

TechBridge

Dimensional
INSIGHT®

**The Benefits of Cannabis
Legalization**

**What Return to Restaurants Means
for Beverage Alcohol Industry**

Current State of Embedded BI

**2022 Top Cybersecurity Investments
for Healthcare**

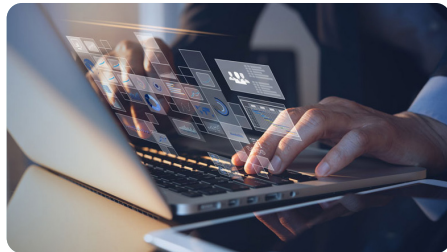
Subscribe!

April 2022



03 The Benefits of Cannabis Legalization

05 What Return to Restaurants Means for Beverage Alcohol Industry



07 Current State of Embedded BI

10 2022 Top Cybersecurity Investments for Healthcare



14 News Brief

15 News brief



CONTRIBUTOR



Trevor Branch,
Marketing Writer

The Benefits of Cannabis Legalization

Trevor Branch

Marketing Writer
[LinkedIn](#)



The United States has witnessed a sudden surge in new cannabis-friendly legislature, with many states decriminalizing its use and distribution and Congress introducing new bills like the [Drug Policy Reform Act](#) and [SAFE Banking Act](#). Although most of the changes are still in their infancy and have yet to be evaluated long-term, many individuals are wondering what a new cannabis-friendly government means for themselves and the country as a whole.

Despite every change coming with its own set of drawbacks, much of what we've seen so far with the new legislature has been largely positive and points towards a promising future. The various laws in place have not only promoted advances in public health and safety, but also provided substantial benefits for state economies.

Although many of these changes currently only exist on a state-level, these benefits are likely to persist through the entire country as the federal government continues to ease up on its strict regulations surrounding the cannabis industry.



Harm reduction

By shifting funding from criminalizing drug users to treating them, some states have seen significant progress in harm reduction and reducing the number of drug-related arrests. Oregon, in particular, has seen major results through [Measure 110, the Drug Decriminalization and Addiction Treatment Initiative](#). The initiative decriminalizes low-level drug possession and increases funding for harm reduction, substance use disorder treatment, and other related services.

According to the [Drug Policy Alliance](#), Oregon has experienced 60% fewer total drug arrests in the 10 months following Measures 110's introduction, compared with the same period the previous year. This means a reduction in nearly 5,500 arrests since the change in legislature.

As part of Measure 110's new policies, a portion of cannabis tax revenue is to be put into a special fund dedicated to the expansion of services for individuals suffering from addiction. In those first 10 months, Measure 110 provided a whopping 16,000 people with access to new services, 60% of which were for harm reduction. Prior to the new legislature, Oregon had some of the worst access to substance use disorder treatment within the country.

Through the measure, the Drug Policy Alliance and [Health Justice Recovery Alliance](#) has secured a total of \$302 million in funding for harm reduction, treatment, housing, and recovery services over the next two years. \$31.4 million has already been distributed, with the remaining \$270 million expected to be awarded to various community organizations.





Increased tax revenue

The cannabis industry, both legal and underground, is huge. [According to the Tax Foundation](#), the nation's leading independent tax policy research nonprofit, the illegal U.S. marijuana industry costs taxpayers \$28 billion annually in lost tax revenues.

Furthermore, in its market study, [Cannabis In the U.S. Economy: Jobs, Growth and Tax Revenue, 2018 Edition](#), New Frontier Data predicts that the full legalization of cannabis on a federal level could generate a cumulative \$105.6 billion in federal tax revenue and 1 million new jobs by 2025.

Although the above numbers are largely speculative, real-world examples demonstrate they may not be far from the truth. [According to California's Legislative Analyst's Office](#), California had generated \$652 million in cannabis excise tax and \$165 million in cultivation tax (plus whatever was accrued from general sales tax) during 2020-2021. In a [market study by ICF](#), it is estimated that the legalization of marijuana will produce at least 81,000 additional direct, indirect, and induced jobs in California, as well as increase total labor income by at least \$3.5 billion.

Other states are experiencing similar results as well, with Illinois [generating \\$317 million](#), Washington [\\$559.5 million](#), and Colorado [\\$423 million](#) in cannabis tax revenue during the 2021 fiscal year.

Reducing costs

Not only does the legalization of cannabis bring in bonus tax revenue for the economy, it also drastically reduces government expenditures attributed to enforcing cannabis-prohibition laws. In the research report ["A Tale of Two Countries: Racially Targeted Arrests in the Era of Marijuana Reform,"](#) the ACLU claims there were almost 700,000 marijuana arrests in 2018, accounting for more than 43% of all drug arrests. In 2019, [more people were arrested for marijuana than for all violent crimes combined](#).

For each marijuana-related offense, taxpayers are responsible for shouldering the costs related to the arrest, court processing, and if necessary, imprisonment of the offender. On average, it costs taxpayers around \$35,000 to house an inmate for just one year.

In a [paper supported by 300 economists](#) (including three Nobel Laureates), Harvard economist Jeffrey Miron argues the government could save \$7.7 billion a year in law-enforcement expenditures by ending marijuana prohibition. These claims are supported by the ACLU, who found in its report ["The War on Marijuana in Black and White,"](#) that ending the enforcement of marijuana possession laws could reduce government spending by \$3.6 billion.



Looking to the future

With the overwhelming amount of evidence supporting the end of cannabis prohibition, it's inevitable that the market is only going to continue to grow as more and more states (and eventually, the federal government) lessen their laws restricting the use and sale of marijuana. □

To learn more about what's in store for the future of cannabis, check out our blog post ["Ecommerce and the Future of the Cannabis Industry."](#)

DOWNLOAD

What the Return to Restaurants Means for the Beverage Alcohol Industry



The beverage alcohol industry saw a big shift in consumer consumption over the last two years, as quarantine and social distancing guidelines led more people to drink at home as opposed to in restaurants. However, with many of these restrictions now lifted, many in the industry are wondering what the future holds for on- and off-premise channels, as well as the e-commerce channels that took off in popularity. Let's examine the changes ahead for the industry

Transition from on- to off-premise

The lockdowns of the last two years forced most restaurants, bars, and other drinking establishments to shut their doors to the public, some permanently. Although some establishments managed to find alternative routes to stay afloat (cocktails-to-go, prioritizing food orders, etc.), many were forced to watch as their customers turned to drinking at home. [Analysts at NielsenIQ](#) found that on-premise beverage sales dropped as much as 68% during April of 2020 from the same time the year before.

Confined to their homes and granted with excess personal time, many people [experimented with new at-home occasions for drinking](#). Part of this can be attributed to younger consumers who, motivated by lower income and advancements in technology, have grown comfortable with staying at home and relying on digital platforms for everything from shopping to dating—activities that were once centered around the on-premise.

Even with the significant downturn in on-premise sales, [alcohol consumption as a whole continued to increase](#) throughout the pandemic as consumers turned to drinking as a less-than-ideal coping mechanism.



The emergence of new channels

Although the pandemic all but muted the on-premise industry, lockdown orders, coupled with relaxed shipping and distribution laws, fueled an unprecedented growth in ecommerce sales. According to [data from NielsenIQ](#), online wine sales spiked 234% during the pandemic in 2020. Although many digital platforms witnessed the majority of their growth during the initial stages of quarantine, their success has continued to carry over into even the present-day.

For many brands, direct-to-consumer (DTC) channels provided a new outlet for bringing in revenue amidst the increasing popularity of mobile and online shopping. DTC wine sales in particular, led mostly by small wineries, saw double digit growth in 2021. Now, more and more states are [loosening their regulations surrounding DTC shipping](#) in an effort to capitalize on its success during the pandemic.



Post-pandemic recovery

With most of the population now vaccinated and lockdowns finally lifted, customers are returning to their favorite drinking establishments. However, bars and restaurants still have a long road of recovery ahead. Changes in consumer behavior induced by the pandemic mean that many establishments will have to adapt their strategies in appealing to potential customers.

Digital branding & engagement:

- One of the biggest trends highlighted during the lockdowns is the importance of digital branding and engagement. The reliance on ecommerce and virtual platforms due to quarantine has led many individuals to value how businesses present themselves and interact with their customers on websites and social media. This means that on-premise establishments will have to invest in quality web-design and digital marketing efforts if they wish to retain many of their returning customers.

Adapting inventory:

- Furthermore, the changes in how consumers were drinking during the pandemic also influenced what they were drinking. Already growing in popularity amongst younger demographics prior to the pandemic, hard seltzer sales skyrocketed during quarantine, [growing a whopping 130% in 2020 alone](#).
- On top of the recent surge in hard seltzer sales, the pandemic also fueled a growing preference for premium products as consumers opted to treat themselves more often. With customers now accustomed to higher quality products and an increased demand for local and craft flavors, on-premise establishments will have to adjust their inventory to reflect the new market trends.

Improving business ethics:

- Although not directly related to the pandemic, 2020 and 2021 also witnessed a [demand for improved business ethics](#) as protestors turned to the streets and social media in support of social justice campaigns. Now, many consumers (particularly millennials and Gen Z) are actively pursuing establishments that share their overall values and demonstrate sustainable and inclusive business practices. Likewise, some venues have faced substantial backlash from the public for reasons such as [racist dress-codes](#) or [political affiliation](#).

Learning more

Although the pandemic was a huge disruption and devastated the on-premise industry, lifted lockdowns and dropping case numbers hint towards a brighter future for bars, restaurants, and other establishments. That said, these businesses still have a lot of changes they have to make if they are to persevere in the post-pandemic world. ▣

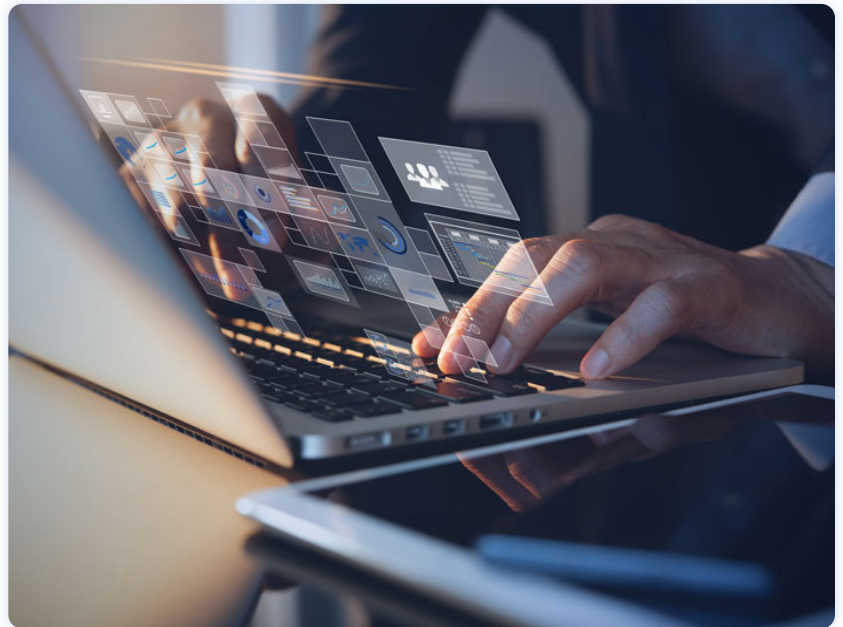
**To learn more about what to expect from the future of the beverage industry, check out our whitepaper
"5 Trends Shaping the Wine & Spirits Industry in 2022."**

DOWNLOAD

Current State of Embedded BI

Embedded business intelligence (BI), or the integration of business intelligence within other tools and applications, allows employees to interact with their data and dashboards without disrupting their workflow. Nowadays, many modern software products have some degree of embedded BI in order to streamline how employees utilize their data within their various responsibilities.

In its recent [2021 Embedded Business Intelligence Market Study](#), Dresner Advisory Services examines some of the biggest trends in BI and how organizations are leveraging the power of business intelligence in their operations. In order to align themselves with current best practices and identify potential opportunities, organizations need to stay informed on the realities of the market and measure themselves against leading industry trends.



Top users

Unsurprisingly, not all industries place the same level of value on embedded BI. According to the 2021 Embedded Business Intelligence Market Study, embedded BI adoption is most popular among respondents in the technology industry at 72%, followed by government at 57%, and healthcare at 54%. Following these sectors, the highest users of embedded BI are the manufacturing and consumer services industries at 44% and 42%, respectively.

Within individual organizations, the sentiment towards embedded BI varies between functions, indicating that different departments and users may need a more tailored approach in order to best fulfill their responsibilities. According to the 2021 Embedded Business Intelligence Market Study, embedded BI is most popular within executive management at 60% of respondents and R&D at 58%. Additionally, respondents in executive management expect 96% adoption within the next 12 months. Among all other functions, only the business intelligence competency center reports 40 percent or greater current adoption in 2021 at 48%.

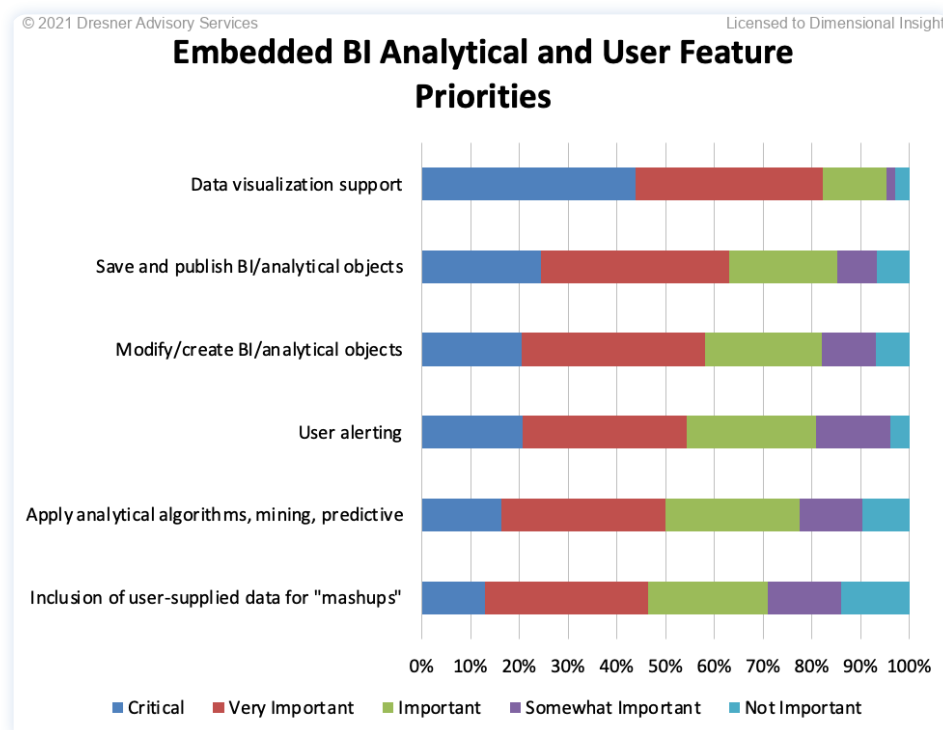


Most important features

Success with embedded BI mostly comes down to having access to the right tools that both optimize your workflow and reduce the amount of time and energy spent transitioning between multiple applications. With this in mind, not all features are equal. In the 2021 Embedded Business Intelligence Market Study, Dresner Advisory Services identifies which features provided the most value for the organizations that utilized them.

According to the study, the ability to interact with objects (such as navigation, filter, drill, etc.) was the most valuable interface integration feature of 2021, followed closely by access to HTML/iframe. Although not as critical as the aforementioned features, the ability to browse/select from a catalog of objects, access JavaScript API, refresh objects, and utilize workflow support were also highly coveted.

In terms of analytical and user features, the study found that data visualization support was by far the top component of 2021, being rated “critical” or “very important” by more than 80% of respondents. The ability to save and publish BI/analytical objects and modify/create BI/analytical objects were also considered highly valuable, being rated as “critical” or “very important” by around 60% of respondents.



Internal objectives take priority

Interestingly, organizations place more emphasis on employee-facing objectives than external. According to the 2021 Embedded Business Intelligence Market Study, self-service capabilities, broadening internal user access, and enhancing existing reports/analyses were the three largest priorities of 2021, rated as “Critical” or “Very Important” by around 70% of respondents. Furthermore, these results are consistent across both geographies (other countries) and industries.

External objectives like cost control, external user access, and especially monetization all ranked as “Critical” or “Very important” in less than 40% of respondents, indicating a possible preference for maximizing ROI through internal optimization as opposed to generating revenue.

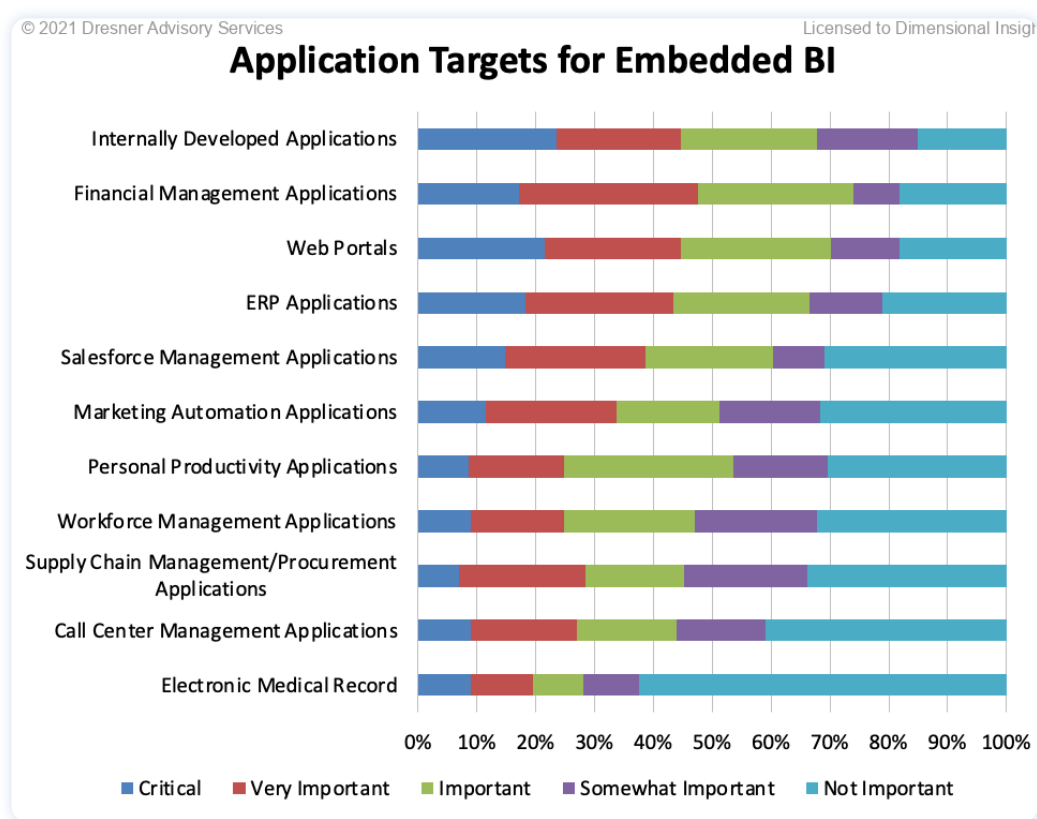


Most targeted applications

BI features don't accomplish much if they're not embedded within the right applications to maximize their utility and ROI. Focusing an organization's time and resources on the wrong objectives can be a serious waste for both users and vendors alike.

Generally speaking, applications that experience frequent use and facilitate data-related functions are going to make the greatest targets for embedded BI. According to the 2021 Embedded Business Intelligence Market Study, Dresner Advisory Services found that internally developed applications, financial management applications, web portals, and ERP applications were the primary targets for embedded BI, rated as "important" by 70% or more of respondents.

Unsurprisingly, however, targeted applications for embedded BI varies for each industry based on their own specific needs and objectives. For example, the study found that marketing automation and supply chain management/procurement were the primary targets for wholesale and retail, while technology organizations prioritized internally developed applications. Likewise, financial management applications are most popular in the finance industry, while consumer services prioritize salesforce management applications.



Learn more

If organizations are to maximize their ROI, they must stay informed on the realities of the market and align themselves with current best practices. [□](#)

To learn more about how your organization can make the most of current trends in BI, check out our white paper "5 Analytics Trends and How Dimensional Insight Is Helping Customers Respond to Them."

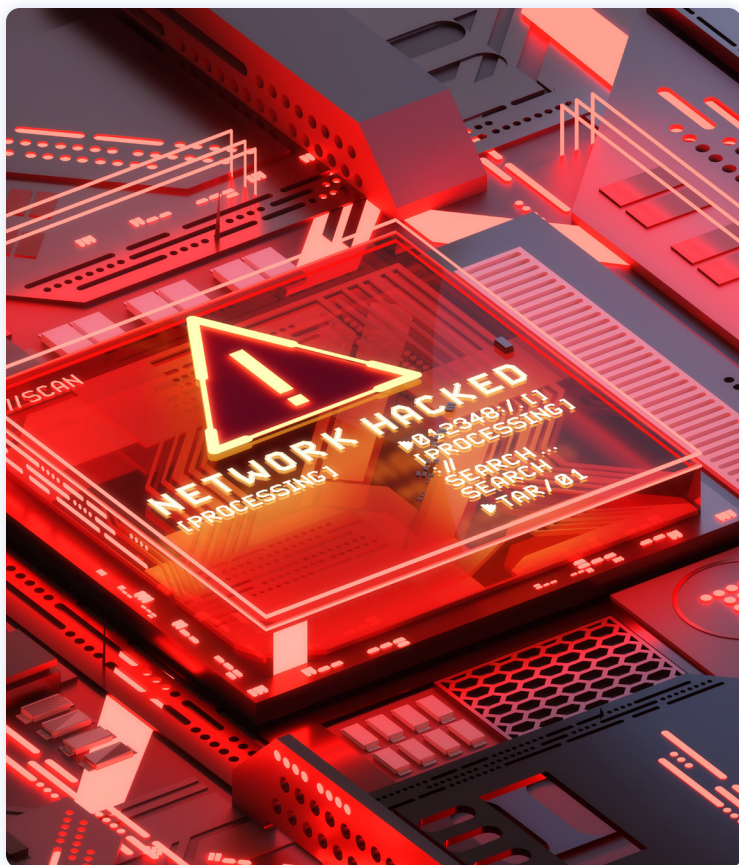
DOWNLOAD



Top Cybersecurity Investments for Healthcare in 2022

Organizations just need to watch the news to know that cybersecurity breaches are becoming an increasingly common threat to the healthcare industry. According to the [U.S. Department of Health and Human Services \(HHS\)](#), 45 million records were compromised by healthcare cybersecurity attacks in 2021, up more than 3x as much from 14 million in 2018.

Many of these attacks arose during the pandemic as the transition to remote work provided hackers with countless new vulnerabilities to target and exploit. In response, as many as [48% of healthcare industry executives](#) said they were increasing their cybersecurity budgets in 2021. With attack rates still increasing well into 2022, it's critical that businesses remain informed on current best practices in order to protect both themselves and their patients.



Anti-ransomware measures

Over the past couple of years, ransomware has grown increasingly popular amongst cybercriminal groups, with [42% of healthcare organizations](#) reporting at least two attacks within the past two years. Whereas data recovery might mitigate the ransomware risk in other industries, ransomware attacks in the healthcare industry can result in longer length-of-stays, poor patient outcomes, and complications in medical procedures.

Unfortunately, the high stakes nature of successful cybersecurity attacks in healthcare means many organizations are more likely to pay a premium, and within a much shorter time frame.

In an effort to reduce some of the risks associated with such attacks, many businesses are investing more in protective measures such as multi-factor authentication (MFA), which in itself has become a requirement for many cyber insurance companies. Other organizations are making use of [immutable backups](#) to provide a protective layer between their current systems and a potential restore point. Immutable backups function as a separate copy with their own security protocols, similar to a safety deposit box.

Securing medical devices

Internet of Things (IoT) devices have exploded in popularity over the last few years due to their versatility and wide range of applications, with the market [projected to reach \\$534.3 billion by 2025](#). However, with all that recent growth also comes a surplus of new targets for potential hackers hoping to capitalize on their portability and internet access.

On top of the danger posed to patients, compromised medical devices can also allow hackers to infiltrate an organization's network. In order to secure medical devices from would-be criminals, organizations have to address major vulnerabilities such as hardcoded passwords, insufficient security controls, poor network implementation, and a lack of enforced security credentials.

As these devices age, health systems will also need to implement a top-down approach to security to ensure that legacy devices aren't compromised. Part of this will entail [developing a bridge program](#) to determine how aging devices should be managed before they're replaced. Furthermore, increased monitoring would provide useful metrics related to the device lifecycle and allow organizations to better plan for future devices.



Protecting supply chains

Over the past couple years, large-scale attacks like the [SolarWinds incident](#) demonstrated just how devastating supply chain breaches can be for the businesses they support. With the number of third-party platforms being used by businesses nowadays, health systems have to put in place measures that not only account for their own networks, but those of their third-party partners.

First and foremost, organizations have to assess and know the risks associated with their suppliers. Security is only as strong as its weakest link, and holding themselves to high standards of cybersecurity means little if healthcare systems don't apply these same standards to the third-party groups they work with. Every connection an organization makes is a potential new endpoint for criminals to attack.

Reliable suppliers, coupled with preemptive measures like vendor access monitoring, continuous vulnerability/risk assessments, background checks, and regulatory compliance requirements can go a long way in terms of deterring potential attacks. However, the risk is never zero when it comes to cybersecurity, and healthcare systems need to include their supply chain in their response and remediation plan. In the case that an incident occurs, organizations need to be ready and be able to communicate and work together with their suppliers to address breaches and mitigate any further damages.



Increased monitoring and risk assessments

The easiest way to stop a potential breach is to catch it before it happens. Increased network traffic monitoring, especially with the transition to remote work during the pandemic, is crucial for making sure that potential risks are never realized. This is why many healthcare organizations are investing more and more in solutions that provide services like network perimeter protection, network surveillance, and appropriate network access assurance. Full network visibility is also becoming increasingly popular across the healthcare IT landscape.

Conducting regular risk assessments can also help healthcare providers detect dangerous vulnerabilities long before criminals do. With new weak points constantly emerging as organizations update and change their systems, IT departments have to remain proactive about evaluating potential threats.



Education and advocacy

At the end of the day, cybersecurity often comes down to the individual employee. Many attacks are simply a result of poor password habits, falling for fraudulent emails, and failing to protect their connected devices. End-user education on best practices and advocacy from upper management is an easy and cheap way to dramatically reduce some of the risks facing healthcare organizations.

IT departments need to establish and enforce policies that clearly communicate appropriate use of an organization's systems and data. Human-error is often the biggest threat to cybersecurity, and even small improvements in proper network access can go a long way. Remember, a phishing email is only dangerous if an individual opens it.

What now?

Technology is constantly evolving and so are the criminals seeking to exploit it. The healthcare industry will continue to be a hot target for cybersecurity attacks for years to come, and organizations have to prepare accordingly. ▢

To learn more the current state of healthcare technology following the pandemic, check out our blog post "Top Healthcare BI Trends."

DOWNLOAD

News brief



Dimensional Insight Spring Products Vulnerability Statement

The vulnerability nick-named “Spring4Shell” or “SpringShell” was announced last week. We are aware of this vulnerability. However, Dimensional Insight software and cloud environment are **not at risk**. We do not make use of any “Spring” products. To learn more, read the full statement from our Cambridge Lab.

[Read the full statement](#)

Upcoming Events

12TH ANNUAL MEETING

Hyatt Regency Chicago | Chicago, IL | April 25-28, 2022
Booth #505

[Learn more](#)

BECKER'S
HOSPITAL REVIEW

New England HIMSS 2022 Annual Spring Conference

Norwood, MA | May 12, 8:00am, EDT - 8:00pm, EDT
Booth #13

[Learn more](#)

HIMSS
NEW ENGLAND
CHAPTER

2022 MUSE Inspire Conference

Dallas, TX | May 15-19, 2022
Booth #316

[Learn more](#)

MUSE
INTERNATIONAL
Medical Users Software Exchange

NABCA 85th Annual Conference

Phoenix, AZ | May 23-26
Booth #25

[Learn more](#)

NABCA

Save the date



Join us for our Dimensional Insight Users Conference 2022 (DIUC22) in the nation's capital!

Sep 15-16, 2022 | Washington, DC | Washington Marriott Georgetown

We are all looking forward to getting together again for an in-person DIUC event. Join us in Washington, DC for learning, networking, and inspiration! We will have some away-from-conference experiences for attendees who might want to come a day early or stay a day later.

Registration details will be available soon.

Save the date!