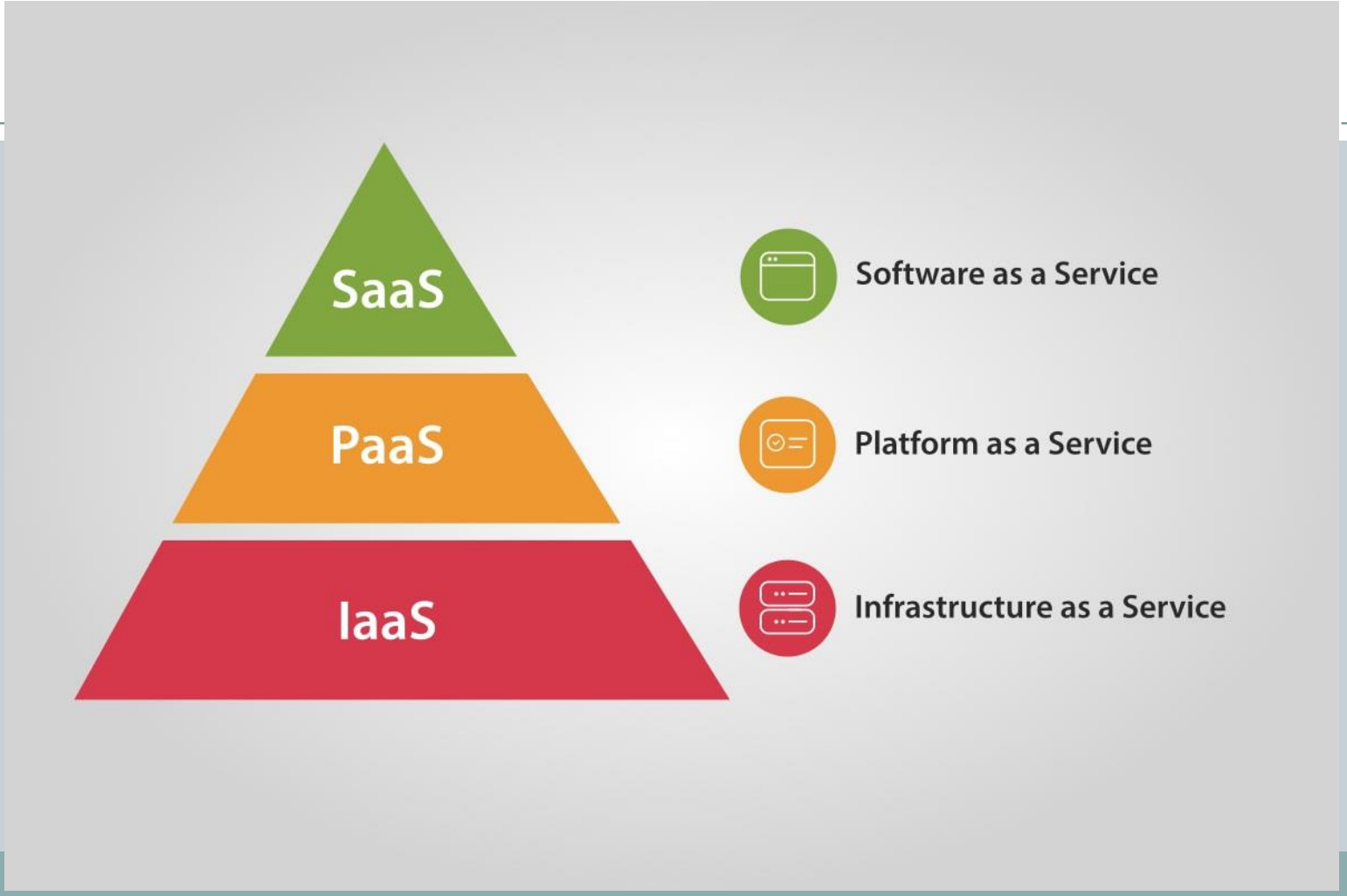
Software as a Service (SaaS)

MODULE CODE:CIS435
MODULE NAME: CLOUD COMPUTING
MODULE TEACHER: DR. MD. NADIR BIN ALI

Layered architecture of Cloud Computing



What is SaaS?

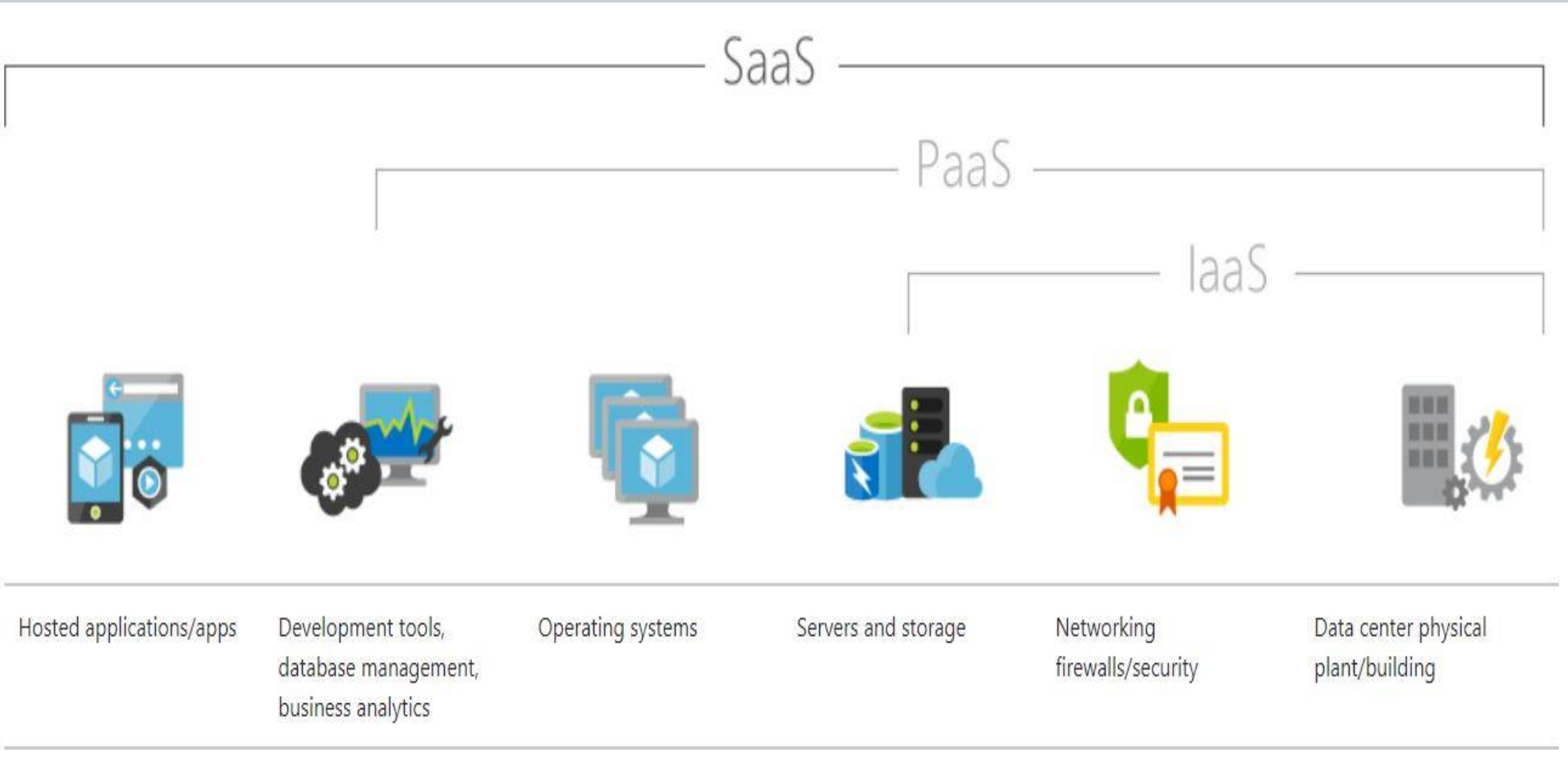
Software as a Service, also known as cloud application services, represents the *most commonly utilized option for businesses* in the cloud market. SaaS utilizes the Internet to deliver *applications*, which are managed by a *third-party vendor*, to it's users.

A majority of SaaS applications are run directly through the web browser, and do not require any downloads or installations on the client side.

Examples of SaaS:

Google Apps, Drop box, Sales force, Cisco WebEx, Concur, Go To Meeting

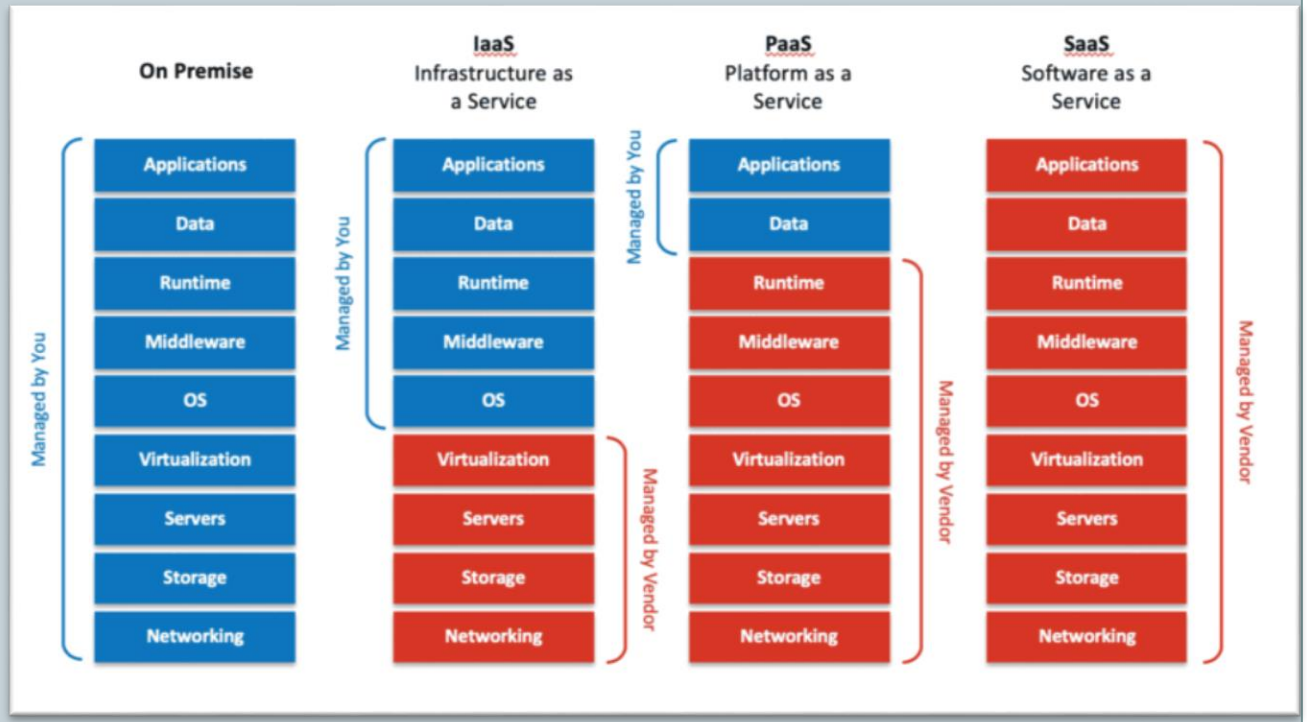
Management of SaaS



Management of PaaS

Common examples of SaaS, PaaS, & IaaS

Platform Type	Common Examples
SaaS	Google Workspace, Dropbox, Salesforce, Cisco WebEx, Concur, GoToMeeting
PaaS	AWS Elastic Beanstalk, Windows Azure, Heroku, Force.com, Google App Engine, Apache Stratos, OpenShift
IaaS	DigitalOcean, Linode, Rackspace, Amazon Web Services (AWS), Cisco Metapod, Microsoft Azure, Google Compute Engine (GCE)



Source: Internet

Characteristics of SaaS

- Managed from a central location
- Hosted on a remote server
- Accessible over the Internet
- Users not responsible for hardware or software updates

When to use SaaS

There are many different situations in which SaaS may be the most beneficial option, including:

- If it is a startup or small company that needs to launch ecommerce quickly and don't have time for server issues or software
- For short-term projects that require collaboration

When to use SaaS

- If you use applications that aren't in-demand very often, such as tax software
- For applications that need both web and mobile access

Common SaaS business scenarios

- These examples are free services *for personal use*. If anyone used a web-based email service such as Gmail, Outlook, Hotmail, or Yahoo! Mail, then he/she already used a form of SaaS. With these services, one will require to log into your account over the Internet, often from a web browser. *The email software is located on the service provider's network*, and one's messages are stored there as well.

Common SaaS business scenarios

- *For organizational use*, it can rent productivity apps, such as email, collaboration, and calendaring; and sophisticated business applications such as customer relationship management (CRM), enterprise resource planning (ERP), and document management. The organization pay for the use of these apps by subscription or according to the level of use.

Advantages of SaaS

- **Gain access to sophisticated applications.**
- **Pay only for what you use.**
- **Use free client software.**
- **Mobilize your workforce easily.**
- **Access app data from anywhere.**

Limitations of SaaS

- **Interoperability:** Integration with existing apps and services can be a major concern if the SaaS app is not designed to follow *open standards for integration*.

- **Customization:** SaaS apps offer minimal customization capabilities. Since a one-size-fits-all solution does not exist, users may be limited to specific functionality, performance and integrations as offered by the vendor.

Limitations of SaaS

- **Lack of Control:** SaaS solutions effectively involves handing over controls to the third-party service provider. These controls are not limited to the software – in terms of the version, updates or appearance – but also the data and governance.
- **Feature Limitations:** Since SaaS apps often come in a standardized form, the choice of features may be a compromising tradeoff against security, cost, performance or other organizational policies.
- **Performance and Downtime:** Since the vendor controls and manages the SaaS service, customers depend on vendors to maintain security and performance of the service.

Thank You