THE MOST VALUABLE RESOURCE

BY NIKHIL RANJAN

Introduction

In its purest form, oil is a black liquid comprised of several organic compounds. Hundreds of corporations and countries invested millions and billions to mine this so-called 'black gold.' In 2013 the oil industry had a total world industry revenue above $1.23 trillion[1]. Oil powers everything, controlling the oil means money and power. Countries would fall and rise in power due to oil. The US has a fleet designated to protect certain middle-eastern countries that export oil to the US. Oil has brought up great prosperity and tough times for individuals and groups, but there's a new commodity. Times are changing, we now live in a digital economy where data and information is now more valuable than ever with Big Data analytics predicted to pass $200 billion by 2020 and climbing fast.[2]

Data is the fuel that powers the information and consumer economy just as oil/fuel powers the industrial economy. Although the information sector has not nearly approached the worth of the oil sector, the use of data and information is growing everywhere. Remember that the amount of oil that the Earth can provide is a finite number, while the amount of data collected is infinite. Oil comes from the organic material deep in the ground that came before us tens of thousands of years ago. We should've left those specimens in the ground, but oil is relatively cheap compared to other renewable energy sources. Just like every commodity comes liabilities. In 2010 BP Oil had a major oil spill killing men and women aboard the rig and affecting sea life and shore life. Ultimately oil has and continues to be a basis for the downfall for many situations including global warming and becoming scarce with no other real form of energy to replace its scale.

Data is everywhere, honestly too much to use on its own, basically worthless. Only when given context and analysis is it really useful and valuable. Then depending on the given context and outcome then it can come in greater use for corporations and individuals. Data can be used to create specified ads, create better research practices, create better transportation operations and many more. Just like oil data also has its liabilities. All this data can be used to advance a war, create weapons, and even an election that is still under investigation with voter data tampering.

Many don't believe that oil has the growth potential that will outshine and overpower that of oil. Data is way more important and more promising because it holds a much larger force multiplier. Data allows the people to become more efficient and smarter, ultimately saving money and time.

Find graph comparison of industry worth, info vs. oil

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[1] "World gas and oil industry revenue 2013 | Statistic." *Statista*, www.statista.com/statistics/215892/revenues-of-the-world-gas-and-oil-industry/.

[2] Press, Gil. "6 Predictions For The $203 Billion Big Data Analytics Market." *Forbes*, Forbes Magazine, 20 Jan. 2017, www.forbes.com/sites/gilpress/2017/01/20/6-predictions-for-the-203-billion-big-data-analytics-market/#17dcd5c62083.

OIL	DATA
$1.3 Trillion in Worth	**$220 Billion worth(Proj. 2020)**
Finite Resource	**Infinite Resource**
Industrial Sector	**Implemented in every Sector**
Can cause conflicts and Wars	**Can be a liability, losing private info**

Significance

Decades ago, oil was the top commodity, being imported and exported everywhere. Now the torch is being passed and the craze is being shifted to data. Tech giants like Amazon, Google, Apple, Microsoft, and Facebook are the top 5 most valuable firms in the world.[3] Amazon racks in almost half of the dollars spent online in America and Google and Facebook accounted for most of the revenue growth in digital advertising in America. Just as countries and corporations rose to power with the control and distribution of oil, the same is for data. Just as oil allowed countries to win wars and develop advanced machines and weapons, data is now being used to make these technologies more efficient, using already collected data to maximize each dollar invested. Oil was and still is a very one dimensional commodity, meaning it primary use it to be burned. However data isn't one dimensional at all, in fact it can be applied everywhere and anywhere, whether its to improve efficiency, improve time, change formulas, create products, new strategies; the fact is, Data allows corporations and individuals to be better at what they do with maximizing their dollar.

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[3] "The world's most valuable resource is no longer oil, but data." *The Economist*, The Economist Newspaper, 6 May 2017.
[4]Bhaduri, Abhijit. "Data is the new oil. Start running your organisation with it." *YOURSTORY*, yourstory.com/2017/05/data-new-oil-start-running-organisation/.

What is this Big Data?

One of the most common forms talked about with data and information is Big Data. SAS, a software company describes Big Data as "is a term that describes the large volume of data – both structured and unstructured – that inundates a business on a day-to-day basis." [5] Any browser you use, any digital market or website connected to the internet is always collecting data. More specifically what you click on, what you're looking at, what you're buying is all collected and analyzed to help businesses plan and strategize. This data is not important on a quantitative basis, meaning it doesn't matter how much is collected, but really what is done with it. All of this data can be used in many ways for corporations including strategic planning, decision making, and marketing.

[6]

Why is Big Data Important?

Once again Big Data isn't built around the amount that is collected, rather what is done with it. This data can be taken from anywhere that a corporation has control of. All of this data can be analyzed and be used to decrease costs, improve time efficiency, create new optimization projects, and better decisions for strategies and planning.[7]

Application of Big Data in the Real World

According to Bernard Marr, a well-known author and strategist, there are 10 ways Big Data is most commonly used. I will go over a few just to give an overview of the applications for Big Data. The most common and most talked about is the use of big data with understanding and

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[5]"What is Big Data and why it matters." *What Is Big Data? | SAS US*, www.sas.com/en_us/insights/big-data/what-is-big-data.html#.
[6] "Big Data." *Digital Frontiers - Dtiers*, www.dtiers.com/big-data-2/.
[7]"What is Big Data and why it matters." *What Is Big Data? | SAS US*, www.sas.com/en_us/insights/big-data/what-is-big-data.html#.

targeting customers.[8] In one case the retailer Target could basically predict when their customers would be expecting a baby by matching what women would buy during their stages of their pregnancy. Target would then send coupons or notifications on sale or clearance items to women based on what 'stage' they were at.[9]

Another way Big Data is used to support business is to analyze data to better decisions and optimize efficiency. Strategies like traceability can better companies when it comes to supply chain optimization. With the use of barcodes and RFIDs companies and distributors can easily pinpoint where problems have occurred and tackle it with efficiency. Bank of America noticed that their best call center employees all took breaks together, they then implemented 'group-break' policy and performance improved by more than 23%.

Big Data analytics doesn't necessarily only apply to the business world, but can also be applied in Sports. More specifically data can be used to track a players effort and performance, used for referees to make better judgments, and used to keep fans satisfied and entertained. ESPN did a bit on Jimbo Fisher's Seminoles' and their use of GPS technology during practice. Each GPS supplies 1000 points of information/sec. All of this data is used for coaches to dissect each player's performance; who is going hard, who is slacking, who needs extra attention[10]. Other teams are following suit, spending money on technology that allows teams to see more than meets the eye.

There are so many areas where Big Data can be used and analyzed to better a number of aspects of many different sectors.

Statistics

According to DOMO, a software company that specializes in business intelligence and data visualization, 3.7 billion people use the internet, that's more than 2.5 billion recorded from 2012 [11]. They also recorded that:

- Google conducts 3,607,080 searches.
- Uber riders take 45,787 trips.
- Amazon rakes in $258,751.90 in sales.
- Skype users make 154,200 calls.

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[8] "How is Big Data Used in Practice? 10 Use Cases Everyone Must Read." *Bernard Marr*, www.bernardmarr.com/default.asp?contentID=1076.

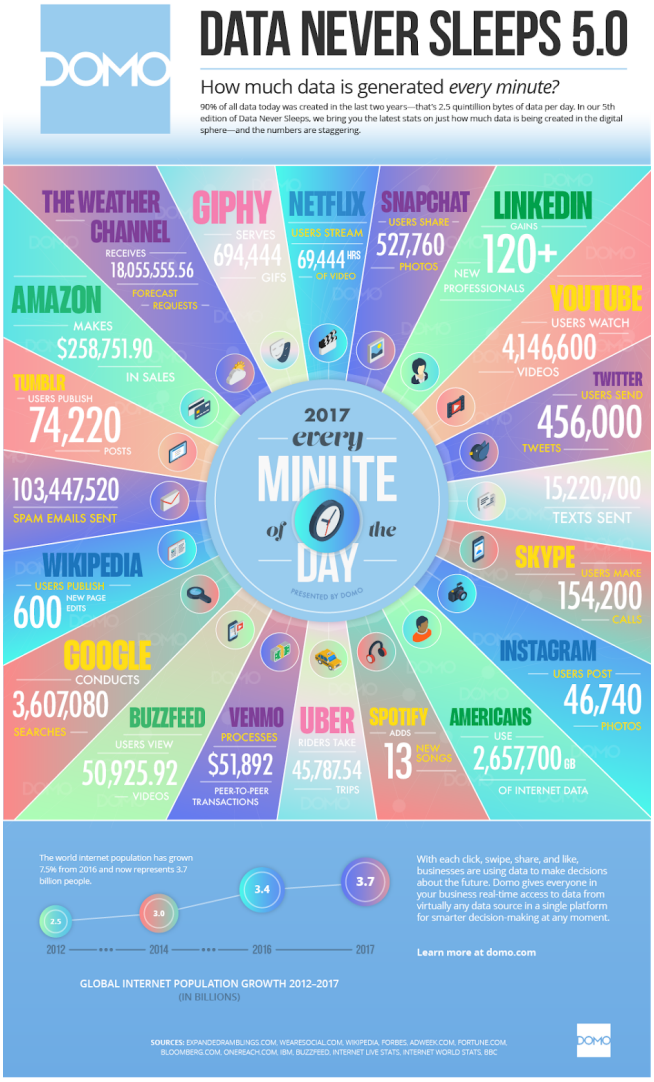
[9] Hill, Kashmir. "How Target Figured Out A Teen Girl Was Pregnant Before Her Father Did." *Forbes*, Forbes Magazine, 31 Mar. 2016, www.forbes.com/sites/kashmirhill/2012/02/16/how-target-figured-out-a-teen-girl-was-pregnant-before-her-father-did/#3c4452386668.

[10] Hale, David M. "FSU rides GPS technology to title." *ESPN*, ESPN Internet Ventures, 23 June 2014, www.espn.com/college-football/story/_/id/11121315/florida-state-seminoles-coach-jimbo-fisher-use-gps-technology-win-national-championship.

[11] "Data Never Sleeps 5.0 | Domo." *Data Management – Data Analytics – Data Reporting*, www.domo.com/learn/data-never-sleeps-5?aid=DPR072517.

- Venmo processes $51,892 peer-to-peer transactions.
- Twitter users post 456,000 tweets.
- People send 15,220,700 text messages.
- People receive 103,447,520 e-mail spam messages.
- The Weather Channel receives 18,055,557 requests for forecasts.
- Wikipedia publishes 600 new page edits.
- Tumblr users publish 74,220 posts.

These numbers are incredible, 90% percent of all data that exists has been created over the past 2 years. So as years pass and everything becomes digital and collected, more and more data will be used to advance our lives. I have provided DOMOs' infographic on data collection



[12]

[12] "Data Never Sleeps 5.0 | Domo." *Data Management – Data Analytics – Data Reporting*, www.domo.com/learn/data-never-sleeps-5?aid=DPR072517.