



Keeping up with Evolving Casino and Gaming IT with CBT Nuggets



Casinos and others in the gaming industry rely on information technology (IT) for all aspects of their business¹². Some of the most critical of these IT needs include:

- Facial recognition for spotting important guests or preventing crime
- License plate readers
- ³Counterfeiting and theft prevention in poker chips using radio frequency identification (RFID)
- Mobile apps that help customers check in to their hotel
- Internet-based phones with Voiceover IP
- VIP concierge services for high rollers
- Key cards that are programmed with different functions, like providing access to hotel rooms and acting as a player's card
- Data mining, modeling, and predictive software to provide recommendations to visitors to improve the overall casino experience
- Data collection to stay ahead of emerging marketing opportunities
- Casino betting kiosks⁴

As is being felt across the industry, decades-old legacy technologies in casino and gaming IT are often impeding growth and innovation⁵. The casino and gaming industry stands to gain heavily from cloud infrastructure to improve operational efficiency⁶. Modernized cloud infrastructure helps casinos grow, reduce costs, and improve both performance and customer experiences.

For IT personnel within the industry, core applications of cloud computing include:

- Interconnecting geographically dispersed gaming sites with virtual resources
- Monitoring operations on the gaming floor by facilitating remote logins for workers at various in-person locations in the casino
- Transitioning away from on-premise hardware
- Increasing data insights and analysis
- Improving data privacy and security for customers

The casino and gaming industry must address three essential IT challenges moving forward: cybersecurity, cloud modernization, and advanced networking. CBT Nuggets can solve these problems with **transformative IT training**.

1 <https://www.dincloud.com/blog/how-technology-transforming-the-casino-and-gaming-industry>

2 <https://gamblersdailydigest.com/casino-technology/>

3 <https://www.information-age.com/4-technology-essentials-casino-businesses-123462631/>

4 <https://www.imageholders.com/insights/how-technology-has-influenced-the-gambling-and-casino-industry/>

5 <https://ggbmagazine.com/article/legacy-casino-systems-impede-innovation/>

6 <https://www.dincloud.com/cloud-services-for-the-casino-and-gaming-industry>



Casinos must be able to capture guest information, synchronize that information across systems, and provide staff with access to that data so they can anticipate guest expectations.

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Data Security

For both industry leaders and customers, the importance of cybersecurity isn't always obvious. This is especially true of the high-tech infrastructure, including cyber architecture, that goes into our favorite games⁷.

For one thing, casino IT requires secure transactions. After all, the financial information of customers is at stake. This by necessity demands a proactive and robust investment in data security and user privacy from casinos.

Various IT threats exist in the casino cybersecurity landscape, including ransomware attacks involving the distributed denial of service (RDDos), theft of customer data, and other distressing outcomes that dissolve trust and customer loyalty. In some high-profile hacks, cybercriminals have obtained customer data, then sold it for a profit. This undermines customer confidence and leads to major profit losses⁸. Today's casino operators must be on the lookout for cyber threats of all shapes and sizes⁹.

⁷ <https://www.uscybersecurity.net/casino-cybersecurity/>

⁸ <https://www.securitymagazine.com/articles/96449-how-the-cybersecurity-threat-landscape-has-changed-and-evolved-in-casinos>

⁹ <https://www.securitymagazine.com/articles/96449-how-the-cybersecurity-threat-landscape-has-changed-and-evolved-in-casinos>

To prevent such damaging cyberattacks, casinos have begun upskilling their IT workforce to protect physical hardware and limit access to sensitive information. Physical deterrents that safeguard critical hardware are essential. They can also play an important role as the industry responds to the growing need for a cloud environment to reduce the need for on-premise software.

Leaders in today's casino and gaming industry are increasingly committed to a long-term investment in security software, including updates and audits, all of which prevent cyberattacks before they happen. Encryption protects sensitive data from being transferred over internet networks so that they cannot be easily accessed by cybercriminals.

CASINO CYBERSECURITY SHOULD BE TOP OF MIND FOR IT WORKFORCES.

The gaming industry has likewise transitioned from on-premises operations to digital applications. As Security Magazine writes, "threats are sprawled across the internet in gaming, block-chain-based games, online sports betting, mobile payments, and mobile games."¹⁰

The transition to digital gaming has created many more cybersecurity vulnerabilities. Organizations that can mount "strong, layered defense strategies" will be best poised to prevent such attacks, which cost the \$44B industry in monetary losses as well as reputational damage¹¹.

Modernizing legacy technology, including cloud modernization

Industry leaders have recognized that legacy technology is often holding casinos back from growing, scaling, and maximizing customer experience. When casinos transition from on-premise IT to cloud infrastructure, they work more efficiently, save more money, and benefit from advanced cloud analytics. Cloud infrastructure also facilitates data collection and mining to improve customer experience and promote casino growth.

Cloud modernization means casinos keep up with guest demands, such as an increasingly personalized experience driven by digital transformation¹².

Today's casino visitors aren't looking just to gamble by spending more on food, beverages, and entertainment. They're looking for a seamless, modern experience unique to a particular casino. To deliver

¹⁰ <https://www.securitymagazine.com/articles/96449-how-the-cybersecurity-threat-landscape-has-changed-and-evolved-in-casinos>

¹¹ <https://www.securitymagazine.com/articles/96449-how-the-cybersecurity-threat-landscape-has-changed-and-evolved-in-casinos>

¹² <https://blog.technologent.com/the-cloud-casino-gaming-winning-strategy-rapidly-changing-industry>

the best customer service and capitalize on changing consumer trends, casinos must be able to “capture guest information, synchronize that information across systems, and provide staff with access to that data so they can anticipate guest expectations¹³.”

Despite this, legacy systems do not have the capability to integrate with point-of-sale systems. These systems sadly lose much revealing data that would otherwise yield rich insights about what foods, beverages, and other experiences consumers are purchasing—when, where, and how often.

One option is to “retool [casinos’] IT infrastructure to enable more flexible and efficient operations¹⁴.”

At its most basic, cloud modernization enables casino IT modernization without significant financial investments in on-premise hardware. It also enables casinos to scale and command all the benefits of the cloud, especially data collection and analysis, as well as interconnecting many different locations, and providing remote data access to staff. Using smart devices, staff can now access cloud-based software and rapidly deal with issues¹⁵.

Advanced Networking

Across the casino industry, everything one does relies on a network connection, whether it’s using your card to play the slot machines, checking into the hotel, or making financial connections. Advanced networking is essential to make these technologies not just possible, but transformative¹⁶. Network technology uses data systems to “manage and deliver digital resources over a computer network¹⁷.”

Given the rise and advancements of the Internet of Things, and the need to collect and analyze large amounts of data for marketing purposes, advanced networking has become more important than ever. It allows casino machines to interface with the network to perform essential duties, as well as for other devices used by staff and customers, such as employees’ and visitors’ smartphones and other mobile devices, to interact with the network.

13 <https://blog.technologent.com/the-cloud-casino-gaming-winning-strategy-rapidly-changing-industry>

14 <https://blog.technologent.com/the-cloud-casino-gaming-winning-strategy-rapidly-changing-industry>

15 <https://blog.technologent.com/the-cloud-casino-gaming-winning-strategy-rapidly-changing-industry>

16 <https://www.networkworld.com/article/2284208/casino-insider-tells--almost--all--about--security.html>

17 <https://www.clark.edu/academics/programs/science-technology-and-engineering/network-tech/index.php>

Conclusion

Securing data, modernizing legacy technology, and commanding advanced networks are core IT challenges faced by the casino and gaming industry. Casinos looking to compete in the 21st century gaming industry in the coming years need solutions that protect sensitive consumer data, investments in cloud software that are more powerful and scalable, and robust advanced networking.

Stable, secure IT infrastructure supports casino IT, which means:

- Stable, security network connectivity
- A high level of cybersecurity
- Digital transformation and cloud modernization

All those things need to be in place before the casino and gaming industry can serve their customers – and it's what the IT training of CBT Nuggets provides solutions to.