

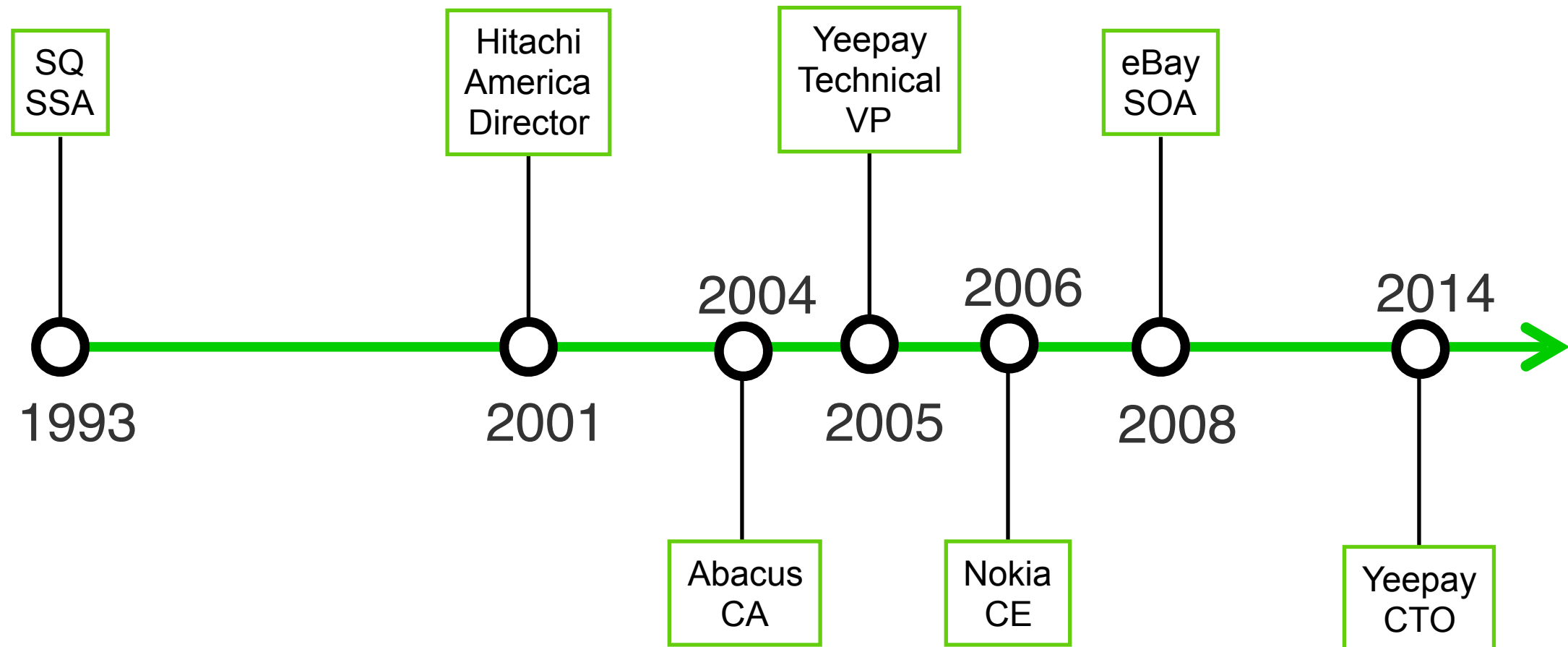


# The Evolution of Large Scale Payment Platform

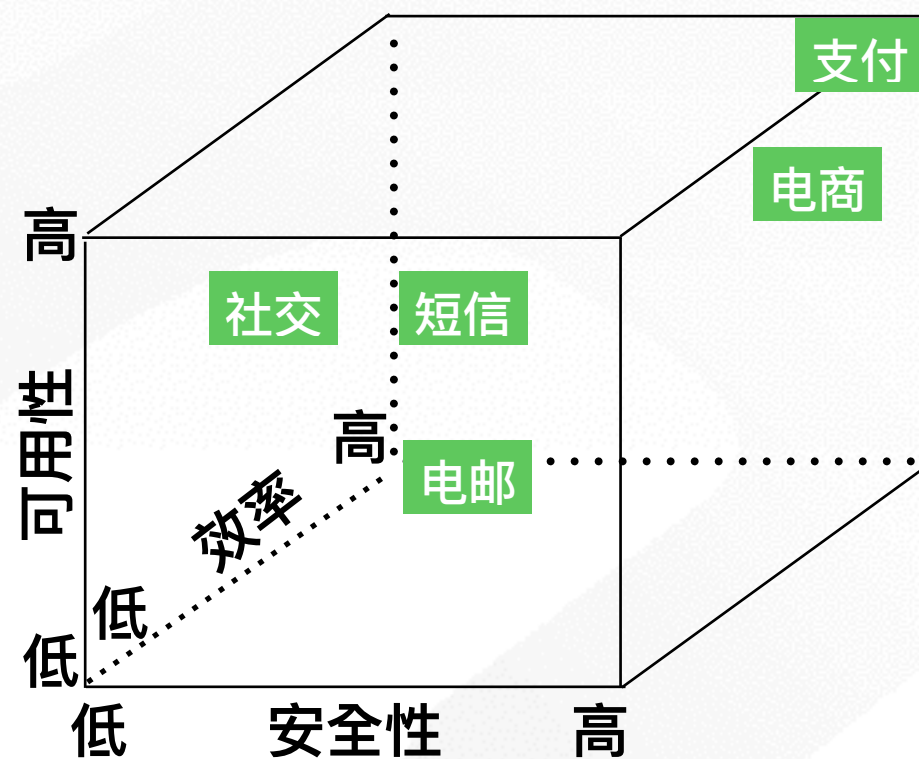
Chuck Chen

2017.08.10

# ABOUT MYSELF



# CHARACTERISTICS OF PAYMENTS



## Payment Transaction Platform

Availability

Security

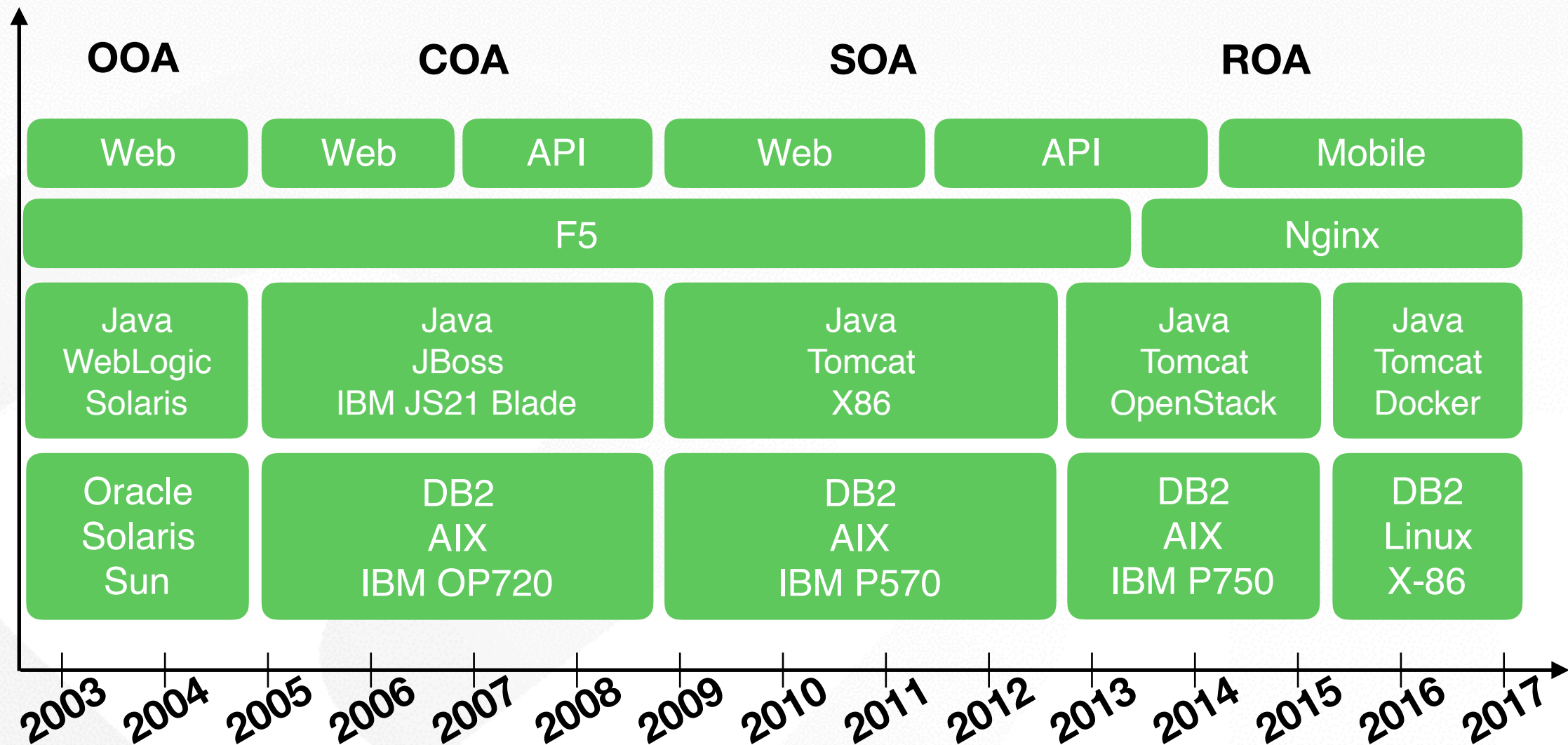
Efficiency

- **Availability : 7 X 24 X 365**
- **Security : PCI-DSS , ISO27000**
- **Efficiency : Low cost**

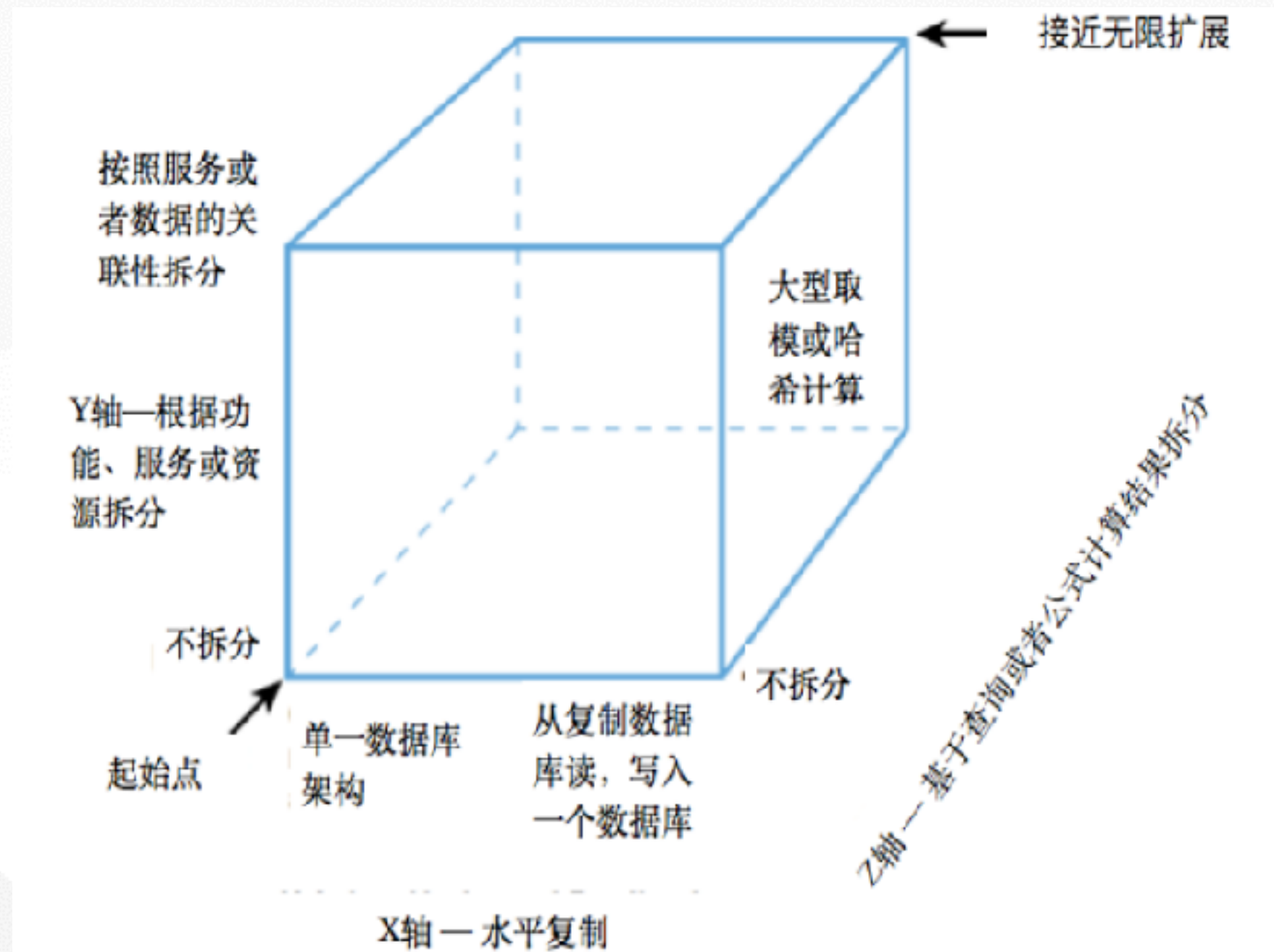
RMB20B/Year, 5000TX/second



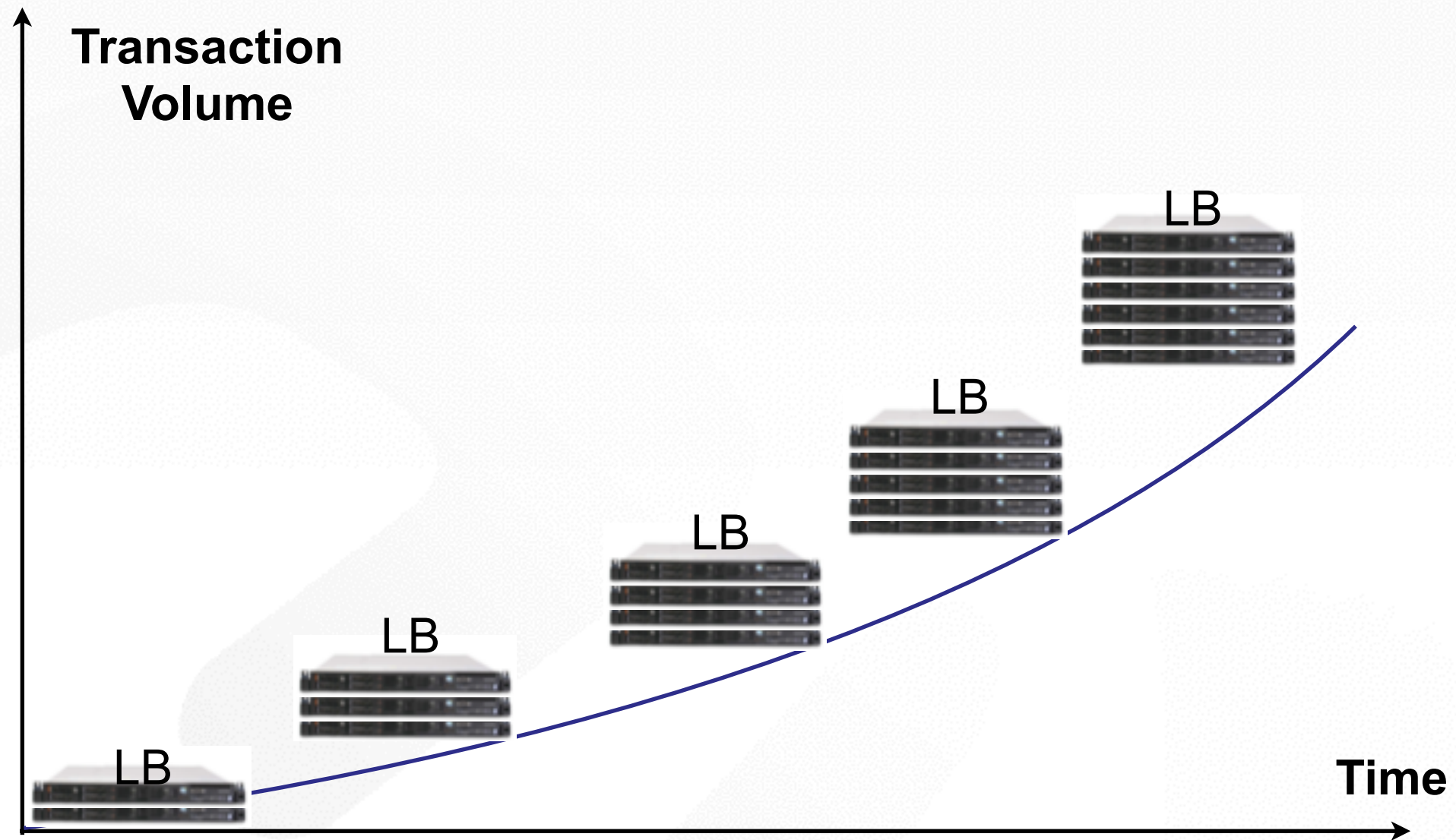
# EVOLUTION OF THE PLATFORM



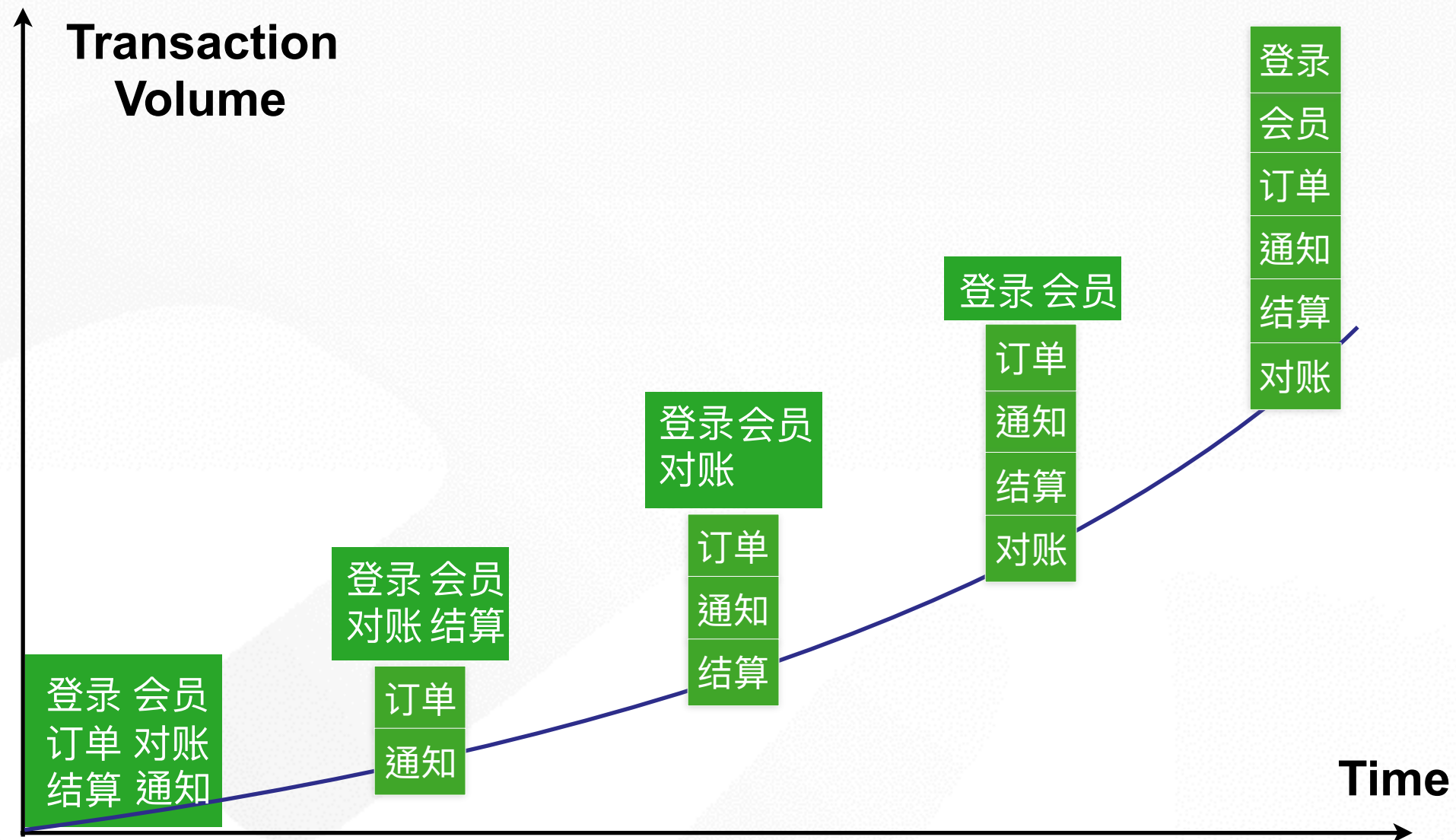
# NKF 3 AXIS SCALABILITY



# X-HORIZONTAL SCALABILITY

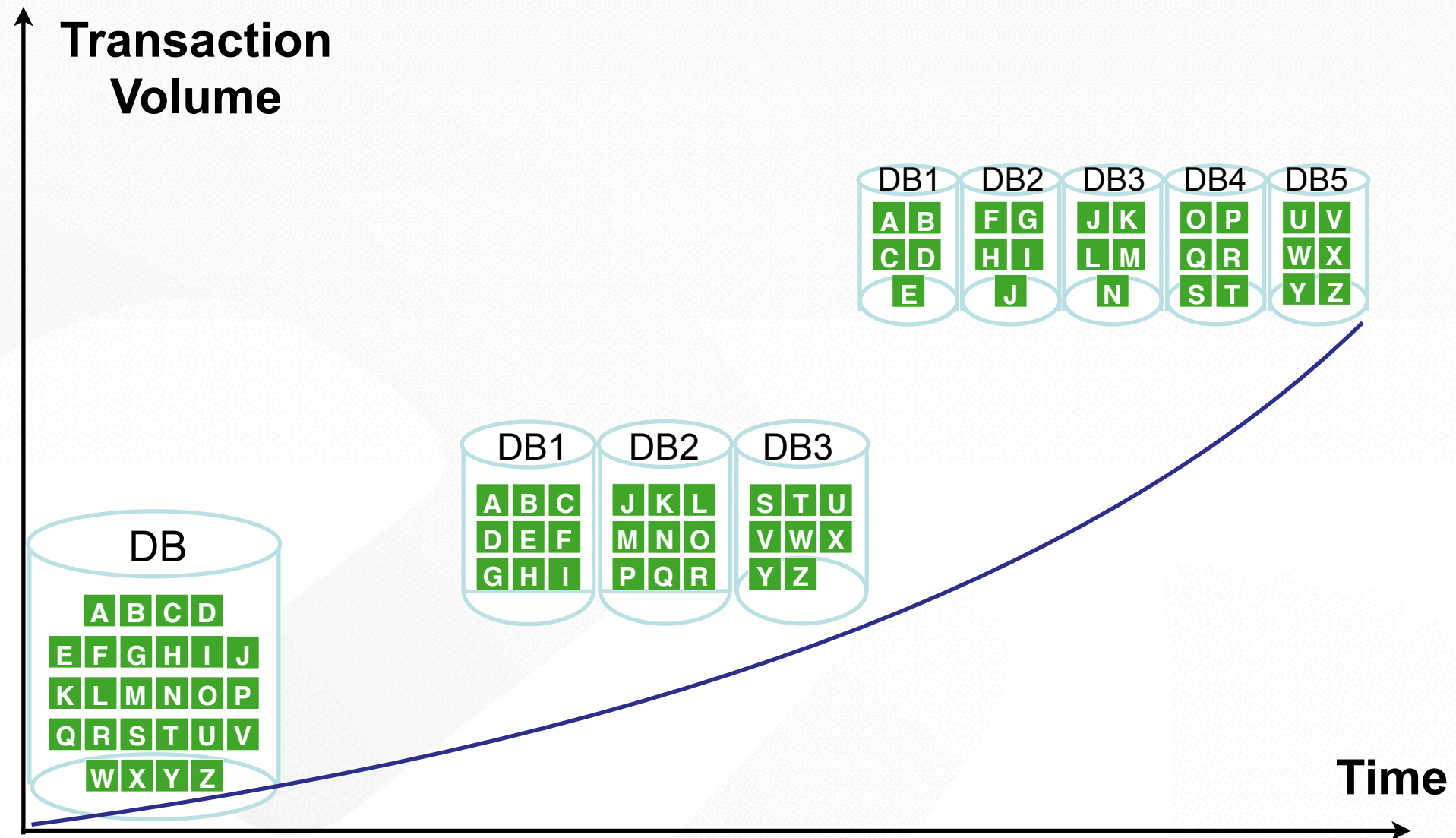


# Y-APPLICATION SEPARATION



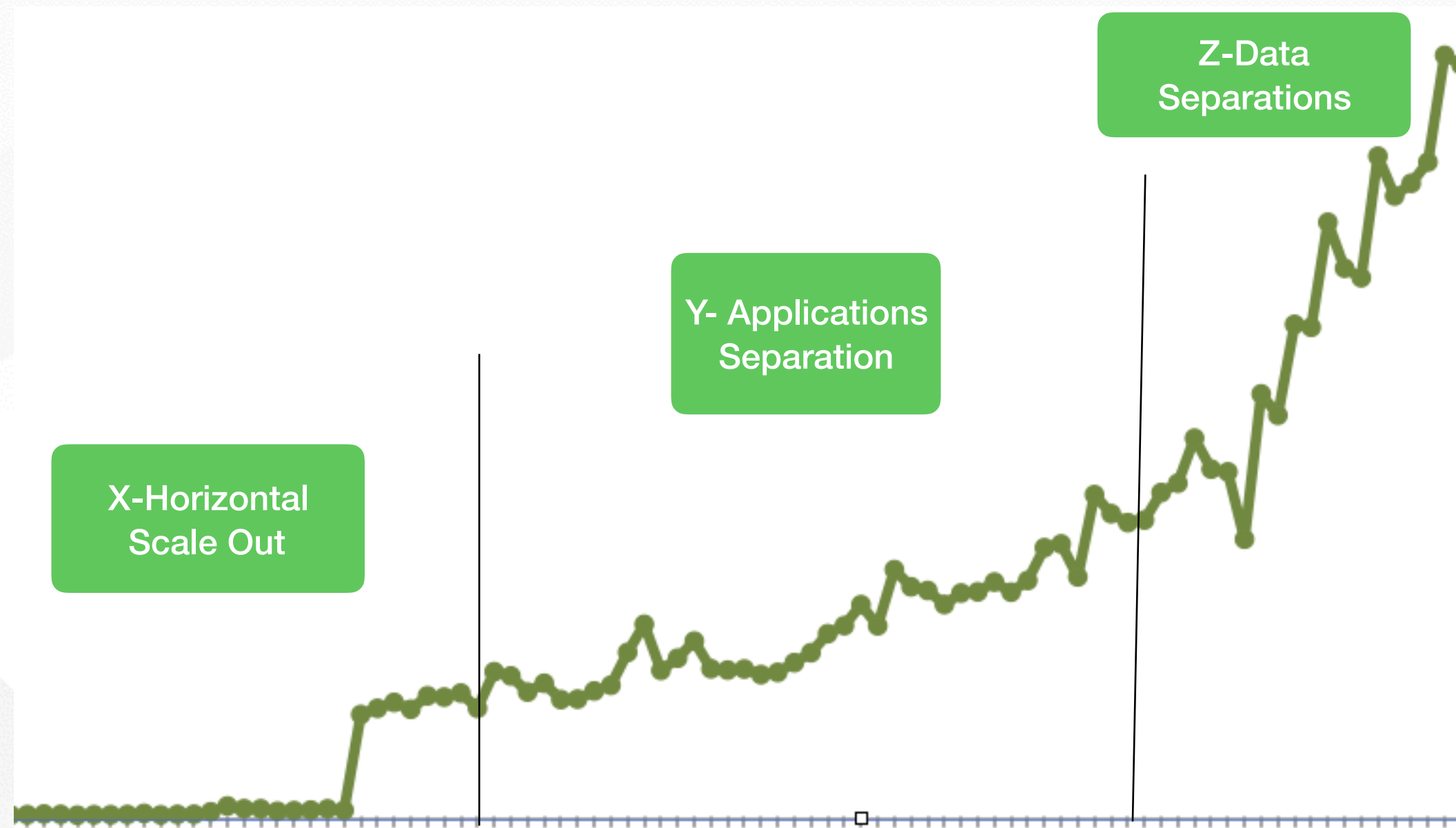


# Z-DATA SEPARATION



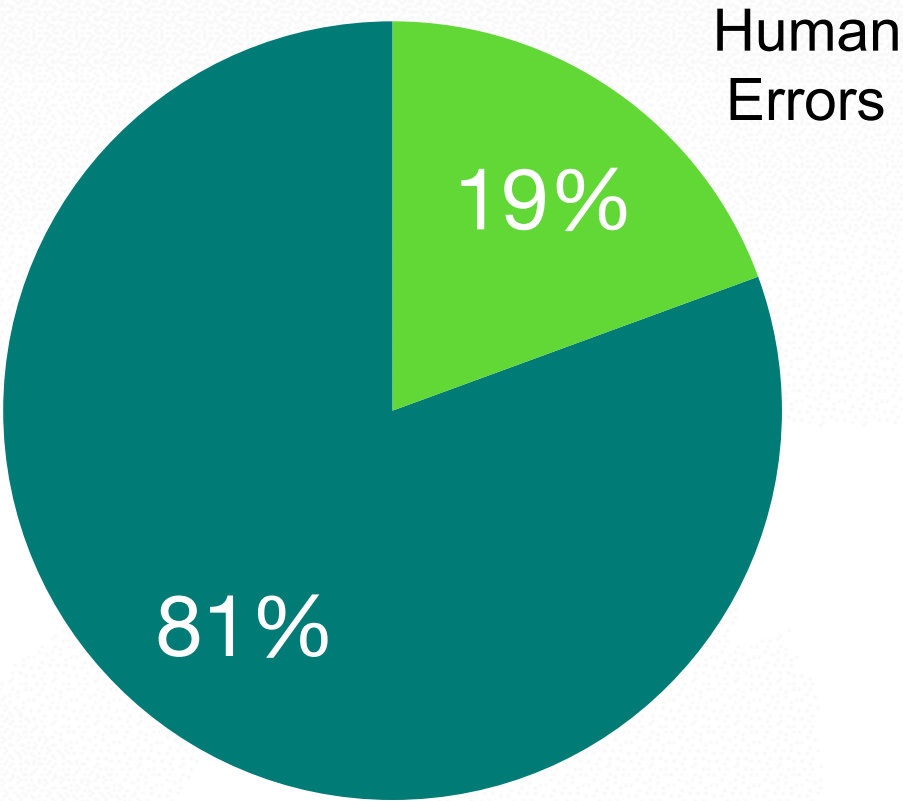
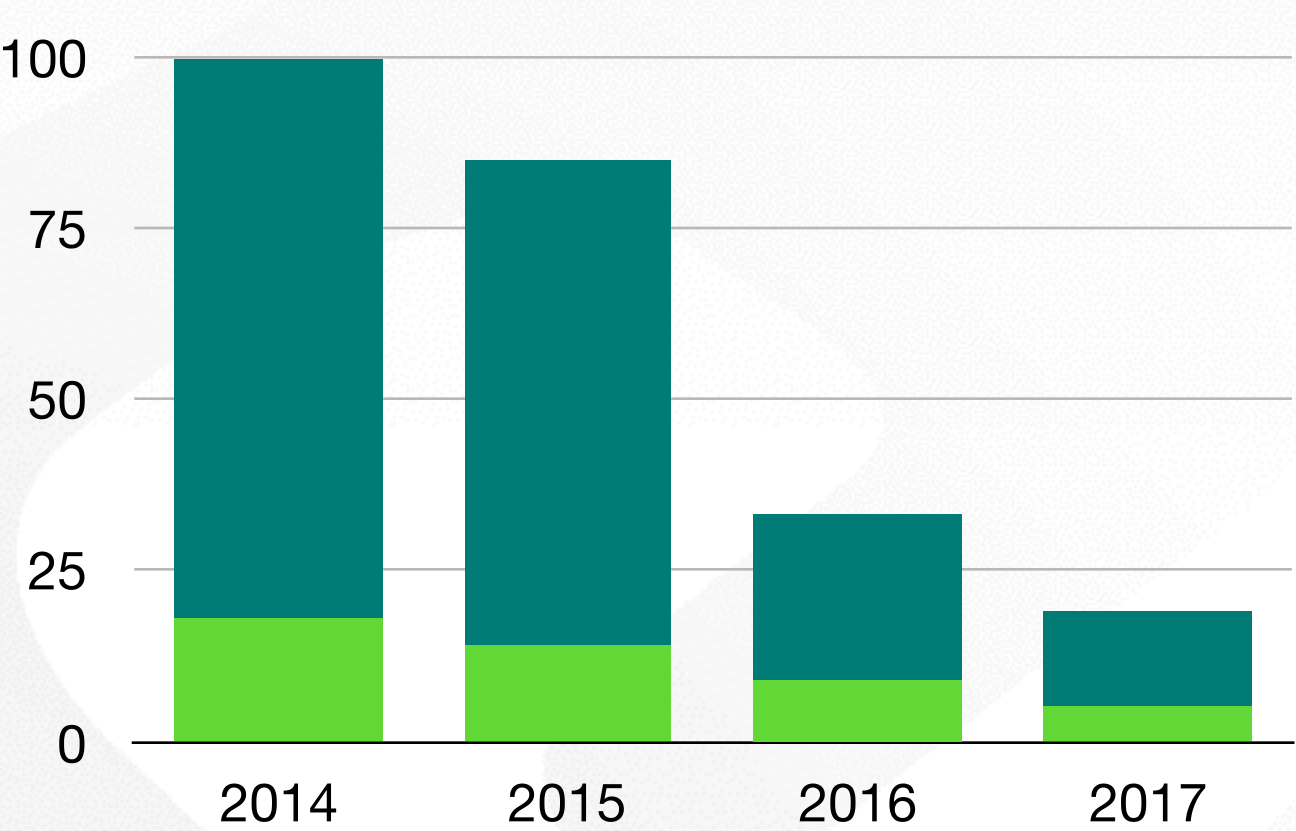


# TRANSACTIONS INCREASE RAPIDLY

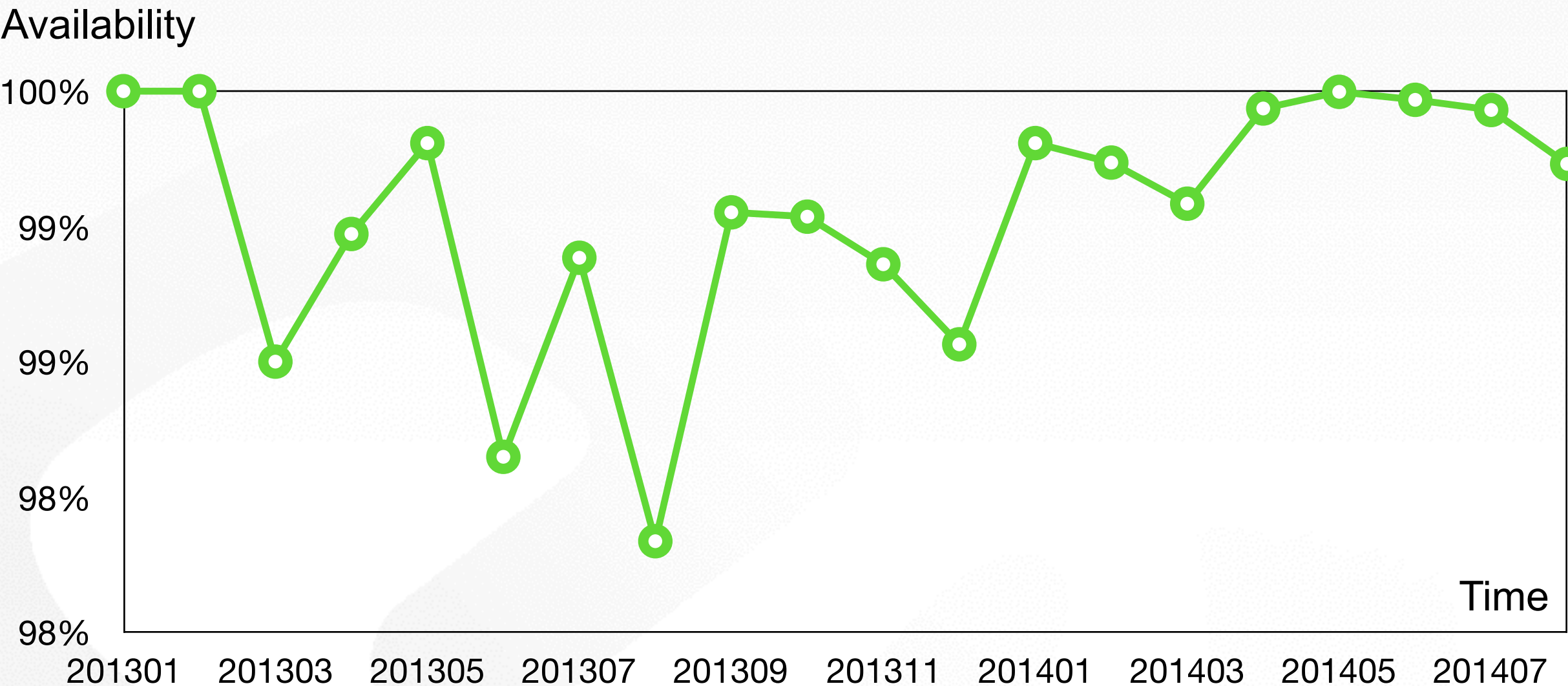


# VERS, ENV, STEPS, INSTRUCTIONS

Human Error      Accidents



# FLUCTUATION OF AVAILABILITY



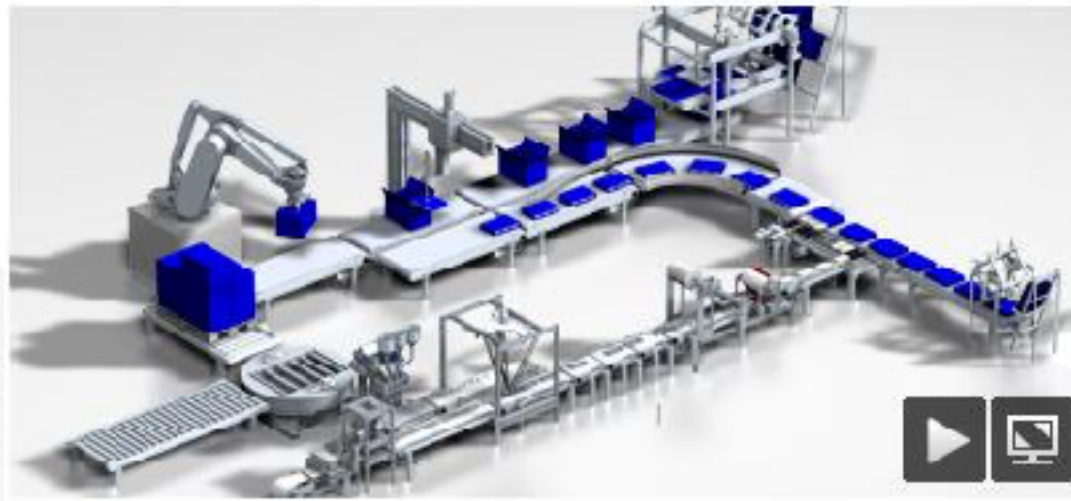


# OPERATIONS CHALLENGES

- Human Errors
- Boring Routing Works
- Complicated Instructions

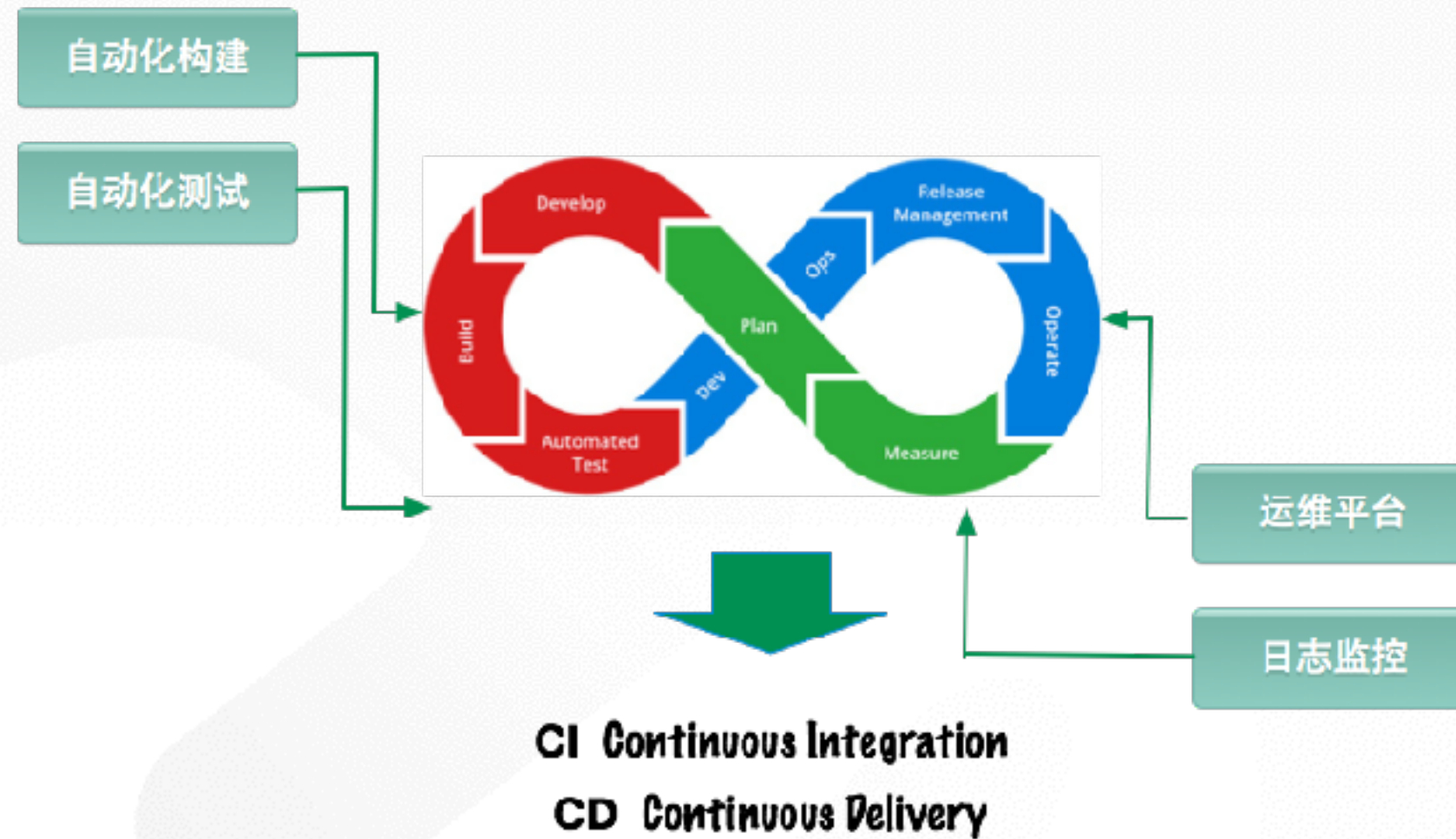


Coding → Testing → Integration → Deployment → Monitoring



- Automatically handle routine works
- Lower cost
- Better Loyalty
- High Reliability

# DEVOPS



# WHY WE PICK DOCKER



功能比较简单  
技术栈简单  
非稳定版



偏重资源抽象  
技术栈复杂  
大规模场景



自主研发  
投入产出比低  
项目风险大  
机会成本太高



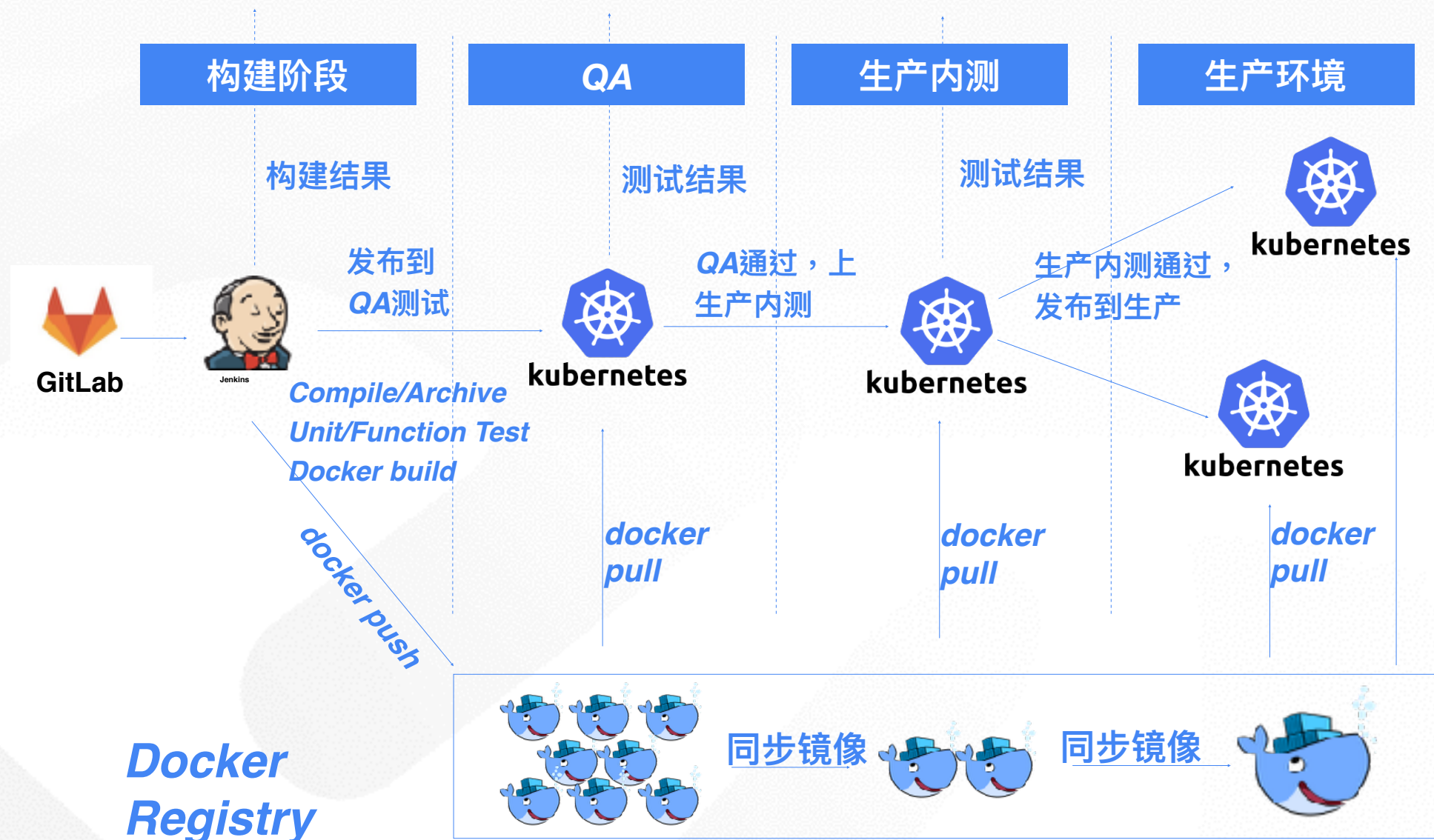
kubernetes

理念先进  
以应用为中心  
Web应用为主  
功能完善

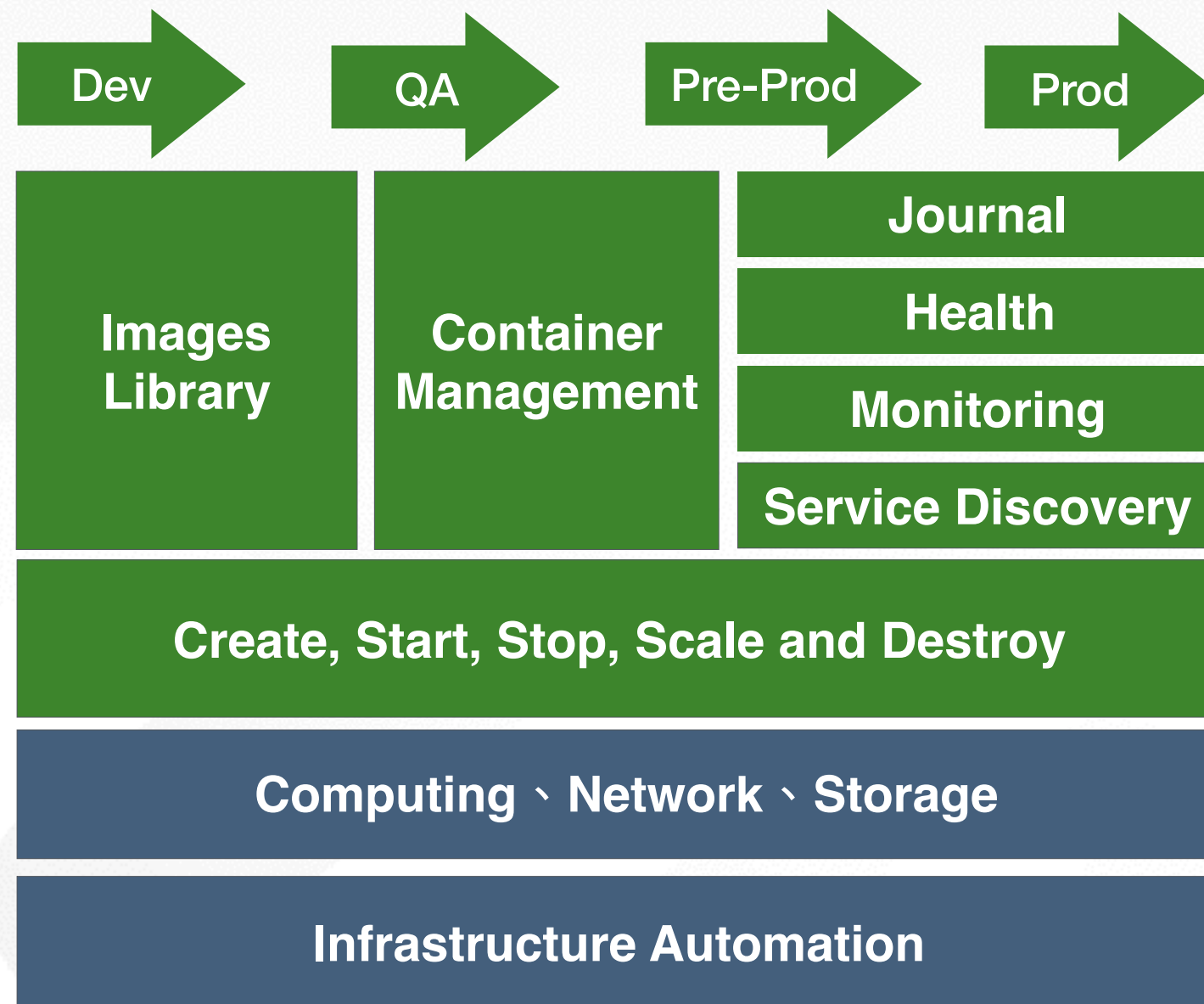
Pass!



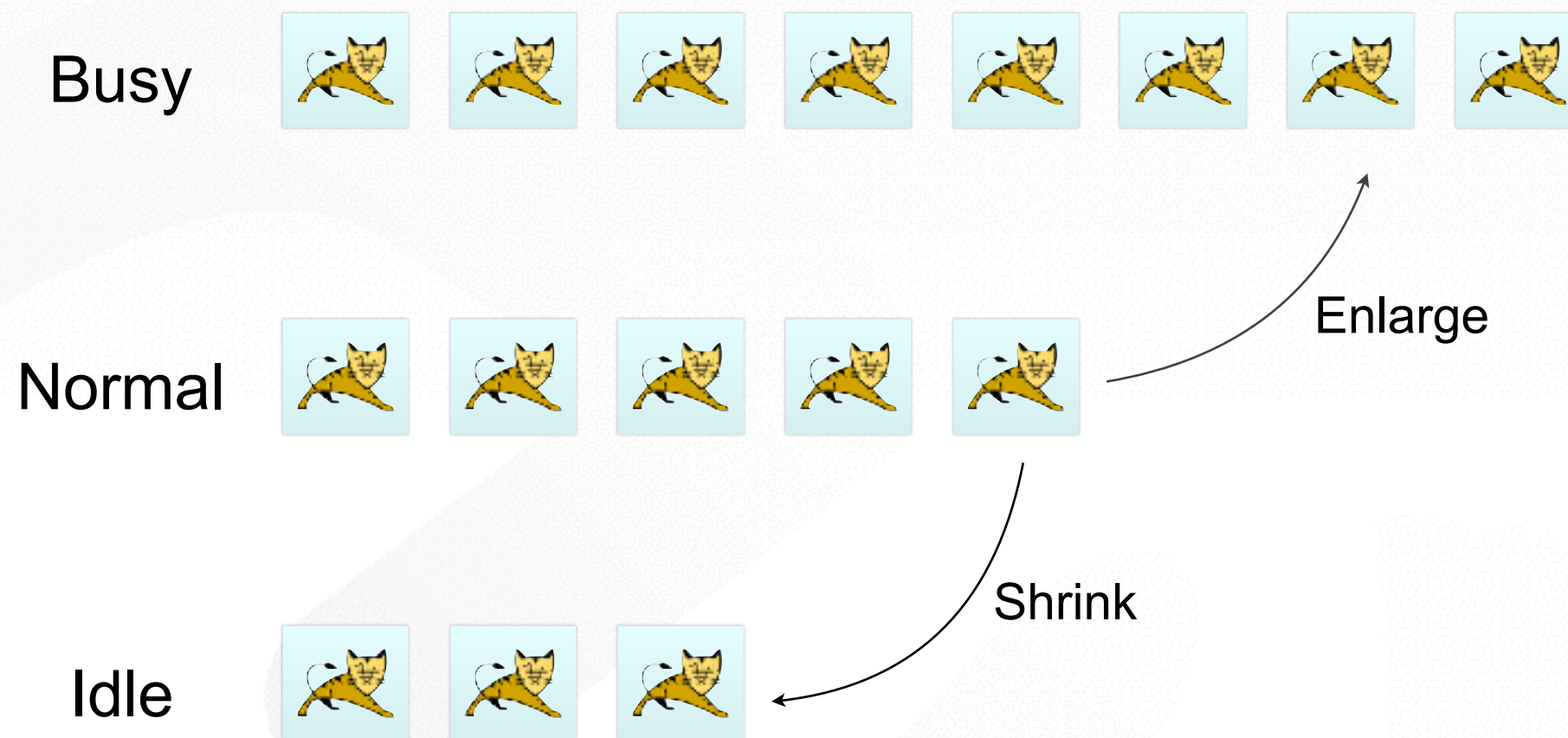
# PRIVATE DOCKER CLOUD



# ARCHITECTURE OF THE CLOUD

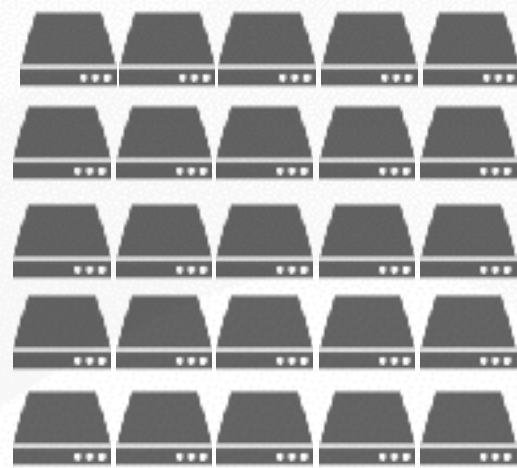


# RESILIENCE/FLEXIBILITY





# IMPROVEMENTS OF OPS



5 : 1



Before & After

Release



Upgrade



Rollback



Retire



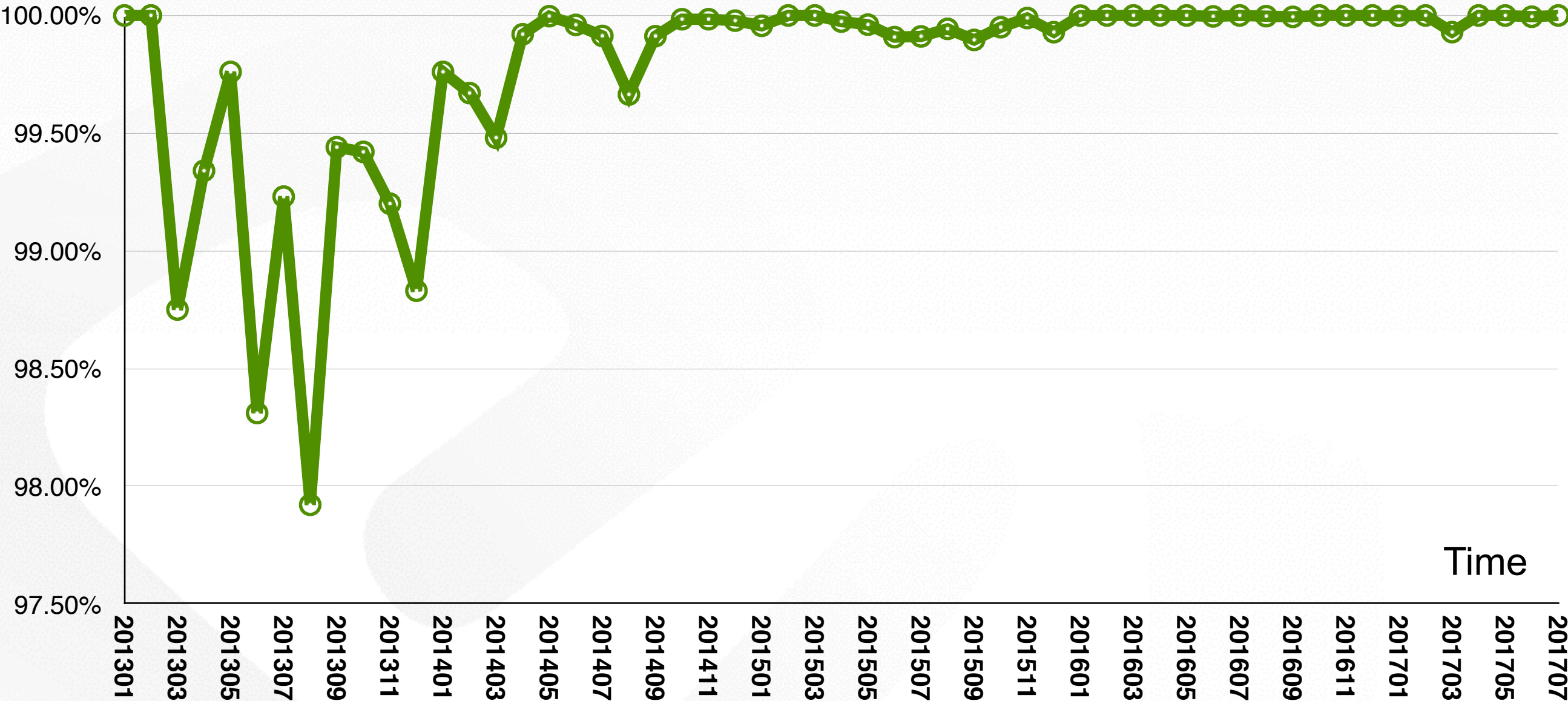
Enlarge



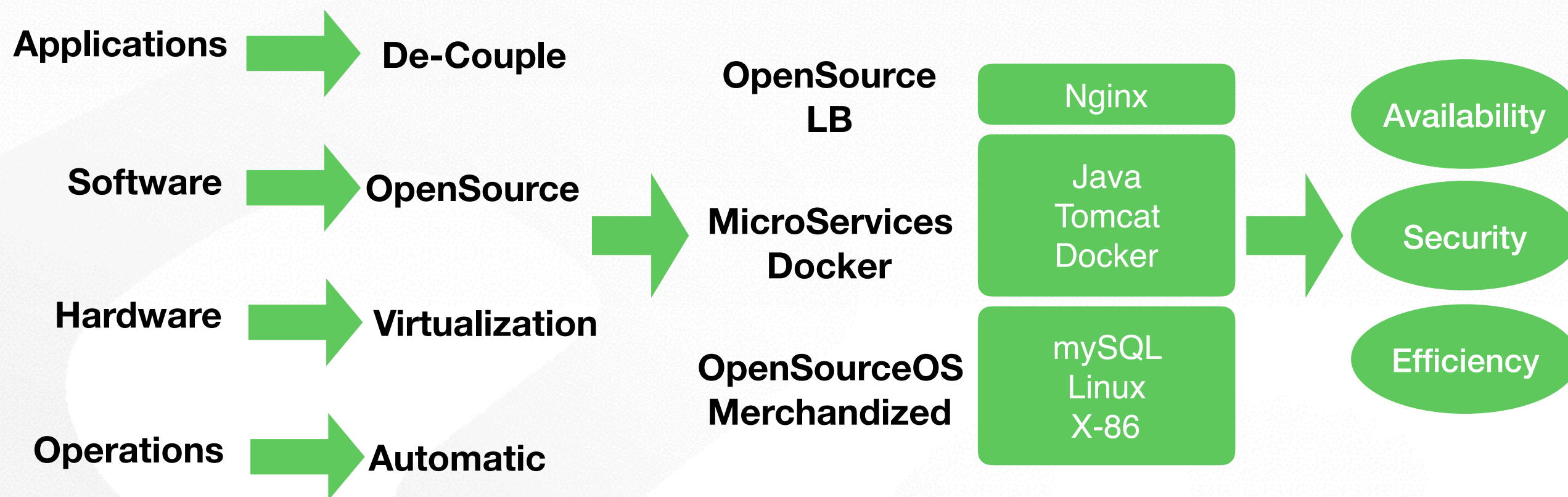
Elapse Time

# AVAILABILITY IMPROVED

Availability



# FUTURE TRENDS





  
**Thank You!**

谢谢！



Chuck微信



Docker公众号