

The background of the entire page is a grayscale image of shattered glass, with sharp, jagged fragments and dark cracks creating a complex, geometric pattern.

# **TURN YOUR DIRTY DATA INTO A COMPETITIVE WEAPON**

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Identify the millions of dollars in non-performing assets compounding in your CRM right now and turn them into revenue.

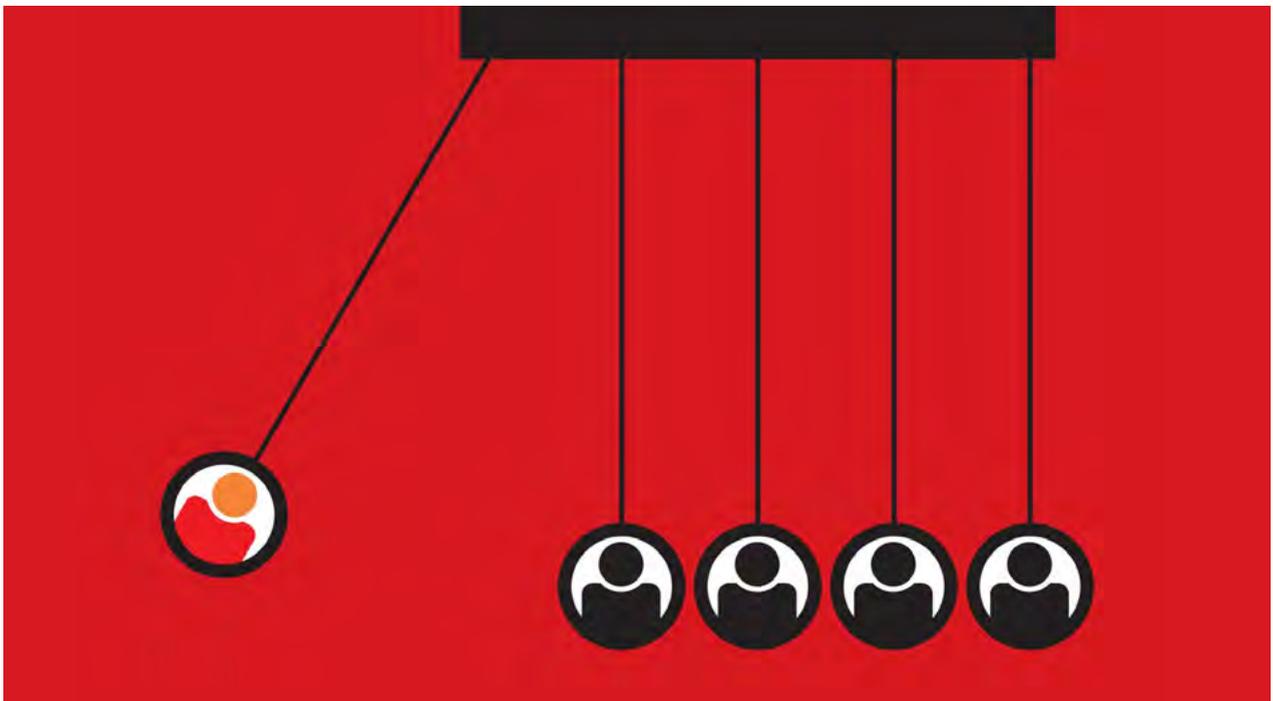
## INTRODUCTION

For better or worse, Big Data has covered the Earth. Every business in every industry and profession lives or dies on the quality of its data and how it's managed. You can't escape it.

So, it matters that IBM put at \$3.1-Trillion the 2016 cost of poor quality data in the United States. How much of that astronomical figure can be laid on franchised auto dealerships?

This paper will show you how to calculate that cost to your business, and will take you through the steps to identify how dirty data is entering and fouling your critical business systems, how to correct and stay on top of it, and moreover, how to clean and convert your bad data into new sales and service business.

Data is the fulcrum on which every business' competitive advantage balances. Find out in these pages how to tip the scales your way.



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# WHY SHOULD I CARE ABOUT DIRTY DATA?

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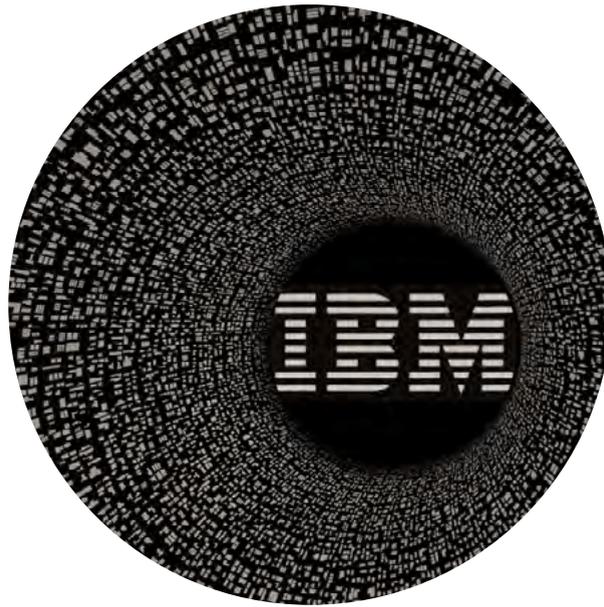
If you're like many of the dealerships we've spoken with recently, your CRM is probably plagued with Dirty Data - inaccurate, expired, outdated contact information that clogs your system and makes running effective marketing campaigns nearly impossible - all while creating massive technical and legal headaches.

While your dealership may have made an expensive upfront and ongoing CRM investment, dirty data is living in your CRM right now, turning 80% of your organic and third party leads into profits for the competition. This epidemic of dirty data diminishes the value of your digital leads by making it nearly impossible to contact them, let alone sell them a vehicle. Thousands upon thousands of these leads are simply being sucked into a dirty data black

hole that might be costing your dealership millions.

According to a recent Gartner, Inc. study, dirty data is responsible for roughly 40% of all failed business initiatives making it one of the biggest threats to new businesses. The reason? Leads were never converted into sales because the prospects never even received the message.

The benefits of improving your data quality go far beyond reduced cost. There are many hidden opportunities in your data waiting to be exploited - if you have the right tools for the job.



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**IBM ESTIMATES THAT  
THE YEARLY COST OF  
POOR QUALITY DATA IN  
THE U.S. IN 2016 WAS  
\$3.1 TRILLION.**

# WHAT IS DIRTY DATA?

Dirty data is an elusive subject that can defy measurement yet is critical enough to derail any marketing project or company as a whole.

So, what is dirty data? To define dirty data, we first have to consider what is good data. In fact, understanding what is good data, how it can be measured, and improved, is a quite difficult problem due to its multiple dimensions and applicability to different contexts. High quality data can refer to whether data meets the expectations of its users, whether human or systems, or it can simply be “data that is fit for its intended use”.

Data quality problems (or “dirty data”) are the specific problem instances that arise within a dimension (i.e., under the accuracy dimension, we might find format problems) that prevent data from performing its intended task.



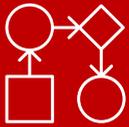
## Defining data quality metrics

You can't improve what you can't measure. So, it's axiomatic that measuring data quality is fundamental in any data-centric organization. However, it's impossible to evaluate your data without agreeing on what should be measured.

# Dimensions Of Data Quality

Data quality is categorized into different measurable dimensions for the purpose of identifying areas that are functioning properly and those that need improvement. Here are the fundamental dimensions.

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## Completeness

The proportion of stored data against the potential of "100% complete"



## Uniqueness

Nothing will be recorded more than once based upon how that thing is identified.



## Timeliness

The degree to which data represents reality from the required point in time.



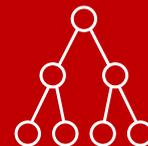
## Validity

Data is valid if it conforms to the syntax (format, type, range) of its definition.



## Accuracy

The degree to which data correctly describes the "real world" object or event being described.



## Consistency

The absence of difference, when comparing two or more representations of a thing against a definition.

# HOW DIRTY DATA IS CREATED AT YOUR DEALERSHIP

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Performing a superficial identification of data quality issues at your dealership is relatively straightforward. However, unless you have a dirty data prevention strategy or data cleaning procedures in place, identifying your dirty data is pointless. The first step to become a data-centric organization is to understand how the problem is created in the first place.

”

	C	D	E	F	G	H	I	J	K
1	FIRST_NAME	LAST_NAME	ADDRESS_1	ADDRESS_2	CITY	STATE	ZIP	HOMEPHONE	WORK
2	Robert	White	209 WINDSOR PARK Dr		Winston Salem	NC	27105	(336) 767-8260	
3	Janette	Armenta	234 Snow Hill Church Cir	X KERNERSVILLE	KERNERSVILLE	NC	27284	(336) 362-4681	
4	Erica	Baker	4408 JOSEPH SAMUELS Dr		WINSTON-SALEM	NC	27107	(336) 875-2932	
5	Deeanna	Biggs			GREENSBORO	NC	27406		X
6	X	Caffey	6325 STYERS FERRY Rd			NC	27106	(336) 760-5915	
7	Gloria	Carmen Beni	791 Motor Rd		WINSTON SALEM	NC	27107	(336) 776-7027	
8	Jason Chilton	Chilton	2017 WESTFIELD Rd		WINSTON SALEM	NC	27103		X
9	Brandy	Cole	3953 Shadydale Acres Ln			NC	27107	(336) 788-3889	
10	Franklin		X 1136 Saint Lukes Rd		WINSTON SALEM	NC	27106	(336) 817-7743	
11	Brandy	Cook	205 North Depot St	Apt f	X	WINSTON SALEM	NC	27104	000-000-0000
12	Colette	Connor	1610 Benbow St		LEWISVILLE	NC	27023	(336) 414-3681	
13	Kenneth	Cox	1195 BEECHWOOD Rd				27045	969-1863	
14	Carrie	Daigle	X	1020 GINGER CREEK	LEXINGTON	NC	27295	(336) 764-8171	
15	Asha	Doshi	Winston Salem 27106		Hewitt	NJ	X 7421		X
16	Nancy	Fernandez	Winston Salem		208 ALEXANDER PRE	NC	27127	577-0196	
17	Glenn	X	287 Berrywood Ln		Winston Salem	NC	27127	(336) 764-2175	
18	Michael	Fletcher	2836 FAR VIEW Rd		ADVANCE	NC	27006	xxx-xxx-xxxx	
19	April	Forte	6097 BRENTWOOD PARK PI		WINSTON-SALEM	NC	27105	(336) 408-1834	
20		X Garzaro	100 STAGECOACH Rd Apt 61A	Apt 61A	X	Winston Salem	NC	27106	(336) 462-4014
21	Chris	Gervais	10323 Green Hedge Ave		Kernersville	NC	X 272849711	(336) 993-8665	
22	Johnny	Grooms	3709 Maverick St			NC	270099812		X
23		X Handy	1209 EAST 12 St Apt C		Huntersville	NC	X 280789629	(704) 896-9721	
24	Jane	Hodge	1164 Pinnacle Hotel Rd		WINSTON SALEM		27106	(336) 555-5555	
25	Jerry	Hodges	104 BRADBERRY Ct		Millers Creek	NC	286519183	(336) 838-3937	
26	John		102 CAROLINA Dr		Burlington		X 272172528	(336) 402-7634	
27	David	Ihme	144 BRADFORD PLACE Ln		CLEMMONS	NC	27012	(336) 466-4485	
28	Steve	Jenkins	424 MAPLE St		Pinnacle	NC	27043	(336) 655-2312	
29	Xu	Jiang	4990 MURRAY Rd		KERNERSVILLE		X 27284	(908) 531-0226	
30	Raunak	Khisty	165 Crowne Chase Dr		WINSTON SALEM	NC	27127	(336) 231-2447	
31	Cynthia	Kimmer	296 MALLARD Dr		King	NC	27021	(336) 408-3588	
32	Lee	Kiser	1095 WHITE DOVE Rd		WINSTON SALEM	NC	27105	(336) 725-4921	
33	Richard	Maryo	10600 EDGERTON Rd		WINSTON SALEM	NC	27105	(336) 695-3218	

# COMMON FILE ERRORS

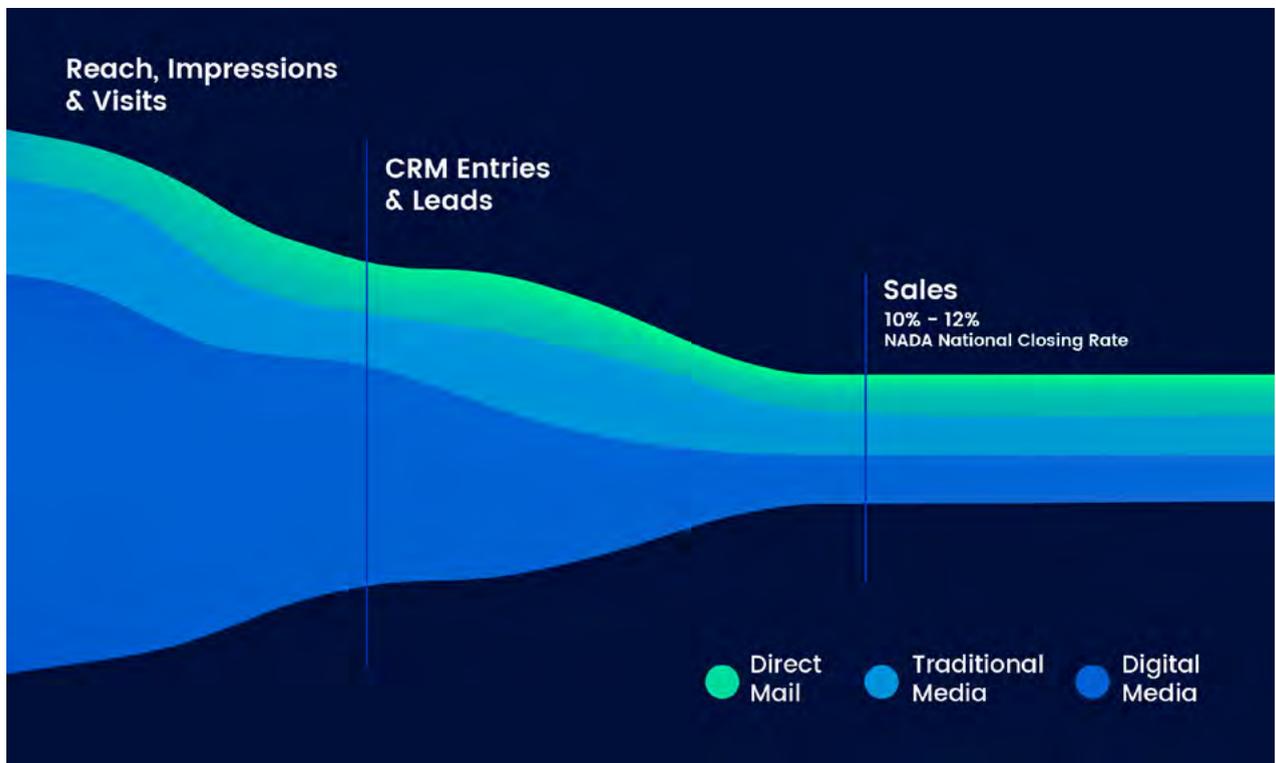
- Duplicates
- Erroneous Entries
- Typographical Errors
- Inconsistent Data Templates

**The shocking truth that every dealer should know about dirty data is that it piles up exponentially and it’s almost impossible to prevent.**

It's not uncommon for business databases to have 60% to 90% bad data, which not only forces frequent data audits to maintain database integrity, but greatly affects the company's performance.

even last names. Time passes and leads move across town or across the country. Or maybe they just get turned off by the salesman and buy elsewhere or simply lose interest. Day after day, marketing efforts are rendered ineffective and sales are lost, all because these small

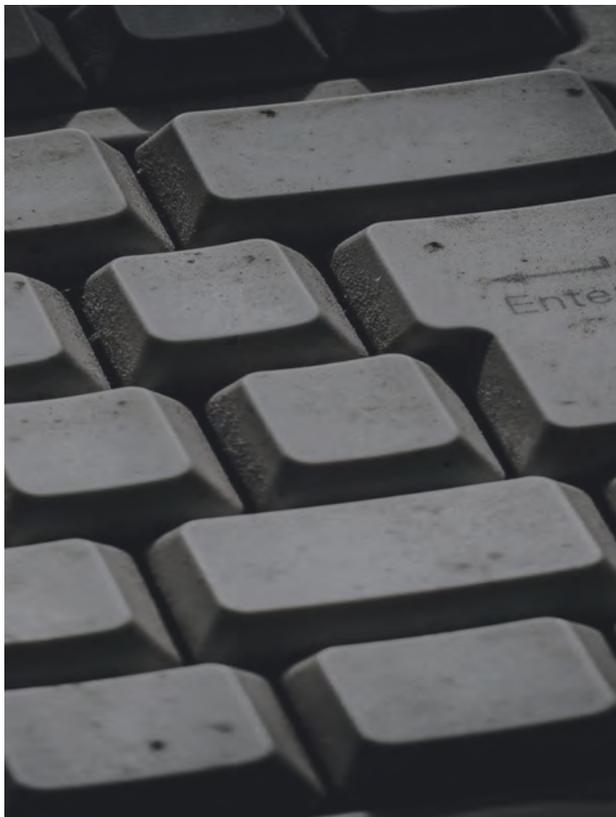
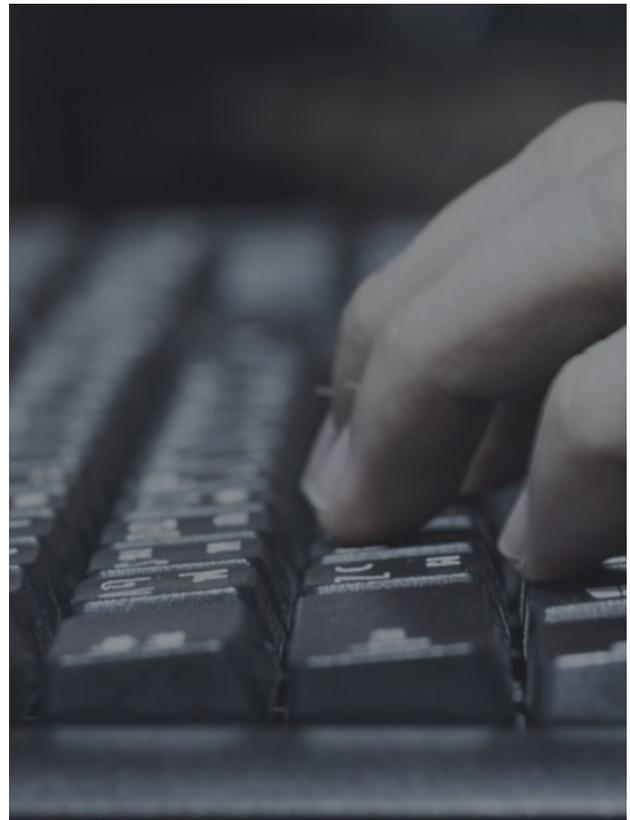
A phone number is entered with a single incorrect digit, a name is misspelled, an email address is lost or altered. People change careers and instances of outdated, erroneous data have now compounded in the CRM and are growing out of control.



**Ultimately all marketing efforts are designed to generate data. Inevitably, a big part of this data goes bad.**

## **DATA THAT IS BORN DIRTY**

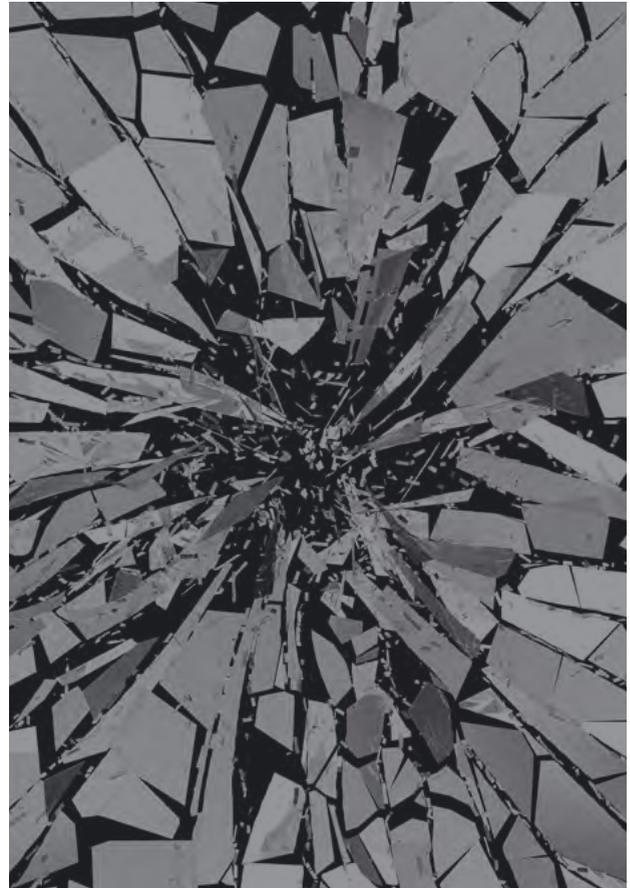
Erroneous & False Entries  
Typographical Errors  
Inconsistent Data Templates



## **DATA THAT BECOMES DIRTY**

Opt-Outs & DNC's  
Outdated  
Information Changes & Relocations

# THE REAL COST OF DIRTY DATA



Besides the obvious costs brought by poor data, managing data quality also comes with its own expenses, and so, there is always a trade-off between any data quality management protocol and the potential losses caused by poor data. This further magnifies the importance of understanding the costs of poor data.

There are many benefits that result from improving the data quality of your

dealership. However many of these benefits are “intangible” or impossible to measure.

The U.S. Department of Defense produced a set of data quality guidelines, where the cost of poor data quality is divided into two main groups: i) direct costs; and ii) indirect costs.

## Direct Costs

The direct cost of dirty data is not only related to the intimate lost of sales and service revenue opportunities, but the staggering lost of the Live Time Value of the customer.

### TIME STUDY OF LOST OPPORTUNITIES

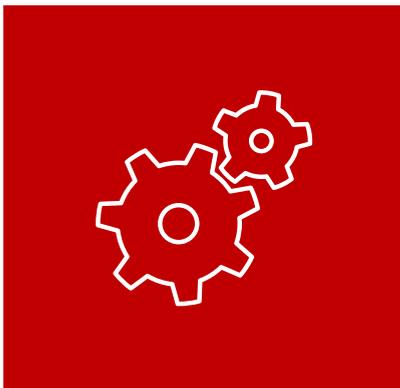
Let's consider a local dealership that gets 1,000 entries (new leads) into its CRM per month. Based on past experiences with its CRM, Why should I care about dirty data? only able to close roughly 12-20% of these, or move 120-200 vehicles each month. This in spite of the dealership's fantastic marketing efforts and promotions. It may even have an email drip campaign designed to contact these leads over the course of the next 30-120 days. However, 800 out of the total 1,000 leads will never purchase a vehicle from this dealership. Why? You can start by thanking dirty data. By piling up 800 inactive leads each month, this dealership is on pace to lose roughly 48,000 opportunities over the next five years in spite of its marketing efforts. And each of these missed opportunities has a substantial dead cost associated with it. Here's how to look at it from a microeconomic standpoint:

$$\text{TOTAL YEARLY AD SPEND} \div \text{TOTAL ENTRIES INTO CRM} = \text{TRUE COST PER LEAD}$$

**Now take that Cost Per Lead (CPL) and multiply it by the amount of missed opportunities that are compounding monthly, and the resulting financial loss is staggering, no matter how many cars the dealership is selling every month. So not only is it losing sales to competitors, but it's paying hard earned cash to do so - for every single inactive lead it accumulates.**

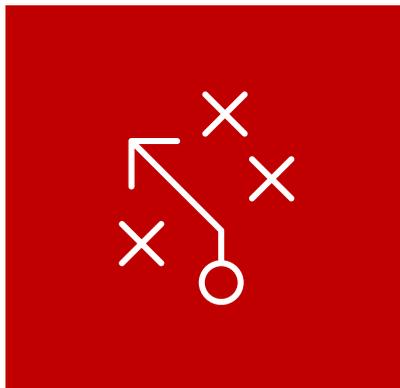
## Indirect Cost

Let's turn to the Department of Defense one more time to understand the indirect costs of bad data. The D.O.D's data quality standards categorize indirect dirty data costs into three verticals: operational, tactical, and strategic. These verticals apply equally well to car dealerships.



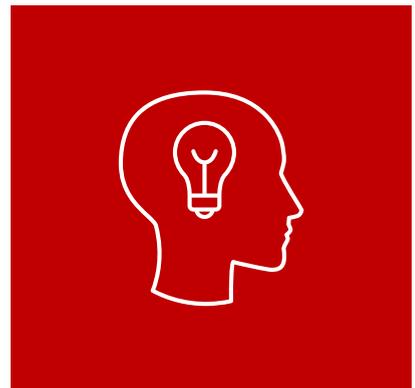
### Operational

Employee and customer dissatisfaction and increased operating expenses due to resources being misallocated. Advertising and marketing efforts perform poorly and lead to increased ROI.



### Tactical

Bad data leads to bad decisions and causes channel conflict, resulting in wasted time and effort to re-engineer processes. This creates mistrust and loss of confidence within the organization.

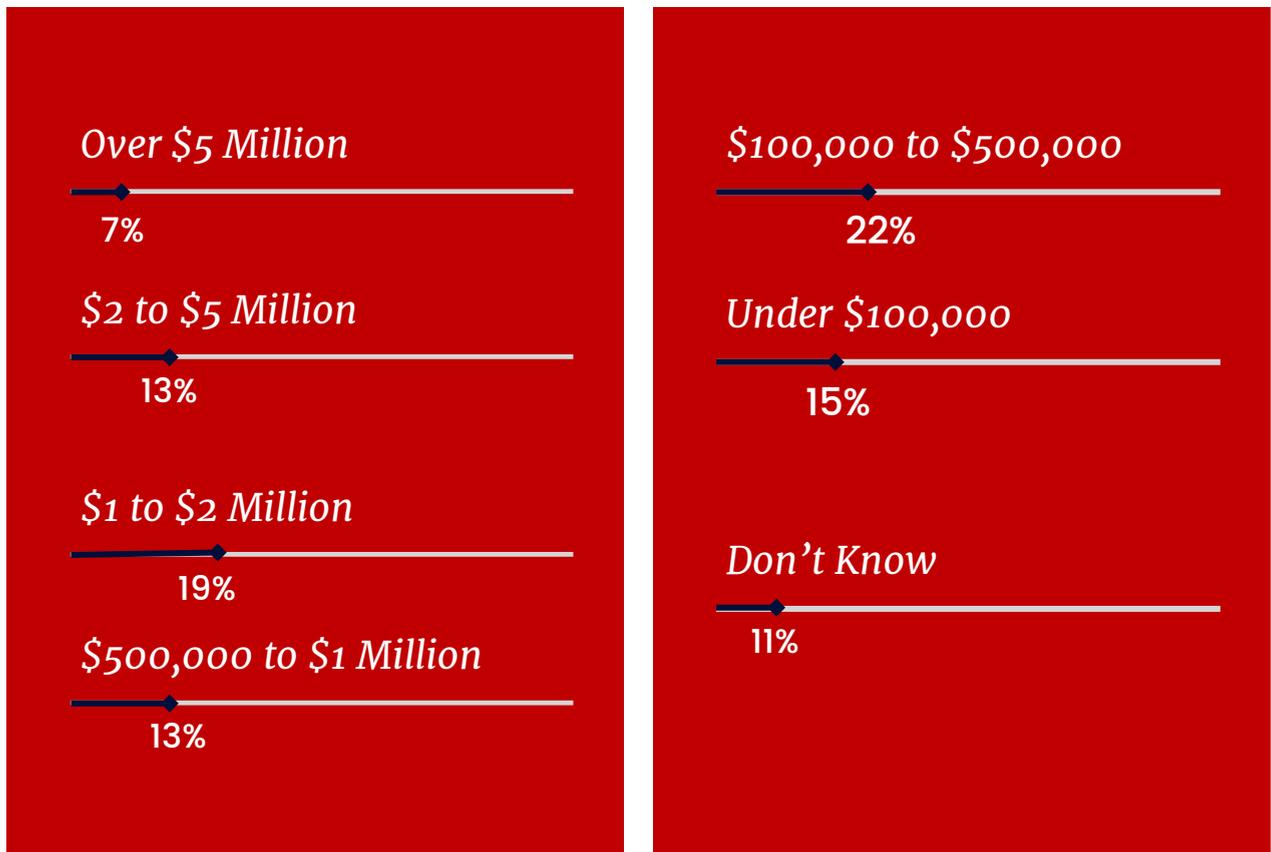


### Strategic

Bad data makes it difficult to define and organize organizational strategies. Uncertainty distracts ownership and management from critical strategic arenas such as customers and competition.

# How Much Are Companies Spending On Data Quality?

In September 2014, an Experian Data Quality research study looked at current approaches to data quality. Two hundred respondents in the U.S. participated in the research. Small to large enterprise businesses were included. These individuals came from a variety of industry sectors, including manufacturing, automotive, retail, financial services and travel.





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**TURN YOUR DIRTY DATA  
INTO A COMPETITIVE  
ADVANTAGE.**

Having high quality data in your database means customers will have unique references, consistent spelling, and addresses that are valid. This increases the percentage of customers who will be “contactable” as well as those who will accurately participate in demographic analysis and clustering for promotions. A customer who receives a promotion in the mail (versus the one who does not) is much more likely to buy. Likewise, demographic and other profiling can be performed effectively thanks to the additional knowledge good quality data imparts into the mar-

**In 2013, more than 6 billion pieces of mail could not be delivered due to bad postal data.**

Processing that mail cost over \$1.5 billion.



# DATA QUALITY SOLUTIONS

Solutions vary dramatically depending on the organization, industry and data needs. There is certainly no one-size-fits-all data quality solution in the market. Data quality is made up of a number of different capabilities and the investment level is spread across these areas.

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## Identify Your CRM's Dirty Data

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### Which data do I want to focus on?

- Old CRM Files
- Missed Opportunities
- Dead or Inactive Prospects
- Inactive Service Files

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Run a simple query. You can have your CRM Administrator, Marketing Manager, Internet Manager or CRM provider run a report to identify how many inactive, unusable records you have in your CRM.

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# 1. Clean Your Data

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**Modify data values to meet domain restrictions, integrity constraints or other business rules that define the quality of data.**

- *Correct Typographical Errors*
- *Remove Corrupt Records*
- *Harmonize Short Codes (St, Rd, Ave)*

## 2. Match & Link

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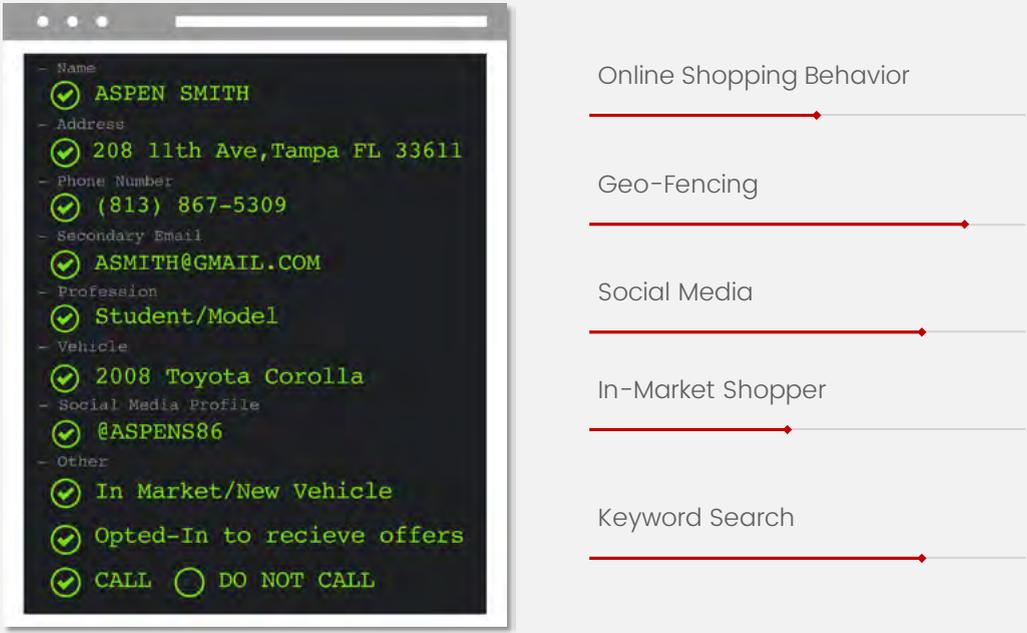


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**Identify, link or merge related entries within or across sets of data.**

- *Validate Records Against Known Data Sets*
- *Correct Records That Partially Match Existing Records*

# 3. Enhance Your Data



The image shows a data profile for a user named Aspen Smith. The profile is displayed in a window with a dark background and green text. The attributes listed are:

- Name: ASPEN SMITH
- Address: 208 11th Ave, Tampa FL 33611
- Phone Number: (813) 867-5309
- Secondary Email: ASMITH@GMAIL.COM
- Profession: Student/Model
- Vehicle: 2008 Toyota Corolla
- Social Media Profile: @ASPENS86
- Other: In Market/New Vehicle, Opted-In to receive offers, CALL  DO NOT CALL

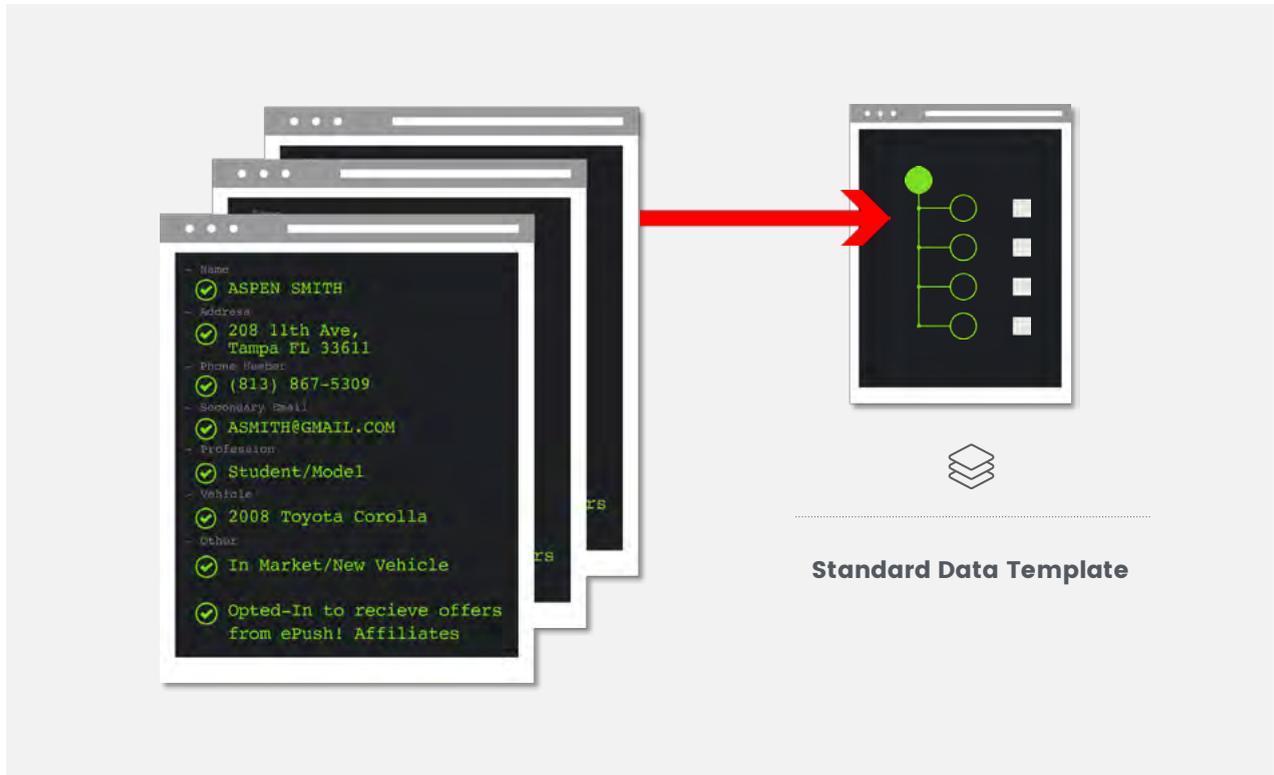
To the right of the profile are six sliders representing different data sources:

- Online Shopping Behavior
- Geo-Fencing
- Social Media
- In-Market Shopper
- Keyword Search

Improve your data with additional information, such as demographic, lifestyle, channel preference, online behaviors, etc. by appending related attributes from external sources to internally held data.

## 4. Raise Your Standards

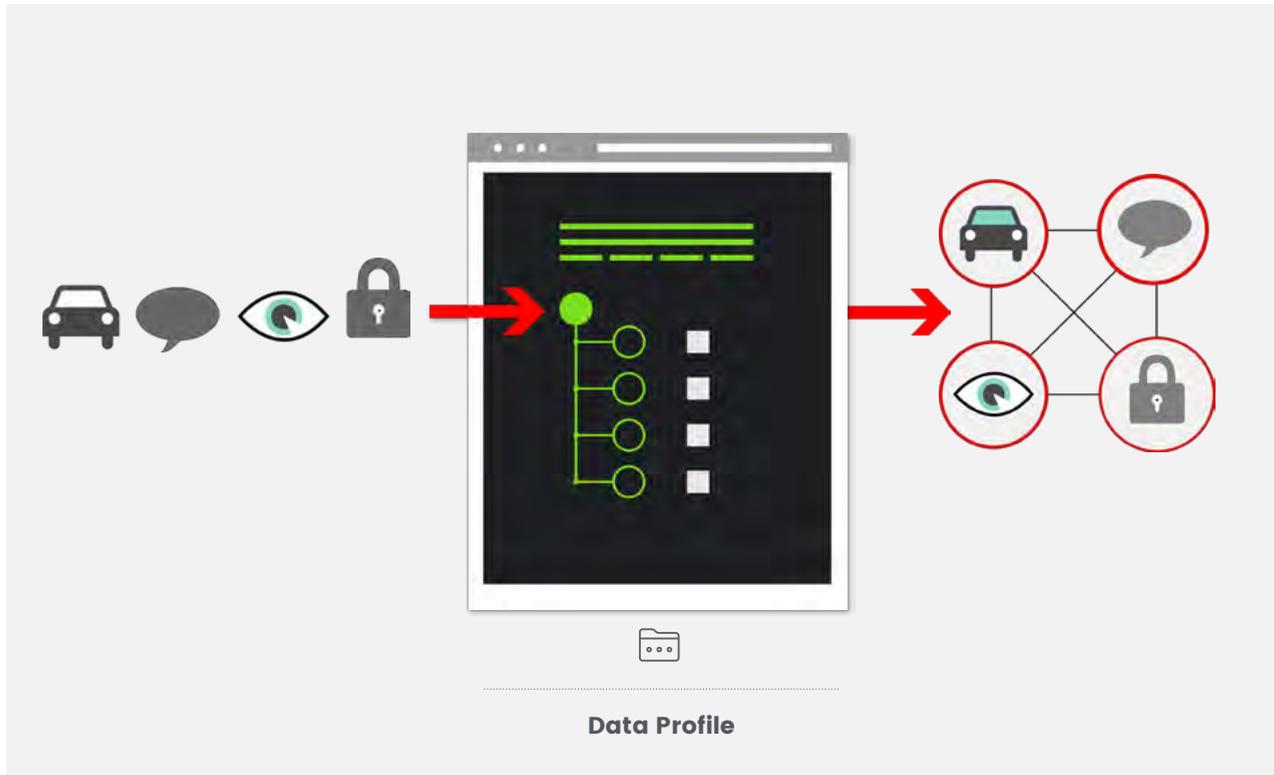
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Use standard file layouts and naming conventions to ensure the data is consistent and can be shared across all departments. This can be done by decomposing text fields into component parts and formatting values into consistent layouts based on preset standards.

## 5. Create DataProfiles

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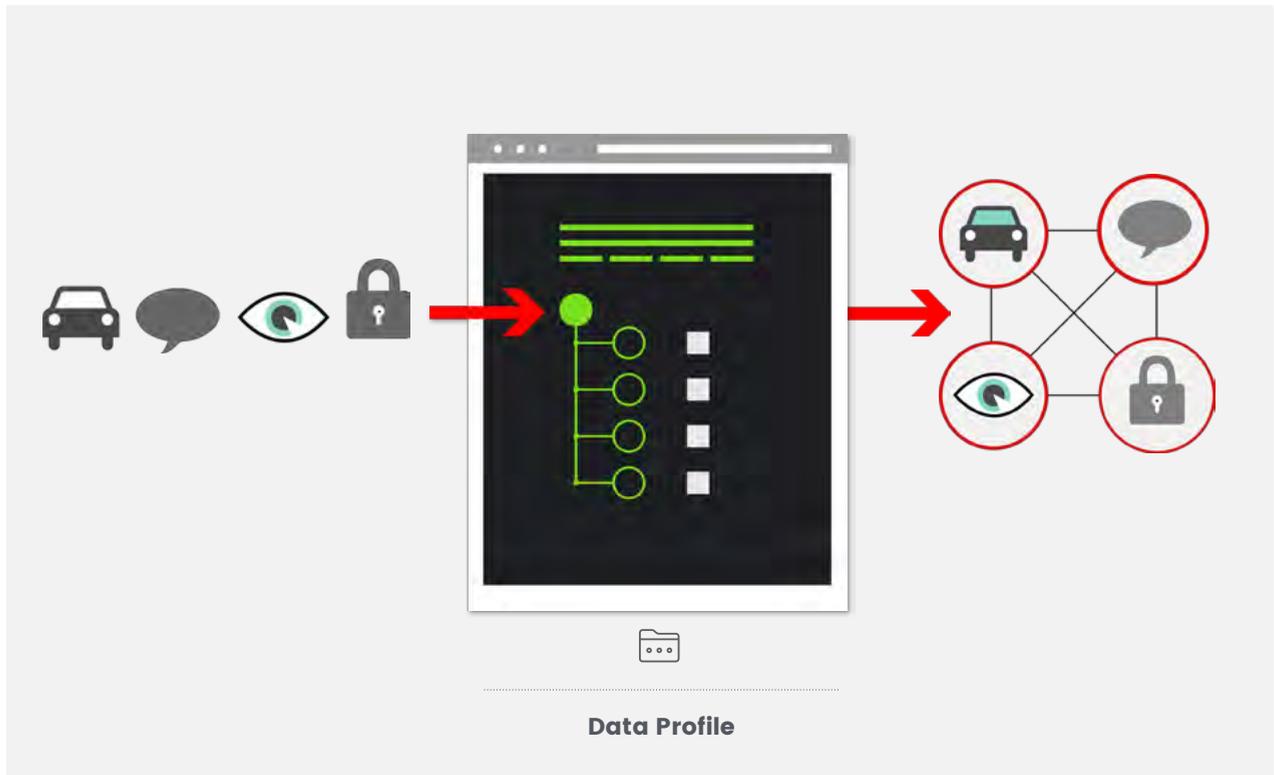


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Analyze your data to uncover insights that point to data quality issues and the steps to resolve them. Profiling helps to not only understand anomalies and evaluate data quality, but also to discover relationships in your metadata that can lead to powerful insights.

## 6. Monitor & Audit

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Establish a consistent preventative maintenance program to ensure your data quality standards are being met by employees and vendors.

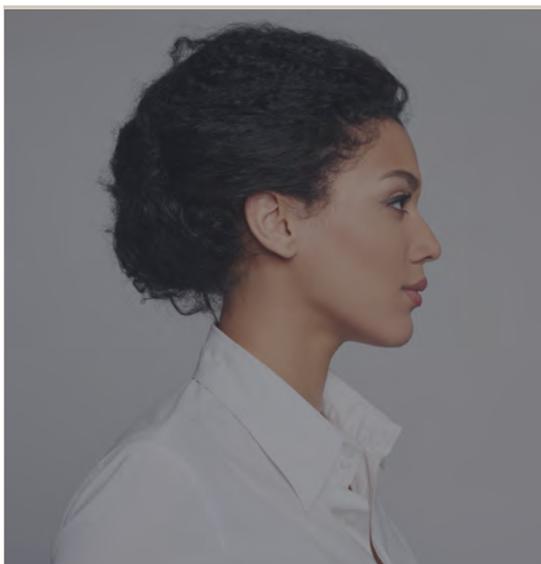
# OPERATIONALIZING DATA

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We are living in the era of instant data. In our everyday lives we have instant access to just about any kind of information we can imagine, and we should expect the same instant access to answers at work. But getting there means gathering data from across the organization, including analytics, CRM, and customer insights from salespeople to build a complete view of your customers and your business integrated across all channels and departments.

**This is how data becomes a competitive weapon  
– and quality is the key.**

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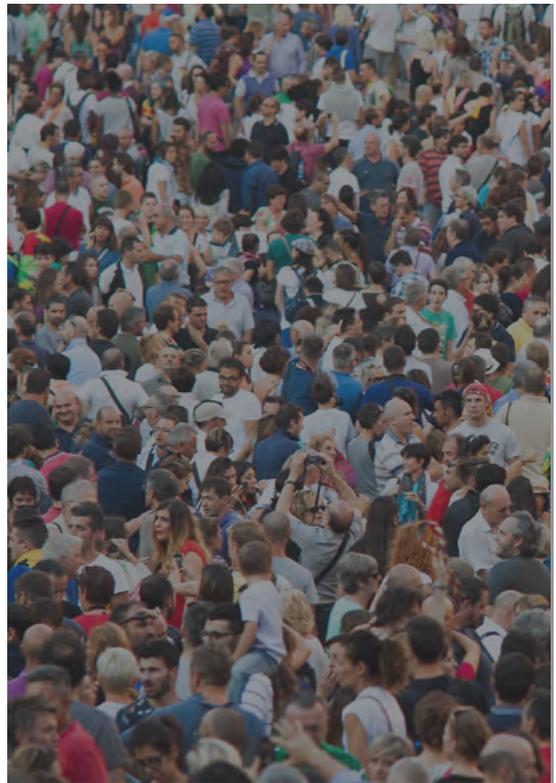


## Build Buyer Persona Profiles

Not all customers are created equal! Use your high quality data to identify the preferences of your buyers and create buyer persona profiles that will allow you to deliver unique customer experiences.

# Segment Prospects With Predictive Scoring

Predictive scoring technologies crawl the web to compile data about potential customers and calculate the likelihood a customer will buy from you. With predictive scoring, your team can prioritize by likelihood to buy, making your sales process more efficient.



# Model Existing Customers

Good data lets you model the characteristics of your best customers so you can target audiences with similar attributes, and increase your effectiveness and engagement, all while lowering costs.



# Improve Customer experience

In today's world, a successful business re-imaging every part of your dealership to is a business that puts its customers at the focus on the customer's experience. For this, forefront – It's so much more than supply high quality data is the key. chain, or advertising, or attribution. It's about

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## MAKE DECISIONS DRIVEN BY DATA

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Instead of using data as a retrospective report card of past performance, data should be used to inform all the actions of your dealership. Operationalizing data means changing the way your dealership operates in the afternoon based on the data from the morning. However this can only happen with high quality data.

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Dealerships are beginning to wake up to the fact that the data they collect and manage should be viewed as a corporate asset. Data is the one thing that separates competitors. The business that maximizes its data use and quality will always outperform the competitor that doesn't.

Ultimately, the quality of your data can be your competitive advantage or disadvantage.

The choice is yours.

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## ABOUT US

Know who's on your website, who's shopping competitor websites, and who's entering the market. Add in clear, verifiable sales and service revenue attribution plus actionable analytics, and you have a digital marketing partner named ePush!