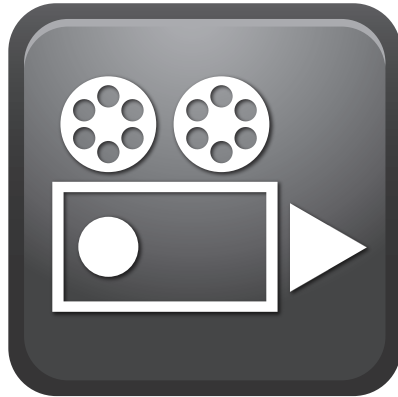


# Management Information Systems 16e

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## CHAPTER 5 IT INFRASTRUCTURE AND EMERGING TECHNOLOGIES

### CASE 3 Netflix: Building a Business in the Cloud



#### SUMMARY

In the past 20 years, Netflix has gone from a fledging DVD rental service to the single top source of bandwidth consumption on the Internet. Find out how Netflix has formed a partnership with Amazon Web Services that allows it to meet its unprecedented levels of demand.

#### (a) What is Cloud Computing?

URL <https://www.youtube.com/watch?v=jOhbTAU4OPU>; L=2:46

#### (b) Netflix on AWS - Customer Success Story

URL <https://www.youtube.com/watch?v=oH3PAGZJewA>; L=3:15

#### CASE

Netflix was founded in 1998 as a Web-based DVD mail service with a flat monthly fee and unlimited rentals without due dates or late fees. The company is credited with disrupting the movie rental marketplace and putting established competitors like Blockbuster Video out of business. Although Netflix lost money rapidly in their early years, the company continued to refine their business model and grow their subscriber base, focusing on site features like their personalized recommendation system. Netflix became profitable in 2003, at which point it had approximately 1 million subscribers.

However, Netflix started to become the juggernaut it is today in 2007, when it launched its content streaming service. Netflix felt the coming shift away from DVDs and towards on demand streaming video earlier than most, and they quickly refocused

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their business model to capitalize. In a matter of months, Netflix went from the fastest-growing customer of the United States Postal Service to the biggest source of Internet traffic in the evening. Netflix streams both TV and movies. In 2013, Netflix launched their first original show, House of Cards. The company now has approximately forty original shows and has renewed many other shows that were canceled by their original networks. These offerings help Netflix distinguish themselves from competing streaming services like Hulu and Amazon Prime and lure former cable subscribers who have “cut the cord” in favor of streaming services. In 2018 Netflix had 139 million subscribers and revenue of \$15.7 billion, up 35% from 2017.

However, the transition from DVD mailing service to content streaming giant wasn't without challenges. Streaming video services accounted for approximately 78 percent of all Internet traffic in 2018, and Netflix towered over its competitors with a whopping 36 percent of all Internet traffic (YouTube was next at almost 18 percent, less than half of Netflix). One day of Netflix traffic today is greater than the amount of daily traffic on the entire Internet in its early years.

After years of struggling to keep pace with user demand, Netflix now relies on Amazon Web Services (AWS) for its streaming capability. Known first and foremost as the giant of online retailing, Amazon launched its AWS service when it realized that the computing infrastructure it had built to support its site could be useful to other companies as well. AWS is the leading cloud services provider, with hundreds of thousands of customers in 190 countries across the world. AWS provides a full set of cloud computing and storage services for companies of all sizes, from small businesses to the literal biggest streaming site on earth in Netflix. AWS allows clients to pay for only the computing power that they use, allowing them to both save money and scale with demand.

In 2009, Netflix began its transition to AWS to support its streaming business, and in 2010 the company launched its iPhone app, its first service powered entirely by AWS. Netflix continues to grow rapidly today as they ramp up their expansion into other markets across the globe, and Amazon is ready to grow along with it. Netflix can continue to focus on content, personalization, customer service, user interface, and offerings across multiple devices and platforms, and leave the worrying about data storage and streaming demands to AWS.

### VIDEO CASE QUESTIONS

1. What event convinced Netflix to switch to a cloud-based service?
2. What is Chaos Monkey and why is it importance for Netflix and its use of AWS?
3. Why is it important for Netflix that AWS has multiple availability regions?

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4. Do you watch TV or movies on Netflix? Have you encountered varying quality of service at different times of day?

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