

# 10 TECHNOLOGY CHALLENGES

Although technology is undoubtedly making our lives easier, the ease of access to shared information presents a wide range of legal implications for businesses

BY BRETT LOCKWOOD

## 1. DATA SECURITY

Data security concerns posed by advances in technology and the manner in which consumers, businesses and other organizations use that technology will be a significant concern in the year ahead. Data-related issues permeate virtually all evolving technologies. With huge amounts of business and personal data transmitted and stored electronically, the opportunities for data breaches are dramatically increased and businesses must anticipate quick responses to satisfy a patchwork of state and federal data breach regulations. While those regulations continue to raise

the standards for data security practices, contracting parties also expect greater accountability for these standards. Enhanced encryption and biometrics may also provide solutions for some of these problems.

## 2. BIG DATA

By one estimate, computer and device users create over 2.5 quintillion bytes of data daily! This is the world of Big Data. Technologies to analyze, use, and, in some cases, commercialize such vast amounts of data are beginning to be more widely deployed. However, the significant productivity gains and commercial opportunities are offset by serious security concerns





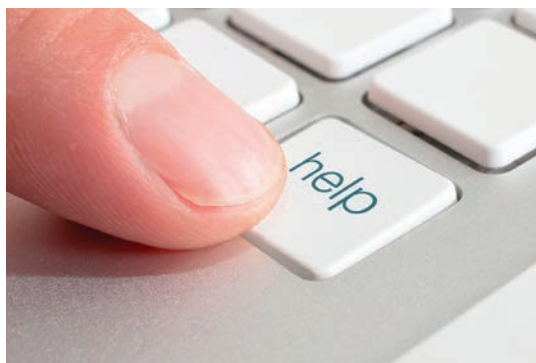
and encroachments on privacy. Major issues will include who should control and be compensated for such data.

### **3. CLOUD COMPUTING**

Cloud computing continues to show great promise for major cost savings for businesses and convenience for consumers. Yet, as more software applications and other computing resources are hosted and accessed online in the “cloud,” data privacy and security risks are increasing, and contracting and licensing norms are evolving and becoming more difficult to manage.

### **4. OPEN SOURCE SOFTWARE**

Non-proprietary open source software applications offer many benefits and costs savings, but compliance with open source license terms can



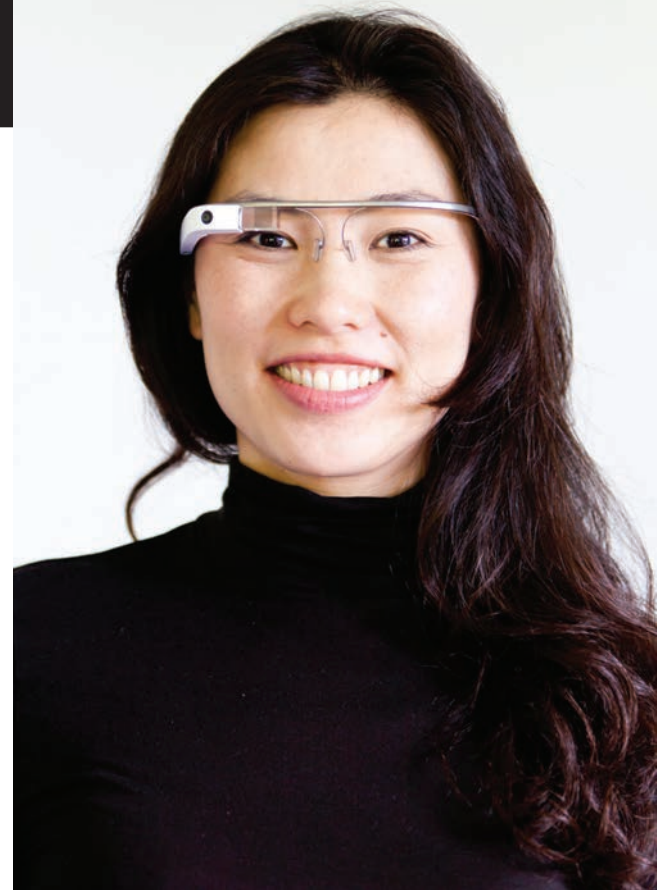
be tricky. If not handled properly, use of open source software can compromise ownership of company software and jeopardize acquisitions and other significant business transactions.

### **5. MOBILE PAYMENTS**

Several consumer surveys suggest that we keep better track of our mobile devices than we do of our wallets, so the rapid spread of mobile payments is no surprise. However, liability issues remain to be worked out for many transactions – misdirected payments, unauthorized access and account balance mistakes, among others – that may not go as intended.







## 6. SOCIAL MEDIA RELATED LIABILITIES

Widespread business use of social media tools means that companies must maintain and communicate clear policies of acceptable practices and ensure compliance with applicable terms. Many legal pitfalls exist, including running afoul of state-level sweepstakes regulations

with online promotions; failure to comply with relevant FTC guidelines when using social media for online marketing programs; inadvertent infringements of third-party intellectual property rights when posting content; and contract breaches because of noncompliance with social media platform rules.





## 7. WEARABLE COMPUTING

Google Glass, computer watches (more elaborate than what Dick Tracy might have imagined) and other wearable computing devices push the boundary of mobile computing even further than the still recent wonders of smartphones and tablets. The tie-in of these devices with biometric monitoring, access and control offer potential conveniences while also presenting additional risks. The privacy, security and liability issues with such devices will likely dwarf the similar concerns (e.g., texting while driving) raised by our non-wearable mobile appendages.

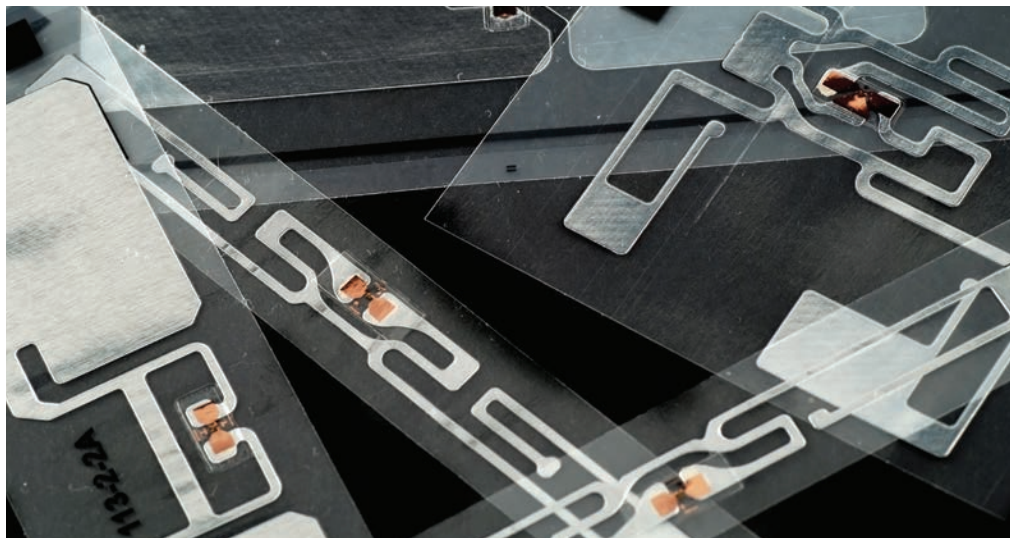
## 8. THE INTERNET OF THINGS

Electronic tagging and tracking of objects and people with bar codes, RFID devices and other technologies and communicating the resulting

data about locations, movements and status – the so-called “Internet of Things” – is on the cusp of becoming reality. While this technology may offer many benefits to businesses and consumers, the privacy issues posed by the Internet of Things are similar to the issues surrounding “Big Data.”

## 9. VIRTUAL CURRENCIES

Offering convenience for many online transactions, virtual currencies (such as Bitcoin) fill a growing marketplace niche. However, unlike sovereign currencies, which are subject to varying degrees of regulation, virtual currencies do not fit neatly into existing legal frameworks. In addition, this fact has not gone unnoticed by criminal elements, and provides another reason that mainstream consumers and businesses are wary about the acceptability of digital currencies.



## 10. REMOTE AUTOMATION AND CONTROL

The remotely automated, controlled and monitored “smart office” and “smart home” – even smart cities – are now reality. However, a close look at the fine print about responsibility for accidents and mistakes reveals that disclaimers abound. Still to be sorted out is where the balance of liability will ultimately rest between providers and users of these automation and monitoring technologies. ■



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