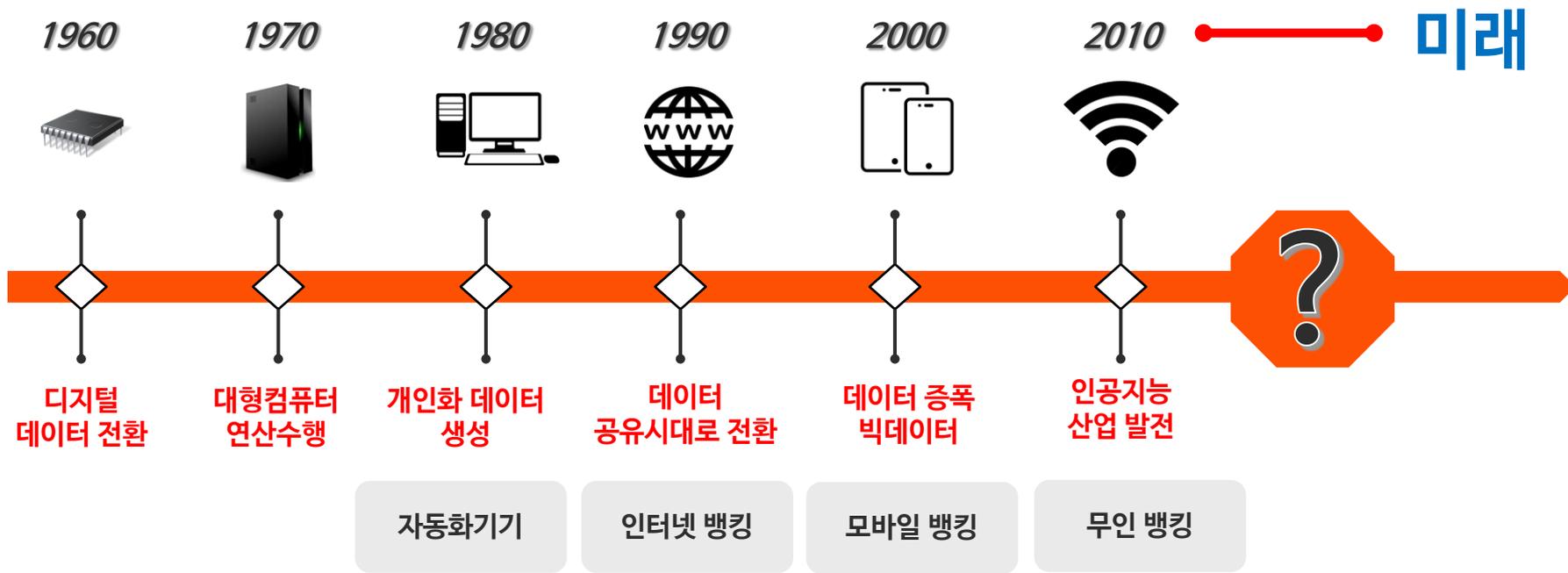


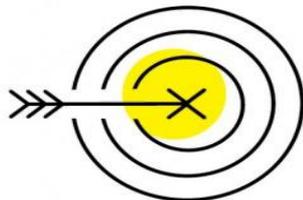
# AI, 디지털 혁명의 리더가 되기 위한 금융플랫폼 미래

2017.12 퓨어스토리지, 홍준혁 이사

# IT발전과 금융 변화



# Top 10 Strategic Technology Trends for 2018



## Intelligent



AI Foundations



Intelligent Apps and Analytics



Intelligent Things



## Digital



Digital Twins



Cloud to the Edge



Conversational Platform



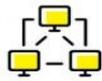
Immersive Experience



## Mesh



Blockchain



Event-Driven



Continuous Adaptive Risk and Trust

[gartner.com/SmarterWithGartner](http://gartner.com/SmarterWithGartner)

Source: Gartner  
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Gartner

## 지능화

# Intelligent Everywhere

## 융합

# 가상/현실 세계의 디지털 융합

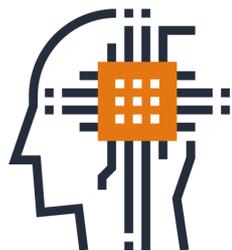
## 확장

# 다양한 서비스간 연결

 PURESTORAGE®

# 금융업 미래 보편화 기술

지능화



**SMART**

디지털융합

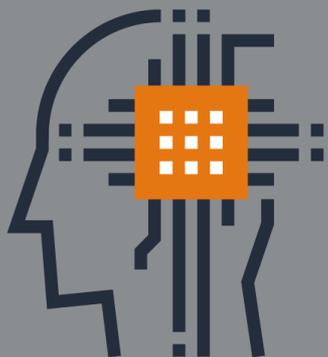


**FASTER**

서비스확장



**ELABORATE**



# 인공지능 기반 금융서비스

# 인공지능 대중화, 챗봇

Bank of America 

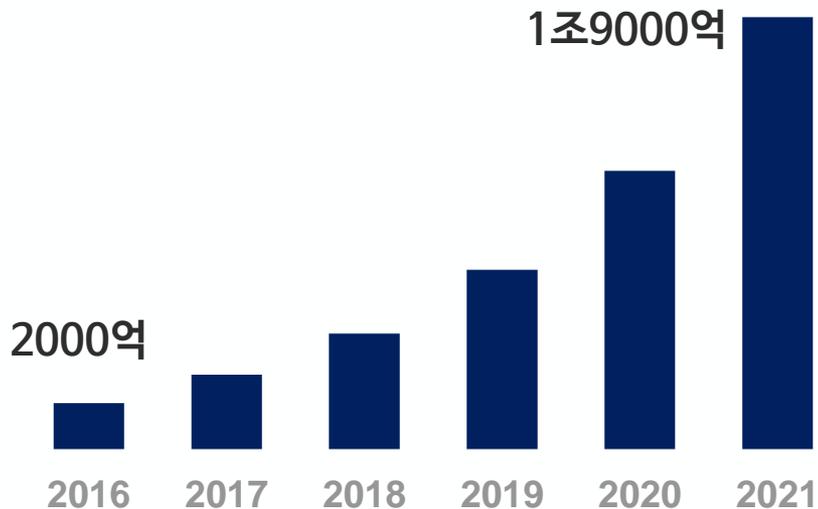


AMERICAN  
EXPRESS



# 디지털 금융 확산, 로보어드바이저

## 국내 로보어드바이저 시장 지속 적용



## 로보어드바이저 장점

### 편리함

Anywhere  
Anytime  
Anyone

### 객관성

데이터기반  
통계적수치  
개인화

# 인공지능 활용 프로세스

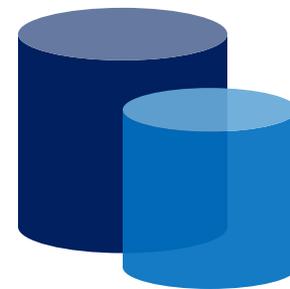
사용자



챗봇, 로보어드바이저

패턴인식  
상황인지  
자연어처리  
시멘틱  
텍스트마이닝

비즈니스데이터



결제정보

고객정보



기업데이터 활용

# 금융시스템, 복잡하고 수 많은 연계

기업내의 모든 데이터 활용 어려움



복잡한 인터페이스 구성

# SILO기반 한계

운영비용 상승



복잡한 관리

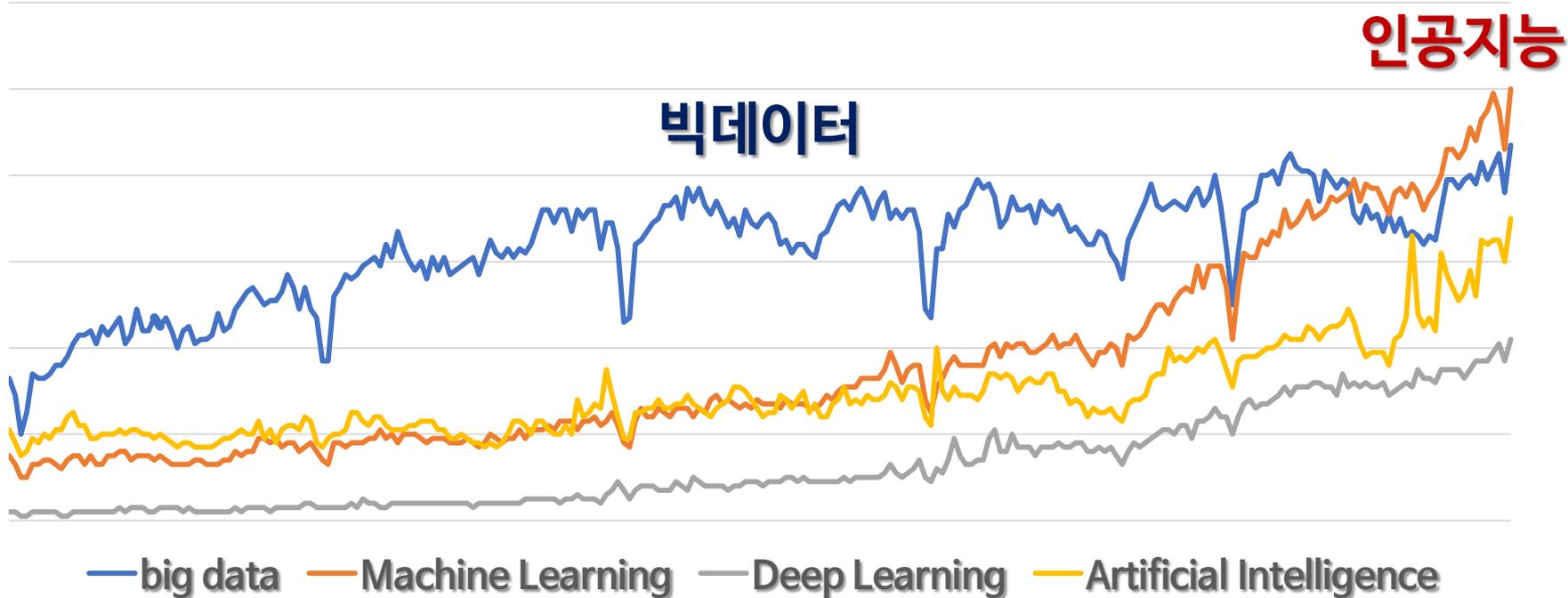


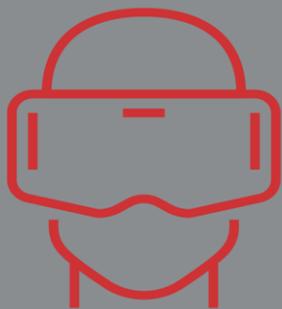
불필요한 이동



# NEXT금융, 반드시 데이터 통합 요구

Google Trend (2012~현재)





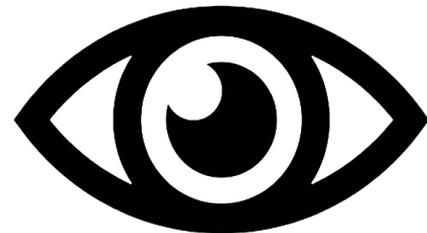
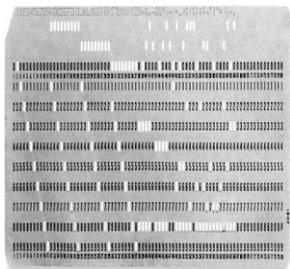
# 디지털 융합 금융서비스

# IT변화와 인터페이스 변화

개인PC

모바일

가상현실



대면

비대면

Virtual Bank

# BUY 가상쇼핑환경에서 구매/결제



Macy's 美国梅西百货

天猫国际 海外旗舰店

Betsey Johnson  
小鹿手提包

人造皮毛 可爱链条包

¥ 454 **BUY+专享价**  
限购5件

- ① 进口税 预计¥58.22
- ② 商家承担 运费



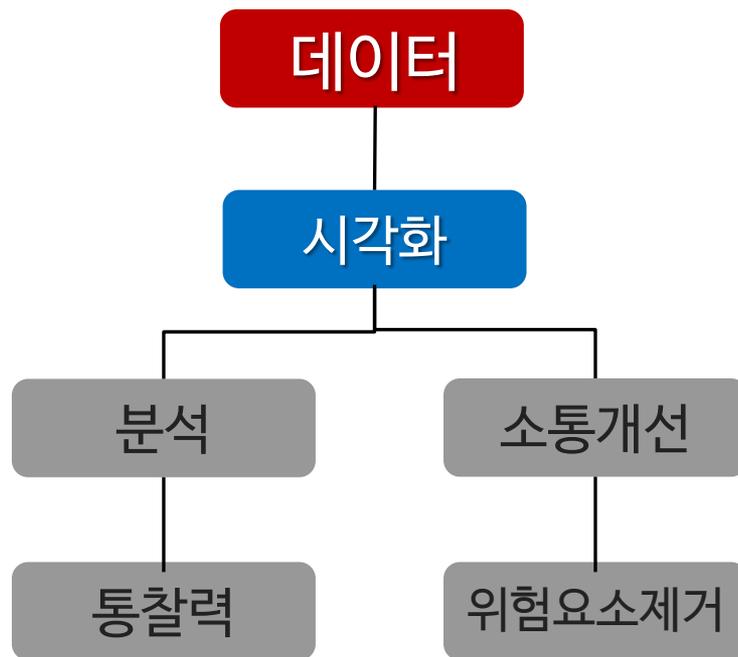
# 금융산업에서 적용 확대

**citi** 투자 및 자산관리



\* Youtube참조  
(<https://www.youtube.com/watch?v=0NogltmewmQ>)

## 비즈니스 환경 개선



# 개인화 기반, 보다 정교한 정보 제공 가능

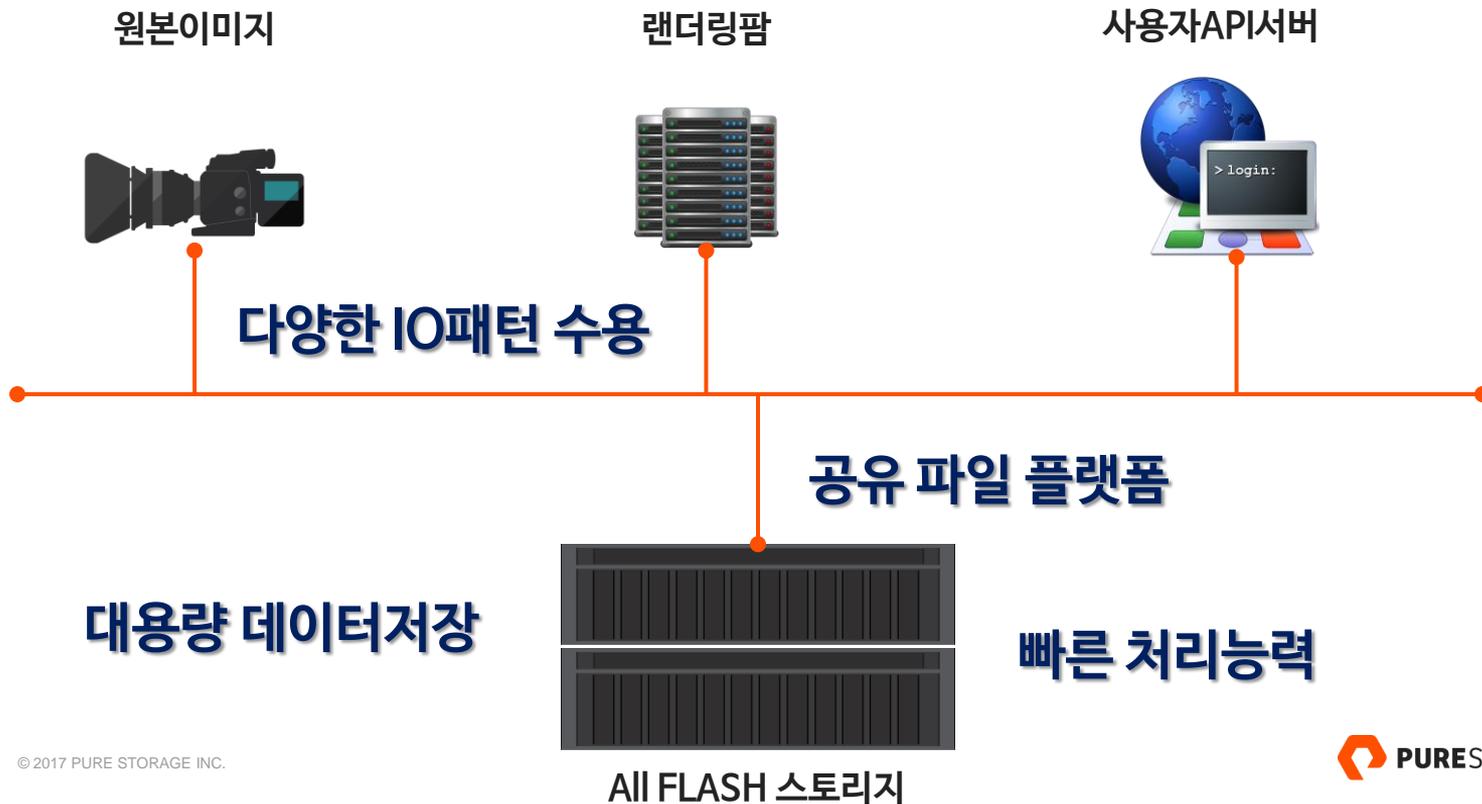


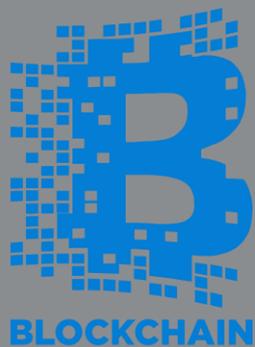
# 가상화를 위한 데이터 처리능력 필수

	FULL HD	Oculus Rift
Total pixels per frame	2.1 M	2.6 M
Total bits	16.6 M	20.7 M
Bit Rate	1.2 Gbps	5.6 Gbps
GB Per sec	0.1 GB/sec	0.7 GB/sec
GB per hour	537 GB/hour	2,519 GB/hour
H.264 Codec	<b>2.0 GB/hour</b>	<b>9.4 GB/hour</b>

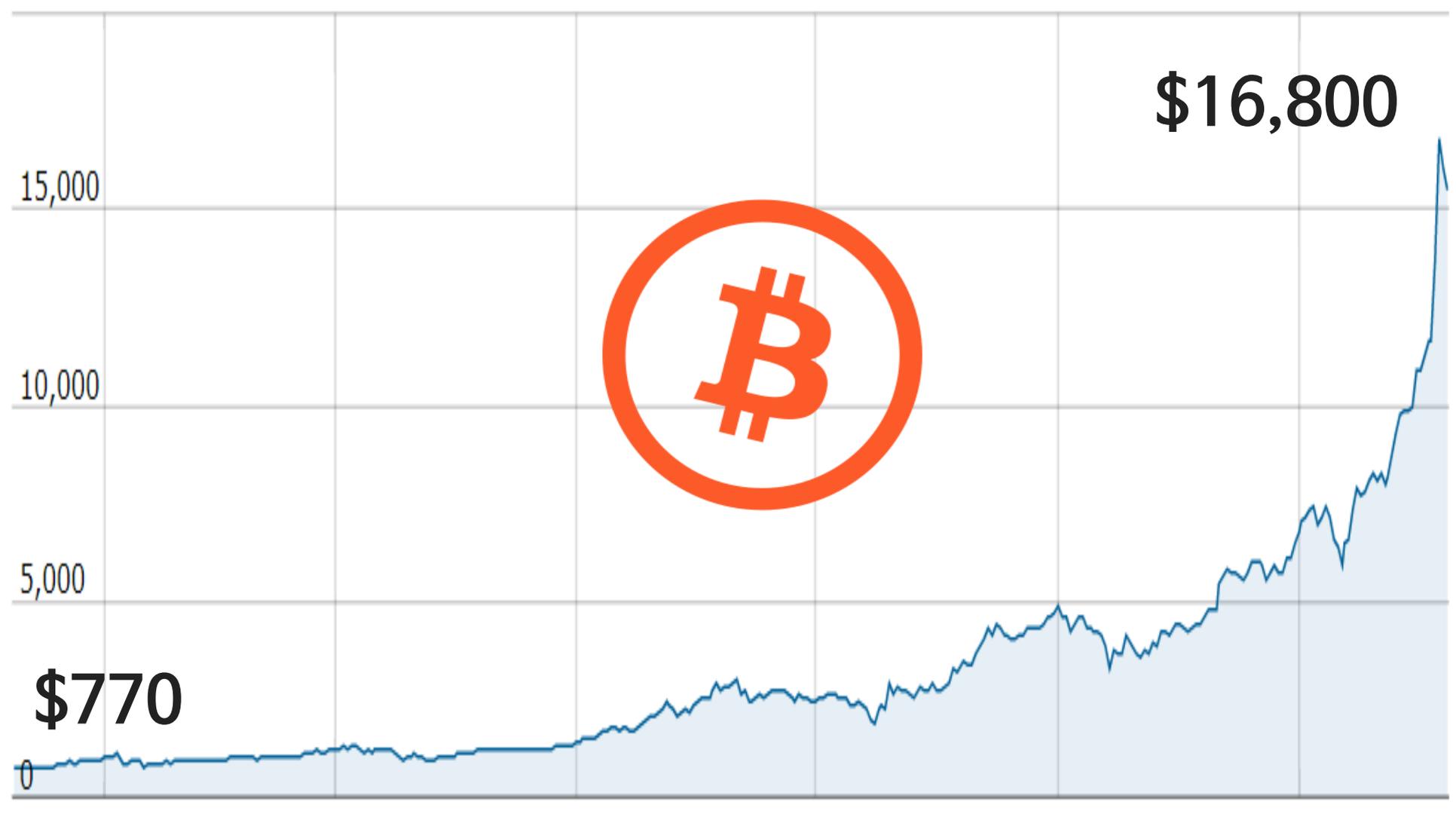
X 4

# 가상현실 플랫폼 조건





# 분산 디지털 금융서비스



**\$16,800**

**\$770**



# 모든 참여자가 공동으로 거래 정보를 검증·기록·보관하는 기술

신뢰성

다중검증

보안성

분산저장

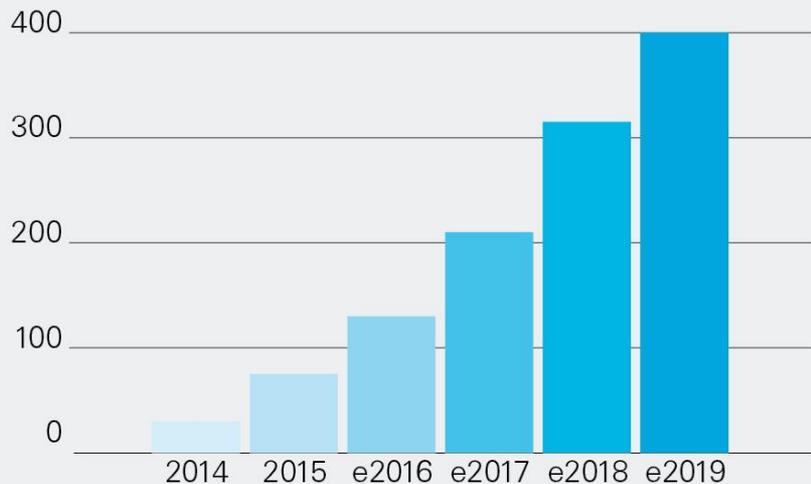
안정성

암호화

# 금융, 블록체인 활용 예

2

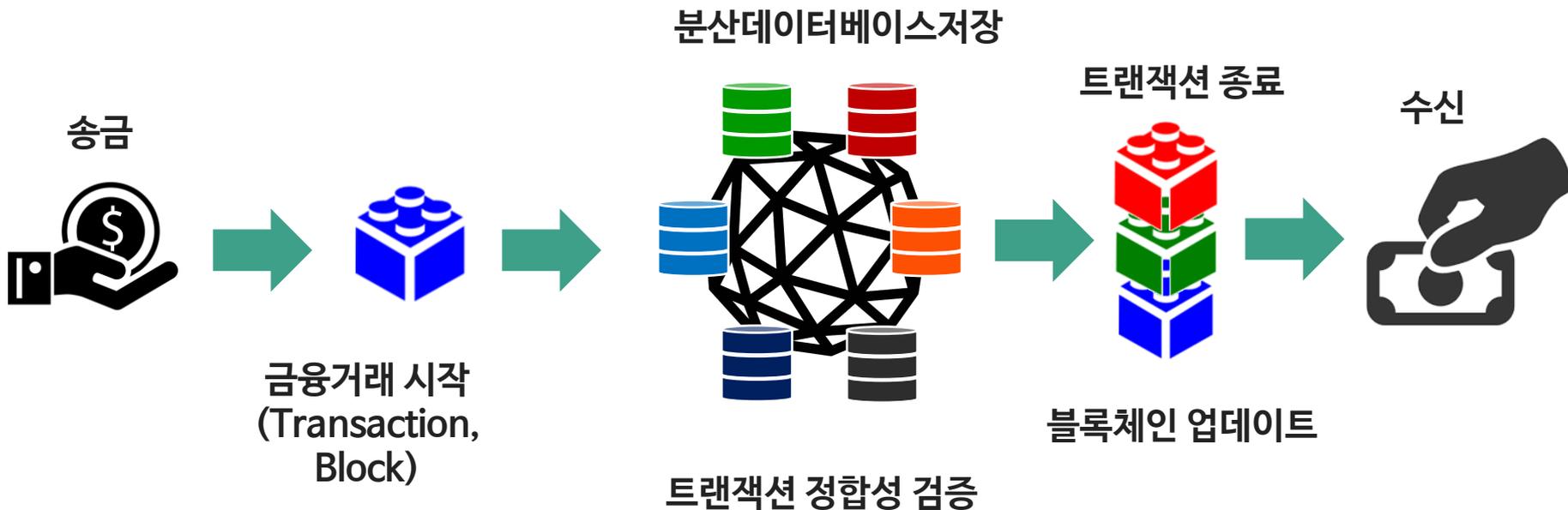
**Bank spending on blockchain is expected to surge** (US\$ millions)



Source: Aite Group

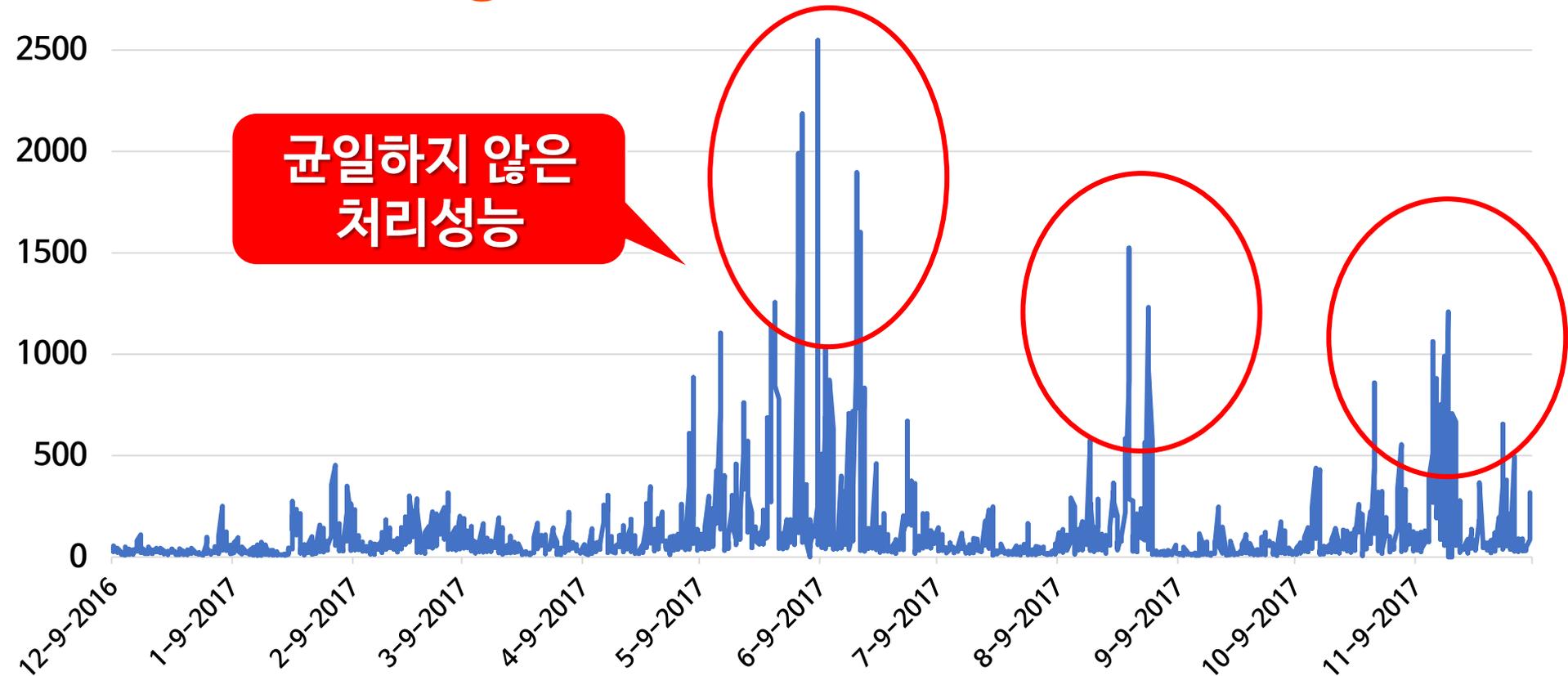
구분	내용
디지털 지갑	전자 화폐 거래용 통장
상품거래	VR/AR 가상환경 거래 간소화
정보관리	고객 및 기업 정보 보호
투자활성화	디지털 화폐기반
기업보안	업무 수행의 규정 준수

# 블록체인 프로세스



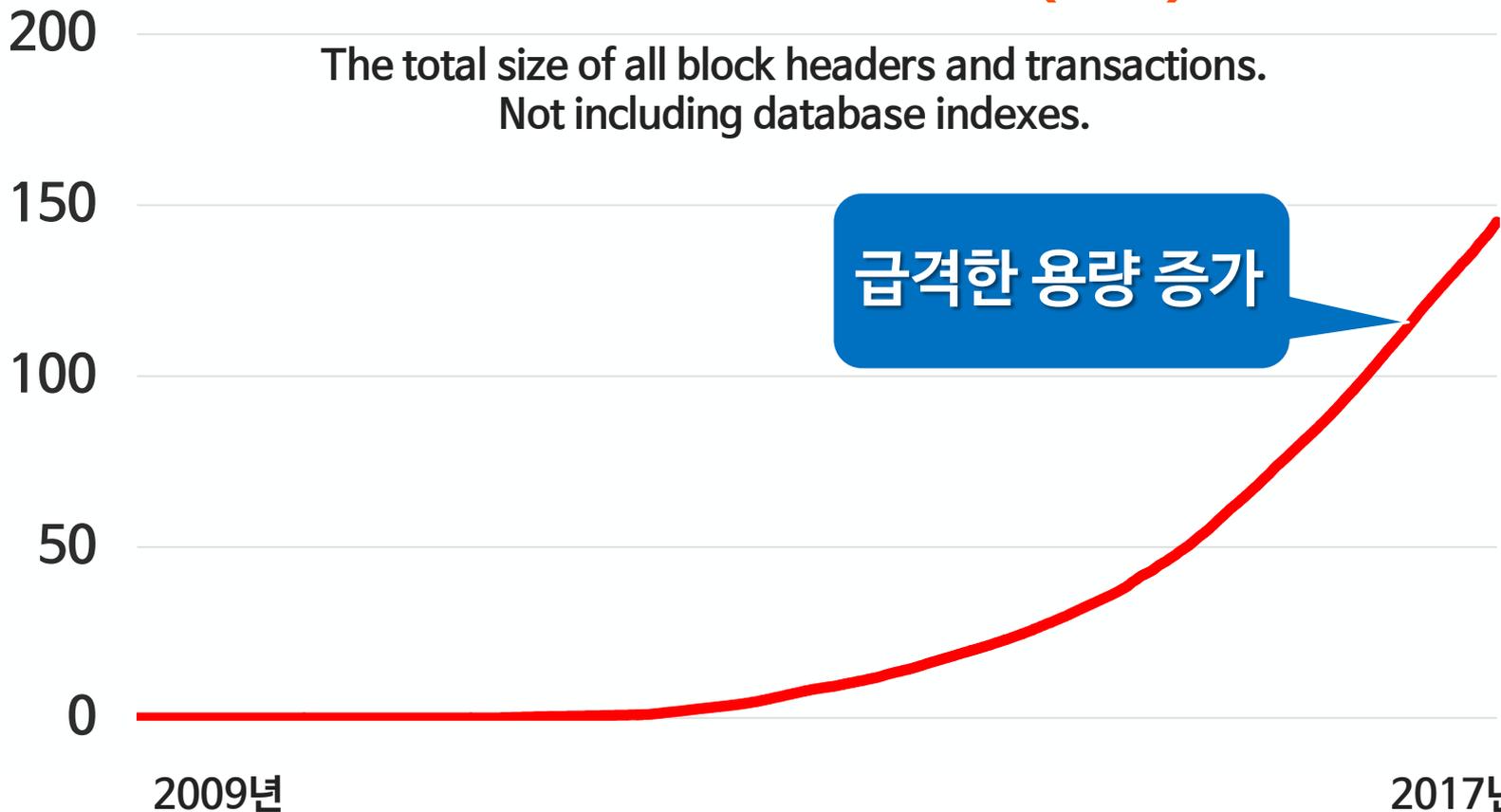
# Average Confirmation Time (Min)

균일하지 않은  
처리성능

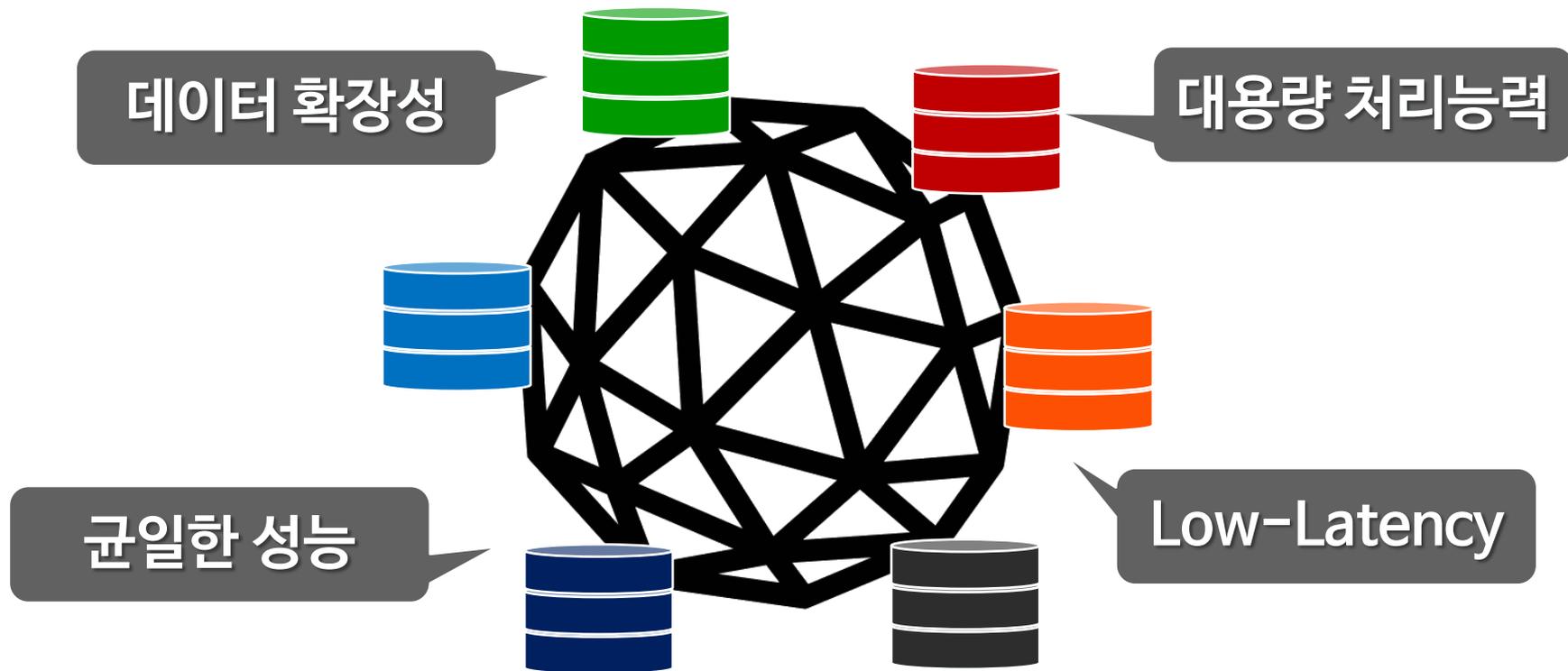


# Block Chain Size (GB)

The total size of all block headers and transactions.  
Not including database indexes.



# 기업 환경에서 블록체인 고려사항





데이터 플랫폼

# 차세대 금융 데이터 플랫폼은 BOTH A TRUCK AND A RACE CAR



CAPACITY  
LARGE FILES  
THROUGHPUT  
SEQUENTIAL ACCESS



CONCURRENCY  
SMALL FILES  
LATENCY  
RANDOM ACCESS

# 실시간 트랜잭션 처리를 위한 FlashArray

## 차세대 SSD 기술 NVMe, 100% 적용



//X70  
CONTROLLER  
(w/ NVMe)



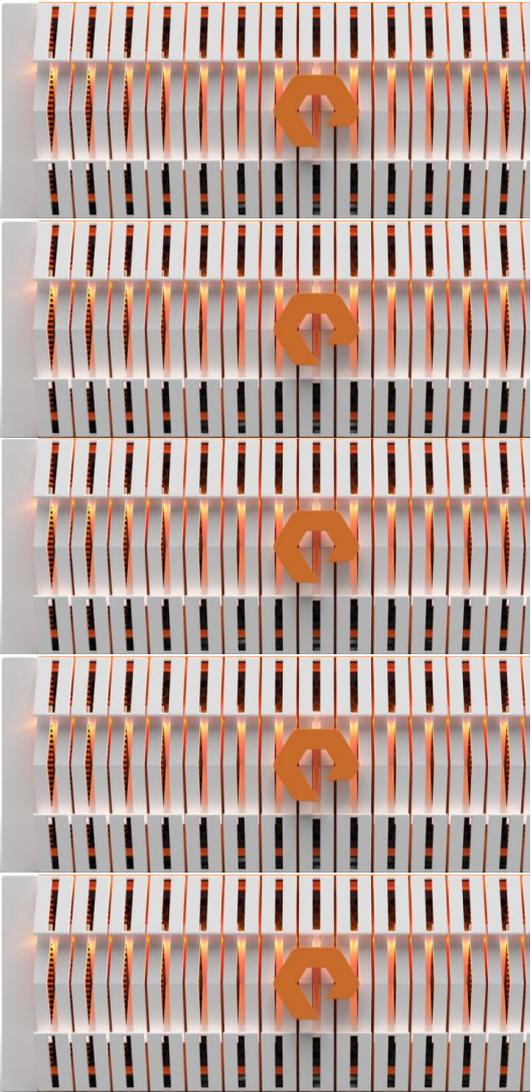
DirectFlash  
SOFTWARE



DirectFlash  
MODULE



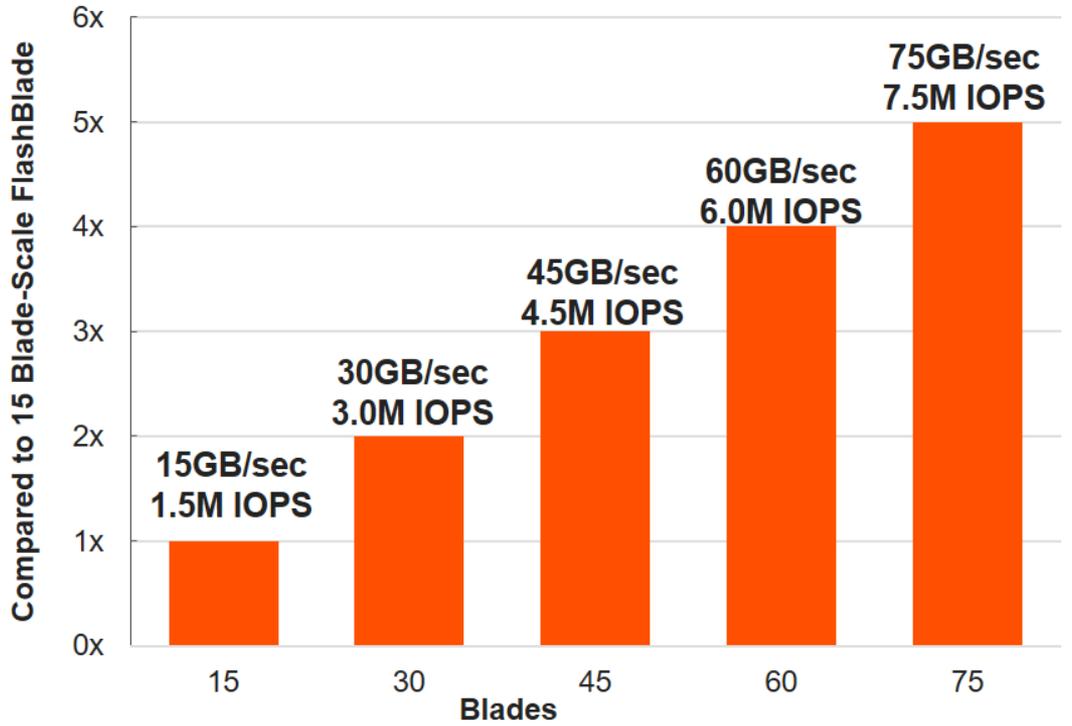
NVMeF  
READY



NFS/CIFS/Object/ Native HDFS 지원

# FLASHBLADE

AI를 위한업계 최초 데이터 허브  
(100% All NVMe)





CLOUD-BASED MANAGEMENT  
ANALYTICS & GLOBAL INSIGHT  
24x7 PROACTIVE RESPONSE



vmware®



CITRIX®

ORACLE®

SAS



Microsoft SQL Server

openstack.

KVM



MESOS

Core OS

puppet

kafka



splunk>



PostgreSQL

elastic



APEX

mongoDB.

redis

MySQL



ARABIC STORM

TRADITIONAL APPS

VMs / CONTAINERS

ANALYTICS

WEBSCALE APPS

HYBRID CLOUD



Google Cloud Platform



Microsoft Azure

EQUINIX



# THE DATA PLATFORM

FOR DIGITAL BUSINESS

DATA EXTENSIBILITY

PowerShell Python C# Orchestration  
REST

Data Mobility Data Processing BYO Container / VM  
CONTAINER ENGINE

DATA PROTOCOLS

BLOCK

VM / VVOL

FILE

OBJECT / S3

HTTPS

DATA SERVICES

REDUCE  
Dedupe  
Compression

ASSURE  
HA, RAID-3D  
99.9999% Avail.  
QoS

SECURE  
Always-on  
Encryption  
Host Encryption  
Multitenancy

PROTECT  
Snapshot  
Replicate  
ActiveCluster

DirectFlash  
SOFTWARE



FlashArray 1M



FlashArray 1X



FlashBlade



FlashStack

# 차세대 금융 IT환경 SMART Data Platform

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감사합니다.

