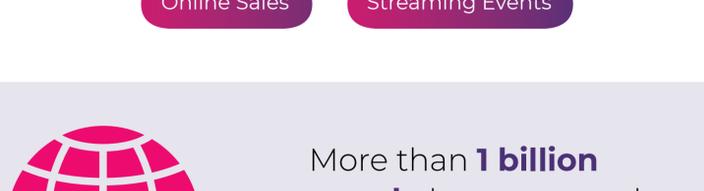


3 Keys To Business Resilience

How to prepare your business to overcome unexpected disruptions



Business success has always been synonymous with business resilience — the ability to withstand, navigate, and adapt to unexpected disruptions. In 2020, the sudden explosions of remote work, online sales, streaming events, and virtual services have put business resilience to the test more than ever.



More than **1 billion people** began to work from home in 2020.¹

U.S. online sales increased **43%** year over year in September 2020.²

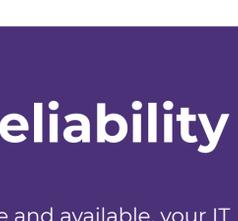


These disruptions are straining IT infrastructures and leaving companies vulnerable to damaging attacks.

DDoS attacks were up **217%** year over year in Q2 2020.³

The global average total cost of a data breach in 2020 is **\$3.86M**.⁴

In the face of increasing disruptions, organizations can foster resilience for their network infrastructure by focusing on **three key traits**:

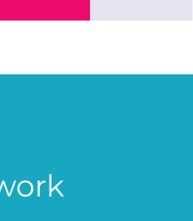


Key #1: Reliability

To ensure your applications remain reliable and available, your IT infrastructure will need to:

- Include built-in redundancy and failover mechanisms
- Steer traffic away from unavailable endpoints
- Minimize downtime during infrastructure migration

Global internet disruptions (including ISP, CSP, CDN, DNS) saw an unprecedented rise, increasing by **63%** in March compared with January.⁵



85% of IT professionals are adopting multi-CDN solutions.⁶

HOW TO: Implement Reliability in Your Network

- Achieve a redundant DNS architecture to avoid or fix a single point of failure in internet-facing applications.
- Implement an intelligent traffic steering solution that automatically steers traffic to the healthiest endpoint.

Key #2: Security

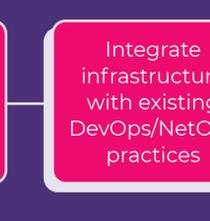
To provide highly secure experiences for their applications, businesses will need to implement the following in their security protocols:

- Protect against emerging and evolving DNS-layer cyber threats
- Prevent downtime and disruption caused by DDoS attacks
- Ensure that tools and providers meet industry-standard security controls



4.83 million DDoS attacks occurred in the first half of 2020.⁷

61% of IT professionals expect security projects to be accelerated in the next 12 months.⁸



HOW TO: Implement Stronger Security in Your Network

- Implement DNSSEC to protect against emerging DNS-layer cyber threats.
- Improve client visibility and reduce MTRR for DNS-based web security without requiring agents or additional in-network hardware.

Key #3: Agility

To navigate sudden market shifts and technology disruptions, your IT infrastructure needs to:

- Enable automation to deliver and scale rapidly
- Provide a modern and robust API architecture
- Integrate with existing DevOps/NetOps practices

By 2022, more than **75%** of global organizations will be running containerized applications in production.⁹



65% of IT professionals expect automation projects to be accelerated in the next 12 months.¹⁰

HOW TO: Implement Agility in Your Network

- Automate day-to-day management and routine network maintenance tasks through APIs.
- Move authoritative DNS and GTM functions off on-premises legacy hardware to a managed DNS service provider. This helps you manage your infrastructure at scale.

NS1 provides today's leading businesses with highly reliable, secure, and agile infrastructure in support of their resilience and continuity goals.

To find out how NS1 can help your enterprise achieve business resilience and business success, visit NS1's **"Building Business Resilience."**

¹ Invest Implications: Forecast Analysis: Remote Workers Forecast Worldwide, Gartner, August 26, 2020.
² "COVID-19 drives a surge in online holiday shopping," Digital Commerce 360, November 11, 2020.
³ "DDoS Attacks Triple in Q2 to Target #COVID19 Home Workers," InfoSecurity Group, August 11, 2020.
⁴ Cost of a Data Breach Report 2020, IBM Security, 2020.
⁵ "Precipitous rise in network disruptions since March 2020," Computer Weekly, August 4, 2020.
⁶ Meeting Application and Access Network Modernization Challenges, NS1.
⁷ Netscout Threat Intelligence Report Shows Dramatic Increase in Multivector DDoS Attacks in First-Half 2020, Market Watch, September 29, 2020.
⁸ Meeting Application and Access Network Modernization Challenges, NS1.
⁹ Best Practices for Running Containers and Kubernetes in Production, Gartner, February 25, 2019.
¹⁰ Meeting Application and Access Network Modernization Challenges, NS1.