



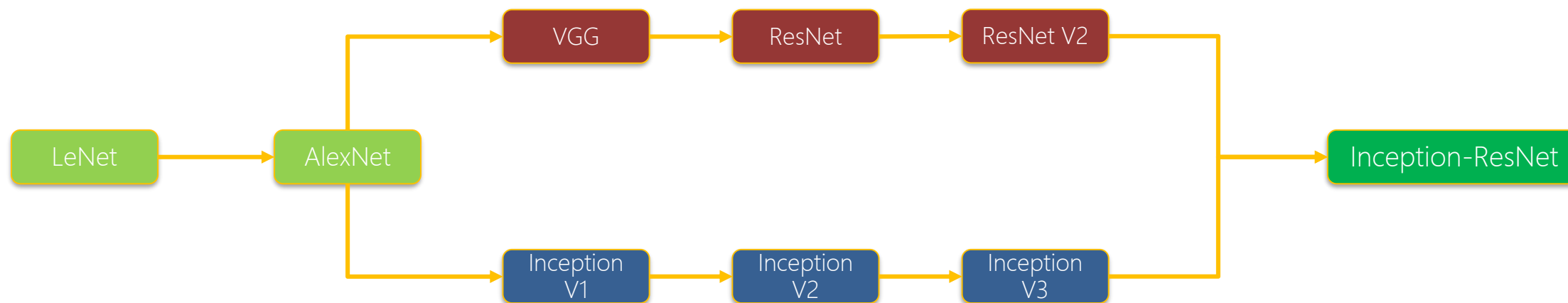
# 富媒体时代的机器学习平台构建

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七牛云人工智能实验室联合创始人



# 机器学习的演进



# 机器学习的演进



## ResNeXt

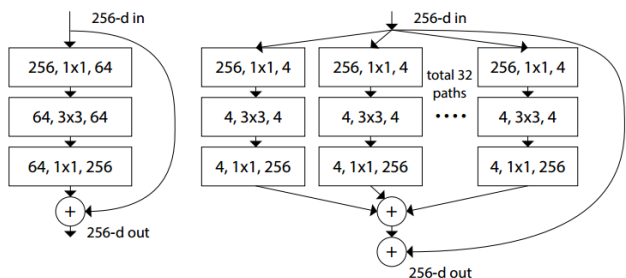
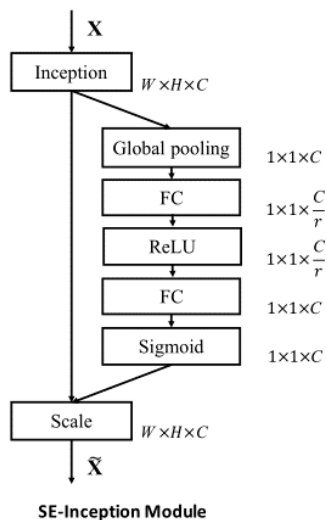
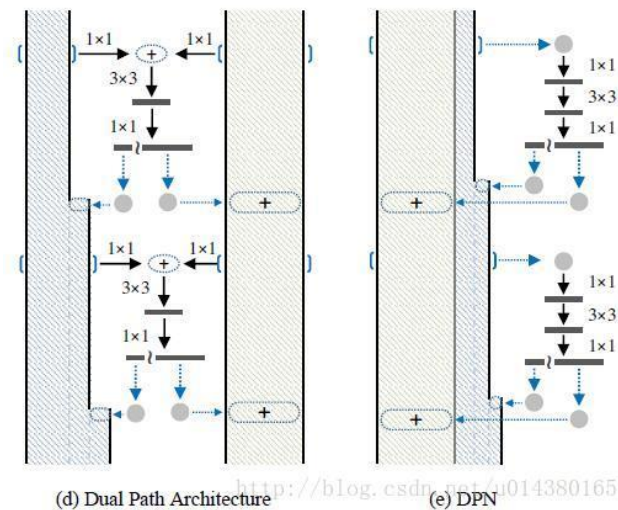


Figure 1. **Left:** A block of ResNet [13]. **Right:** A block of ResNeXt with cardinality = 32, with roughly the same complexity. A layer is shown as (# in channels, filter size, # out channels).

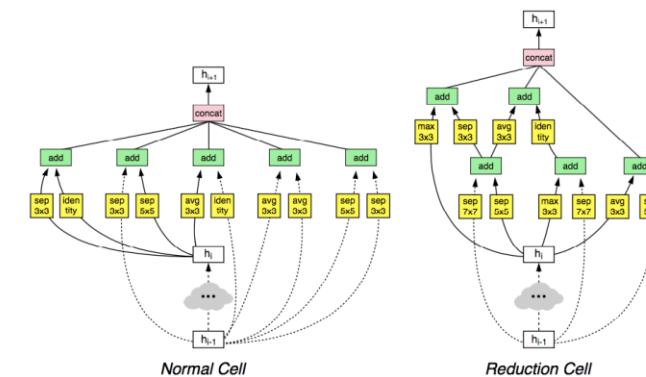
## SENet



## DPN



## NASNet



# 机器学习的演进



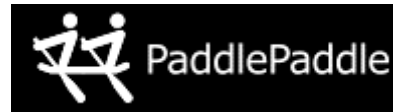
Caffe



theano

dmlc  
mxnet

PYTORCH



Lasagne

Microsoft  
CNTK

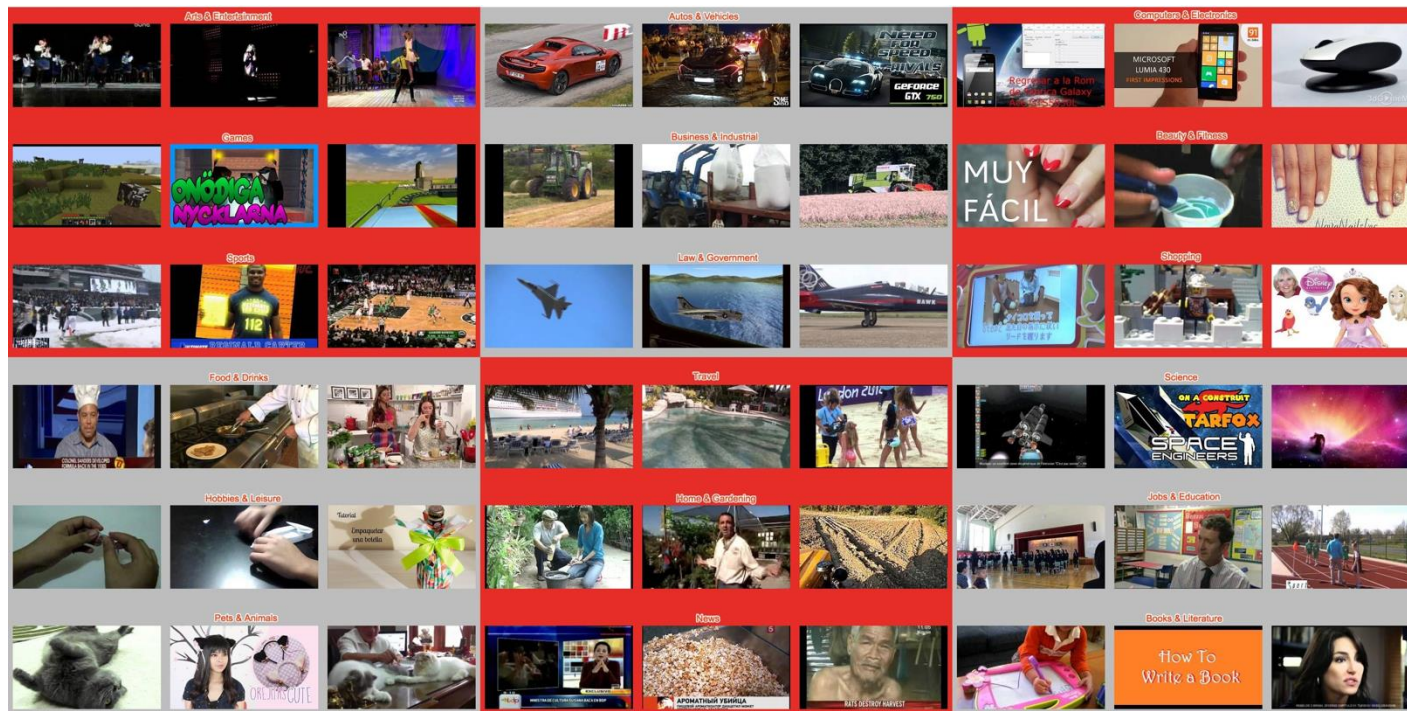
DSSTNE



DL4J  
DEEPLARNING4J



# 机器学习的演进





# 这是最好的时代





# 连接

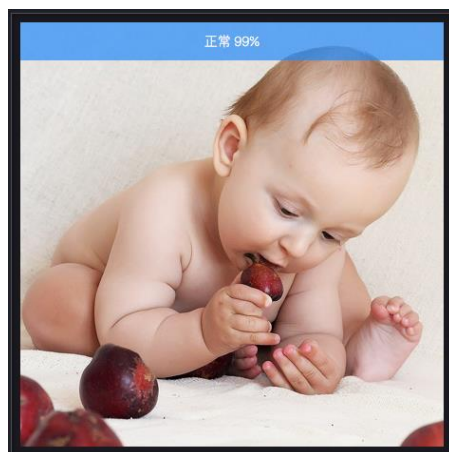
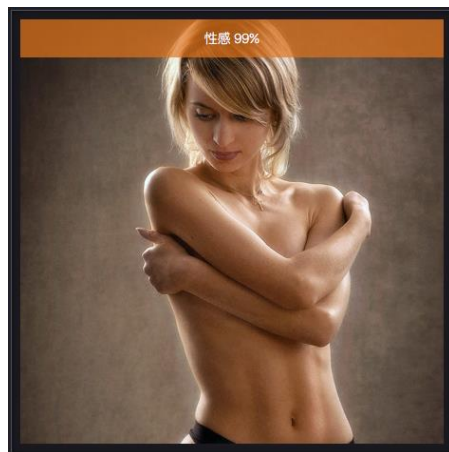


# 智能

## Mobile → 富媒体时代



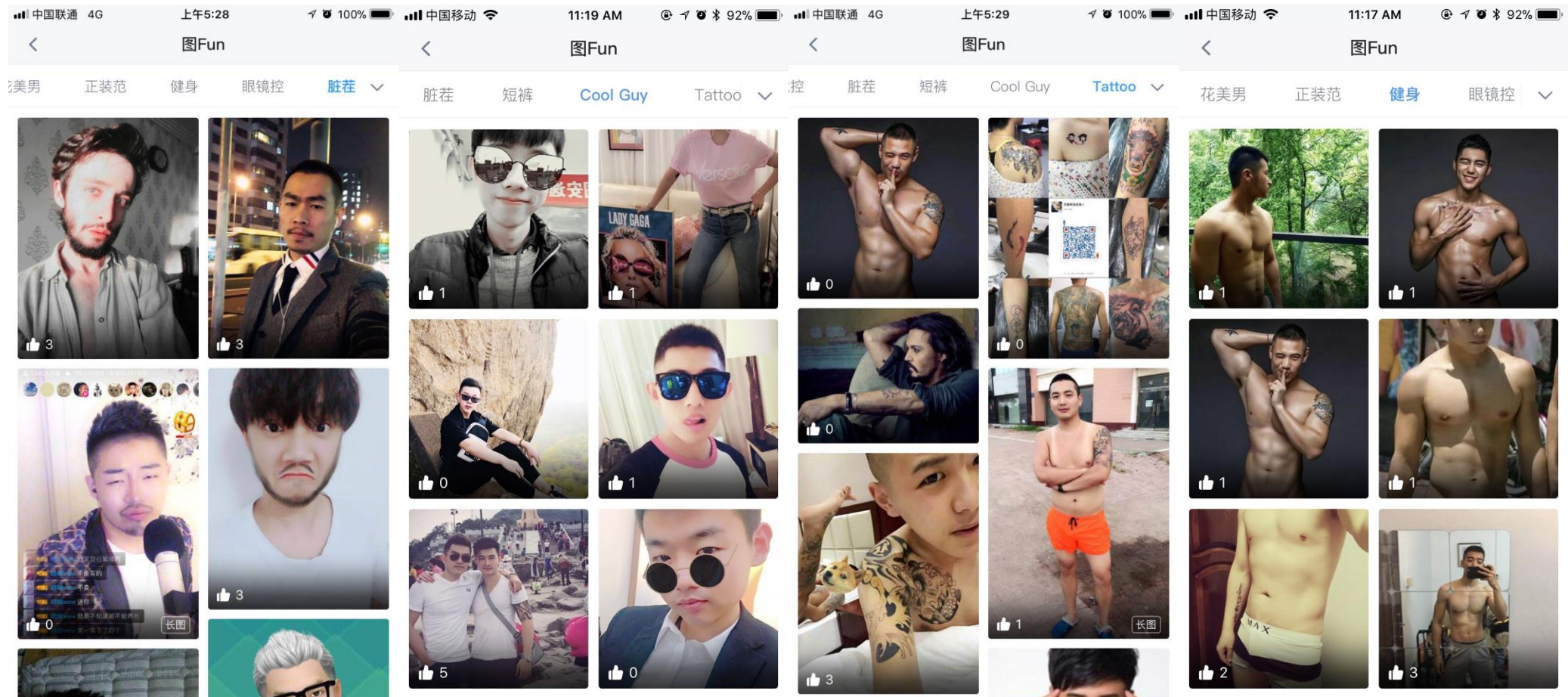
## 安全审核







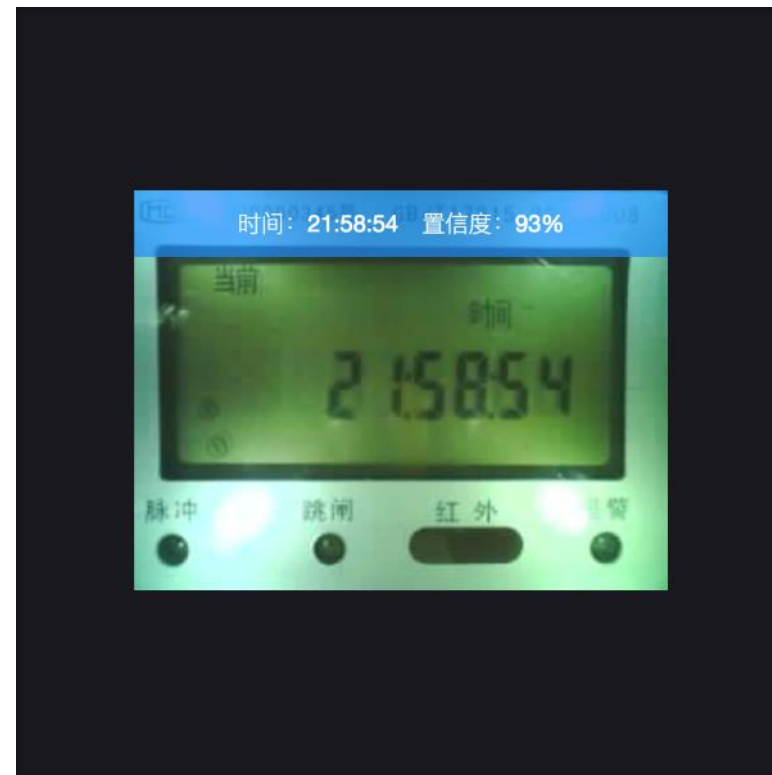
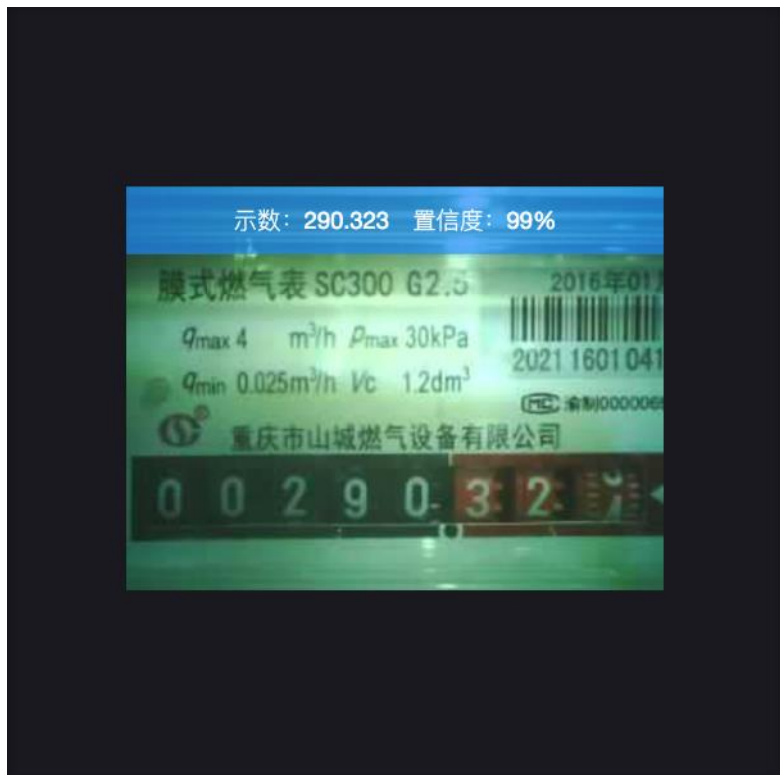
## 内容运营



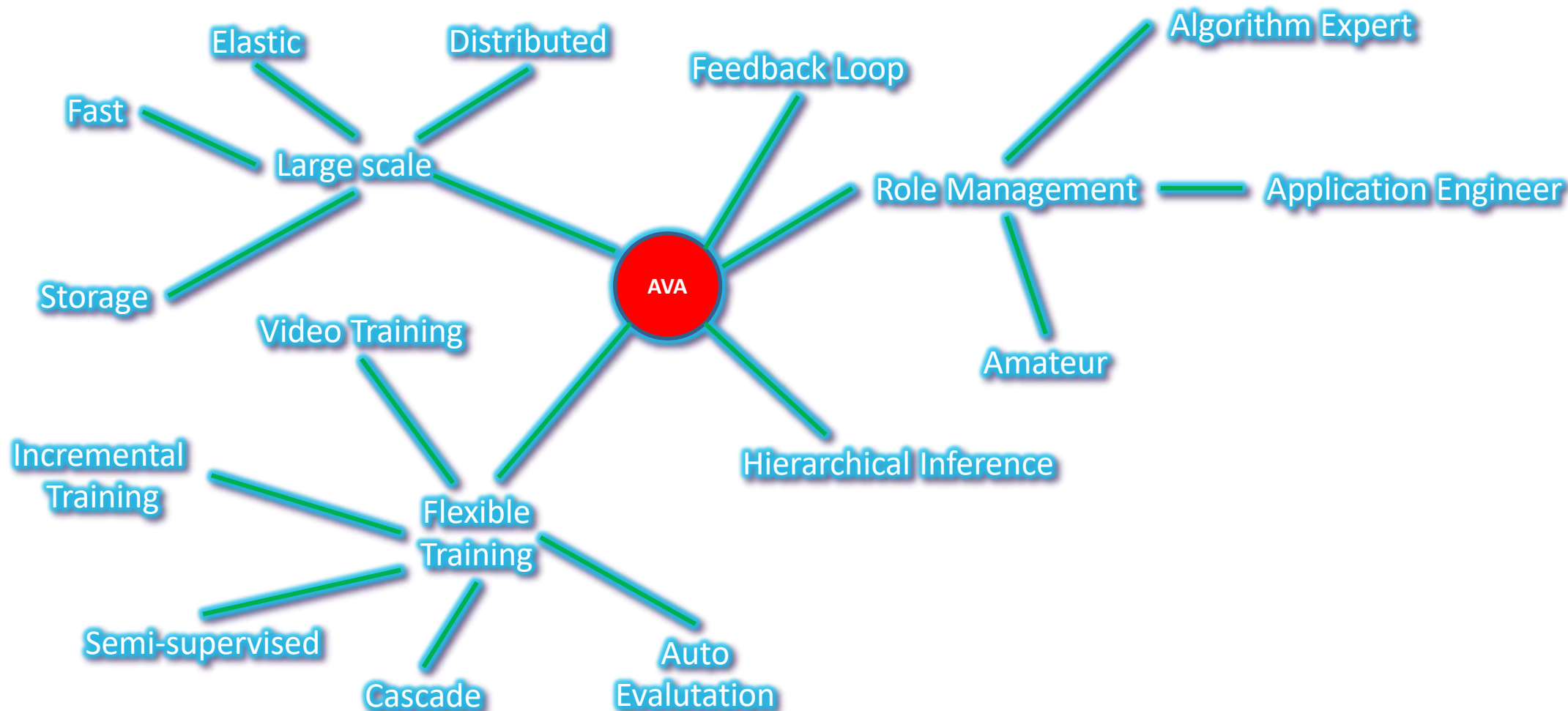
## 场景化



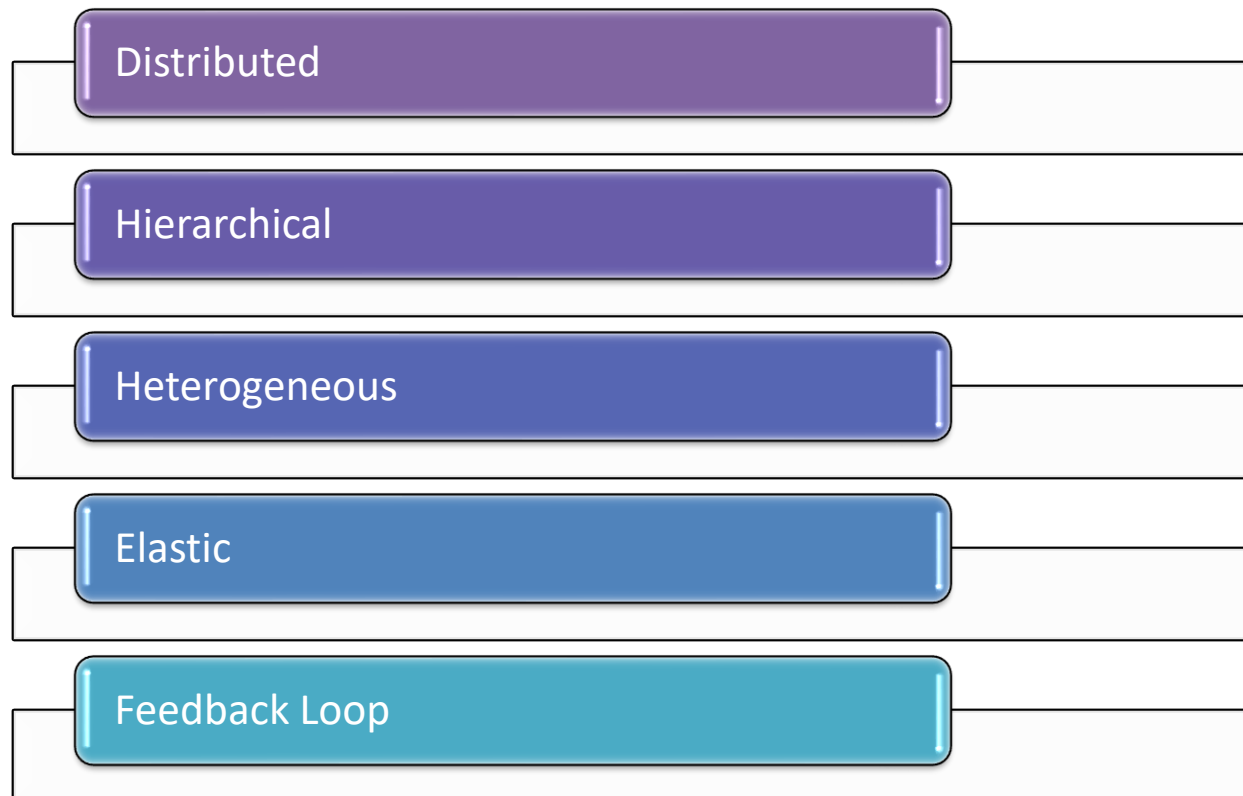
## 场景化

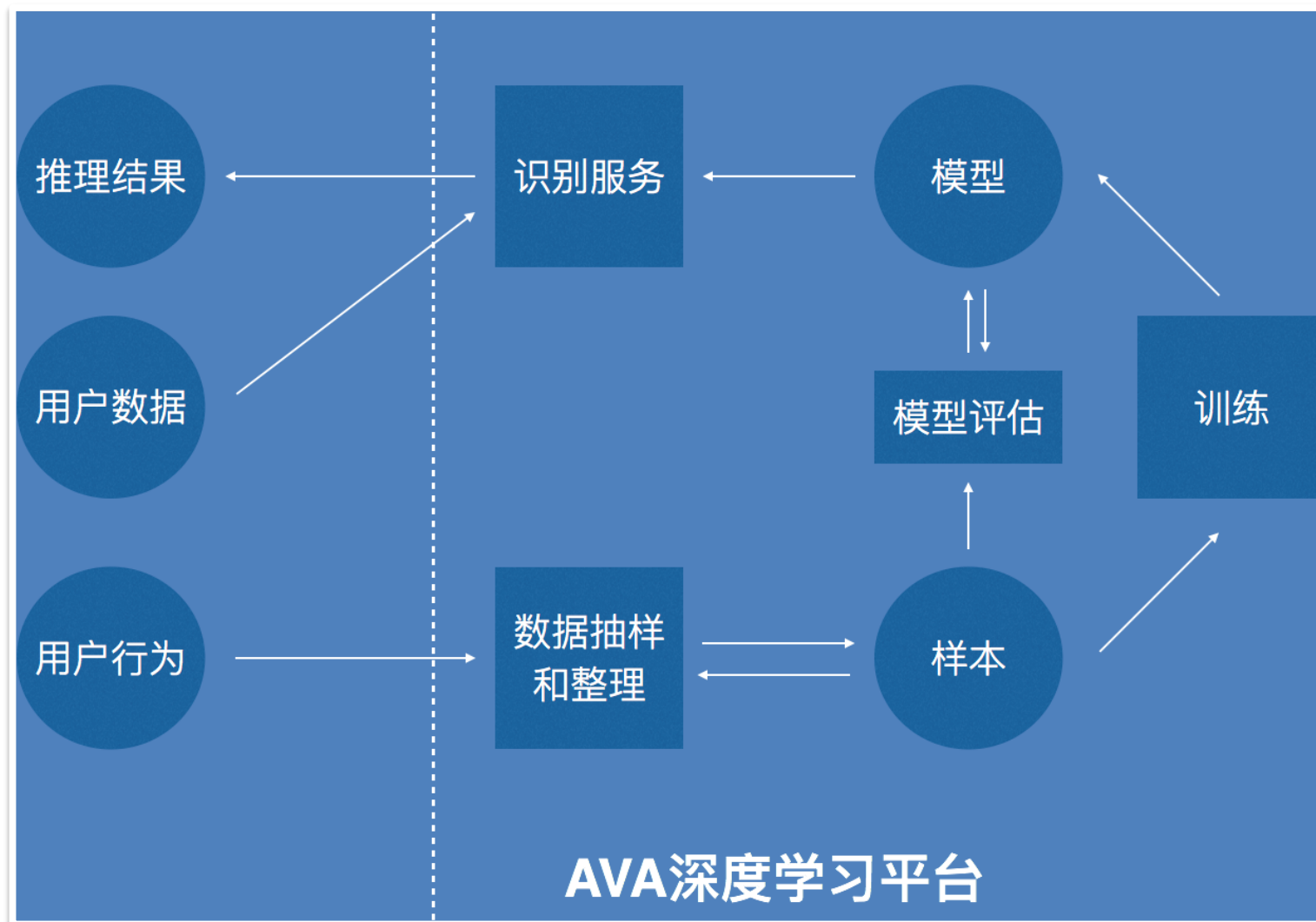


# AVA平台的需求



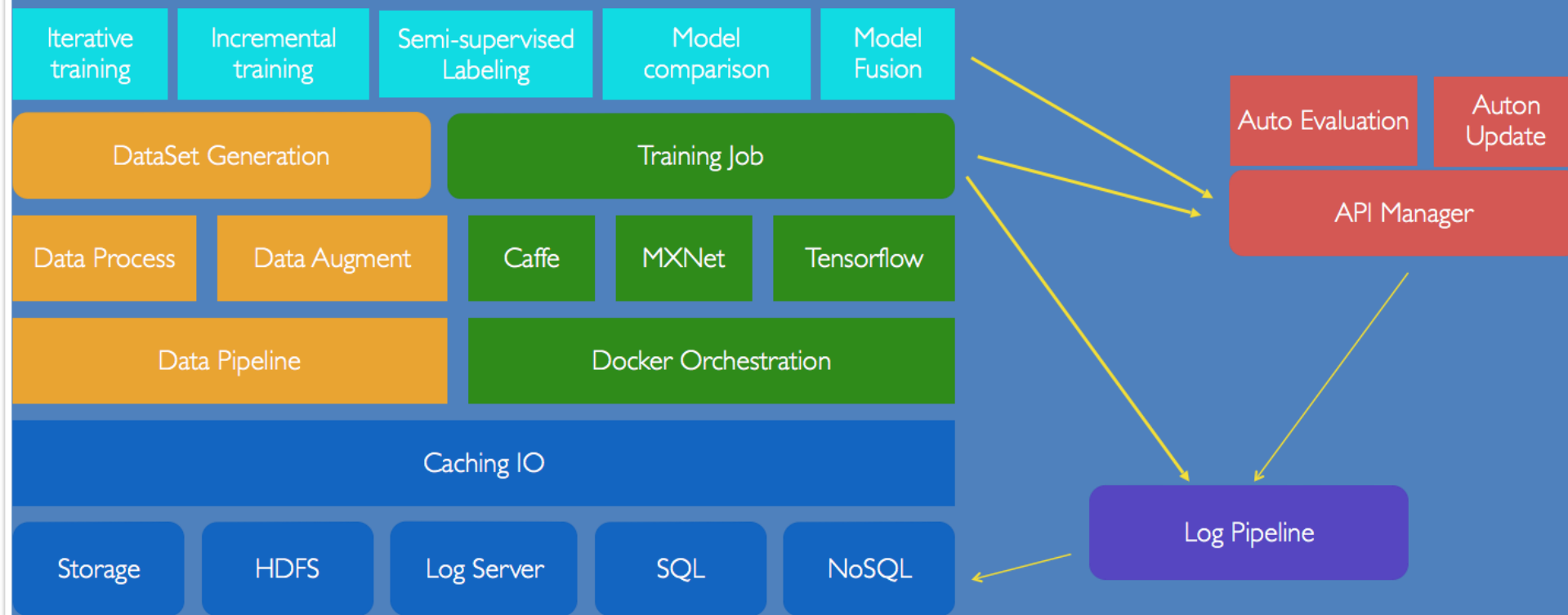
# AVA平台的设计理念







# AVA 弹性深度学习平台



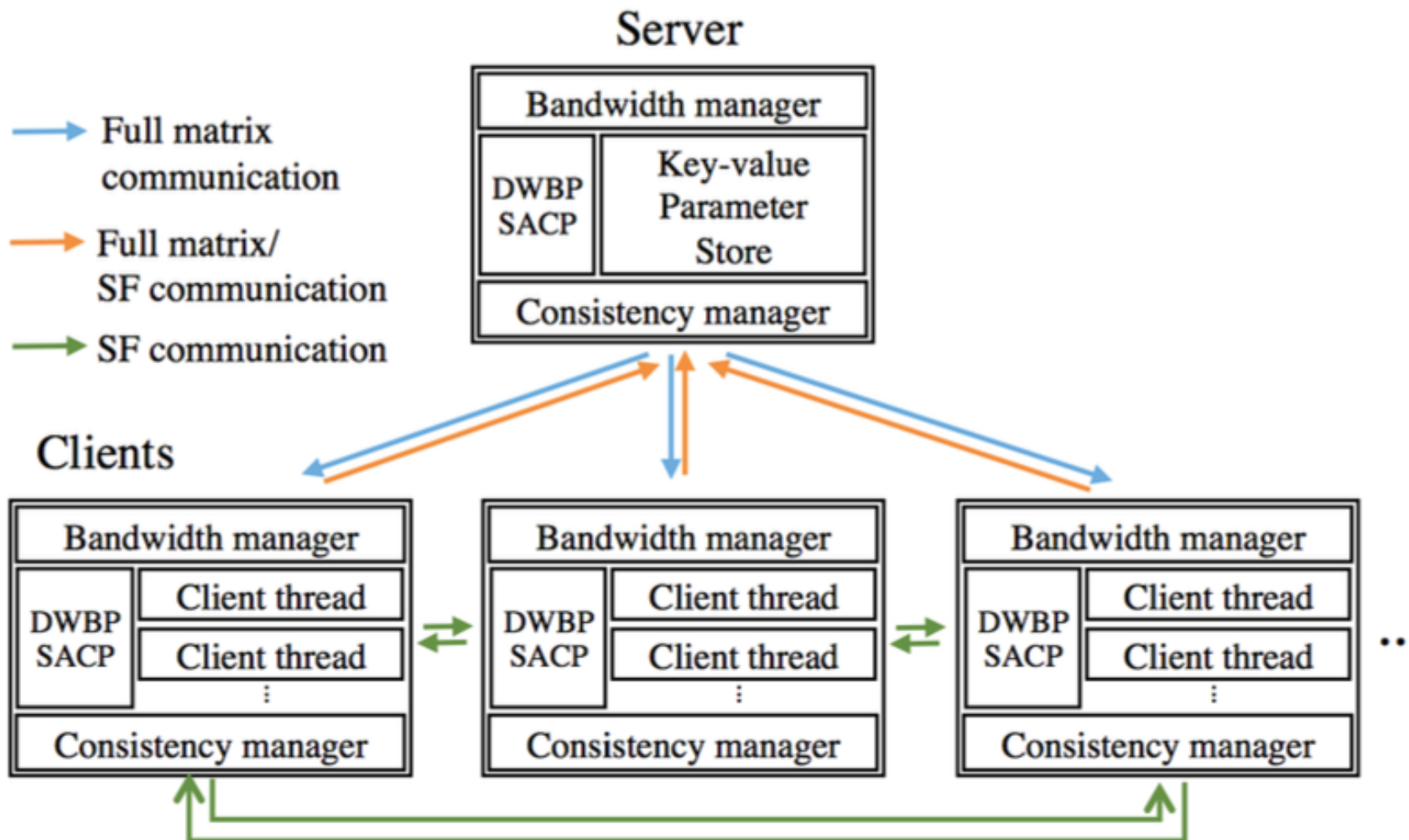
# Hierarchy



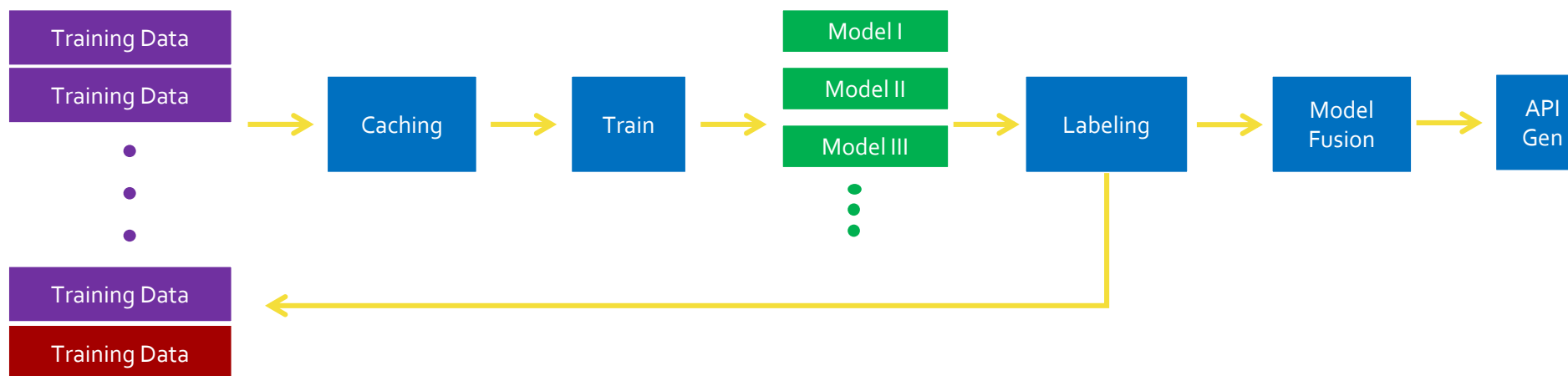
Application	Personal Remote Auth
Module / API	Face Recognition
Templet	Detection, Classification, Segmentation
Modular	Algorithms(AtNet/AtServing Image)
Tool Set	LabelX      AtFlow
Framework-Infrastructure	AtNet(Job)    AtServing(Service)



# 大规模视频训练平台搭建



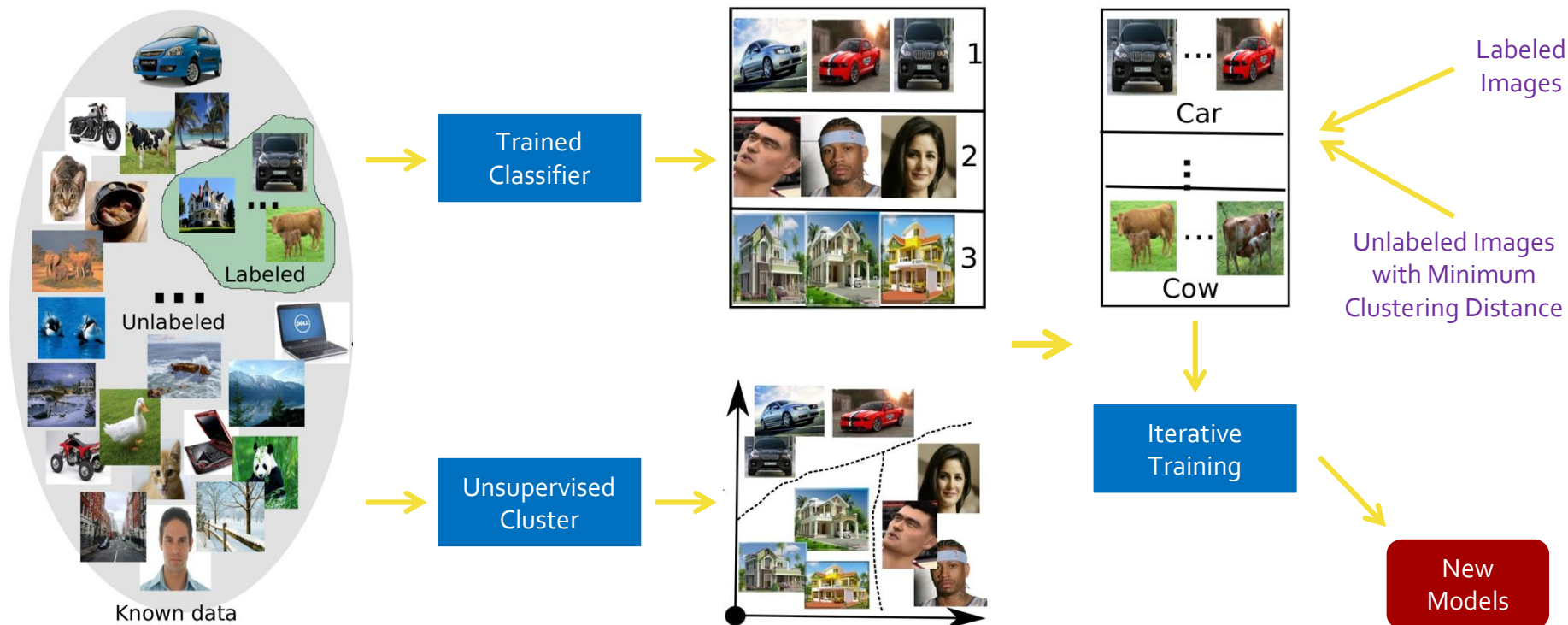
## Iterative & Incremental



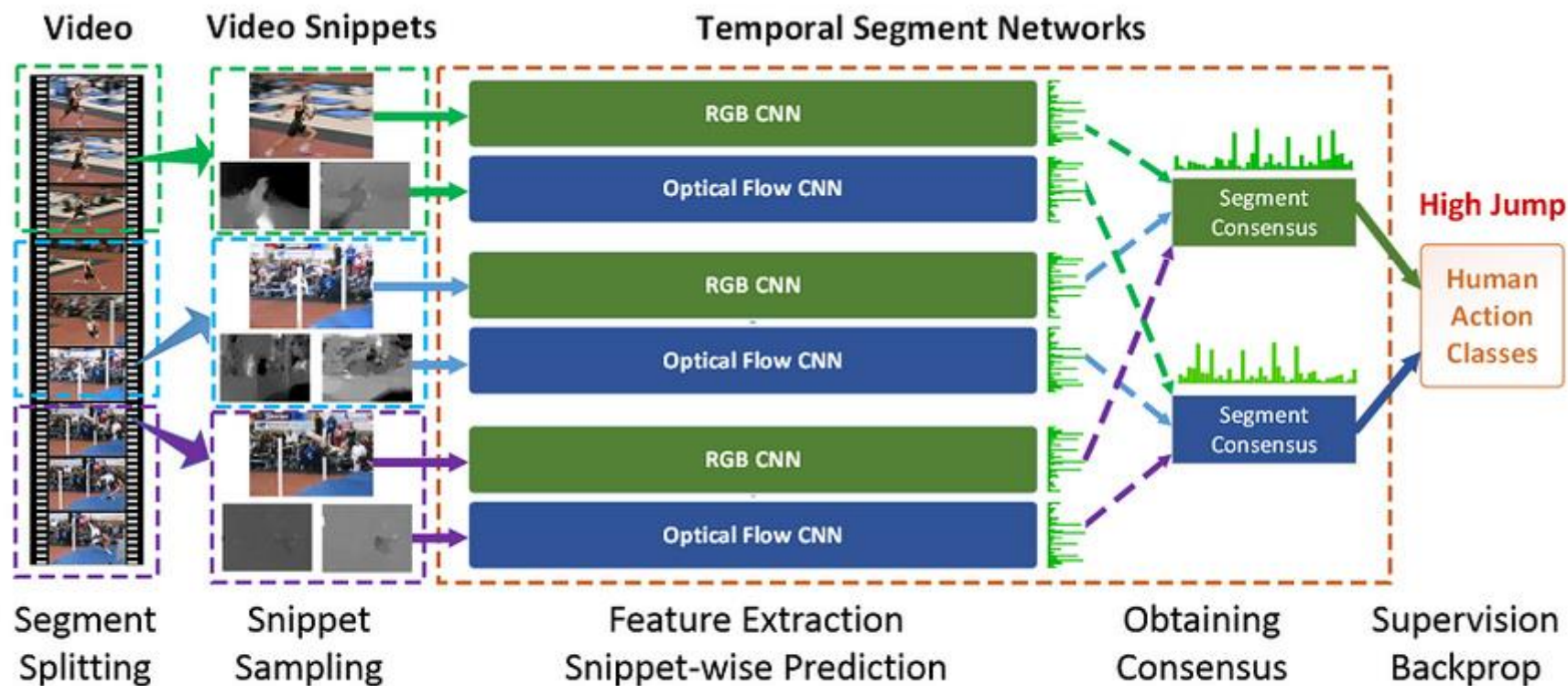
# 大规模视频训练平台搭建



## Semi-Supervised

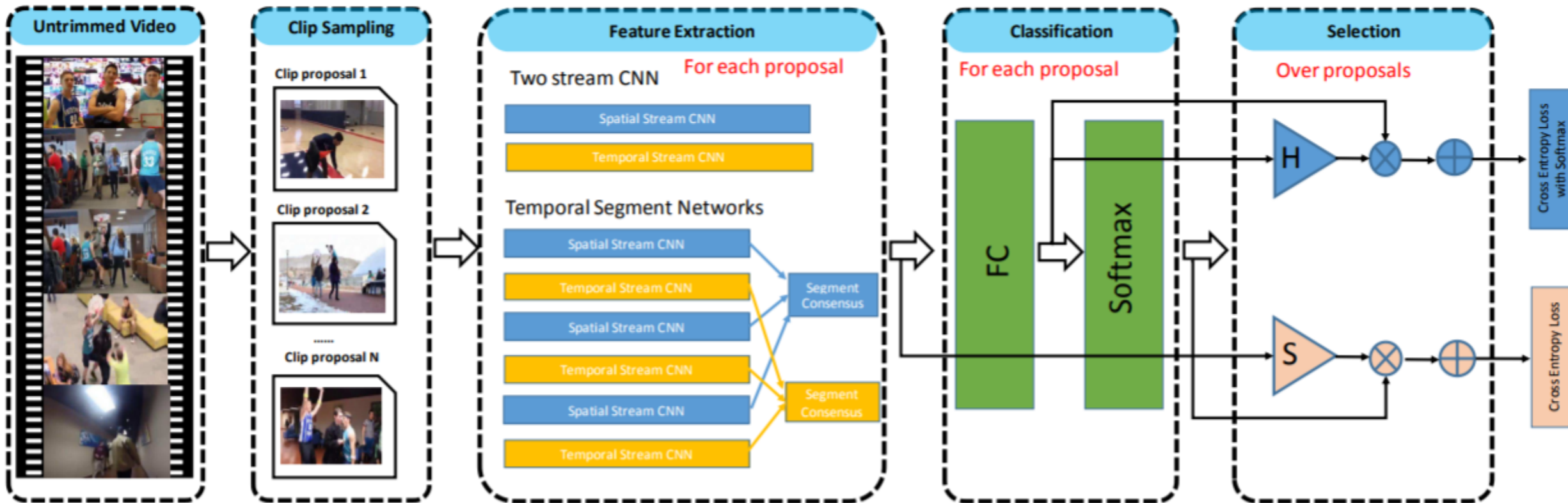


# 大规模视频训练平台搭建



An overview of TSN framework

# 大规模视频训练平台搭建



# 大规模视频训练平台搭建

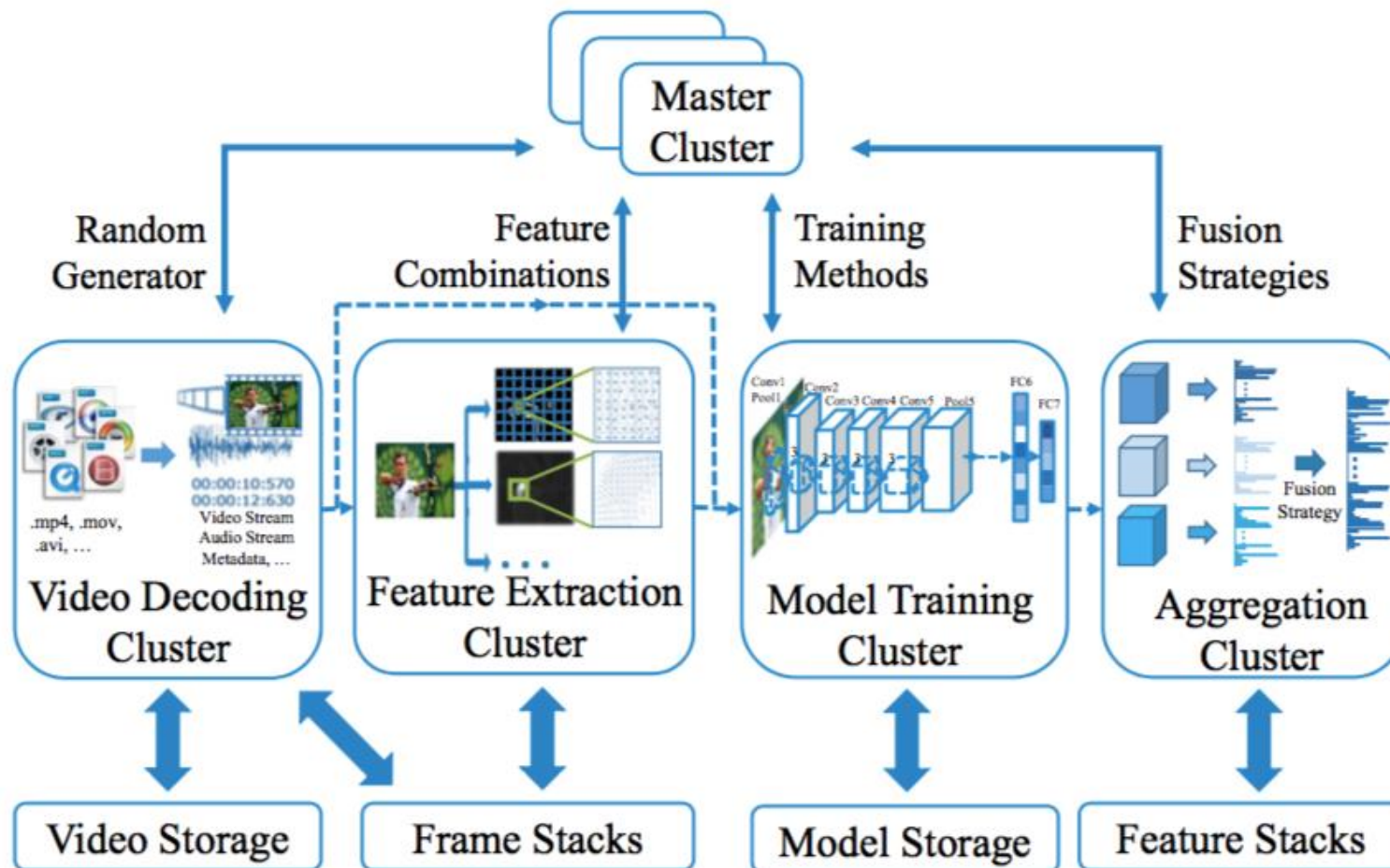
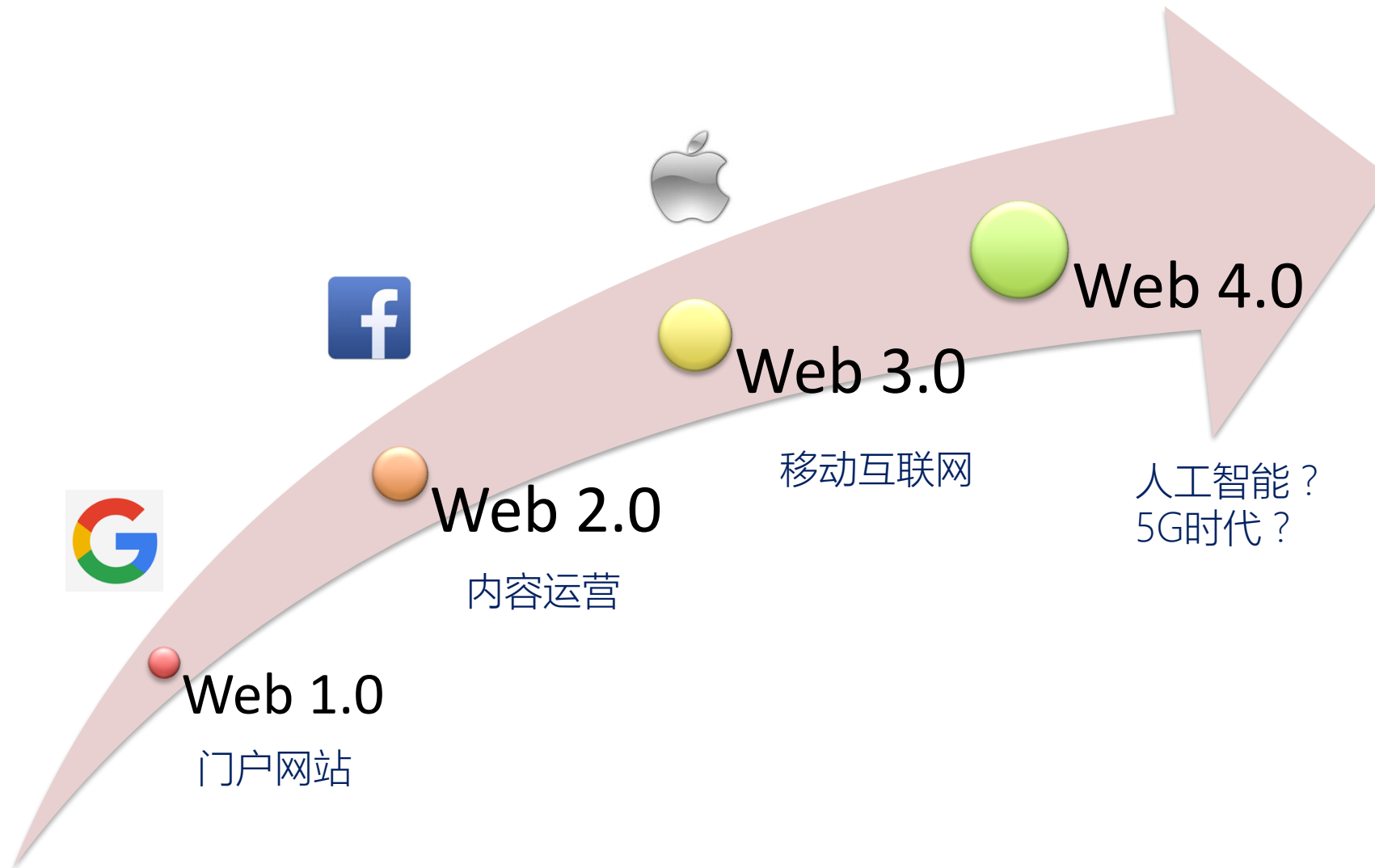
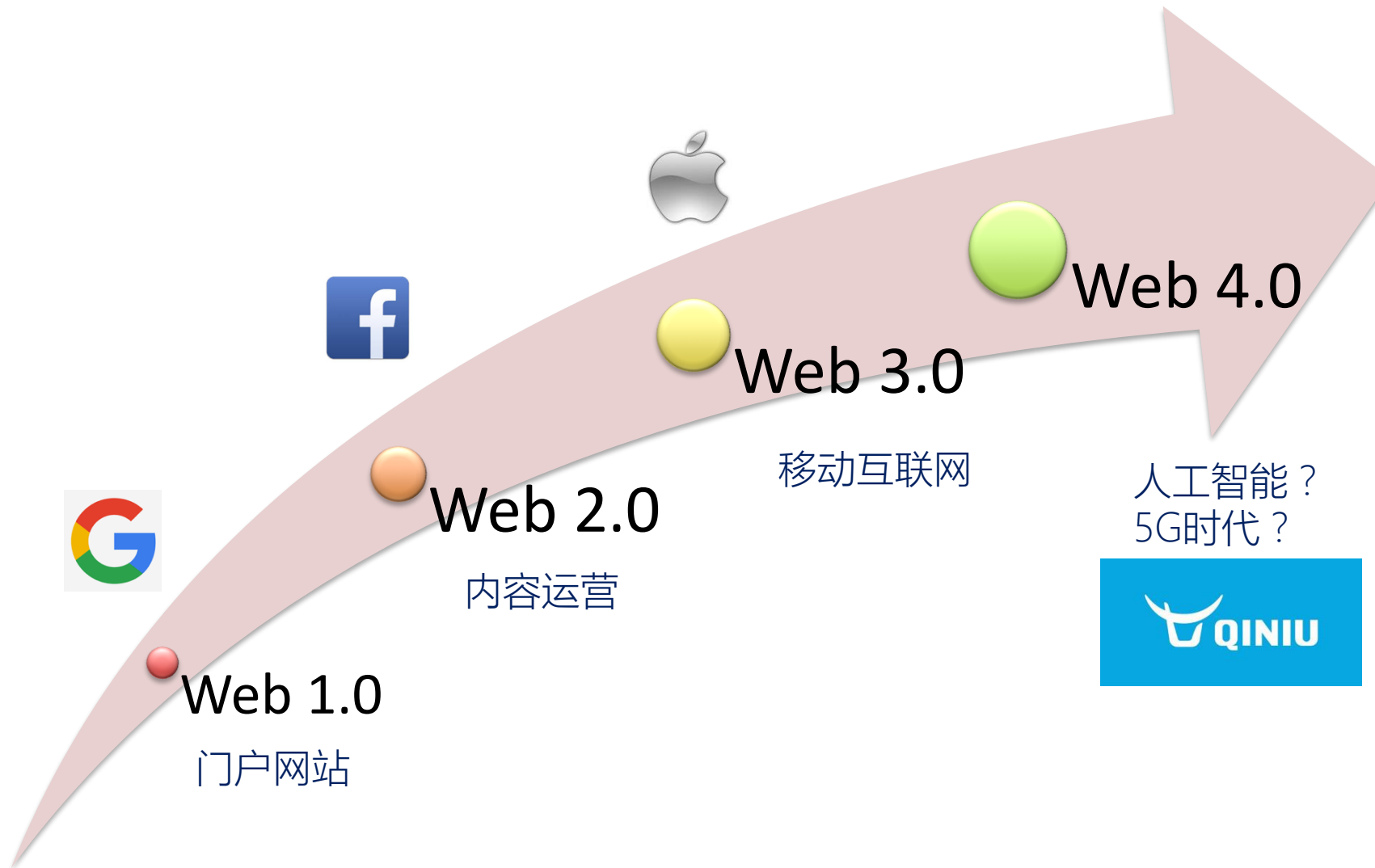


Figure 1: The architecture of the ESSP system.









# IMAGINE

John Winston Lennon

You may say I am a dreamer

but I am not the only one

I hope someday you'll join us

And the world will live as one





# Thanks!

THANKS!

## Q & A

