November 26, 2018

Dear Readers,

Please find below the latest edition of the Cloud Computing Committee’s SciTech Cloud News. Do not hesitate to contact me with any questions, comments, or contributions (including suggested articles for the next publication) to make this most valuable for your practice.

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Data Security

Lessons Learned During October’s National Cybersecurity Awareness Month
National Law Review (Murtha Cullina), October 1, 2018

As part of Cybersecurity Awareness Month, this article highlighted helpful government data security resources, including a toolkit developed by the Department of Homeland Security and written guidance from the DOJ that addresses incident response considerations, ransomware, information sharing under federal law, cloud computing, and working with cyber incident response firms.
Security Challenges Arising Out of the Convergence of Internet of Things and Cloud Computing

*Technology Law Dispatch, September 24, 2018*

This article analyzes a publication by the European Union Agency for Network and Information Security. Key takeaways include the importance of encrypting data floating between the edge of a network and cloud, deploying more secure hardware in relation to IoT devices, adding security elements to IoT devices (such as security appliances, routers and gateways), incorporating API gateways at the cloud level, and adopting a baseline of unified security measures and automated, secure software updates.

FBI Director Implores Corporate Boards to Join Cyber Fight

*Nextgov, October 1, 2018*

FBI Director Christopher Wray warned corporate board members about potential foreign hacks on data and computers. He urged companies to work with the government to establish protections and immediately notify the FBI in the event of any breach. He also encouraged companies to prioritize security, limit which employees and contractors can access companies’ most sensitive information, and be wary of mergers, joint ventures and other deals, particularly with Chinese companies.

Uber to Pay $148 Million to Settle Data Breach Cover-Up with U.S. States

*Reuters, September 26, 2018*

The Uber settlement is the largest payout among attorney generals’ settlements in privacy and data breach cases. This sends a message to other companies about the consequences of covering up a data breach. Settlement terms include changes to Uber’s business practices aimed at preventing future breaches and reforming its corporate culture. It also requires Uber to report any data security incidents to states on a quarterly basis for the next two years, and implement a comprehensive information security program overseen by an executive officer who advises executive staff and Uber’s board of directors.

Data Privacy

The Law: Personal Info on a Work Device: What’s Private?

*The Ledger (Clark, Campbell, Lancaster & Munso), October 3, 2018*

This article addresses the question: What information may an employer access from an employee’s employer-issued mobile device? Particulars are examined in accordance to the Wiretap Act and Stored Communications Act. In short, as long as proper procedures are followed, employers are likely entitled to recover any information an employee has stored on an employer-issued device.

Do You Know Where Your Data Is?

*SC Media, October 1, 2018*

Data security laws are constantly updating across different countries, necessitating companies be aware of the specific procedures for handling their data security on a foreign server. This article focuses on the evolution of the European Union Data Protection Directive into GDPR and its conflict with U.S. data privacy laws.
Market News & Developments

**Edge Computing: The State of the Next IT Transformation**  
*ZDNet, October 1, 2018*

The latest IT computing trend, Edge Computing, keeps processing and analysis near the edge of a network, where the data was initially collected. Edge Computing is a category of Fog Computing, which is further defined in this article. Advantages of Edge Computing include improved application performance, real time analytics/data streaming, required processing away from data centers, and realization of IoT strategies. Challenges include intermittent connectivity or low bandwidth and/or high latency at the network edge.

**Roundup of Cloud Computing Forecasts And Market Estimates, 2018**  
*Forbes, September 23, 2018*

Cloud computing forecasts and market estimates reflect an increased global market for cloud services. A few key takeaways include: Amazon Web Services (AWS) accounted for over half of the company’s operating profit in Q2, despite contributing only 12% to the company’s net sales; 80% of enterprises are both running apps on or experimenting with AWS as their preferred cloud platform; enterprise adoption of Microsoft Azure & AWS increased significantly; and the financial services industry has the highest percentage of server images deployed in private or public clouds, nearly 100% as compared to 19% average adoption rate.

**What Does the New U.S.-Mexico-Canada Trade Agreement Mean for the Digital World?**  
*Marketplace, October 3, 2018*

United States-Mexico-Canada Agreement has many implications for today’s digital world. For example, it protects internet companies (e.g., Facebook, Google, etc.) from being sued over material that shows up on their services, addresses how internet services and future 5G might work in all three countries, and makes it easier for digital goods and data to cross borders.

**It’s A Multi-Cloud World, After All**  
*Forbes, September 21, 2018*

The majority of companies today utilize a hybrid cloud for data storage; that is, a combination of public and private clouds. Technology vendors are capitalizing on this trend by addressing the question of where to store what data in order to get the most value and efficiency. For example, the company Scality created a cloud-native multi-cloud data controller called Zenko, which provides a single point to store, retrieve, and search data across any location.

Public Sector News

**FINRA Manages 50 Billion Daily Transactions Using The Public Cloud**  
*Forbes, October 1, 2018*

This article describes how the CIO for the Financial Industry Regulatory Authority (FINRA) utilizes cloud technology, provided by AWS, to innovate and better surveil markets and broker-dealers. The CIO advocates for the use of cloud technologies within companies and provides insights for use of these technologies. For example, he describes moving the company towards machine learning and advanced analytics to facilitate surveillance by use of machines rather than
surveillance analysts. He also suggests that companies provide in-house training on these technologies to decrease dependence on third parties.

**How to Navigate Cloud Migration Risks to Ensure Success**
*Nextgov, November 7, 2018*

With the increasing growth in cloud services, government agencies are recognizing that “workload profiles” and infrastructure performance requirements are key to determining how to move a workload to the cloud or whether to keep it on-premise. Agencies must understand which questions to ask to determine an application’s or workload’s cloud suitability, understand the best practices to de-risk cloud migrations, and learn how available technology can help to de-risk the process through automation of application infrastructure discovery, dependency mapping, workload profiling, and cloud performance testing.

**Governance & Agreements**

**Hurricane Prep: The Importance of Cloud-Based Legal Software**
*National Law Review, September 20, 2018*

This article guides companies on how to protect their data in the event of inclement weather or other natural disaster. Primarily, companies are encouraged to utilize the cloud to store data rather than physical servers that could be damaged by weather. Cloud-based servers often save new information immediately and do not depend on a physical office to get work done.

**2018 Emerging Legal Technology Forum: Law Firms May Be Wary of the Cloud Now, but That Will Change**
*Thomson Reuters Legal Executive Institute, October 18, 2018*

This article addresses the resistance of law firms to move their data storage to the cloud and describes the benefits law firms could gain by making the switch. For example, while firms think their clients will resist information being stored in the cloud, a recent legal technology forum revealed this is not the case and clients’ data is actually safer in cloud-based storage. Additionally, firms worry moving to the cloud will be difficult and expensive. However, when the particulars of cloud technology are explained, firm leaders can see the direct value and potential additional value cloud technology could create for them and their clients.

**Digital Single Market Update: Technology Standardization in the EU - Improving European Companies’ Competitiveness in the Areas of 5G, Cloud Computing, Big Data, IoT, and Cybersecurity**
*JDSupra (Morrison & Foerster), October 22, 2018*

The European Commission has been working on common ICT standards to ensure the interoperability of digital technologies, services, and devices. Its two-step plan includes: (1) Setting standards in relation to core technologies and (2) Proposing a series of measures to align research and development results with the new standards, and to improve collaboration between standard-setting organizations. Five priority areas of standards-setting include: 5G communications, cloud computing, big data, Internet of Things, and cybersecurity. The Commission encouraged businesses operating in the EU to increase involvement and participation in standards-related organizations and platforms.