

Data! Data! Data!

Are We Blinded By All The Data?

Dhaval Gajjar, PhD, FMP, SFP
Associate Professor
Director, Center for Roofing Innovation & Leadership
Clemson University

Generational Shift



2006 - 2008



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Industry Evolution

Prior to
1990



1990

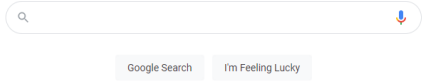


2000

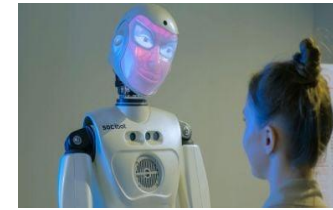


facebook

Google



2010

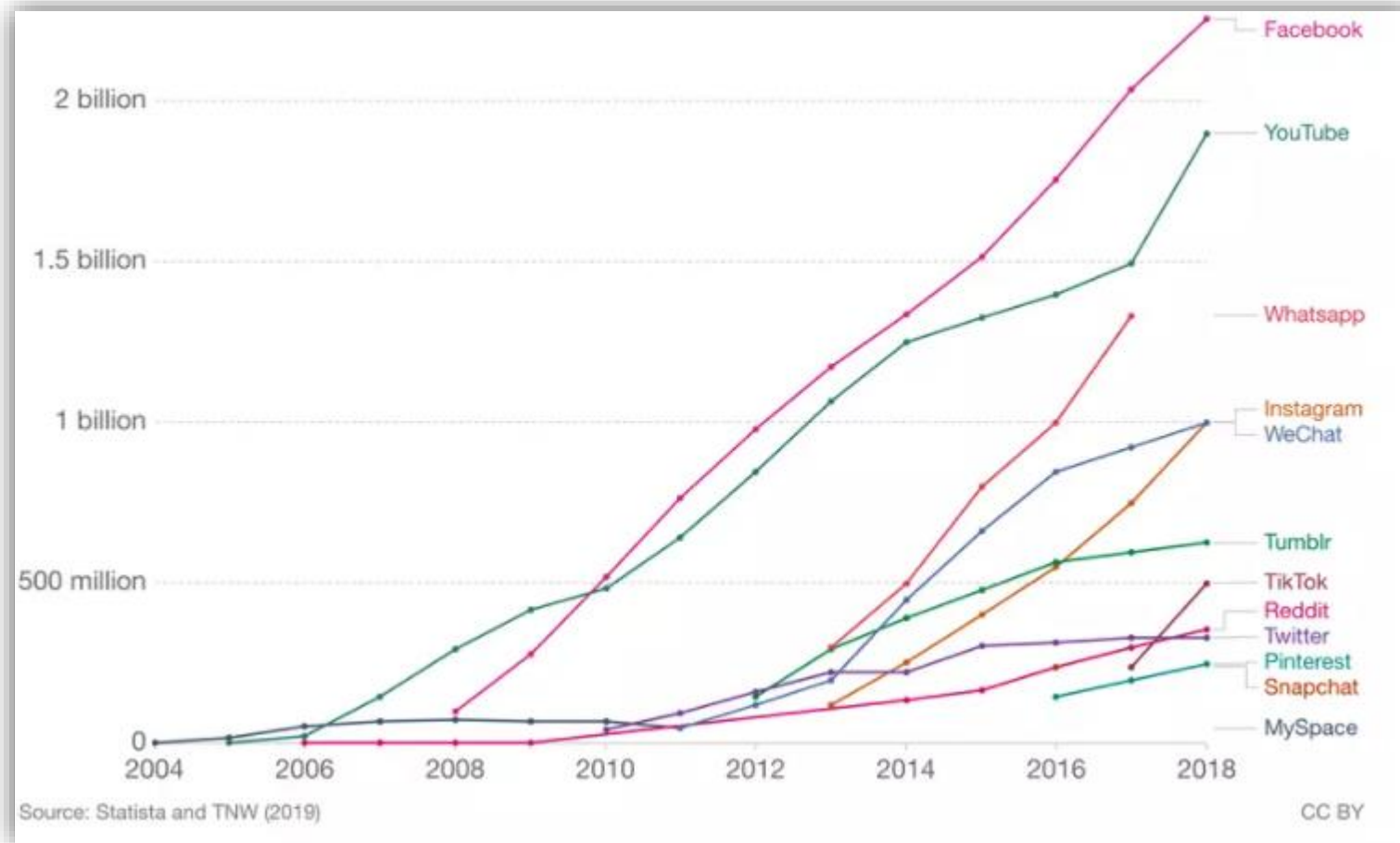


2020



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Societal Big Shift





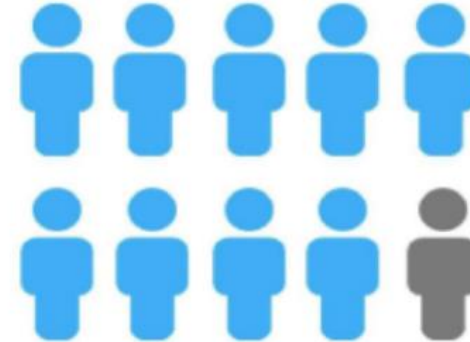
95% of teens either own a smartphone or have access to one.

The average American spends **2 hours and 51 minutes** on their phone every day. The average American teen uses screens for entertainment **7+ hours** a day.



The average person will spend **5 years and 4 months** of their life on social media.

The average smartphone owner will click, tap or swipe their phone **2,617** times a day.



9 in 10 teens think that spending too much time on phones is a problem for their generation.

Teens who spend 5+ hours a day on electronic devices are **71%** more likely to exhibit suicide risk factors than teens who are on their phones for an hour or less each day.

Are We Addicted To Technology?

- Technology Addiction
 - Dependency on the internet and technology-enabled devices
 - Inability to control, regulate, or limit their use of the internet and technology
 - Behavioral Addiction
- Does technology impact the brain?
 - Brain processes like drug addiction
 - Feel-good chemical
 - Winning a level of video game
 - Online gambling
 - “Likes” on a picture
 - Etc.



Are We REALLY Addicted To Technology?

NO!



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What Are We Addicted To?

INFORMATION!!!



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Prior to
1990

1990

2000

2010

2020



INFORMATION

AUTOMATION



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Too Much Information is Stressful!

- Brain driven towards novelty
 - Always searches for more
- 1/3 feel stressed with the increasing data
 - Consume, make sense of and act (daily!)
- Leads to increased levels of stress hormone - cortisol

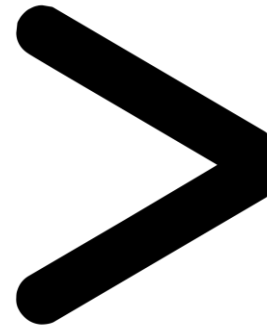
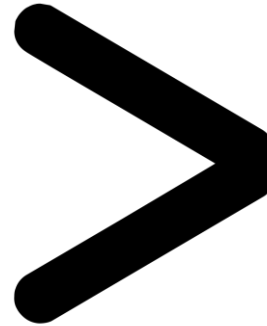


Is Information Inherently Bad?

- NOT AT ALL!!!!
- We need to be mindful!
 - Decide what information is useful?
 - How much time should I spend searching for the information?
 - Do I have the resources to collect the valid information?
 - Who is responsible for collecting the information?



In Summary.....



Data! Data! Data!
Are We Blinded By All The Data?



Let's look at some examples.....



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Example #1

Industry Wide Poor Performance

Industry	On Time	On Budget	Customer Satisfaction
Information Technology	40%	43%	3.6/10
Construction	25%	32%	N/A
Health Sector	N/A	N/A	6/10
Aerospace and Defense	14%	38%	N/A
Manufacturing	67%	50%	7/10
Energy	59%	59%	7/10

Rivera, A. (2017). Dissertation, Ph.D. "Shifting from Management to Leadership: A Procurement Model Adaptation to Project Management." Arizona State University
208 publications, Internet, 3+ Databases [ASU Library, NAESCO, NASA]



Have you heard these before?

- I never get the quality I ask for!
- I thought they knew what they were doing!
- Another change order?
- What is the delay now?
- What happened now?
- Stop blaming each other and just figure it out!
- Why did this cost so much?

PERFORMANCE / SCHEDULE / COST ISSUES



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Level of Expertise



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Software Project Example: Traditional Marketing

- Company “A” will provide an **experienced** project manager, who has delivered **many large complex** IT projects. He has received **very high** client satisfaction with **incredible** performance.
- He has **20 years** of experience, is certified in project management, and has participated in over **30 projects**.
- With our cooperative and **flexible** team of experts we **guarantee** a highly satisfied client.



Level of Expertise: The Language of Metrics

Company “A” will provide an expert PM:

**Experienced
with
large/complex
projects**

- # of projects: 3
- Largest project budget: \$6.1 Million
- Average project budget: \$5.2 Million
- # of interfacing software packages: 4
- # of locations: 12
- # users: 180

**High
performing**

- Customer Satisfaction: 9.8
- Cost deviation: 5.0% (0% caused by the vendor)
- Schedule deviation: 0%



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Risk Mitigation / Value Added



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Risk Mitigation Example

- Risk: A **critical** risk in solar installations is the **possibility** that the existing roof leaks after installation.
- Solution: Vendor only uses **high performing** contractors. Vendor **promises** to stop all roofing leaks that were in the area of the installation. We have a **very successful** company risk methodology and **refined** installation process.

Proven Record

- Vendor tracks **all roofs** after installation [**over 100 roofs**].
- Installations have resulted in less than **1% roof leaks**, and **100%** of leaking has been stopped. Customer satisfaction is at **100%**



Takeaway

1. Do not just collect data to collect data
2. Use metrics for meaningful purposes
3. Simplicity is key



Example #2



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Vendor Goals

- A system to provide documented performance information
- Quickly identify customer concerns or issues



Metrics

- Overall customer satisfaction
- Clients that would purchase our product again
- Leak rates
- Defect rates
- Contractor satisfaction
- Internal rep satisfaction



Information

- Project Info (date installed, job area, location, type of project, type of client)
- Product Info (Warranty information, type of product)
- Applicators (name of the applicator, applicator location, applicator contact)
- Region Info
- End User Info (contact name, email, phone)



Data

1. Satisfaction rating of the system (1 - 10)
2. Purchase product again? (Yes or No)
3. Any current leaks? (Yes or No)
4. Satisfaction rating of the applicator (1 – 10)
5. Hire the applicator again? (Yes or No)
6. Satisfaction rating of the Rep (1 – 10)
7. Satisfaction ratings of the value relative to the cost (1 -10)
8. Overall customer satisfaction (1 – 10)



Key Metrics

- Number of Projects – 4,326
- Number of Clients – 1,356
- Number of Applicators – 572
- Total Area – 31 Million SF
- Total # of Phone Calls – 17,772
- Overall Customer Satisfaction - 9.2 / 10



Overall Key Metrics

NO	CRITERIA	SCALE	RESULT
1	Overall Customer Satisfaction Rating	(1-10)	9.2
	Customer Satisfaction - System	(1-10)	9.3
	Customer Satisfaction - Representative	(1-10)	9.5
	Customer Satisfaction - Value Relative to Project Cost	(1-10)	8.8
	Customer Satisfaction - Applicators	(1-10)	9.0
2	Percent of customers that would purchase the system again	%	98%
3	Percent of projects with no leaks	%	97%
4	Percent of customers that would hire same applicator again	%	91%
5	Percent of repeat customers	%	86%
6	Total area (of surveyed)	SF	31.1 M
7	Total number surveyed	#	1,717

Example #3



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Background

- Major Corporation
 - 1.5 M SF (office, lab, and manufacturing)
 - 50 full-time facilities organization
 - Lots of outsourcing contracts
- Janitorial Services a Big Concern



Major Concerns

- No official document for cleaning schedule [is the work done?]
- Expectations for performance were unclear
- Staffing hours not established
- Multiple areas not being cleaned up to the owner expectations / some not cleaned at all
- Tons of customer complaints
- Janitorial staff workers were confused and not sure of their duties
- No inspections and QA/QC conducted by janitorial management
- Claims were common
 - We already did that
 - That will get done
 - We will put that on our list
- Owner had to “manage”



Solution – Step 1 [Current Assessment]

- Survey of existing employees
- Appearance and Cleanliness of common areas
 - Restroom
 - Lobbies
 - Stairs
 - Elevators
 - Conference rooms
- Quality of trash removal, vacuuming, dusting
- Overall Satisfaction

ARE THEY REALLY LOW PERFORMING



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Solution – Step 2 [Data / Information]

- Monthly review with internal and external stakeholders
- Clear communication of areas that need to be improved
- Positive and beneficial for janitorial vendor
- Clear expectation and documentation

Service Provided: Janitorial				Evaluation Period: Year 1				Customer: XYZ Corporation							
Contractor Name:				Evaluator: George Mansor				Location: Scottsdale Site							
Category	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Score	Average Score	
Quality															
Productivity															
Reliability															
Availability															
Supervision															
Safety															
Visitor Lobbies															
Executive Offices															
General Offices															
Conference Rooms															
Lab & Manufacturing															
Restrooms & Showers															
Health Services OHR															
Break Areas															
Elevators															
Corridors															
Stairwells															
Windows															
Janitor Closets															
Café Kitchen															
Café Dishwasher Rooms															
Café Serving Areas															
Outside Patios															
Receiving Guard Shacks															
Shipping/Receiving Docks															
Compound/Yard															
Monthly Total Score	0													0.0	
Monthly Avg Score															
Performance Metric	182.0	182.0	182.0	182.0	182.0	182.0	182.0	182.0	182.0	182.0	182.0	182.0	2184	182.0	
Rating Identification		Comments:													
1-2 = Unsatisfactory		Any rating of 1 to 4 will require an improvement action plan.													
3-4 = Improvement Needed															
5-6 = Good															
7-8 = Very Good															
9-10 = Excellent															



Solution – Step 3 [Metrics]

Category	Initial Rating	Final Rating	% Improvement
General Cleaning	6.1	6.8	10.8%
Productivity	5.0	6.4	27.3%
Reliability	6.0	7.6	27.3%
Availability	7.0	7.6	9.1%
Average	6.3	7.1	18.6%

- 18.6% increase in annual performance for Year 1
- Customer Satisfaction improve from 25% to 45%
- Janitorial vendor to take accountability



Measured Environment

- Must be simple
- Positive accountability
- Transparency
- Measuring against a plan / end goal



QUESTIONS



Dhaval Gajjar, PhD, FMP, SFP
Clemson University
(480) 332-6674; dgajjar@clemson.edu