 (Fla. 2004). See also Amy G. Doehring, Blurring the Distinction between Contract and Tort: Courts Permitting Business Plaintiffs to Recover Tort Damages for Breach of Contract, 12 BUS. TORTS J. 2, 1 (2005), available at www.mwe.com/info/pubs/aba05.pdf. Because Happy Valley primarily asked for recovery of its property and only economic loss incidental to the wrongful restraint (damages specifically allowed by Florida’s statutory replevin action) the economic loss rule has no application in the analysis of the viability of Happy Valley’s tort claim. FLA. STAT. § 78.01 (2009) (stating that “[a] person whose personal property is wrongfully detained . . . may . . . recover . . . any damages sustained by reason of the wrongful . . . detention”).
plaintiff’s property is enough to create the duty, and it would exist if there were no contract at all and the goods were found on the highway.24

Nifty, the bailee for hire—a situation based upon the contract between the parties—owed a duty to Happy Valley, the bailor, to use due care in holding bailor’s property and to return it upon demand.25 When Nifty failed to return the property and proximately caused damages to Happy Valley, Happy Valley was able to bring a tort claim against Nifty for replevin under section 78.01 of Florida Statutes. While Happy Valley may theoretically bring this tort claim against Nifty, the data hostage and arbitration clauses in the IT outsourcing contract data hostage clause attempt to interpose a contractual bar to Happy Valley’s suit.


The data hostage clause requires Happy Valley to pay Nifty a termination fee when terminating without cause. The self-help remedy provided by the data hostage clause allows the service provider to make the initial determination whether it has breached the contract. While subsequent litigation or arbitration might result in a victory for the outsourcing business, the aggrieved customer may be unable to leave its data in possession of the service provider long enough to achieve victory.

IT services outsourcing agreements typically include arbitration clauses or litigation provisions governing choice of law and forum. Happy Valley’s contract with Nifty included an arbitration clause: “any controversy or claim arising out of or relating to this Agreement, or the breach thereof, shall be settled by arbitration.” In recognition of this provision, Happy Valley filed a demand for arbitration claiming that Nifty had materially breached the IT outsourcing contract. The demand for arbitration claimed money damages caused by Nifty’s breaches and requested an award of specific performance of Nifty’s


obligation to return Happy Valley’s data so that the conversion to a new service provider could take place. The arbitration, however, proceeded very slowly.

The data hostage and arbitration clauses together may give a breaching service provider the leverage to coerce an outsourcing business to pay a termination fee to which it is not entitled. To proceed with the tort claim in court, Happy Valley must demonstrate that the clauses taken together constitute exculpatory clauses and are thus unenforceable. Restatement (Second) of Contracts states exculpatory contract clauses are unenforceable when “[a] term exempting a party from tort liability for harm caused intentionally or recklessly is unenforceable on grounds of public policy.”

In Florida, exculpatory contract clauses may be enforceable, but:

As frequently recognized by the Florida courts, exculpatory clauses [not only for negligent, but also for willful, malicious or grossly negligent actions] are not favored in the law, and Florida law requires that such clauses be strictly construed against the party claiming to be relieved of liability. Such clauses are enforceable only where and to the extent that the intention to be relieved was made clear and unequivocal in the contract, and the wording must be so clear and understandable that an ordinary and knowledgeable party will know what he is contracting away.

In O’Connell v. Walt Disney World Co., the court discusses an exculpatory contract clause in contrast to an indemnification or an assumption of risk clause. In the discussion, the court focuses on the effect of the clauses and concludes that such clauses, which have similar purposes and effects, are subject to the same disfavor as exculpatory clauses. Under this functional analysis, the hostage clause and the arbitration agreement in Nifty’s data processing contract immunize

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26 Restatement (Second) of Contracts § 195(1) (1981).
Nifty from the consequences of its tortious conduct and, thus, should be disfavored and subject to careful scrutiny.

To be enforceable against Happy Valley, the intention of the clause must be “clear and unequivocal” and the contractual language must convey in an understandable way the consequences of the clause.\(^29\) Although Happy Valley is in some ways a sophisticated business entity, it is unclear whether the implications of the data hostage clause and arbitration clause taken together were conveyed in a manner that made these consequences clear.\(^30\)

III. TWO STRATEGIES TO MITIGATE THE IMPACT OF DATA HOSTAGE CLAUSES

It is unlikely that service providers will voluntarily stop requiring their outsourcing customers to agree to data hostage clauses. Moreover, outsourcing customers are unlikely to litigate in data hostage situations. It is therefore unlikely that case law will develop in this area to clarify the extent to which data hostage clauses are enforceable. There are two possible solutions to the data hostage dilemma; the first requires government intervention while the second requires addition of a contract term creating a private expedited dispute resolution mechanism to remove the data from the service provider while arbitration or litigation proceeds.

A. Government Intervention

Financial institution regulators might at least prohibit the use of data hostage terms in outsourcing contracts entered into by regulated financial institutions. Federal regulators, particularly those for banking

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\(^{29}\) Id.

\(^{30}\) While beyond the scope of this article, it may in fact be possible, at least under Florida’s formulation of the law, to construct a data hostage clause and dispute resolution mechanism that overcomes the legal disfavor of such clauses and satisfies requirements for enforceability. See Glenn D. West & W. Benton Lewis, Jr., *Contracting to Avoid Extra-Contractual Liability—Can Your Contractual Deal Ever Really Be the “Entire” Deal?*, 64 BUS. LAW. 999 (2009) (examining the effectiveness of exculpatory contract provisions, in the context of fraud and negligent misrepresentation claims, in limiting tort liability).
institutions, may regulate and examine those companies that provide services to Federally-chartered or Federal Deposit Insurance Corporation-insured entities. However, direct regulation in this form (as opposed to examinations that occur on a regular basis) rarely occurs.

Taking a more indirect approach to the problem, financial regulators might promote “best practices” for IT outsourcing. For example, the Federal Deposit Insurance Corporation began requiring insured banks and thrifts to maintain certain deposit data in specific formats, regardless of whether they process the data in-house or outsource the services. Further, the Federal Financial Institutions Examination Council, which is a cooperative of all Federal banking regulators, long ago issued examinations guidance that advises directly on certain substantive terms in IT outsourcing contracts. Federal and state regulators could continue to strengthen their guidance to regulated institutions regarding the dangers of data hostage clauses, or even prohibit their use altogether. This approach could increase data portability for businesses that employ cloud computing services.

B. Private Choice

Parties to IT outsourcing contracts could reduce the leverage service providers enjoy by providing for more expeditious resolution of disputes. This could be done by drafting a rapid resolution mechanism. This mechanism would permit the parties to submit limited evidence to a single, neutral decision maker who is required to decide quickly whether a terminating customer is likely to prevail in arbitration or litigation. The standard could be much like that applied in Federal courts for the issuance of a preliminary injunction, i.e., whether the party seeking the preliminary injunction is “likely to succeed on the merits.”

32 See 12 C.F.R. § 360.9 (2009) (stating the FDIC rule requiring that major banks keep deposit data in specific format to assist in deposit insurance determinations).
33 See OUTSOURCING TECHNOLOGY SERVICES, supra note 10, at 12–19.
If the neutral decision maker finds that the customer seeking return of its data without payment of the termination fee meets the standard, then the service provider would be compelled to first deliver the data and then submit the dispute to arbitration or litigation, as agreed in the parties’ contract. Such a rapid resolution mechanism could be cast as a mandatory, binding arbitration provision that is enforceable pursuant to the Federal Arbitration Act.35

CONCLUSION

The data portability discussion among IT cloud computing service providers is a familiar one. Financial institutions have been outsourcing data processing to service providers for years. These service provider arrangements are precursors to the services provided by today’s cloud computing companies.

Typical contract provisions that have hindered or even prevented defections from one service provider to another have been problematic for the financial services industry. If they are used in cloud computing, then they may become problematic in other industries as well. Outsourcing businesses may not recognize the coercive power their service providers stand to gain when data hostage clauses are combined with dispute resolution clauses that permit substantial delays in resolving disputes.

In regulated industries, like financial services, regulators can address the problem and adopt remedial measures to discourage or eliminate the unfairness that data hostage clauses impose. In other industries, outsourcing businesses could reduce the risk of paying substantial termination fees, even to service providers that have breached their agreements, by devising expedited dispute resolution terms.

35 See AM. BAR ASS’N, MODEL ASSET PURCHASE AGREEMENT WITH COMMENTARY § 2.9 and cmt. (2001) (offering a similar provision to resolve purchase price adjustment disputes in asset purchase transactions and discussing its enforceability as an agreement to arbitrate).