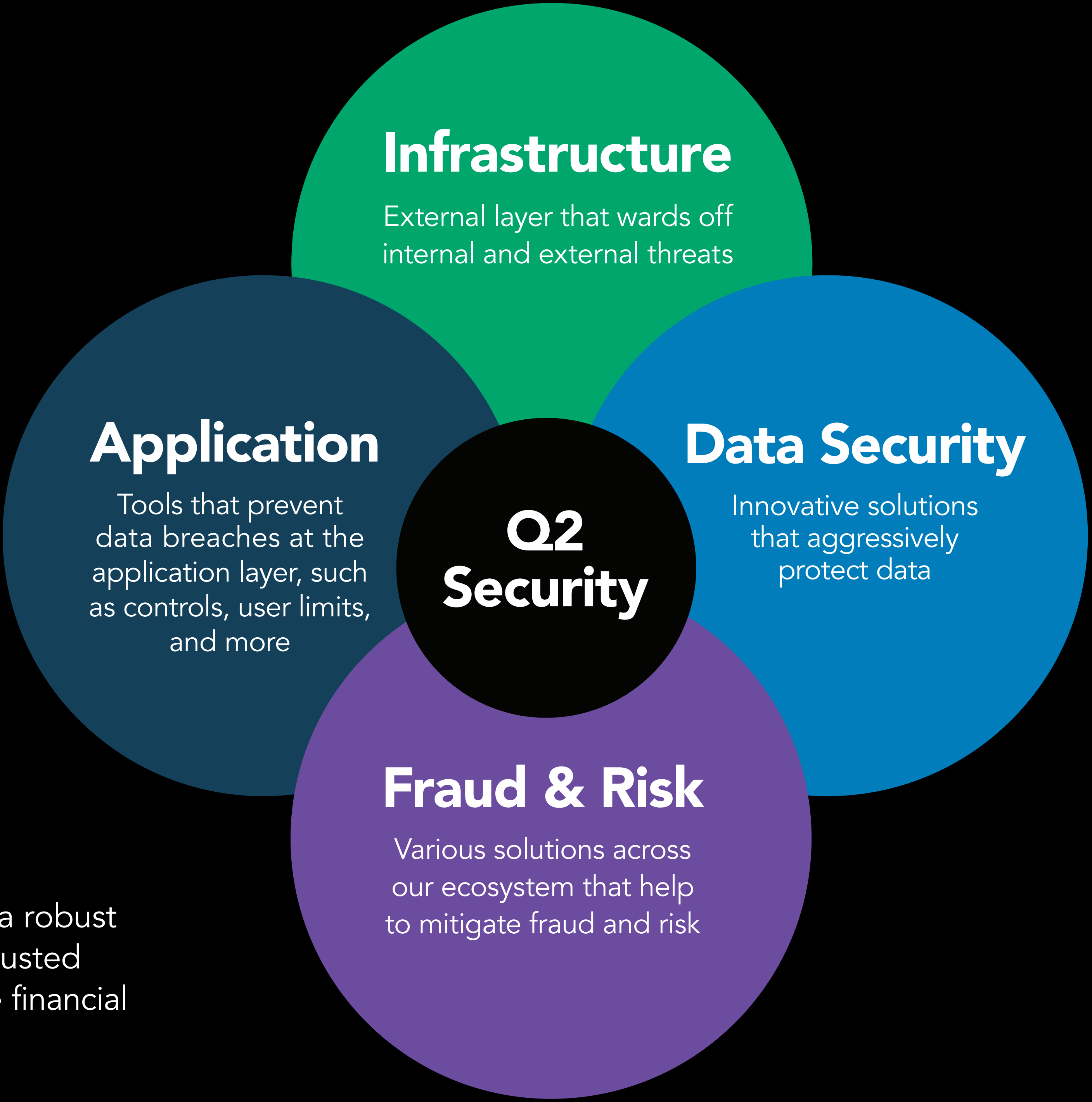
eBOOK

Q2’s Security Strategy

An End-to-End Approach to Protecting Our Clients

With threats emerging from **multiple attack points,** every financial institution is at risk of a **data breach** that could hurt its **reputation** and **bottom line.** Q2 has the expertise and infrastructure to help you manage that risk.



Infrastructure

External layer that wards off internal and external threats

Application

Tools that prevent data breaches at the application layer, such as controls, user limits, and more

Q2 Security

Data Security

Innovative solutions that aggressively protect data

Fraud & Risk

Various solutions across our ecosystem that help to mitigate fraud and risk

In addition to expertise and infrastructure, Q2 provides a robust suite of solutions to bring trusted security to every area of the financial institution.

Financial institutions and fintechs operate in a highly regulated industry that **demands the highest possible level of digital security.**

Q2 combines our nearly **two decades of experience** in financial services with equally deep expertise in **digital security** to give our clients the highest level of data and network security when using Q2's platform and services.

Based on Best Practices

At Q2, security is interwoven through all aspects of the engineering environment, with security experts at every level of the company. We provide 24/7 monitoring that protects the network, application, and data layers with multiple tools.

Our security approach focuses on **five best practices** that work together to deliver the highest level of security to financial institutions.

Perimeter

Securing the perimeter, preventing bad actors from reaching internal systems

Framework

Enabling a zero-trust framework to continuously authenticate and authorize access systems and our network

Cloud

Deploying a secure access service edge (SASE) and identifying sensitive data or malware

Channels

Hardening endpoints to secure entry points through which accepted traffic is allowed to enter an FI environment

Data

Protecting the data layer if a breach occurs, making critical data inaccessible, while also managing fraud and minimizing risk across various transactions

1,200 transactions

worth $2.3 million stopped by Q2 Sentinel January–July 2022 for one financial institution

$342M worth of check and ACH fraud stopped by Q2 Centrix in 2021

$2.1B in fraudulent transactions stopped by Q2 Sentinel April 2021–April 2022

*Based on internal data

Fraud Protection Across the Customer Journey

From account acquisition through servicing, Q2 employs a full range of tools to protect our clients and their account holders from fraudsters.

Q2 Sentinel monitors and analyzes transactional and user data in real time to identify and suspend suspicious transactions before they take place.

Q2 Centrix has a comprehensive set of solutions for managing risk, detecting fraud, streamlining compliance, and more.

Besides Q2 solutions that assist the financial institution, we offer third-party products that are fully integrated with our platform to also help play an active role in mitigating risk, such as credit score monitoring and account alerts.

Validated With Top Marks

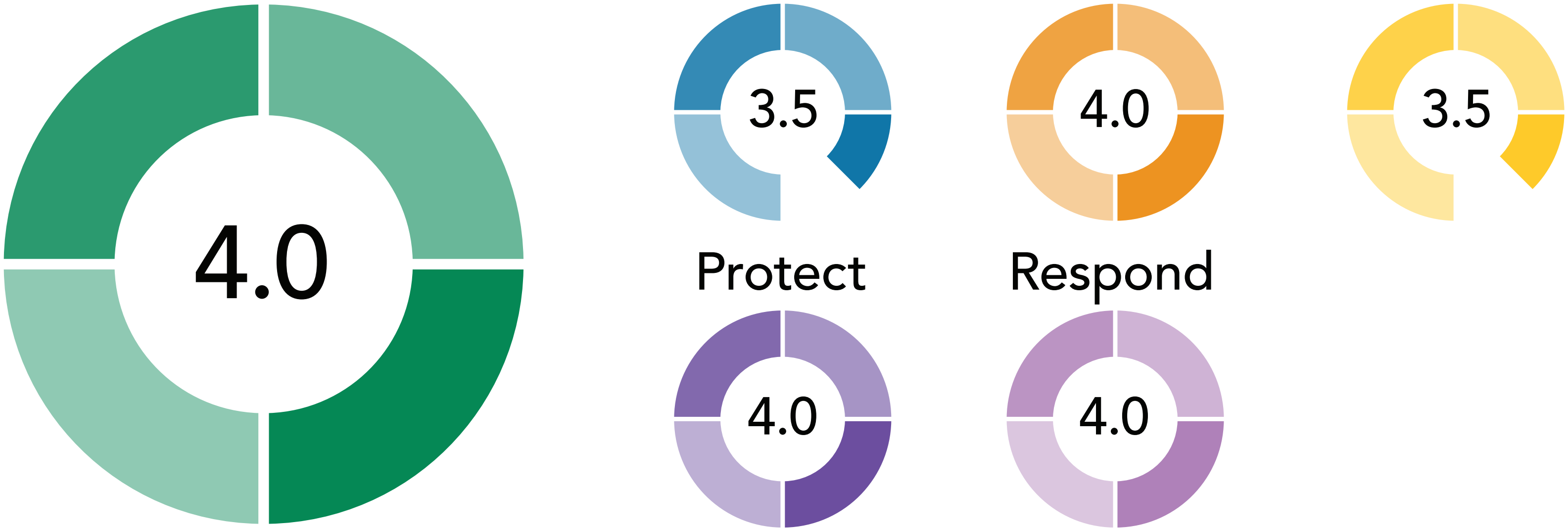
Q2's security strategy is mature, adaptive, resilient, and based on the National Institute of Standards and Technology's Cybersecurity Framework, which focuses on five main categories: identify, protect, detect, respond, and recover. These categories are further broken down into 23 subdomains to provide a comprehensive, thorough security program.

We review our maturity against industry standards to validate our strengths and identify a roadmap to keep improving. Then we undergo continual testing by a series of internal and external tools and third parties. Q2 maintains the highest rating (4.0—most mature) in the Marsh Cyber Self-Assessment, indicating an adaptive and resilient cybersecurity program.

Q2's Overall Maturity Rating

1.0 - Least Mature

4.0 - Most Mature



Layered Security for More Thorough Coverage

Q2 focuses on three layers of security incorporated with best practices to help provide end-to-end safety for our clients.

Infrastructure Security

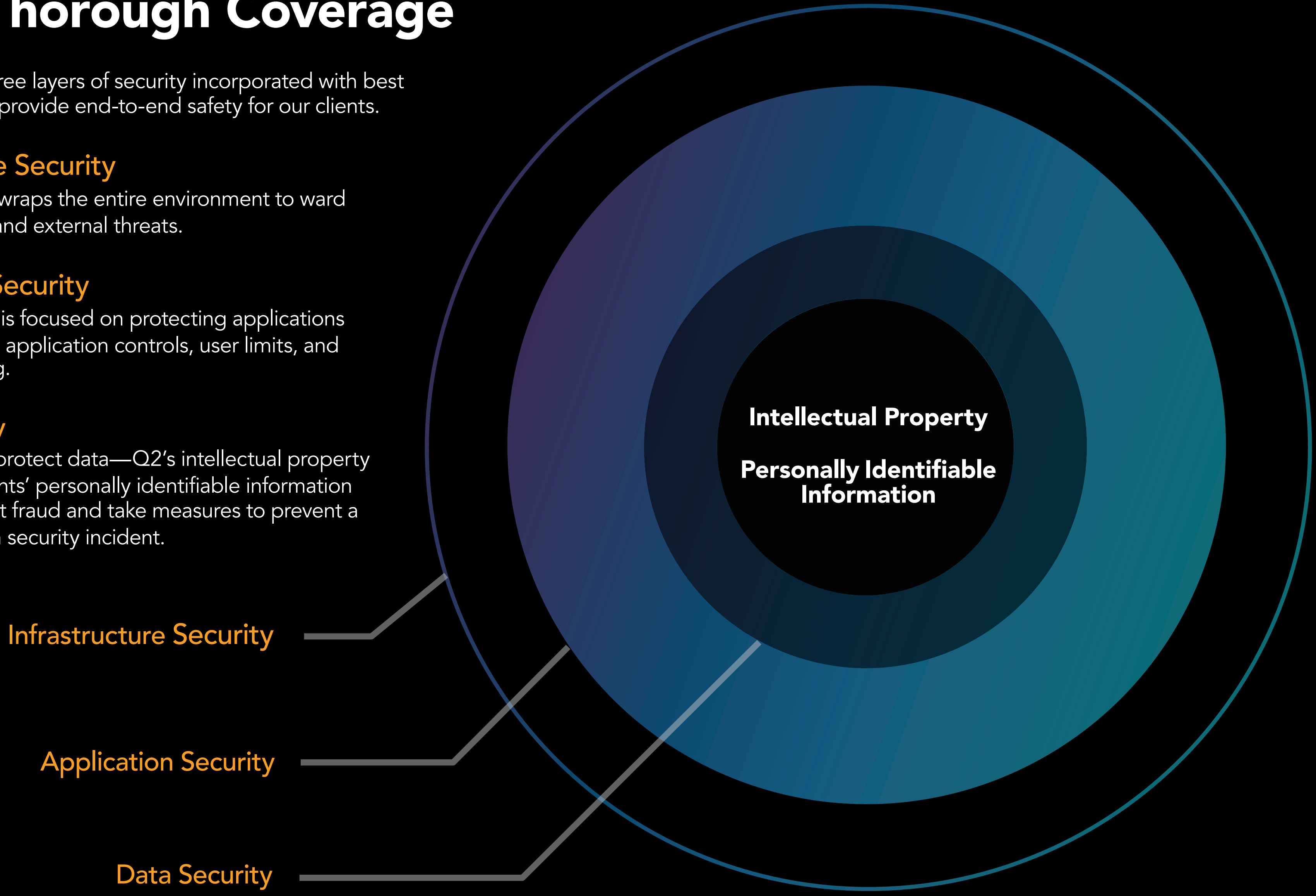
A thick layer that wraps the entire environment to ward off both internal and external threats.

Application Security

The second layer is focused on protecting applications with tools such as application controls, user limits, and database auditing.

Data Security

We aggressively protect data—Q2's intellectual property as well as our clients' personally identifiable information (PII) data—against fraud and take measures to prevent a service disruption security incident.



Expertise in All Hosting Environments

All environments in our distributed cloud are protected under a security posture. Not only are our 2,200 employees locked into using Q2 managed devices, we track every keystroke and every file and maintain several layers of separation of the endpoint from the clients' data.

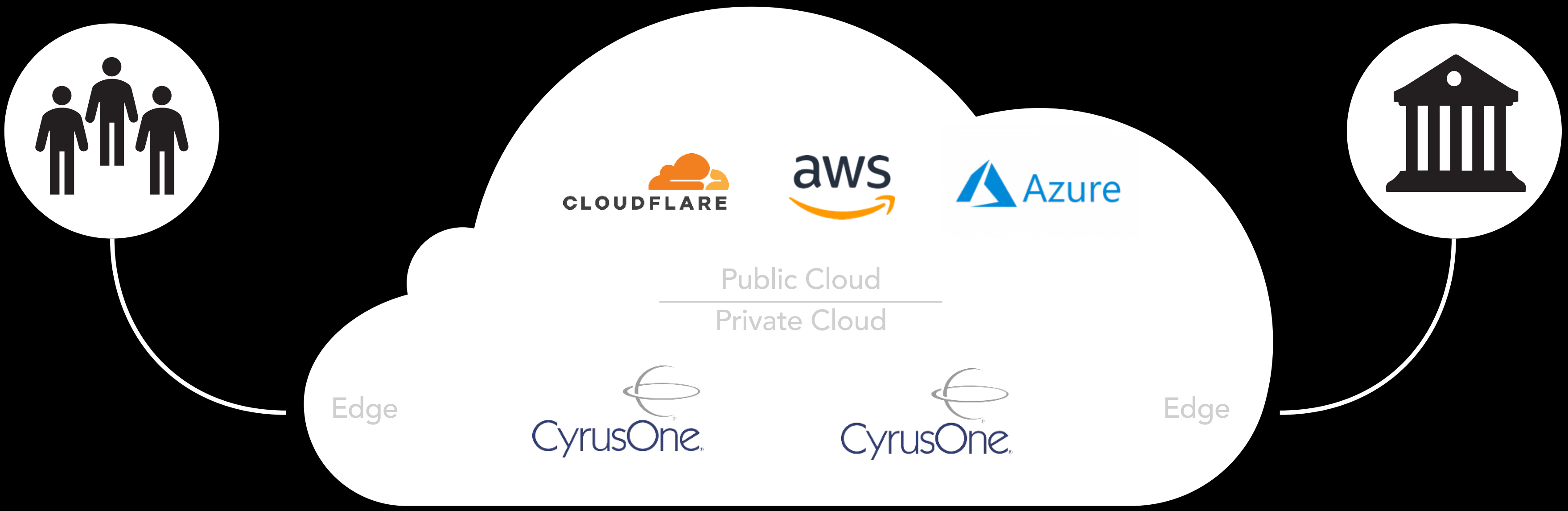
With Q2 TrustView, all sensitive data is removed from the environments and is rehydrated only when the application needs it. Sensitive data is never stored.

Our service providers actively protect millions of customers. Should one of them be attacked and quickly build new defenses, we all get those defenses added to our environments automatically.

We use an Endpoint Detection and Remediation (EDR) product which leverages data analytics to establish and maintain a baseline for system behaviors. If an anomaly is detected, the product alerts and removes the system from the network.

Distributed Cloud

Q2's unique, optimized hosting solution uses the best of both the public and private cloud to deliver the highest level of availability, security, and speed/control of innovation.



What’s Next

Innovating for the Future

Blockchain

As security technology advances, so do the tactics of bad actors who hack into companies to expose, steal, or hold their key data ransom. One way to stay ahead of fraudsters is with blockchain technology, which promises to reshape the industry by enabling trust, increasing transparency, and reducing friction. Blockchain is one of the most secure data protection technologies, using concepts such as cryptography key vaulting mechanisms.

In partnership with ALTR, Q2 is implementing blockchain to securely store key client data. We incorporate three parts—a smart driver, the brain, and blockchain.

- The smart driver sits between the application and the database where it can intercept the live data stream. It intercepts the data identified as valuable and sends it to the brain.
- The brain encodes the data and transforms and dissects it into random bits, which are sent to for storage across multiple blockchains.
- The data goes through multiple transformations, and the only information stored in the database is a token—not the location, but the brain itself as a reference.

Security Center

Now a part of Q2 Console, Security Center helps financial institutions continually review their security posture while providing next-level alerting, right down to the user.

Blockchain is key in warding off cyberattacks from multiple servers **(DDoS –distributed denial–of-service)** focused on centralized data points.

Security Expertise You Can Rely On

Q2 protects 20 million users, representing more than a thousand unique financial institutions, across more than 40 product offerings. When our security teams build a control in response to a threat for one client or service offering, all clients across the entire Q2 product portfolio benefit from it. Our approach and long-term success validate Q2's continued investments in the right areas to secure our clients' digital assets.

Industry Recognition

ALTR

CSO 50 AWARDS

2020 WINNER

Q2 TrustView

trustgrid

CSO 50 AWARDS

2021 WINNER

Q2 Trustgrid

About Q2

Q2 is a financial experience company dedicated to providing digital banking and lending solutions to banks, credit unions, alternative finance, and fintech companies in the U.S. and internationally. With comprehensive end-to-end solution sets, Q2 enables its partners to provide cohesive, secure, data-driven experiences to every account holder—from consumer to small business and corporate. Headquartered in Austin, Texas, Q2 has offices throughout the world and is publicly traded on the NYSE under the stock symbol QTWO.
To learn more, please visit **Q2.com**.