

# Content Delivery Network (CDN)



# CDN Basics



# Why Internet alone might not be enough

## Internet does not optimize for performance

- Data Centers globally rely on the Internet to deliver content to edge devices
- Without a CDN, delivery of content suffers yielding poor customer experience
  - Routing complications, traffic and congestion, and security flaws
  - Explosion of devices, network types
  - Richer, more sophisticated content
  - Evolving protocols and formats
  - Attacks, increasing in scale, sophistication

Cannot rely on Internet alone to deliver Azure workloads

# Why should you care about CDN ?



57% Abandon  
a website that takes more than  
3 secs to load(1)



87% Stop Watching Video  
if video takes more than 7 secs to  
buffer (2)



1% Drop in revenue  
for 100ms slowdown for  
ecommerce site

## Google

Add'l page load of 500 ms = 20% impact on ad rev

## Microsoft Bing

Add'l page load of 2 sec = Reduction of 2.5% of  
clicks/requests

## Amazon

Add'l page load of 100ms = 1% impact on revenue

## Yahoo

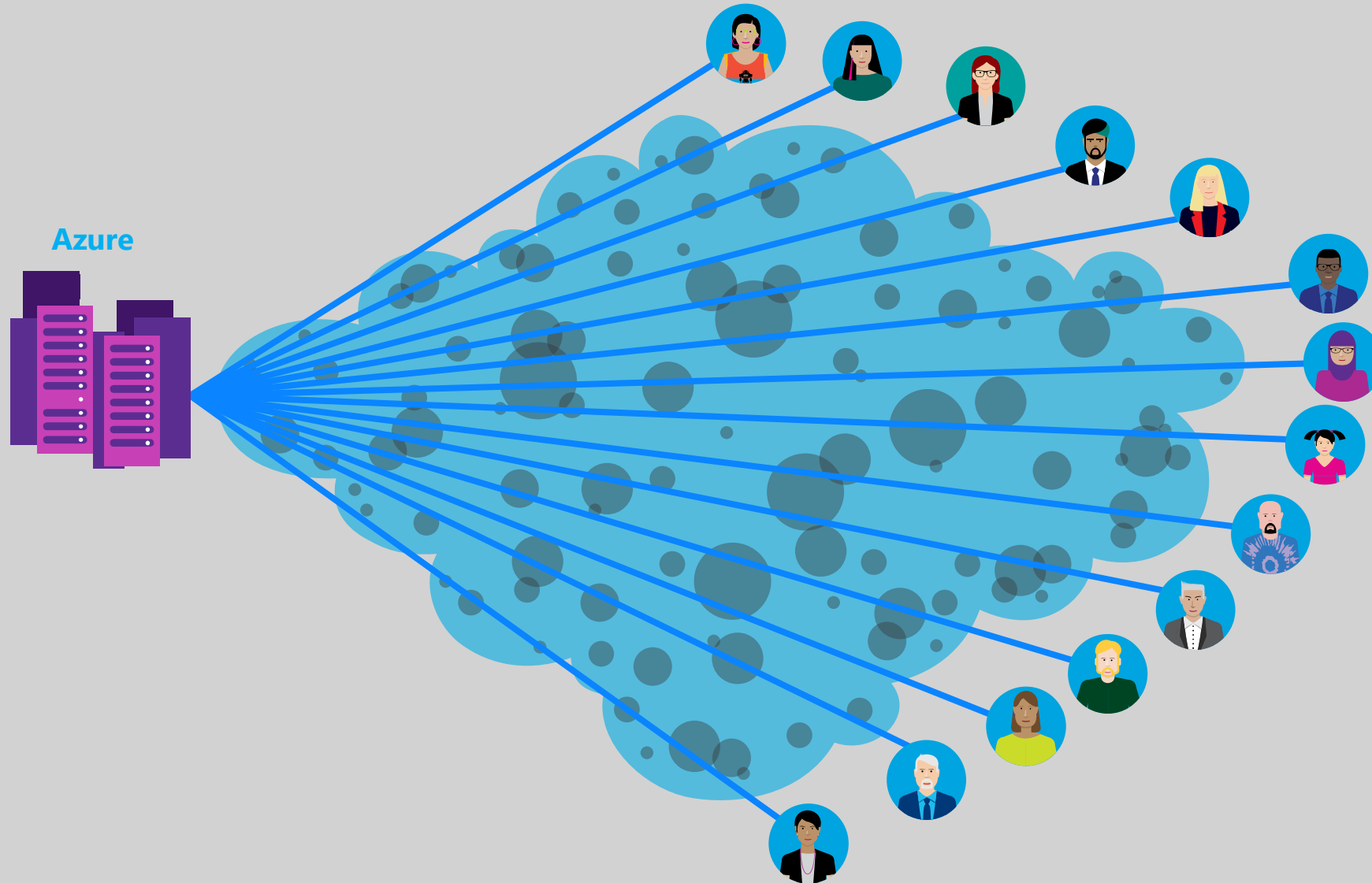
Improvement of 400 ms page load = 9% traffic  
increase

## Mozilla

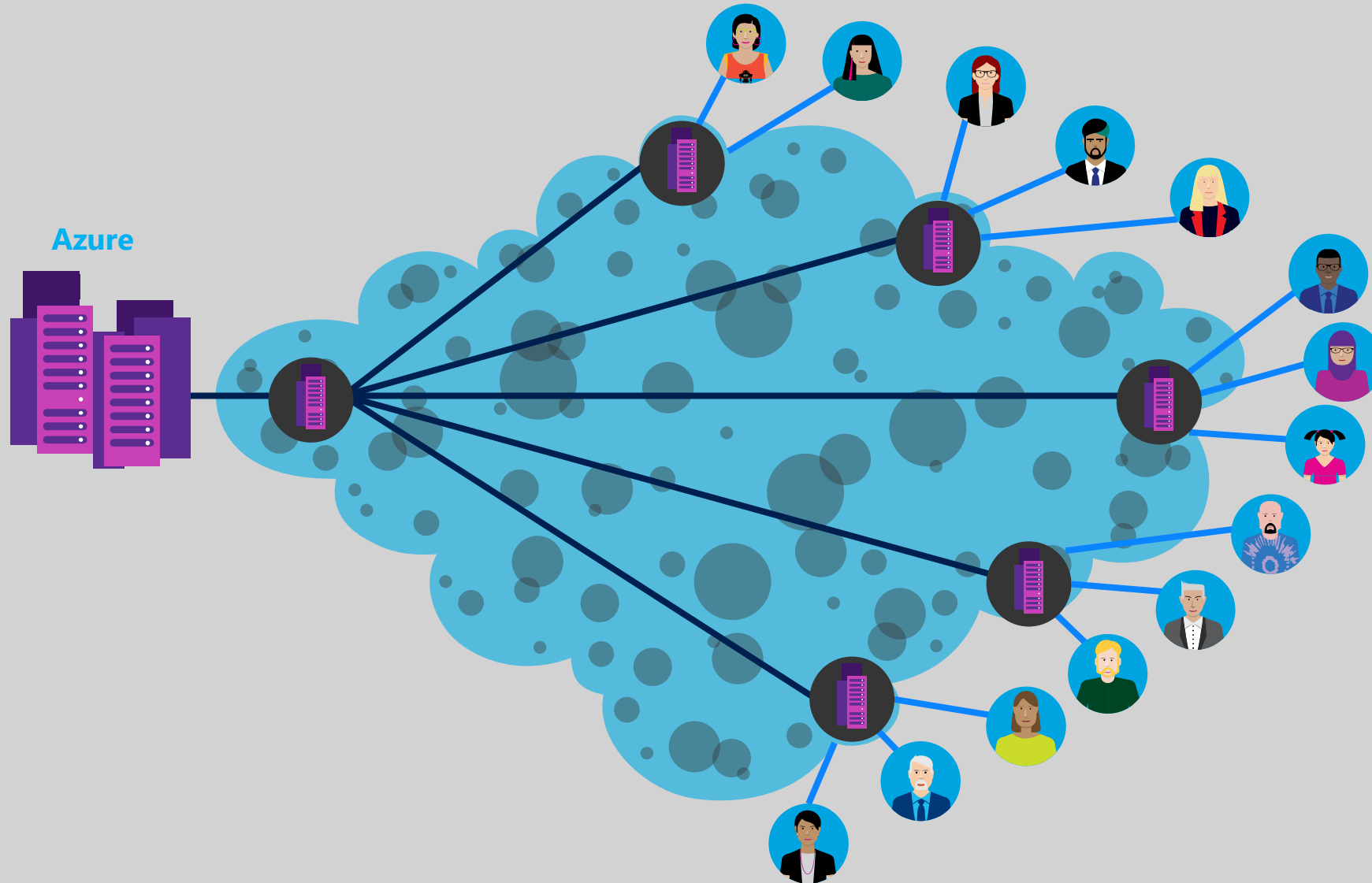
2.2 seconds less of download time for Firefox = 60  
millions additional downloads!



# Delivering content from the edge of the internet



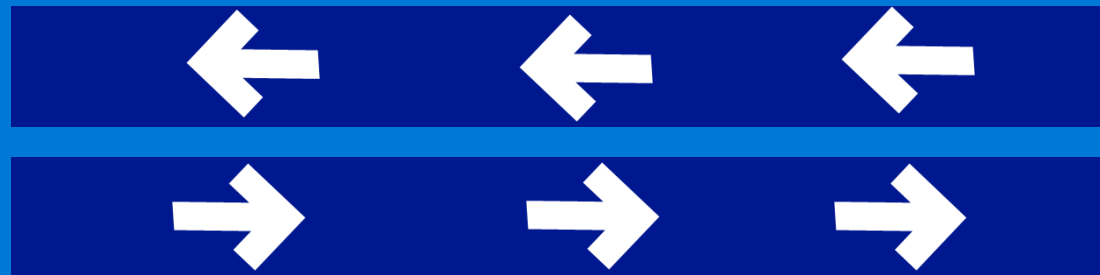
# Delivering content from the edge of the internet



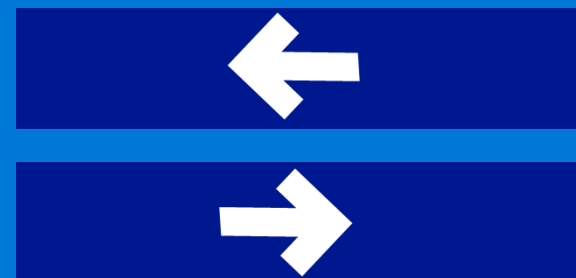
# Caching with a CDN



First request



Next requests



# CDN accelerates any web content

**Static**—fixed objects that aren't capable of action or change

Code



Downloads



**Dynamic**—actions that take place in real time, rather than in advance

SaaS



Web applications

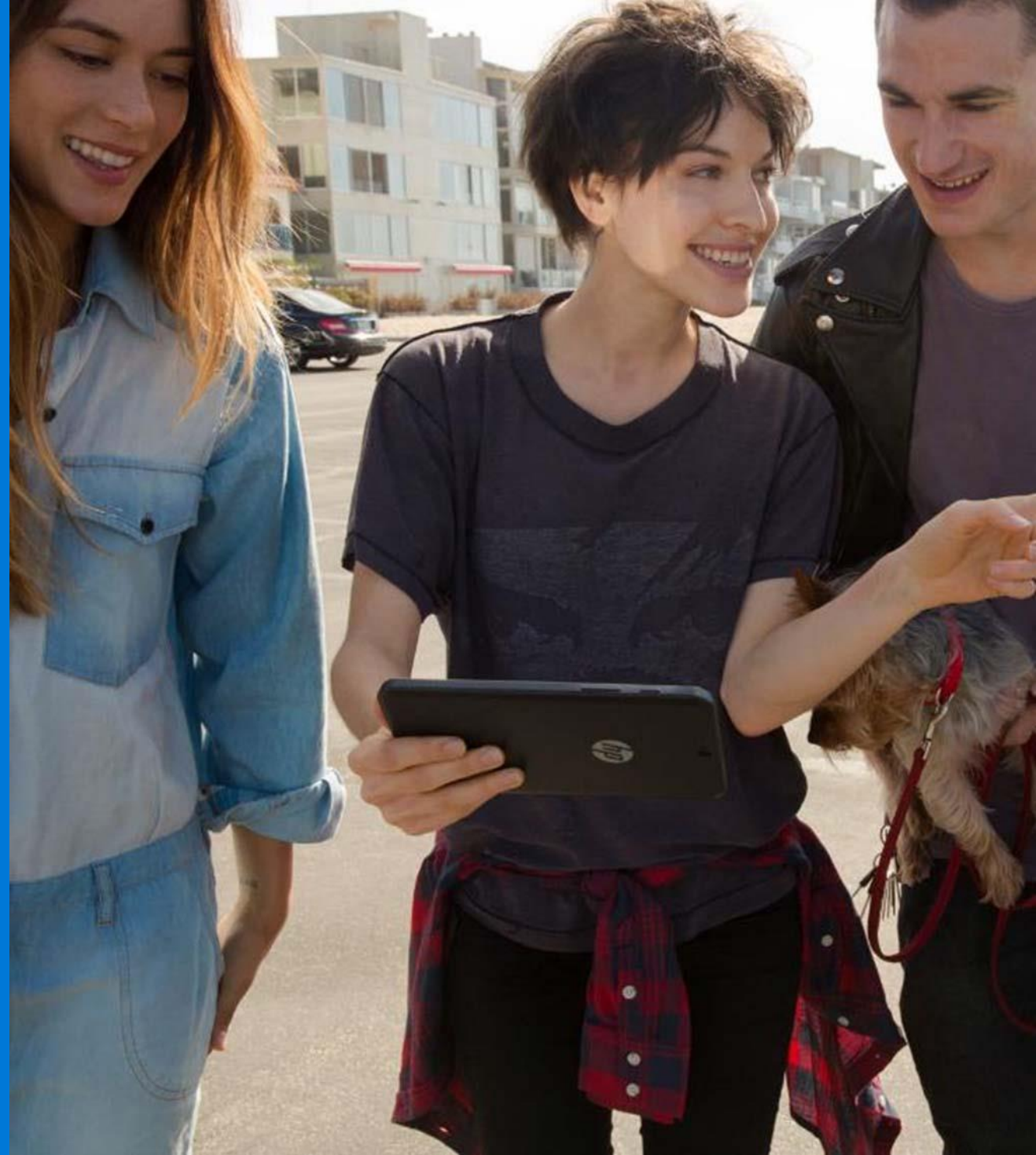


Media





# CDN Scenario Overview



# Usage Scenarios

CDN enhances delivery of



## ✓ Storage/Downloads

- Firmware updates (Smart TVs, consumer electronic appliances, etc.)
- Software updates
- Gaming updates

## ✓ Websites

- Customer facing websites and apps
- Enterprise apps hosted in the cloud

## ✓ Media Delivery

- Live + VOD

## ✓ Mobile Services

## ✓ Any Internet Facing service over HTTP or HTTPS

# Industry Alignment



- ✓ Retail, Travel, & Hospitality
- ✓ Finance
- ✓ Entertainment
- ✓ Healthcare
- ✓ Manufacturing
- ✓ Public Sector
- ✓ Any Internet Facing Industry/Service



# Resources and Next Steps



# Resources

- Using CDN for Azure  
<http://azure.microsoft.com/en-us/documentation/articles/cdn-how-to-use/>
- CDN service overview  
<http://azure.microsoft.com/en-us/services/cdn/>
- CDN node locations  
<http://msdn.microsoft.com/library/azure/gg680302.aspx>
- CDN list pricing details  
<http://azure.microsoft.com/en-us/pricing/details/cdn/>

# Thank you

