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# THE IMPACTS OF BAD DATA QUALITY

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# TABLE OF CONTENTS

I INTRODUCTION

II COSTS OF BAD DATA

III KEY ASPECTS OF DATA

IV BUSINESS IMPACTS

V WHY ACT NOW?

# I – INTRODUCTION

If you've never heard or seen GIGO, then now is the time to get acquainted with the concept.

## Fear the Garbage

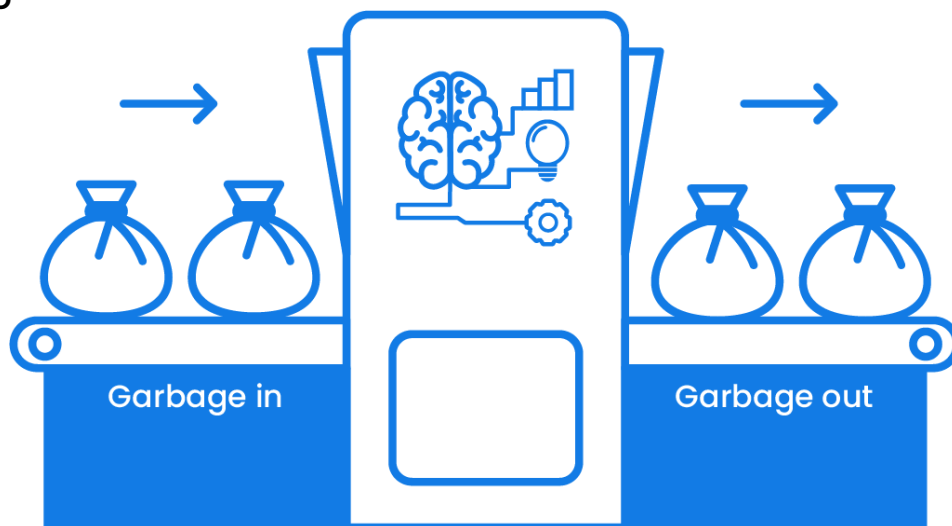
**Garbage in, Garbage out.**

George Fueschel is generally credited for coining the term back in the late '50s while working as an IBM 305 RAMAC technician.

He was reminding programmers that their machines will not transform bad or incomplete data into valuable results.

**If bad data is inputed, then bad results will be produced.**

GIGO is just as prevalent in the world of Big Data and Machine Learning as back then.



**Did you know the No. 1 failure of CRM success is bad quality data?**

Data is estimated to decay at a rate of 30% annually which could mean thousands of records are outdated and accumulating each year.[1]

**Data comes largely from two main sources, machines and humans.**

**Machines** referring to anything from sensors to websites and IoT devices. Data for the most part generated from machines can be very accurate and easily cleaned, refined and analyzed.

**People-generated data** is more problematic and prone to error (data entry, text, voice, etc.), and requires more attention to improve the quality of data. The answer is human augmentation.



The impact bad data has on a company is paramount from debilitating sales efficiency to ruining brand reputation.

**With 85% of companies believing AI will help sustain or obtain new competitive advantages**, the first step should be to invest in improving data quality otherwise AI/ML investments to improve business effectiveness aren't going to succeed. [2]



## II – COSTS OF BAD DATA

According to IBM, US businesses spend \$3 trillion USD annually in costs associated with bad quality data. [3]

Data is the foundation of businesses today and only good foundations are going to be able to maintain strong and competitive businesses.

Data can also be a source of great value. Some have said it's the new oil, but only if it's refined correctly and completely!

**\$3.1T**  
**USD**

est. cost of bad data  
for US businesses

**#1**

cause of  
CRM failure

**12%**

average loss  
in revenue due  
to bad data

**20%**

stalled  
productivity

# III – KEY ASPECTS OF DATA

There are many characteristics of data that influence quality, but we will focus on these six major dimensions :

- completeness
- accuracy
- validity
- consistency
- uniqueness
- timeliness



There isn't a hierarchy amongst these dimensions in terms of which has a bigger impact on data quality, but each possesses unique challenges for companies depending on their growth and maturity stages.

Businesses are challenged on a daily basis when it comes to each one of these data characteristics.

Companies could be struggling with:

- cleansing legacy data
- integrating data from new mergers and acquisitions
- enforcing consistent CRM entries across global offices
- keeping accounts up-to-date (data decay)
- eliminating duplicate contacts

The key is to define **what data** needs to be collected, **how it's** stored and **what procedures** need to exist to maintain high quality.

Continuing to do business and data collection as usual will not improve data quality. In fact, doing nothing or waiting to fix it later will increase costs exponentially.

# IV – BUSINESS IMPACTS

Bad data affects the entire business from marketing to sales and customer success in the form of:

- missed opportunities
- increased financial costs
- damaged brand reputation

Again we are not talking about bad data produced from machines such as the faulty data from malfunctioning sensors that can cause Boeing 737 crashes, but the data from human-involved processes.

We are not equating loss of life to business loss, however bad quality of data can have severe impacts on the health of a business.

Let's take a deeper dive into the specific impacts.

## 1 – Missed Opportunities

**Poor quality data** in your CRM can mislead your marketing and sales teams' approach to landing and converting opportunities into successful deals.

**Bad proposals** may be created and delivered as a result of the poor data that served as the foundations for each one or it may be that potential opportunities are overlooked entirely.

**Accurate and relevant opportunities** will be more often secured when there is high-quality data fueling the identification, nurturing and conversion processes.

## 2 – Financial Costs

### Bad Decisions

Business leaders need good data in order to make good decisions (think GIGO). When marketing and sales teams have inaccurate information or outdated data in their databases, they are unable to make efficient decisions and ultimately waste resources.

For example, Forrester conducted a research on how bad quality data affects marketing teams and their findings suggest that **21 cents of every media dollar spent was wasted** due to poor data (about \$16.5 million average annual loss for enterprises). [4]

#### Additional estimates:

**15–25%**

MIT and other research consultants suggest the cost of bad data can range from 15% to 25% of revenue. [5]

**\$15M**

Gartner also calculated that **annual financial cost** to be around \$15 million on average. [6]

**30%**

Ovum research estimates companies lose approx. 30% of revenue on average due to low data quality.



# Productivity Loss

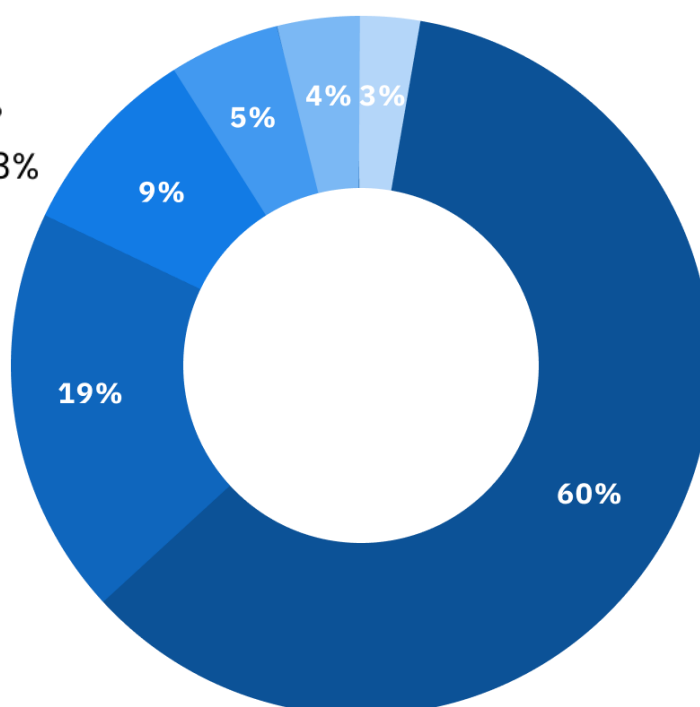
The result of bad decisions are mistakes and more mistakes require more time fixing. It becomes a very tedious and painful process for the organization when people are unable to trust the data and have to spend resources to fix incorrect data. All teams suffer productivity losses when an organization has poor quality data.

- **32% of marketing teams' time is spent on managing data quality [7]**
- **26% of campaigns on average suffered from poor quality data [7]**

Research has estimated that **data scientists can spend up to 80% of their time on the mundane tasks of collecting and preparing data** before it can be refined into new value for the company.

## What data scientists spend the most time doing

- Cleaning And Organizing Data: 60%
- Collecting data sets: 19%
- Mining data for patterns : 9%
- Other: 5%
- Refining algorithms: 4%
- Building Training Sets: 3%

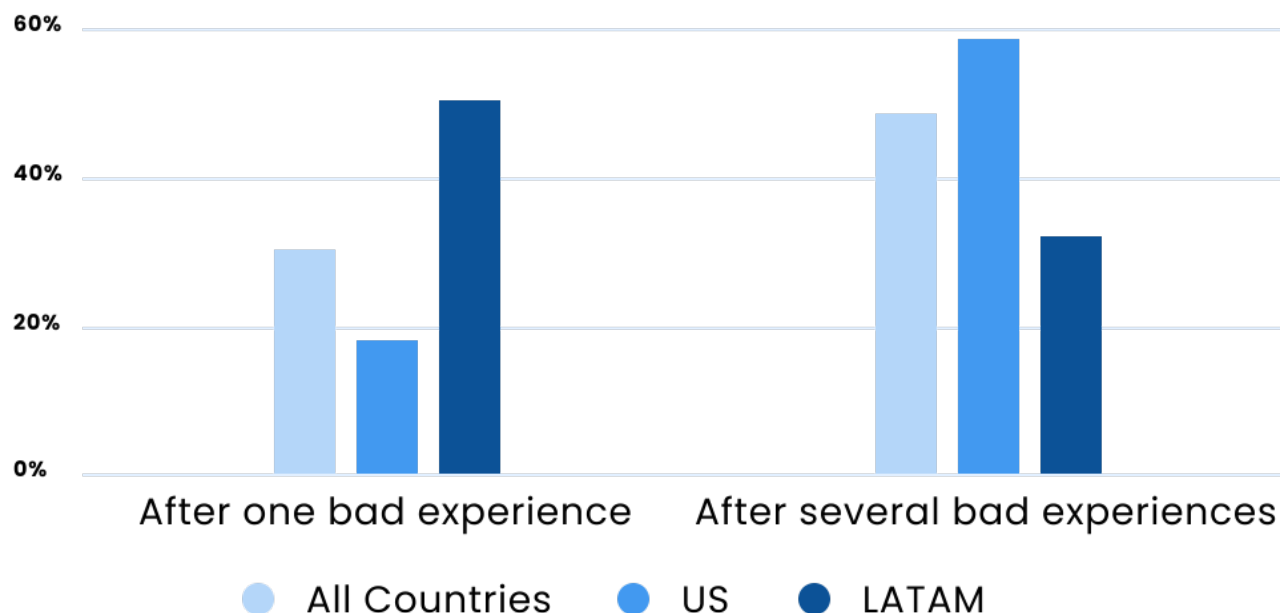


### 3 – Damaged Reputation

When data is incorrectly assessed as accurate, teams can make decisions that have **negative consequences** such as **bad customer support** and **compliance issues**. Sending products to the wrong address or having one customer's buying and support records split across duplicate contacts can create bad touch points with the brand.

Experiences are everything when it comes to customer relations and one bad experience, such as one bad interaction with a service agent, can cause the customer to switch brands. When customers have to correct service teams about their account information or purchase history, this is not a positive experience. These bad touch points can lead to a **bad customer experience** and **damage the brand's reputation**.

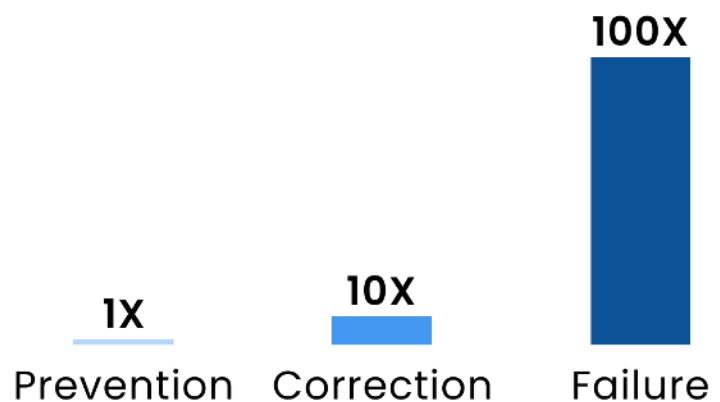
#### When do consumers stop interacting with a brand they love?



\*Source in appendix [8]

# V – WHY ACT NOW?

The answer can be found in the **1-10-100 rule**. Fixing data quality retroactively is going to cost the business 10X more and potentially 100X more depending on the severity of the situation compared to investing in prevention methods. [9]



The golden ticket that will protect higher profit margins for businesses is to begin proactively improving data quality.

**Research suggests that 30% of CRM data becomes obsolete annually. [10]**

Instead of waiting until the functionality of your CRM is tiptoeing around the precipice of failure to throw one-time savior funds to pull it back from the edge, businesses should implement processes that prevent databases from getting near the edge in the first place.

The key is to figure out how to build a firewall that ensures only good data is being saved and proactively updated in the company's database.

Contact us here to learn more  
about how **Delpha** can help  
you start **proactively**  
**improving** your business's **data**  
**quality** today.



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