Cloud Computing

an introduction

me@**adityaputra**.com
https://github.com/adityaputra/praktisimengajar-cloudcomputing

Aditya Putra

adityaputra

DevOps & cloud engineer - AWS certified. Based in TW & ID.

Edit profile

4 followers · **9** following

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Taipei
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https://adityaputra.com

Achievements

x3

Beta Send feedback

Highlights

Developer Program Member

Organizations

Overview | Repositories 41 | Projects | Packages | Stars 101

Pinned

Customize your pins

server-utilities Public
miscelaneous useful scrips for server-related works
Shell ☆ 1 1

telegram-locate-me Public
Forked from yukuku/telebot
Telegram Finder Bot. Useful to find nearby places using Telegram Bot Platform.
Python ☆ 2

advanced-chat Public
Forked from ditaoktaria/advanced-chat
JavaScript ☆ 1

business-directory Public
Business directory site, built with codeigniter
JavaScript ☆ 1 5

html-dead-pixel-check Public
A simple HTML, CSS, and Javascript tool to check any dead pixels on your screen.
HTML ☆ 1

59 contributions in the last year

Contribution settings

2023 2022 2021 2020 2019 2018 2017 2016 2015 2014

@AstralWebTW

Activity overview

Contributed to
adityaputra/pemrograman-web,
AstralWebTW/cht-edm,
AstralWebTW/feetfirst-linode
and 10 other repositories

Praktisi Mengajar

instagram.com/praktisimengajar

Our plan

4 classes with lecture, demo, and workshop – both online and in-person, 3h each

- Introduction of IT industry, cloud computing, and DevOps
- Containerization technologies
- Public cloud (part 1)
- Public cloud (part 2)

Our today's discussion

- Introduction about IT industry (and whether it's really related to your study)
- Introduction about cloud computing
- Introduction about DevOps and CI/CD
- Future trends

Why
do you study
computer science?

HELPNETSECURITY

10 IT INDUSTRY TRENDS TO WATCH IN 2022

1. The workplace can no longer be easily defined
2. Changes in business travel drive innovation
3. The impact of regulation goes beyond new laws
4. Technology budgets experience stealth growth
5. Proactive cybersecurity takes a big step forward
6. Channel cybersecurity has a ways to go
7. Consulting: Today's channel opportunity
8. Chip supply chain woes provide wake-up call
9. Software development gets more granular
10. Foundational data management drives an analytics revolution

SOURCE: CompTIA

Academia

Industry

Opportunities in IT

- Global opportunities
- Evolving rapidly - requiring continuous learning
- Not limited to traditional IT engineering jobs
- New fields of work keeps coming
  - Cloud
  - AI
  - Automation
  - Data science / analytics
  - Academics work

Getting started and advancing in IT career

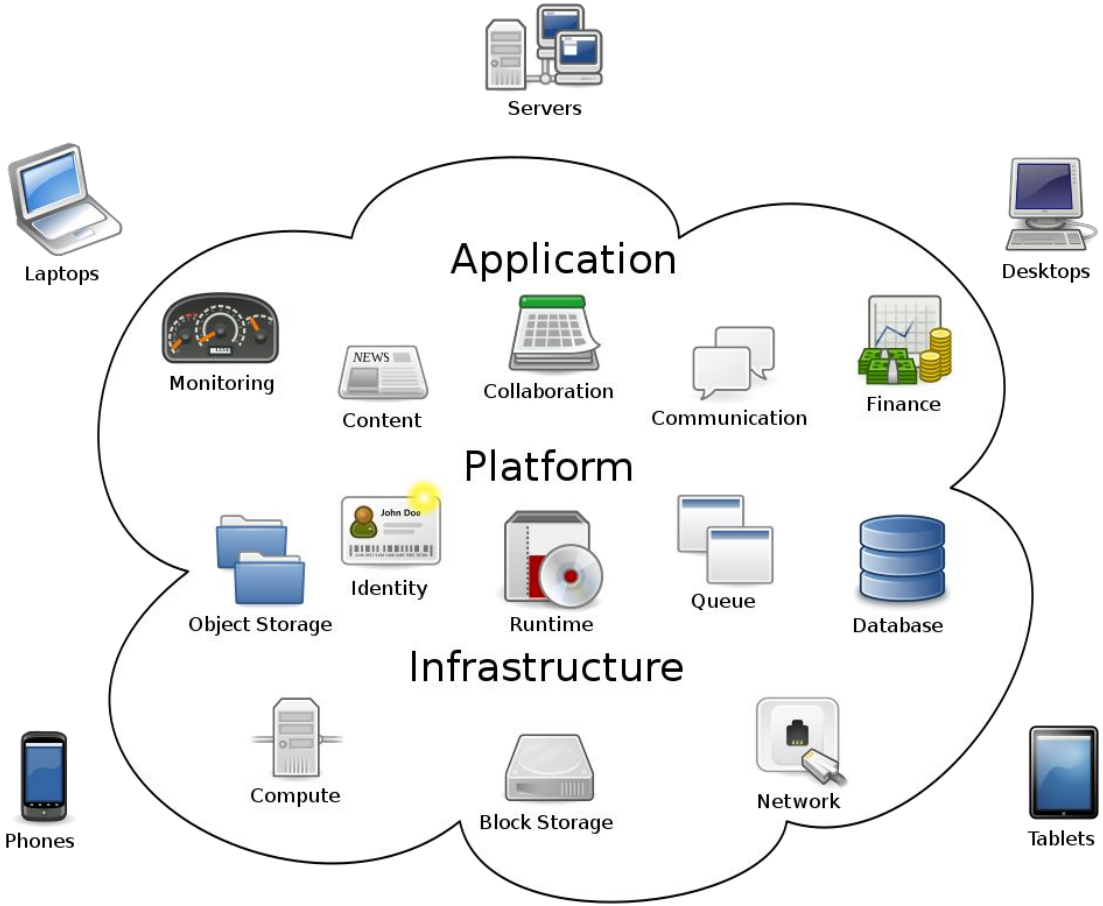
- Self-paced learning, and keep learning
  - Invest time in learning - even when you're working
- Allocate time for life, work, and study
- Learn from experts
- Join communities
- Start building your CV right NOW
- Start working / freelancing, when possible
- Don't be afraid of black and white consoles. Terminal is your friend.
- English is a must
- Enjoy the process, don't worry about the pay!

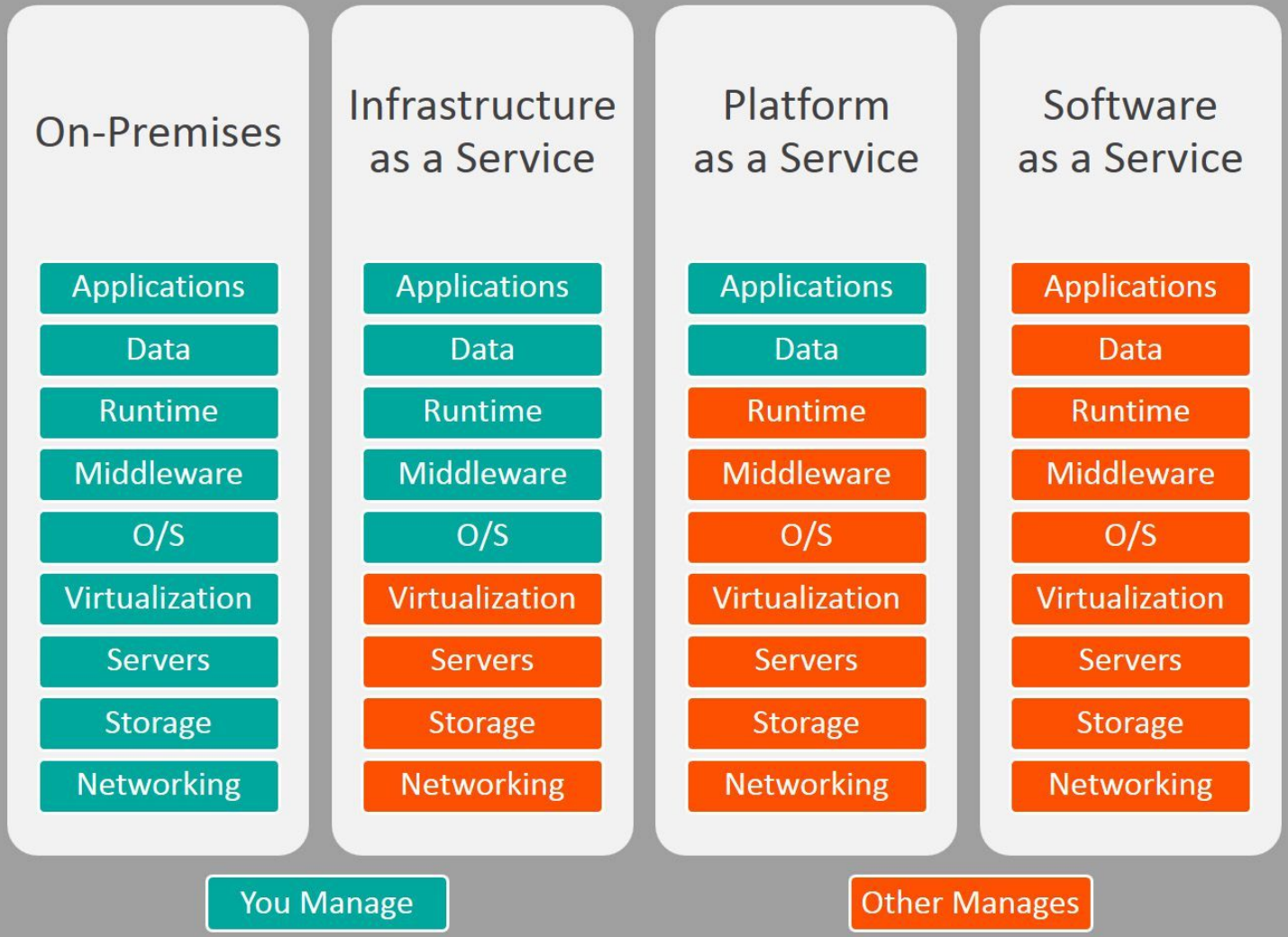
What do you think about cloud computing?

Cloud computing is . . .

the on-demand availability of computer system resources, especially data storage (cloud storage) and computing power, without direct active management by the user.

What is Cloud Computing?


Servers
Laptops
Desktops
Application
Monitoring
Content
Collaboration
Communication
Finance
Platform
Identity
Object Storage
Runtime
Queue
Database
Infrastructure
Compute
Block Storage
Network
Phones
Tablets


On-Premises
Applications
Data
Runtime
Middleware
O/S
Virtualization
Servers
Storage
Networking
Infrastructure as a Service
Applications
Data
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Middleware
O/S
Virtualization
Servers
Storage
Networking
Platform as a Service
Applications
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Middleware
O/S
Virtualization
Servers
Storage
Networking
Software as a Service
Applications
Data
Runtime
Middleware
O/S
Virtualization
Servers
Storage
Networking
You Manage
Other Manages

IaaS vs. PaaS vs. SaaS Examples

IaaS	PaaS	SaaS
Amazon Web Services	Google App Engine	HubSpot
Google Cloud	Red Hat OpenShift	JIRA
Microsoft Azure	Heroku	Dropbox
IBM Cloud	Apprenda	DocuSign

Characteristics of cloud

Agility

Elasticity

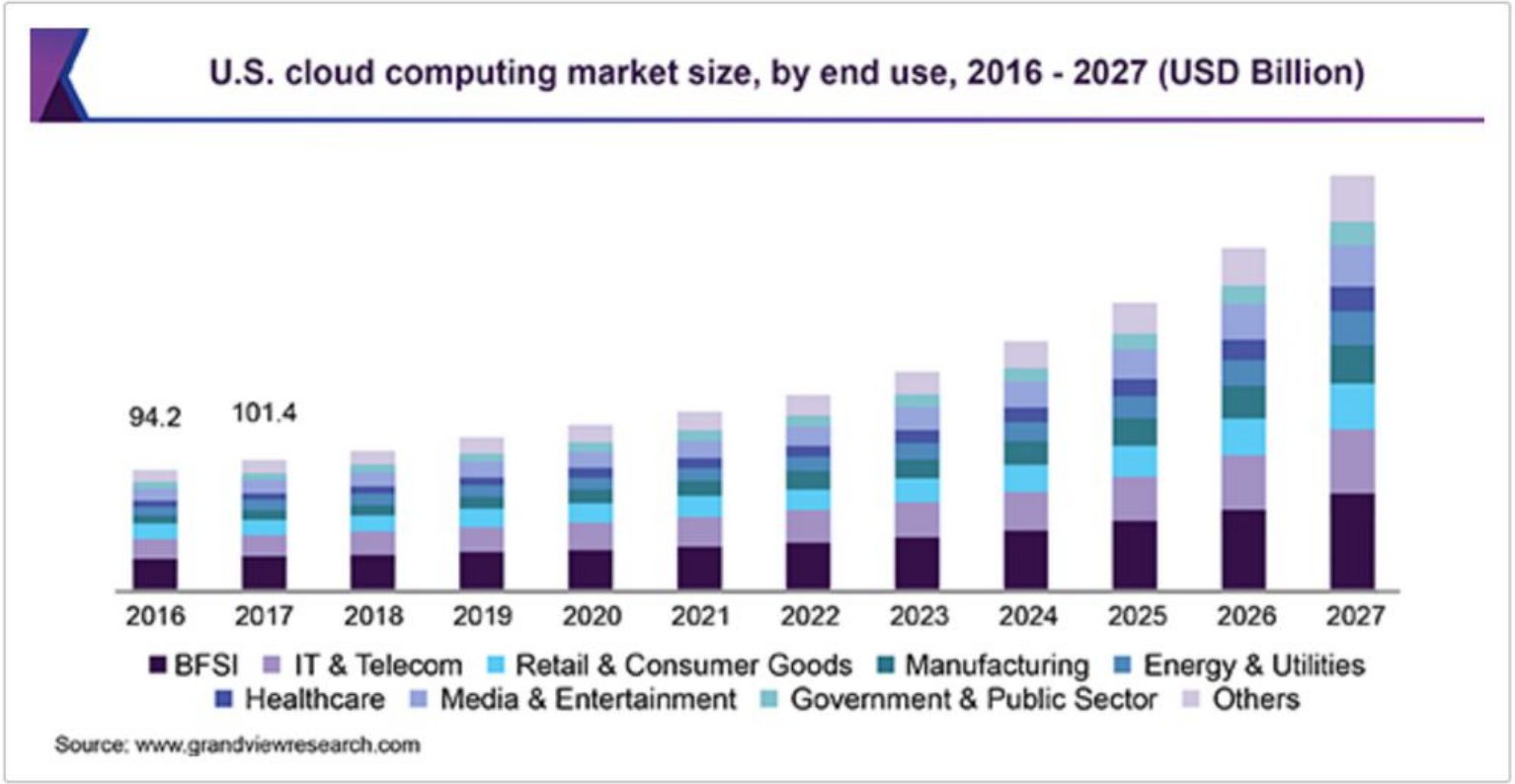
Cost savings

Deploy globally in minutes

Use cases of cloud

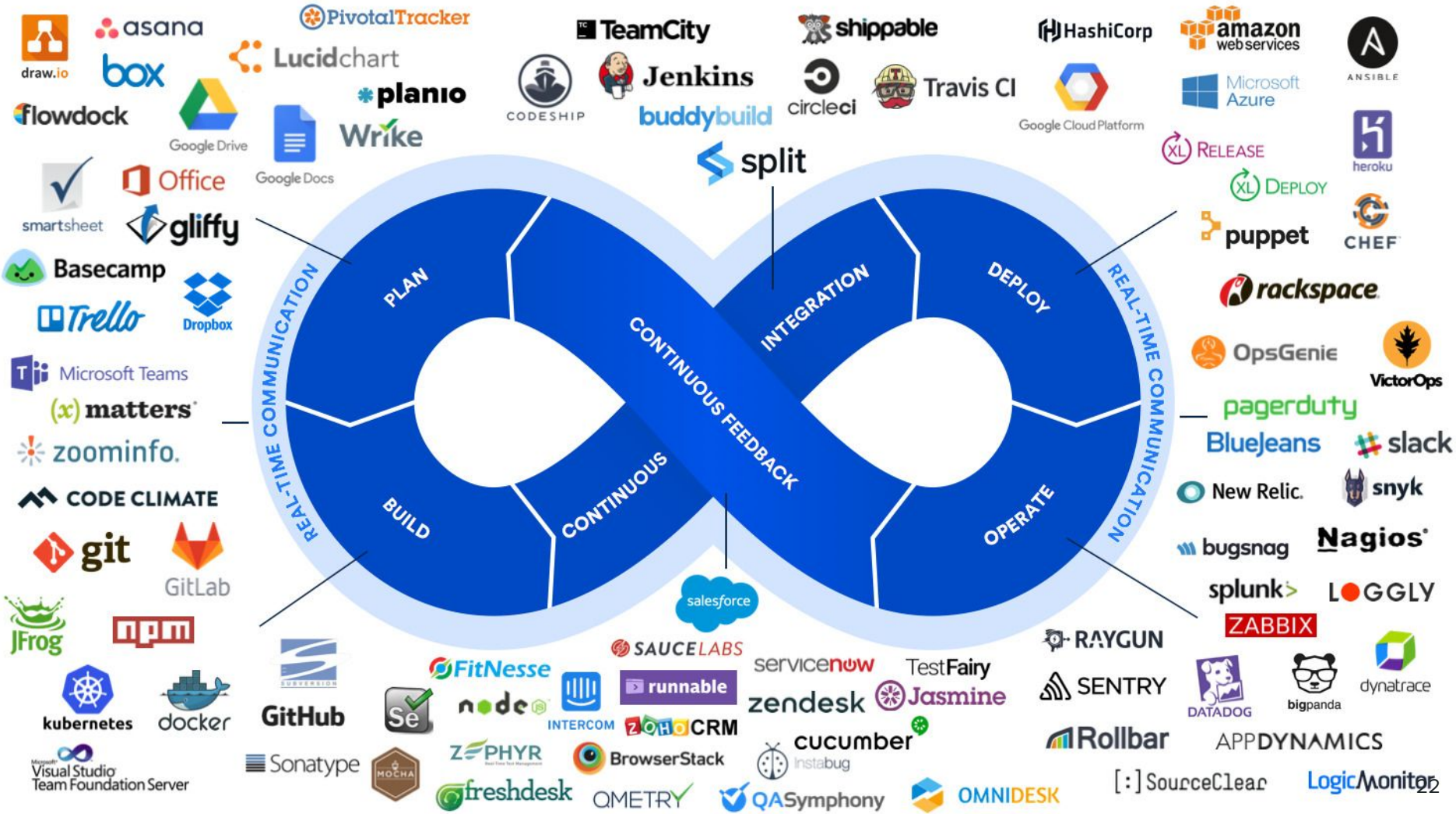
- IaaS and PaaS
- SaaS
- Hybrid cloud and multi-cloud
- Test and development
- Big data analytics
- Cloud storage
- Disaster recovery and data backup
- Highly available application deployment

Cloud potentials



Average cloud computing career salaries

DevOps
culture in companies


draw.io
asana
PivotalTracker
box
Lucidchart
planio
flowdock
Google Drive
Google Docs
Wrike
CODESHIP
TeamCity
Jenkins
buddybuild
shippable
circleci
Travis CI
HashiCorp
amazon web services
Microsoft Azure
Google Cloud Platform
ANSIBLE
heroku
RELEASE
DEPLOY
CHEF
puppet
rackspace
smartsheet
Office
gliffy
Basecamp
Trello
Dropbox
split
PLAN
CONTINUOUS
INTEGRATION
DEPLOY
BUILD
CONTINUOUS
OPERATE
CONTINUOUS FEEDBACK
REAL-TIME COMMUNICATION
REAL-TIME COMMUNICATION
Microsoft Teams
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zoominfo.
CODE CLIMATE
git
GitLab
JFrog
npm
kubernetes
docker
GitHub
Sonatype
Visual Studio Team Foundation Server
OpsGenie
VictorOps
pagerduty
BlueJeans
slack
New Relic.
snyk
bugsnag
Nagios
splunk>
LOGGLY
ZABBIX
RAYGUN
SENTRY
DATADOG
bigpanda
dynatrace
Rollbar
APPDYNAMICS
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LogicMonitor
salesforce
SAUCELABS
FitNesse
servicenow
TestFairy
runnable
zendesk
Jasmine
node
INTERCOM
ZOHO CRM
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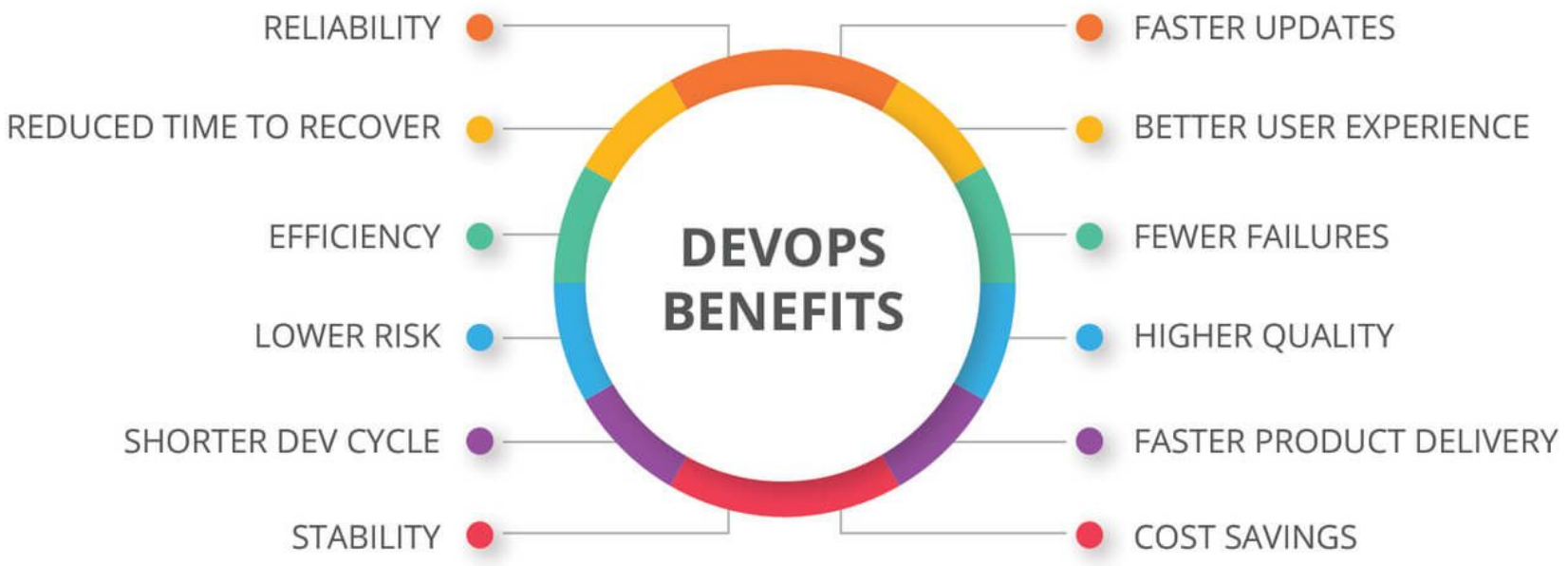
Instabug
ZEPHYR
BrowserStack
freshdesk
QMETRY
QASymphony
OMNIDESK

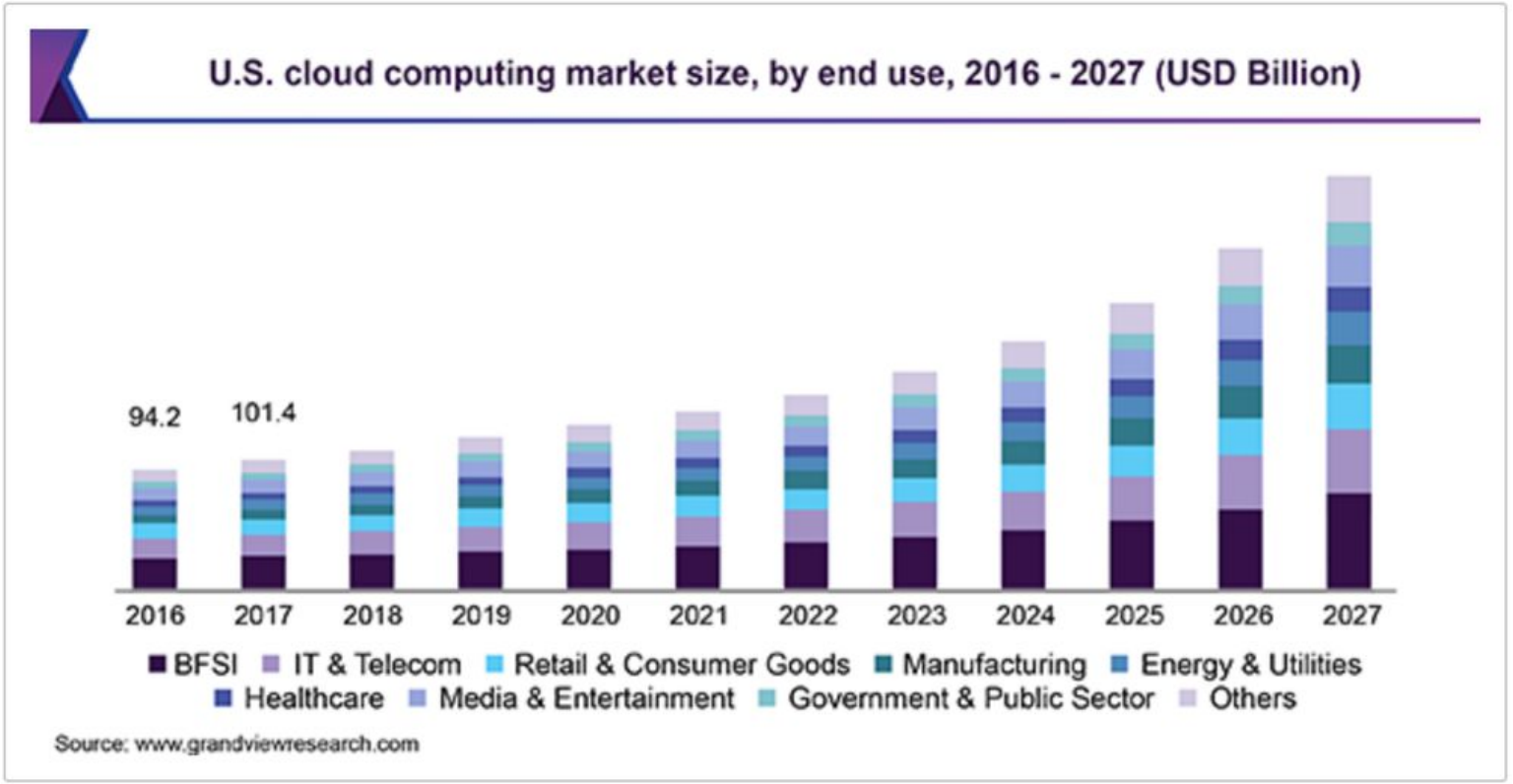
Benefits of DevOps and CI/CD



Future trends

Artificial intelligence

Cloud computing & automation



Cloud will keep growing and flowing

Public cloud providers

Market share numbers for the top cloud providers as of Q4 2021, according to Synergy Research Group:

- **Amazon Web Services (AWS) - 32%**
- Microsoft Azure - 20%
- Google Cloud Platform (GCP) - 9%
- Alibaba Cloud - 6%
- IBM Cloud - 4%
- Tencent Cloud - 2%
- Oracle Cloud Infrastructure (OCI) - 2%
- Salesforce Cloud - 2%
- VMware Cloud - 1%
- DigitalOcean - 1%

Overview of cloud infrastructure and services

Main division of cloud infrastructure and services:

- Compute
- Storage
- Networking
- Database
- Security
- Machine learning
- Others

Demo

- On-premise (proxmox, traditional servers)
- Smaller cloud providers: Linode, DigitalOcean, etc.
- AWS & GCP

Thank you

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