IoT: Cloud Services

Introduction to Cloud Computing for IoT

Objectives

Students completing this module will be able to explain the motivation behind cloud computing, how it is used today, the development of I/O systems and the history of cyberinfrastructure.

Cloud Computing Growth

Cloud Computing Industry is growing

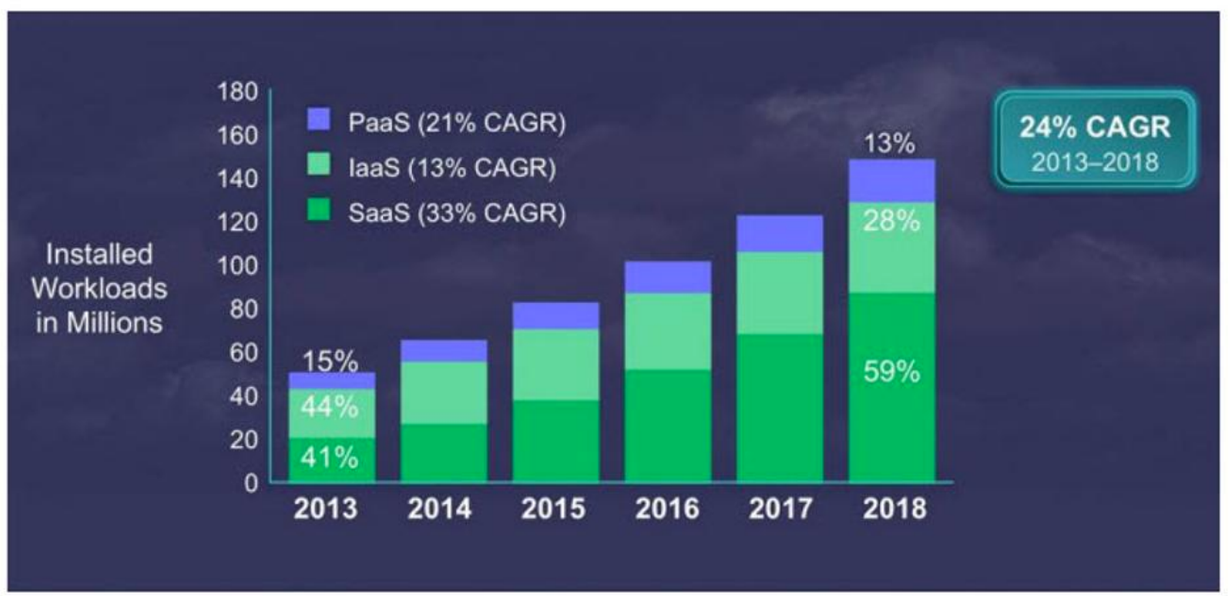
By 2018, 59% of the total cloud workloads will be Software-as-a-Service (SaaS) workloads, up from 41% in 2013.

Cisco is predicting that by 2018, 28% of the total cloud workloads will be Infrastructure-as-a-Service (IaaS) workloads down from 44% in 2013.

13% of the total cloud workloads will be Platform-as-a-Service (PaaS) workloads in 2018, down from 15% in 2013.

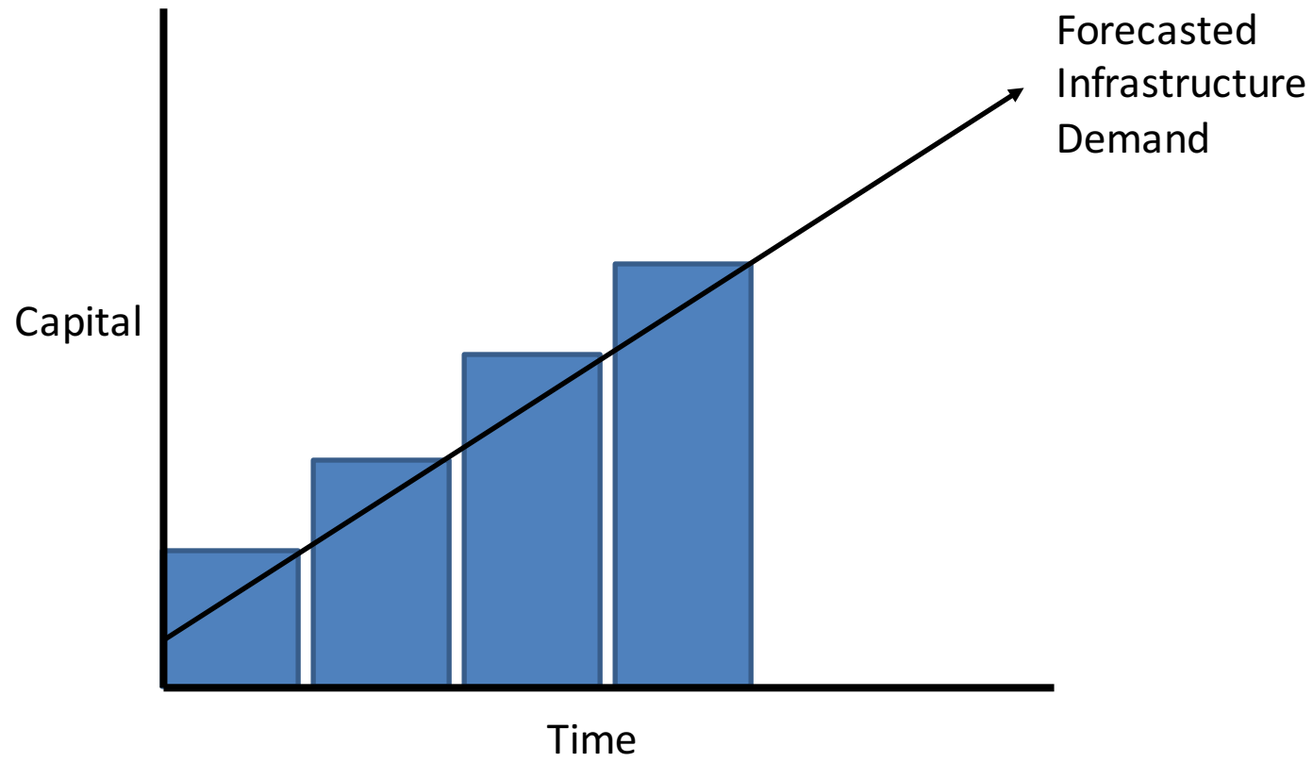
The following graphic provides a comparative analysis of IaaS, PaaS and SaaS forecasts from 2013 to 2018. Source: Cisco Global Cloud Index: Forecast and Methodology, 2013–2018.

Figure 9. SaaS Most Highly Deployed Global Cloud Service by 2018

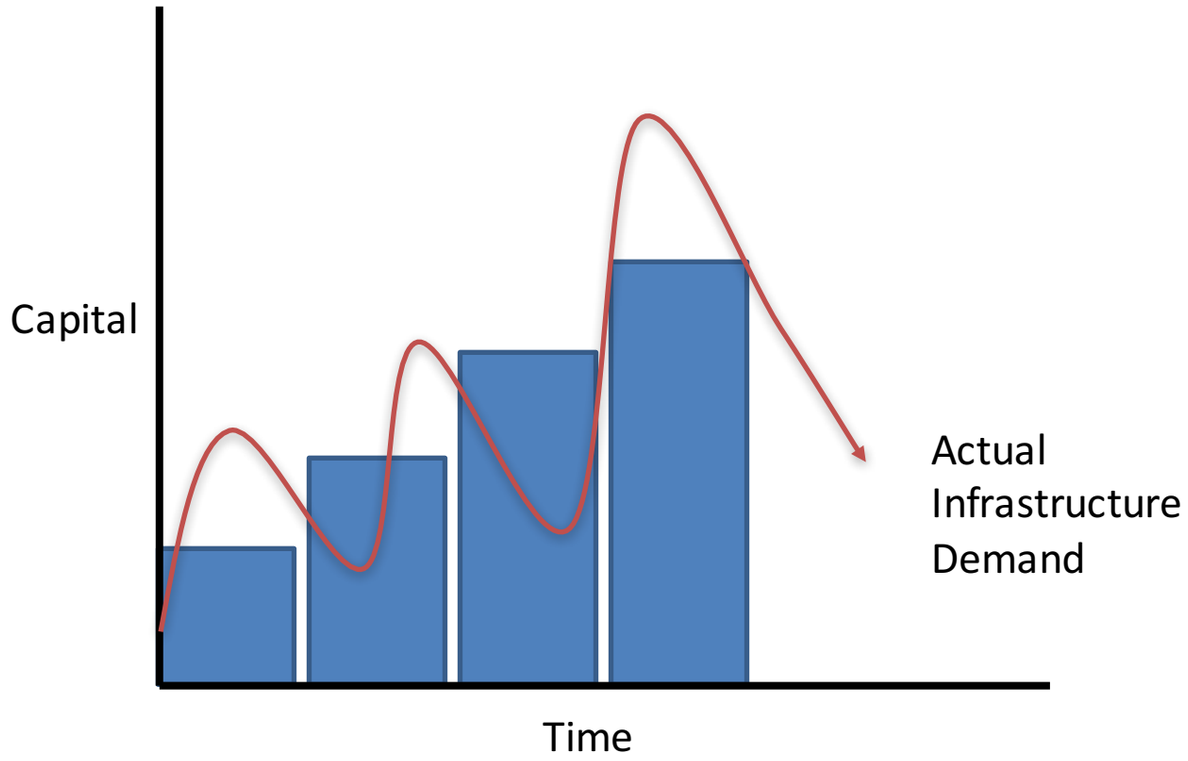


Source: Cisco Global Cloud Index, 2013–2018

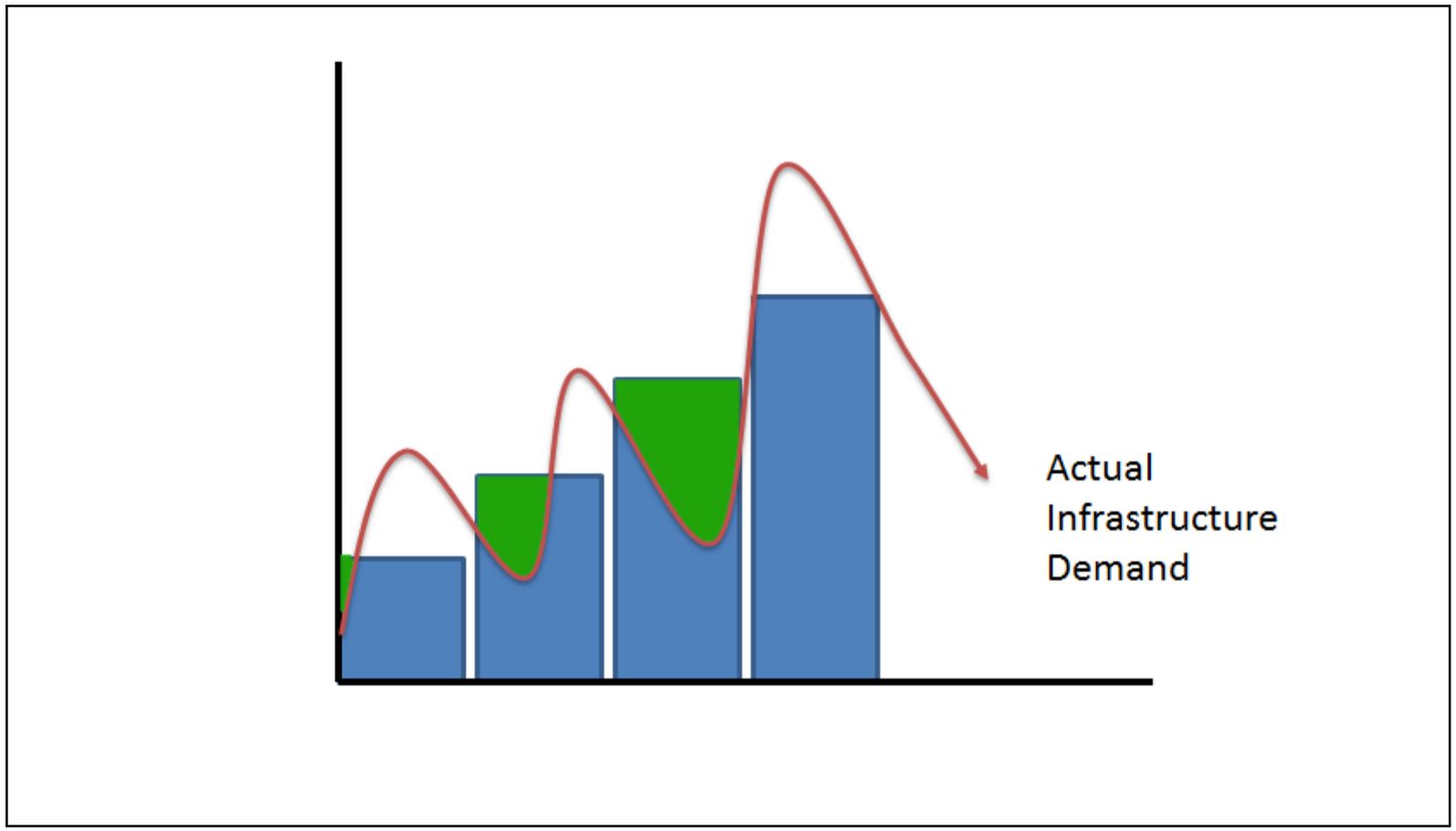
Traditional Infrastructure Model



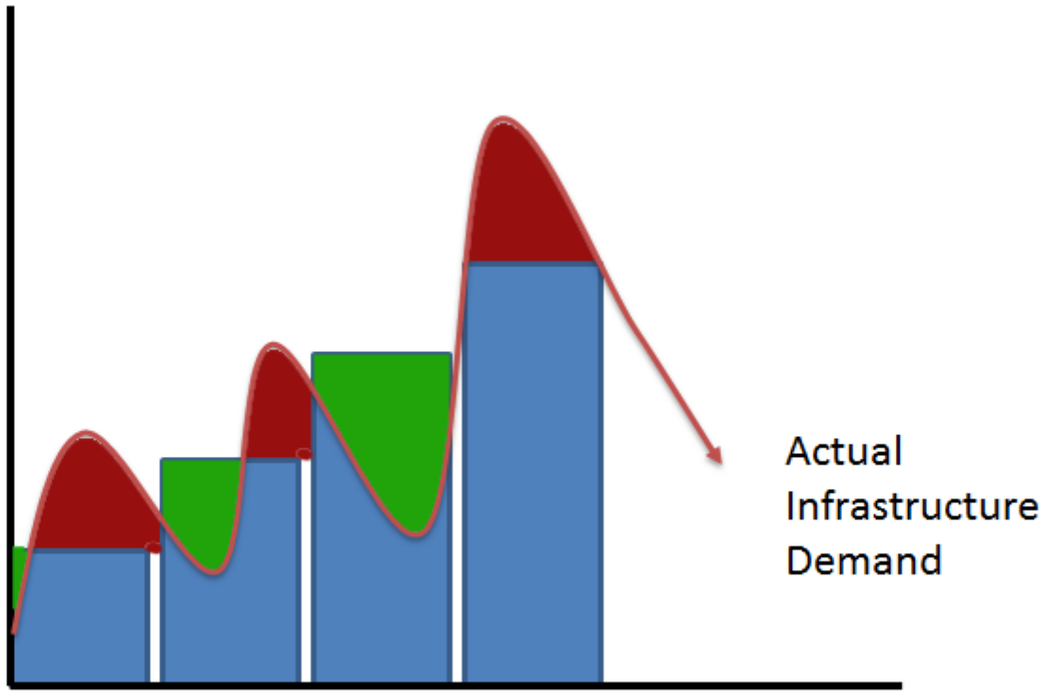
Actual Infrastructure Demand



Unacceptable Surplus



Unacceptable Deficit



Utility Infrastructure Model