



SNS COLLEGE OF TECHNOLOGY



COIMBATORE-35

23BAE733-DATA- DRIVEN DECISION MAKING

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# Recap

Operations and Supply Chain

Forecasting Demand

Inventory Optimization

Streamlining Logistics

Talent Management





# Data-Driven Decision Making: A New Era



[dreamstime.com](https://dreamstime.com)

ID 139076093 © Opolja



# Traditional vs. Data-Driven Decisions

Traditional

Intuition and experience based.

Data-Driven

Real-time data and analytics based.



# Zara's Data-Driven Approach



1

Initial Order

Stores order for a week or two.

2

Data Collection

Weekly sales data from every store.

3

Analytics

Descriptive, predictive, and prescriptive analytics.

4

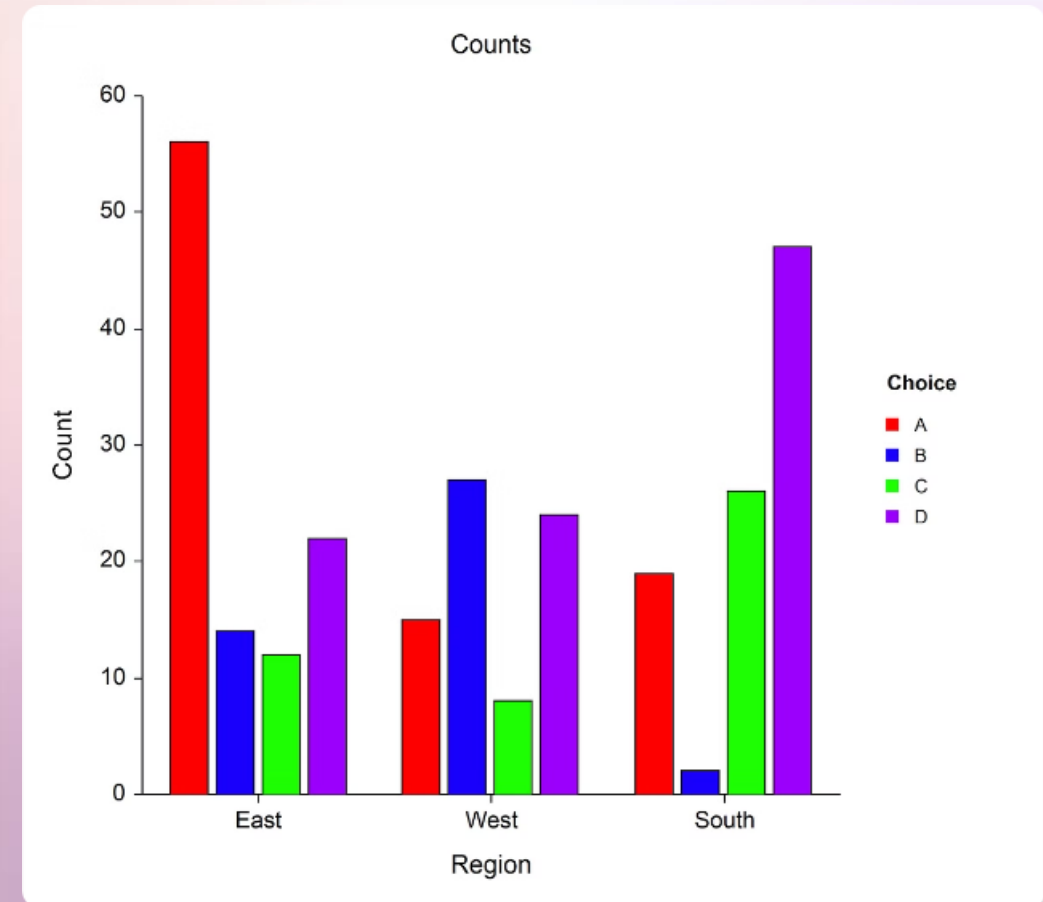
Informed Decisions

Adjust inventory and design based on insights.



# Types of Analytics Used by Zara

- 1** Descriptive Analytics  
Understanding past sales performance.
- 2** Predictive Analytics  
Forecasting future demand.
- 3** Prescriptive Analytics  
Recommendations for inventory and design.





# Zara's Data-Driven Success

## Optimized Inventory

Minimize risk and maximize efficiency.

## Meeting Consumer Demand

Respond rapidly to changing preferences.

## Market Leadership

The largest fashion group in the world.





# ANALYTICS IN FASHION: ZARA



TRADITIONAL APPROACH	ZARA'S DATA-DRIVEN APPROACH: INITIAL PROCESS	IMPACT AND SUCCESS OF ZARA'S STRATEGY
<ul style="list-style-type: none"> <li>• High reliance on intuition and expert judgment.</li> <li>• Designers predict season's styles.</li> <li>• Entire season's line produced based on prediction</li> </ul>	<ul style="list-style-type: none"> <li>• Starts with initial orders from stores.</li> <li>• Orders merchandise for only a week or two.</li> </ul>	<p>Informed Decisions</p> <ul style="list-style-type: none"> <li>• Identifies popular features (e.g., pants with patches).</li> <li>• Designs new models based on insights.</li> </ul>
<p><b>CHALLENGES</b></p>	<p>Collects weekly sales data from every store</p>	<p>Operational Efficiency</p> <ul style="list-style-type: none"> <li>• Renews product lines every two weeks.</li> <li>• Rapid response to consumer preferences.</li> </ul>
<p>Incorrect predictions lead to stock issues. Financial losses due to overstock or discounts.</p>	<p>Utilizes various types of analytics:</p> <ul style="list-style-type: none"> <li>• Descriptive Analytics: Understand past sales performance.</li> <li>• Predictive Analytics: Forecast future demand.</li> <li>• Prescriptive Analytics: Recommend inventory and design adjustments.</li> </ul>	<p>Business Success:</p> <ul style="list-style-type: none"> <li>• Largest fashion group in the world.</li> <li>• Revenues exceeding \$23 billion.</li> <li>• Minimized risks, optimized inventory, and met consumer demand effectively.</li> </ul>





# Zara's Data-Driven Success



## Optimized Inventory

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# Data-Driven Decision Making in Other Industries

Healthcare

Financial Services

Retail

Personalized  
medicine

Fraud detection

Customer  
segmentation



# TIME FOR ASSESSMENT





# Benefits of Data-Driven Decision Making



## Improved Efficiency

Optimize operations and resources.



## Increased Profitability

Make better decisions for financial gain.



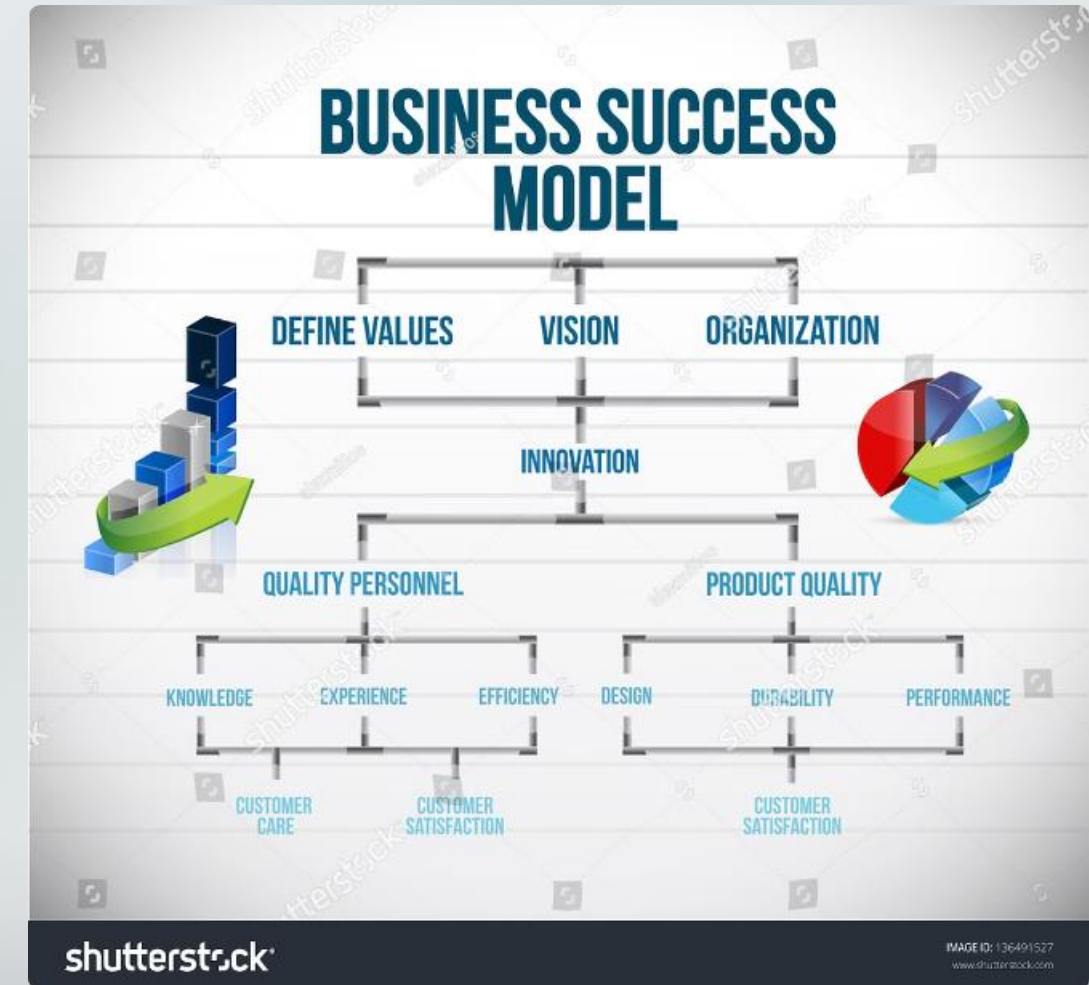
## Enhanced Customer Experience

Meet customer needs more effectively.



## Competitive Advantage

Stay ahead of the curve.





# Challenges of Data-Driven Decision Making

1

## Data Quality

Accurate and reliable data is essential.

2

## Data Security

Protecting sensitive data is crucial.

3

## Data Analysis Skills

Proficient analysts are needed to interpret data.

4

## Organizational Culture

Embrace data-driven decision making.

# DATA BREACHES



FIRST QUARTER 2014

There were

# 200,735,721

data records lost or stolen in the first quarter of 2014.

2,230,397 records lost or stolen every day

24h

92,933 records every hour

1h

1,549 records every minute

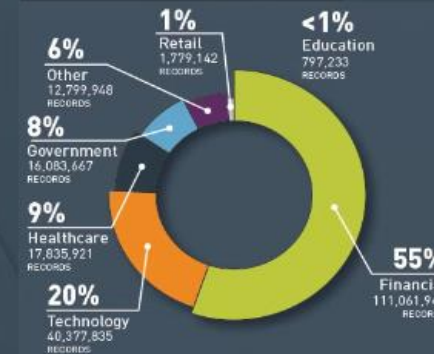
1m

26 records every second

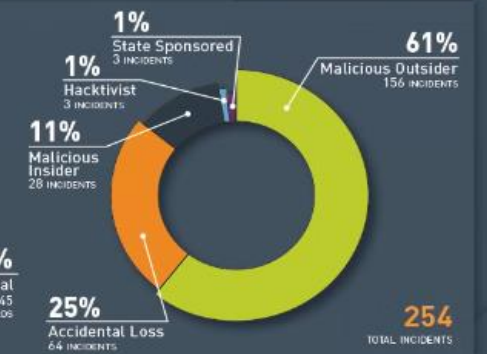
1s

ONLY 1% of breaches were "Secure Breaches" where encryption was used and the stolen data was rendered useless.

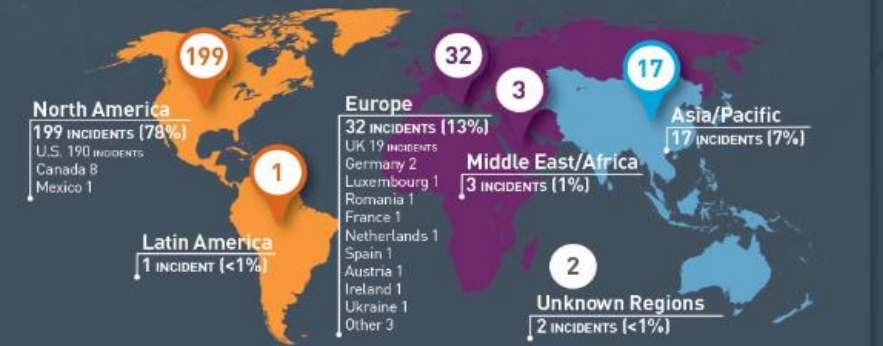
Data Records Lost/Stolen by Industry



Breach Incidents by Source



Breach by Region\*



\*Due to legal requirements, not all breaches are reported or publicly disclosed. Regional differences of data may not accurately reflect total data breaches that occur. Statistics presented are based on the Breach Level Index (breachlevelindex.com)





# The Future of Data-Driven Decision Making

AI and machine learning will further automate and enhance decision-making.





## DATA DRIVEN DECISION MAKING PROCESS

1

### SET CLEAR GOALS

- Before starting to play with data for decision making, you must have a clear idea about what you want to achieve.
- Do you want to make the market segmentation more efficient? Do you want to reduce financial risk?

2

### CHOOSE THE DATA SOURCES

- Check the data that you already have and defining outside data sets with valuable information.
- Consider primary and secondary data channels.
- Don't forget for costs. Typically, the primary data sources are expensive.

3

### SET METRICS

- Metrics are numerical values to help you find out whether your efforts are making a difference.
- For example, if your goals relate to improving sales, you can look at metrics such as average time needed to close a deal and conversion rates.
- Define the metrics that have the most impact.

# Embracing Data-Driven Decision Making

Lead the way towards a more informed and successful future.



# Zara's Data-Driven Success



- **Problem:** Traditional fashion forecasting often fails, leading to financial risks.
- **Solution:** Zara uses data analytics to adapt quickly to market demand.
- **Process:** Initial small orders, followed by weekly sales analysis.
- **Impact:** Rapid product updates, optimized inventory, and global market leadership.





# Thank You.....