



## Data – The New Water

by Andrew Cardno

Access to clean water for sanitation and consumption has been recognized by the United Nations a fundamental human right. For years, Indian Country has fought to protect its water rights from a variety of external forces. Similarly, tribal casino operators have found that data has become the new water, and shielding data from external intrusion and maintaining the right to it can be as complex a proposition as it is for tribal governments to protect their rights to water on their land.

### Water Rights

Water flows over land, falls on land, and is stored deep within the earth. Basic reasoning would lead one to assume that the holder of the land would have full rights to the water contained within it. This assumption couldn't be further from the truth. Ownership of water rights are quite separate from ownership of the land. Despite the supreme court giving tribes strong water rights to tribes (Church, Ekechi, Hoss, and Larson, "Tribal Water Rights: Exploring Dam Construction in Indian Country," *Journal of Law, Medicine & Ethics*, Spring 2015), the federal government "can be kindly described as having been less than diligent in its efforts to secure sufficient water supplies for the [Indian] community to develop its arable lands and achieve meaningful economic self-sufficiency and self determination," according to Rep. Morris K. Udall in March 1988.

### Data Rights

Like water, data flows from nearly every component within the gaming property. All aspects of a casino and its attached amenities generate data constantly – from table games to slot machines, from food and beverage to the hotel and entertainment arena. Also, like water rights, the fact that the data is generated on the property does not guarantee ownership by the property holder of this most valuable asset.

### Data Data Rights

Owning data is more complex than acquiring the rights to it. A useful metaphor imagines rights as a bundle of sticks, where each stick represents an individual right that can be separated and reassembled. Business owners possess a set of "sticks" related directly to the data generated by the business.

The following are five different rights to be aware of as they relate to data:

#### 1) *The right to access data in the business*

Use of data inside a casino and its associated amenities seems like a basic right. If an operator pays a system provider to facilitate a transaction with a customer, surely

the data generated during that transaction belongs to the operator? One would think, but consider the following example of a typical customer's interactions with various systems in a casino setting.

Out of town guests typically start at the hotel check-in desk (hotel system). They may eat at a restaurant (point-of-sale system), gamble on a slot machine (slot accounting system and player tracking system), wager at a table game (table tracking system), redeem a marketing offer at the kiosk (kiosk system and offer management system), and fetch their car at valet (valet parking system) upon departure. The systems they touch are provided by a variety of vendors, and ownership of the data that is generated is no simple matter. Depending on where and how the data is stored, business owners have no guarantee of ownership, let alone access.

#### 2) *The right to resell the data to third parties*

The data generated on property can carry information that is valuable to the business owner, and to third parties. An exclusive database maintains its resale value; a shared database... not so much. If vendors employed by the business to facilitate transactions retain the right to sell the data to third parties, the value of that data to the business is rapidly eroded.

#### 3) *The right to store and combine with other data streams*

The right to combine data with other data sets is critical to building a powerful database. If data is generated in real time as it is in a modern casino environment, the operator must also secure and protect the right to stream the data from all sources in real time. Here's a common scenario that illustrates the importance of the right to combine and stream real-time data:

*Jenny arrives at the casino and the valet system records her entry. Jenny's host is alerted once she enters the property, and is notified about Jenny's waiting free play offer. Meanwhile, Jenny heads to her favorite slot machine and inserts her player card. The host receives an alert, and walks over to the game to welcome Jenny and remind her about her available offer. The host checks her player record, and proceeds to make a reservation for Jenny at her favorite restaurant on the property. Jenny finishes gambling, enjoys a nice steak dinner and heads to the valet. She doesn't have to find her valet ticket, because the valet attendant was notified the moment she paid her check and has already prepared her vehicle.*

This type of interaction requires real-time data streams between multiple source systems, all of which have different vendors. If one system does not permit the right to access the data in real time, these interactions simply cannot occur.

#### 4) *The right to know you are being investigated*

In today's world, the data a business holds is critical to any investigation. Casinos, in particular, hold a great deal of financial data on their best players, who are often extremely wealthy. It is crucial that procedures are in place to ensure investigations handle personal player information correctly with an eye to protecting the privacy of individuals.

#### 5) *The right to update into source systems*

Source systems routinely require data updates. Examples of common updates that an operator would need to make can include an address change, new rating, or addition of a mobile phone number to a player record. Given the lack of clarity around ownership of data and source systems, it's critical for an operator to have the right to push data back into the sources systems they rely on to run their businesses.

### Common Methods of Taking Rights

With a better understanding of the difference in data ownership rights, the question remains: what threatens ownership rights and how can they be protected? The following are three ways data rights can be eroded:

**In the cloud:** If your data is in the cloud, the cloud provider probably has full access to it. They could run aggregate reports to show market trends or charge fees for extracting historical data. For tribes, it's important to realize that when data is removed from tribal jurisdiction for storage in the cloud, they risk exposing their data to outside sources. In some cases, a tribe may not even be notified when their data is accessed. In a recent federal investigation into anti-money laundering practices, warrants to access the casino's data were served directly to the cloud provider – not the tribe or the gaming operator, who were not even notified that a warrant for data access had been issued.


**Encrypted within the business:** Data stored in modern databases are encrypted, which means that without the unlock keys, even business owners cannot access data in their own databases. Encryption of data by a database vendor adds a layer of security, certainly, but it also puts the vendor in a position to charge the business for access rights to its own data and control these rights by limiting access to the encryption keys.

**The right to integrate:** Unlike water, data streams are bi-directional. This means that source systems sometimes need to be updated. Consider the example of a marketing freeplay offer which is issued only by the gaming system. The provider of this system can deny or charge a fee to update when said offer is redeemed, effectively penalizing or taxing operators who simply need to ensure that data about those offers can flow back into the gaming systems.


### Bringing it Together

Similar to water rights, losing data rights can go unnoticed at first. In the casino business where long term gaming data is a key asset, it is of the utmost importance that tribes have a clear understanding of their data ownership rights, and a strategy for protecting those rights well into the future. ♣

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