



# The Rise of Data Capital

## DATA CREATES VALUE

**\$78 trillion**

Global gross domestic product 2014<sup>1</sup>



**\$4 trillion**

Global information, communications, technology (ICT) spending 2014<sup>2</sup>

Some portion of the \$74 trillion-dollar gap between these two numbers is attributable to the **4.4 zettabytes** of data in the digital universe. But how much?



**\$6 trillion**

The accumulating global value of digital-capital investments, about 8.5% of nominal world GDP<sup>4</sup>



**84% of the market value**

of companies in the S&P 500 come from intangible assets<sup>3</sup>

## DATA CAPITAL DEFINED

Data capital is the recorded information necessary to produce a good or service. It encompasses any and all captured data, including:



**Audio**

Customer support calls, voice interactions from devices and automated systems



**Video**

Satellite imagery, X-rays, security footage



**Sensor**

Temperature, humidity, vibration, acceleration



**Mobile**

App interactions, device configuration, GPS



**Social**

Posts, shares, network links



**Enterprise**

Transactions, customer records, support history



**Why It Matters:**

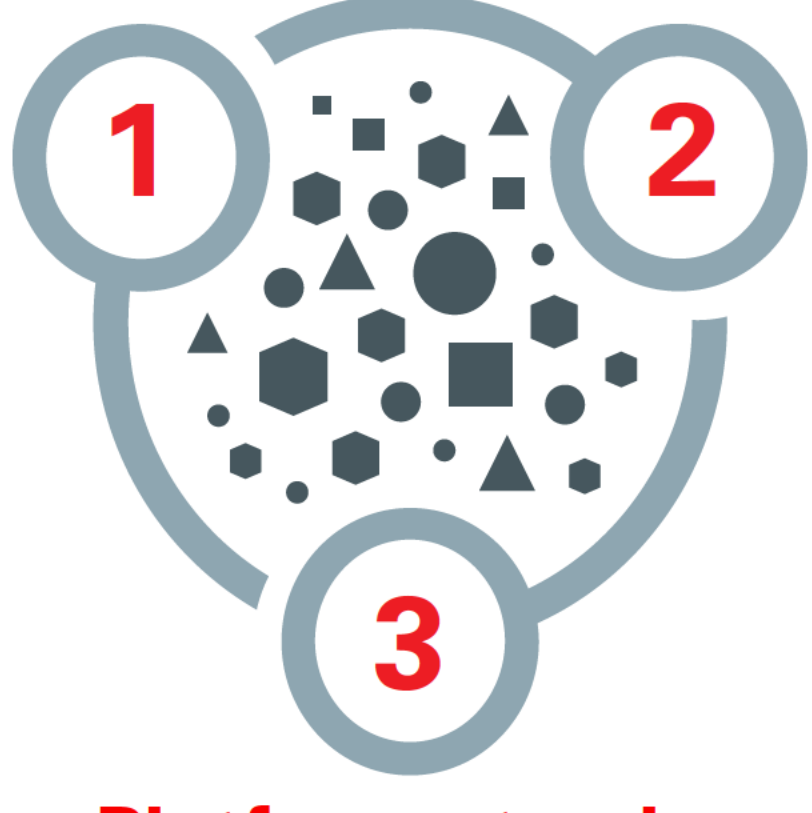
Data capital has big implications for competitive strategy.

## 3 PRINCIPLES OF DATA CAPITAL

**Data comes from activity**

Data is not just a record of what happened, but raw material for creating new digital products and services.

**So what? You can't build with data you don't capture.**



**Data tends to make more data**

Algorithms that drive pricing, ad targeting, inventory management, and fraud detection all produce data about their own performance - data that improves performance.

**So what? Algorithms are the secret weapon of data-driven competition.**



**Platforms tend to win**

The capture and use of more data in more daily activities brings platform competition to real-economy industries like transportation, manufacturing, financial services, and healthcare.

**So what? Platform competition often leads to a winner-take-all outcome.**

## HOW ORACLE CAN HELP

Fully exploiting data capital requires a hybrid cloud architecture that delivers new capabilities:



**Data driven tailoring**

Algorithms taking finely tuned actions on behalf of the company.

► Wargaming.net uses advanced analytics to understand and segment its online gaming players more accurately and faster its 300 billion events per day.

**62%** Revenue increase in one region by increasing the precision of messaging for that region

**Before** 6:00 Hours it took to run just one predictive model related to player activity  
**After** 0:03 Minutes it took to successfully run an ensemble of four player activity predictive models



**Data services**

Data packaged up for sale or made available for use through APIs.

► We work with many of the Fortune 500 global brands in virtually every industry:

**26** of the top CPG brands  
**13** of the top retail brands  
**8** of the top auto manufacturers  
**3** of the top U.S. banks, tech providers, travel brands and wireless telcos

► OracleData Cloud Audience Data Marketplaces give you access to:

**110MM** U.S. HHs  
**\$3T** in consumer transactions  
**1,500+** data partners



**Data nudges**

Using analytics embedded in applications to nudge people toward desired outcomes.

► De Persgroep analyzes a 360 degree view of customer and prospect behavior, achieving:

**92%** prediction accuracy to reduce customer subscriber churn, and a  
**6x** improvement in converting prospects to customers.

► CaxiaBank integrates massive datasets from points of sale, ATMs, web, and mobile to deploy personalized, targeted messages - which led to:

**39%** improvement of click-through rates  
**50%** resulting sales

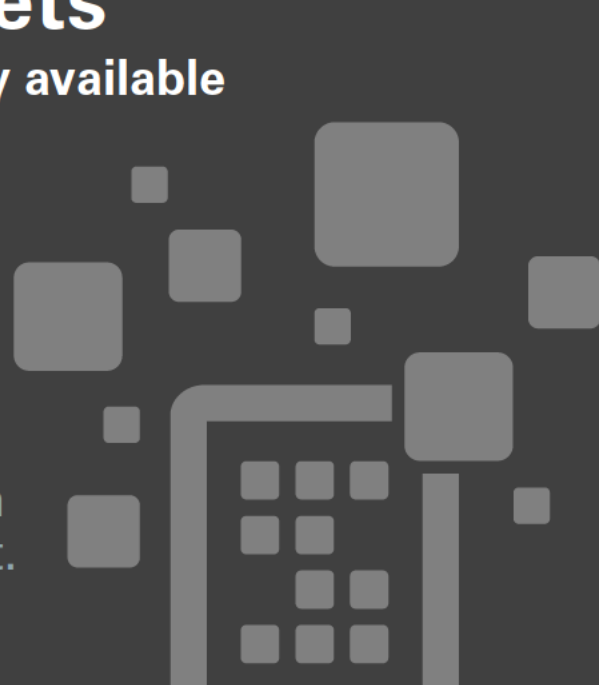
in less than one month.



**Internal data markets**

Making diverse data sets easily available within the company.

► CERN's Large Hadron Collider is the most complex machine in the world. The lab combines diverse data from hundreds of flow meters, thousands of control valves and over ten thousand actuators into one internal data market. Technicians browse for data sets in this market, making new combinations of data to uncover new issues before they become problems.



To learn more about how to take advantage of your data capital, visit: [oracle.com/bigdata](http://oracle.com/bigdata)

Join our communities

<sup>1</sup> <http://databank.worldbank.org/data/download/GDP.pdf>  
<sup>2</sup> <http://www.statista.com/statistics/203935/overall-it-spending-worldwide/>  
<sup>3</sup> <http://www.ocean-tomo.com/blog/2015/03-05-ocean-tomo-2015-intangible-asset-market-value>  
<sup>4</sup> [http://www.mckinsey.com/insights/high\\_tech\\_telecoms\\_internet/measuring\\_the\\_full\\_impact\\_of\\_digital\\_capital](http://www.mckinsey.com/insights/high_tech_telecoms_internet/measuring_the_full_impact_of_digital_capital)