Data: It's a Kind of a Big Deal

Allen Turner – International Paper, Innovative Solutions

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The road ahead…

- Headline news
- Value proposition
- Focus on the foundation
- Takeaways

“Sixty percent of the time it works every time”

- Ron Burgundy (Anchorman)

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Headlines news… Data is a big deal

"Without big data, you are blind and deaf and in the middle of a freeway." – Geoffrey Moore

"In God we trust, all others bring data."
— W Edwards Deming

"Data is the new Bacon."

"Where there is data smoke, there is business fire." — Thomas Redman

"You can have data without information, but you cannot have information without data."
— Daniel Keys Moran

"Data beats emotions." — Sean Rad

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Data: The Currency of Modern Business

- More data has been created in the past two years than in the entire previous history of the human race. *~40 Zetabytes of data exist (2019) = 40 billion terabytes*
- 95% of businesses need to manage unstructured data. (Forbes, 2019)
- For a typical Fortune 1000 company, a 10% increase in data accessibility will result in more than $65 million additional net income (Forbes, 2015)
- Businesses that use **Big Data** saw a profit increase of 8–10% and a 10% reduction in overall cost. (Entrepreneur, 2019)
- It's a precious commodity - worth mining & refining

➢ **At the moment < 0.5% of all data is ever analyzed and used ….imagine the potential**

Sources: Waterford Technologies (2017); Entrepreneur (2019), Forbes (2015, 2019)

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What is **Big Data**?

Big Data (/big/ /ˈdadə,ˈdādə/)

A term that describes the large volume of data – both structured and unstructured – that **inundates** a business **on a day-to-day basis**.

But it's not the amount of data that's important. **It's what organizations do with the data that matters.** Big data can be analyzed for insights that lead to better decisions and strategic business moves.

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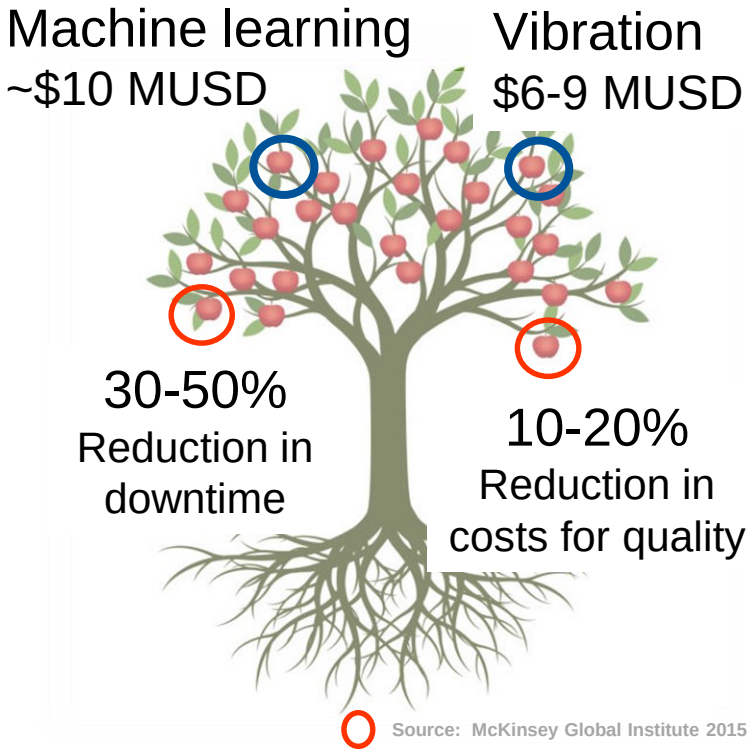
Data: It could be a Big Deal (but show me the money)

What's driving Industry 4.0

- Lower Operating Costs
- Improved Equipment Reliability
- Increased Uptime/Performance
- Improved Quality



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Industry 4.0 could be a…

opportunity

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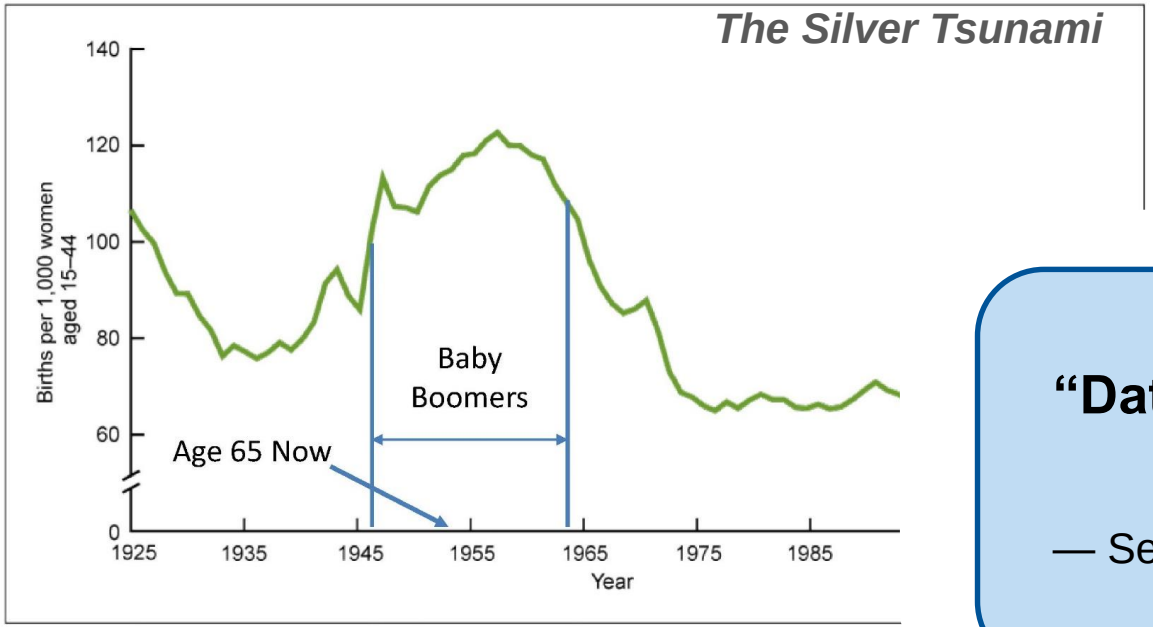
Workforce demographics

moving from experience-based, leader-driven decisions to data-driven decisions



NOTES: Data for 2009 are preliminary. Access data table for Figure 1 at: http:/www.cdc.gov/nchs/data/databriefs/db60_tables.pdf
SOURCE: CDC/NCHS, National Vital Statistics System.

“Data beats emotions.”

— Sean Rad

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Data is Valuable

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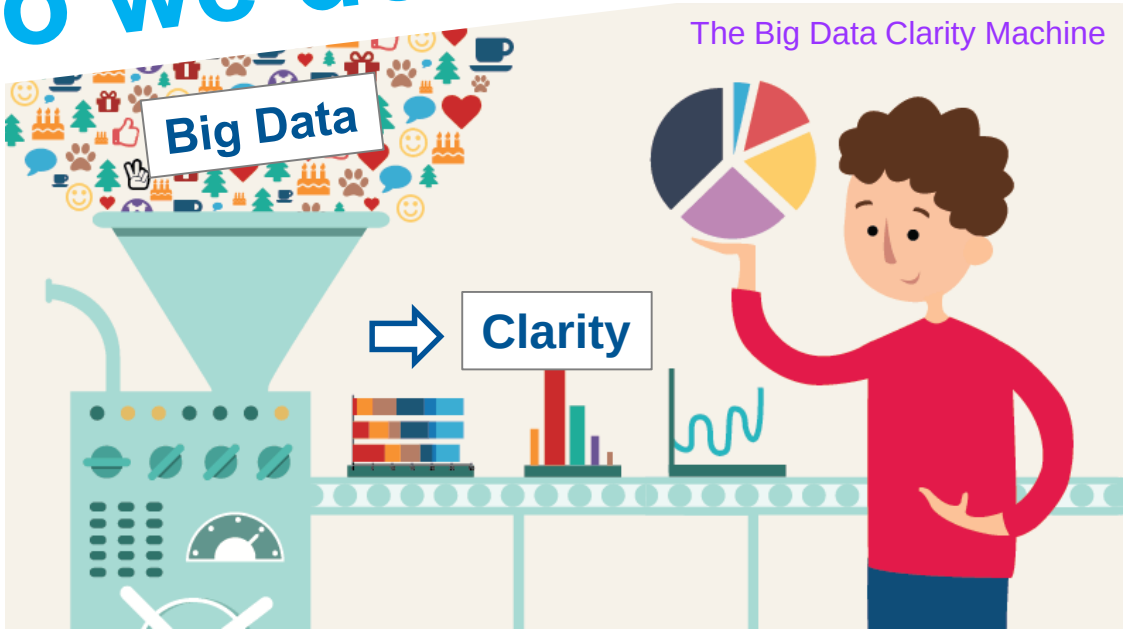
If Data is a big deal…

Now what do we do with it?



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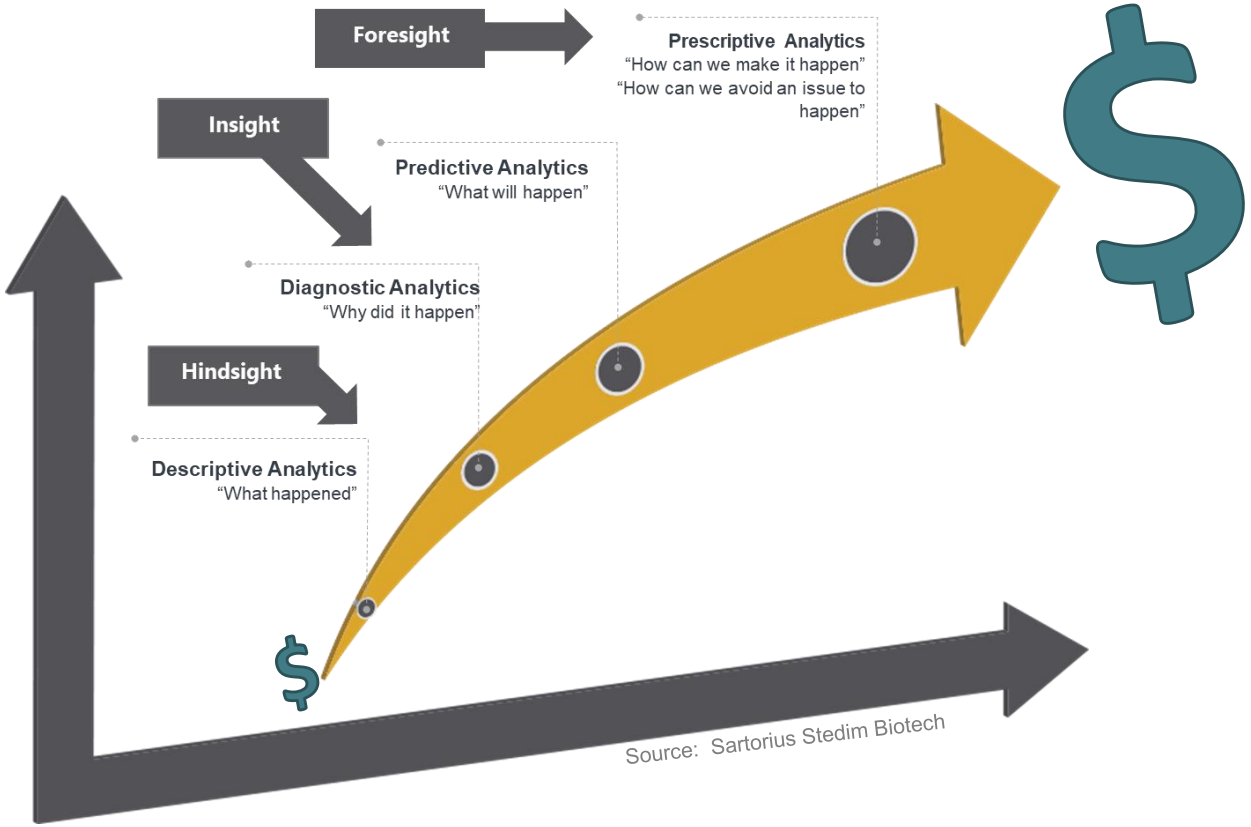
Data Maturity Model



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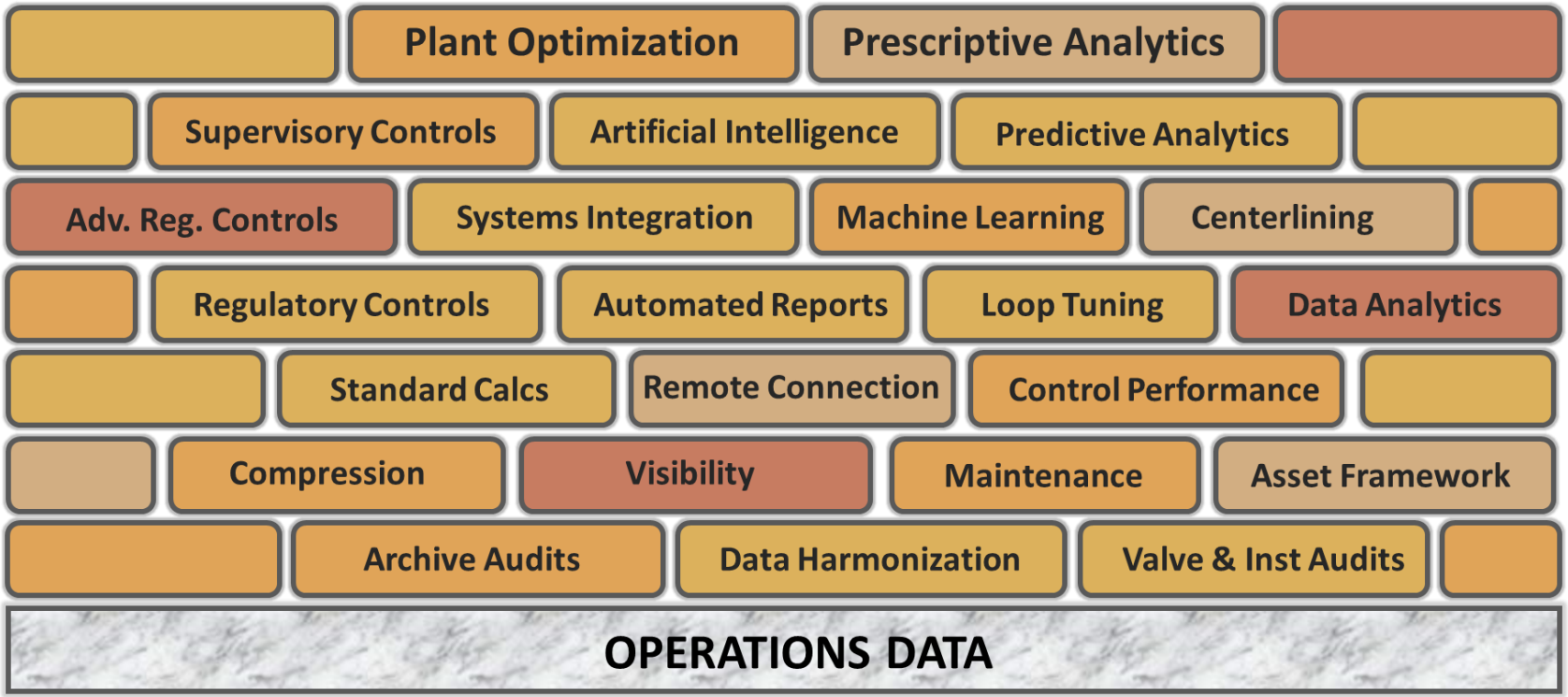
First thing First – Focus on the Foundation



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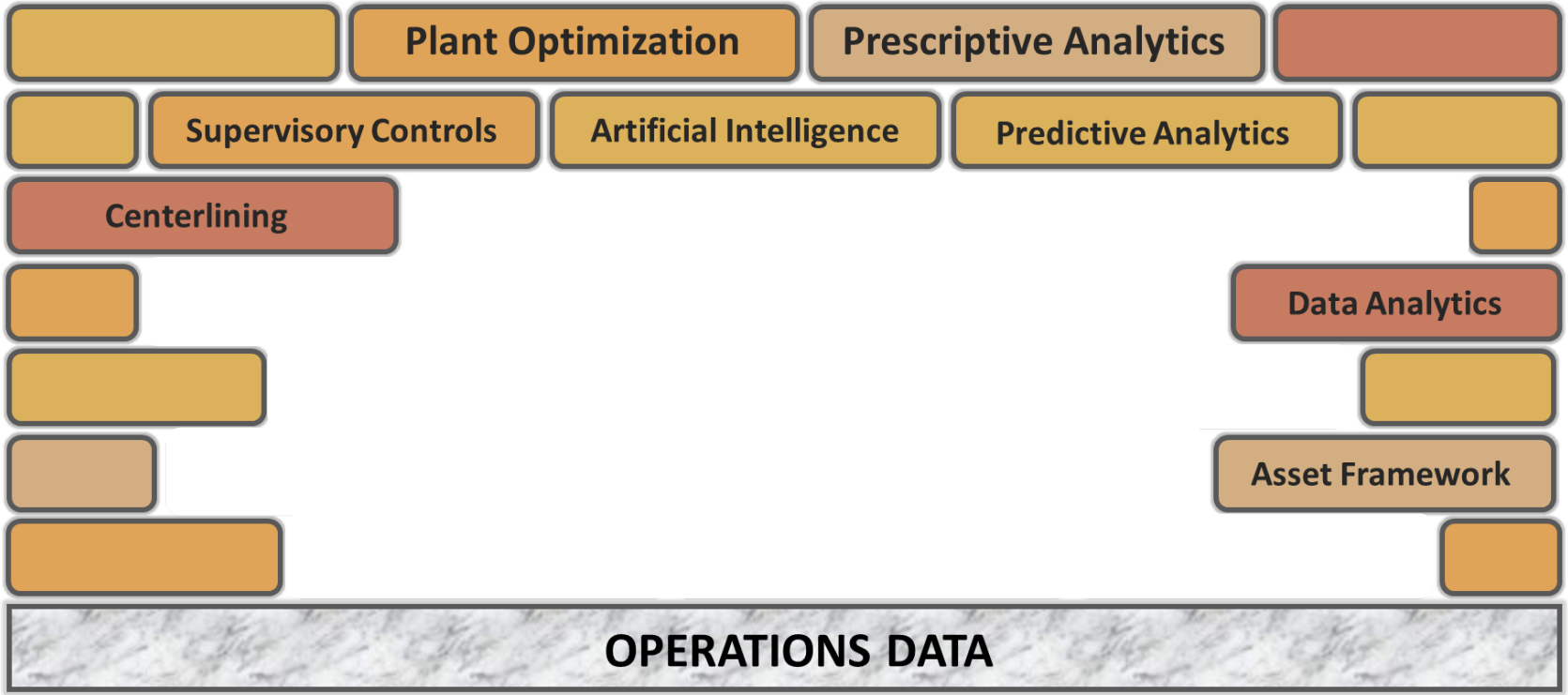
Top Layer Focus



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Top Layer Focus

Plant Optimization

Prescriptive Analytics

Supervisory Controls

Artificial Intelligence

Predictive Analytics

Shiny Object Syndrome

Centerlining

Data Analytics

Asset Framework

OPERATIONS DATA

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First thing First - Foundational Focus

"Get the fundamentals down and the level of everything you do will rise."

– Michael Jordan

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Data is Valuable

Data is Foundational

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How to avoid Shiny Object Syndrome

Look before you leap

PI Audits

Data Compression Analysis

Data Harmonization

Asset Framework

PI Vision / Tableau / Power BI

Standardized Tools

Standard Calculations

"Studies by the International Data Corporation show that only 22% of data is documented well enough to be analyzed and that only 5% is actually analyzed. "

- J. McKendrick

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First things first – Things to Avoid

Beware *of building a skyscraper on top of a shaky foundation*

"Relying on aging systems to support business activities of the future is a losing strategy"

- Pluralsight

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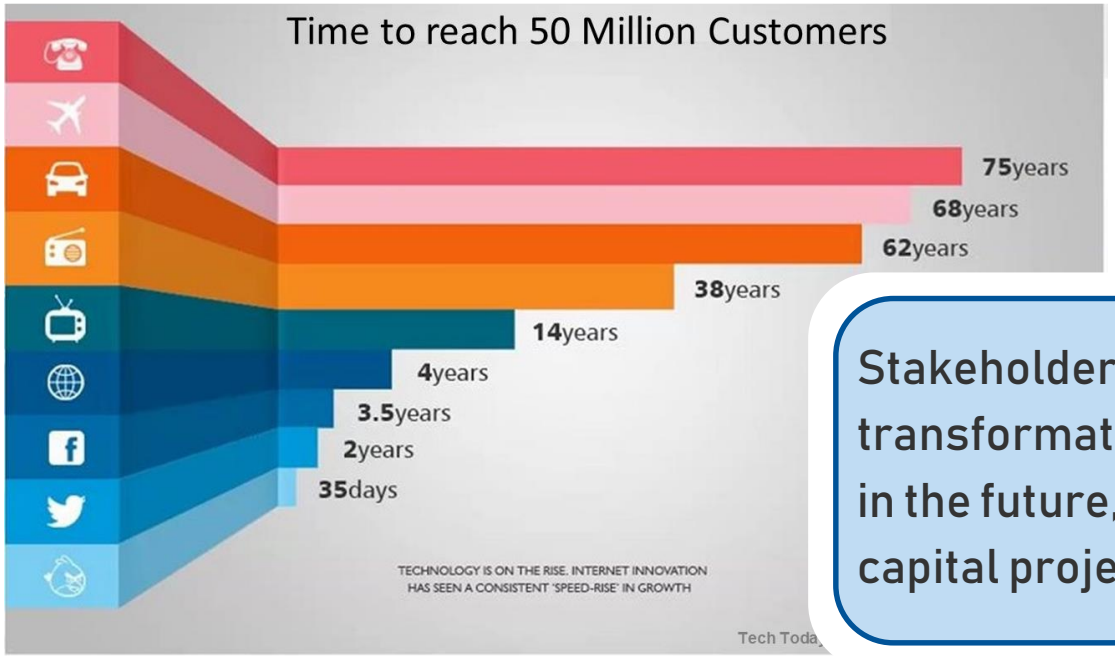
First things first – Things to Avoid

Be careful *with speed, it is not always your friend with digitalization*



Stakeholders should see digital transformation as a means to compete in the future, not as a one-time bet (a capital project)“

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Data is Valuable
Data is Foundational
Data is not Magical (yet)

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Takeaways

- **Data is valuable**
  - **Take** care of your data
- **Data is foundational**
  - **Transform** the foundation while investigating “shiny objects”
- **Data is not magical**
  - Its not the tool nor the data that extracts value, it’s the analyst

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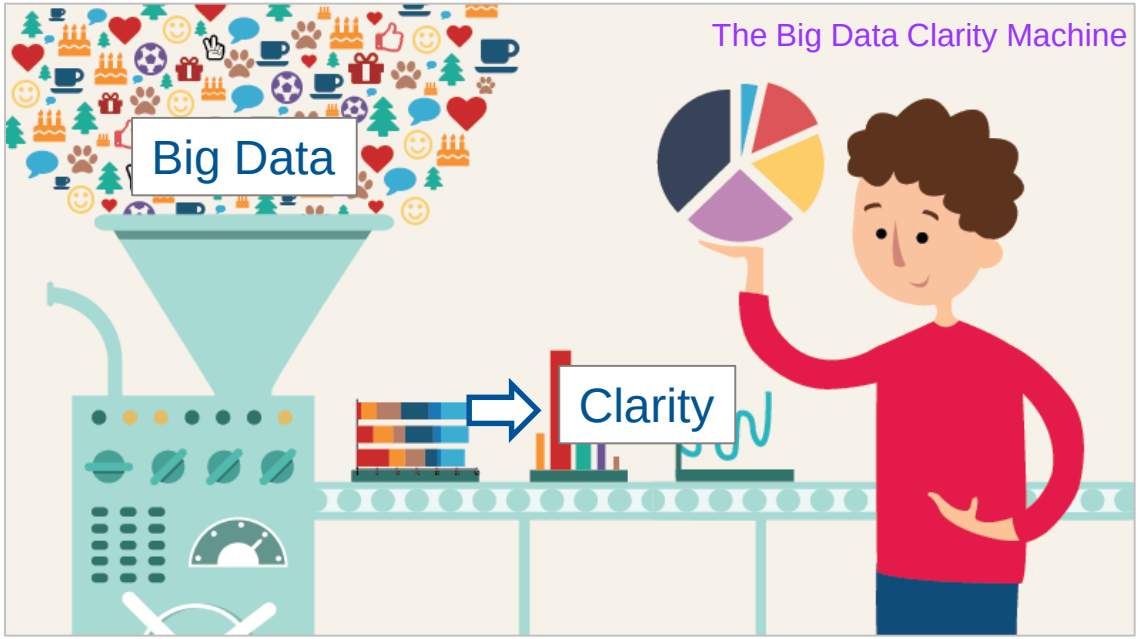
Does the mythical Big Data Clarity Machine exist?



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the **microphone**

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AMSTERDAM
October 26-29, 2020

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