BUS 139 Data-driven Marketing

Stanford | Continuing Studies

Step 2: Collection and Preparation

The reason we use data is to make better business decisions and that starts by asking questions.

1. **Customer Data**
   Demographics, social media behavior, segmentation etc.

2. **Response Data**
   Campaign metrics, open rate, click-through-rate, engagements, etc.

3. **Sales and Financial Data**
   Sales forecasts, eCommerce, lifetime value, marketing contribution, ROI, etc.

4. **Goal-based Data**
   Conversion, key performance indicators (KPIs), retention, acquisition, awareness, etc.

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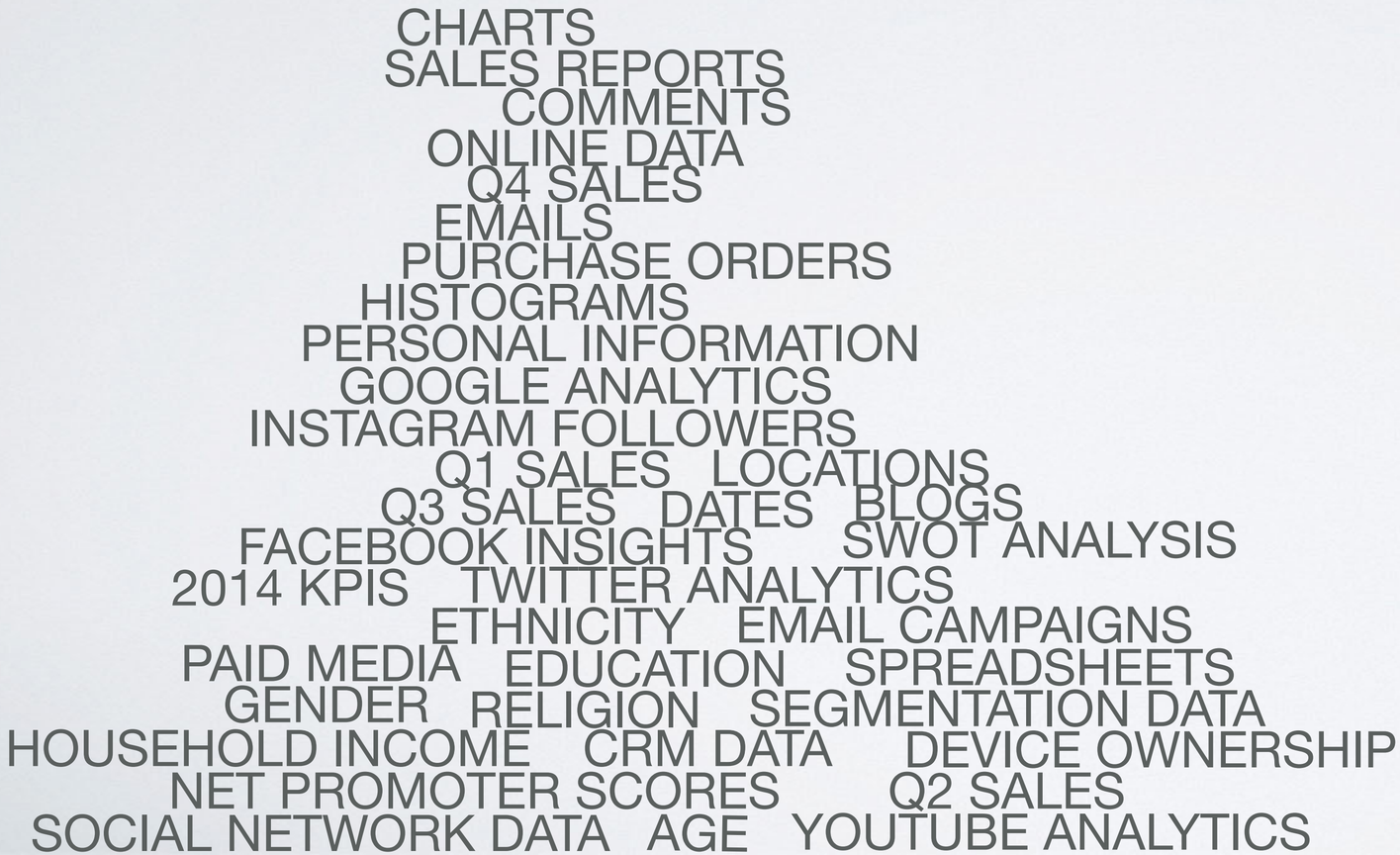
Data problems typically come in two forms: too much and not enough.



There is no “right” data.
Data are always context specific.

A Demographics

B Psychographics

C Purchasing history

D All of the above

Four-step process to collect and prepare data to answer a question.

STEP 1: CREATE A QUESTION

STEP 2: IDENTIFY THE ATTRIBUTES OF THE QUESTION

STEP 3: IDENTIFY THE DATA SOURCES OF THE ATTRIBUTES

STEP 4: PREPARE THE DATA FOR ANALYSIS

Four-step process to collect and prepare data to answer a question.

WHICH CUSTOMERS SPEND THE MOST $ ON OUR PRODUCT?

DEMOGRAPHICS, SALES HISTORY, STORE LOCATIONS, ETC.

WEBSITE METRICS, PURCHASE HISTORY, ETC.

MISSING DATA? MESSY DATA? NO DATA?

STEP 1: CREATE A QUESTION

What are the right questions to ask?

- Questions that lead to sales
- Questions that inform you of your competition
- Questions that reveal something about your customer
- Questions that lead to action

STEP 2: IDENTIFY THE ATTRIBUTES OF THE QUESTION

Which data inputs should we use to surround the question?

- Customer Data
- Response Data
- Sales and Financial Data
- Goal-based Data

STEP 3: IDENTIFY THE DATA SOURCES OF THE ATTRIBUTES

Where do data come from?

- Make it
- Scrape it
- Buy it
- Harvest it

STEP 4: PREPARE THE DATA FOR ANALYSIS

What to do when data isn’t perfect?

- Organize
- Enhance
- Enrich
- Replace

Preparation, like the data itself, is always context specific.

BINNING

CUSTOMER AGES
31
33
31
32
36
31
38
32
33
39
34
37
35
31

ANOMALIES

AVG. RESPONSE RATE
2.1%
2.3%
1.8%
16%
3.1%
1.4%
1.6%
1.9%
2.0%
2.3%
2.2%
1.7%
0.02%
1.3%

INSPECTION

GENDER
M
F
M
M
M
F
F
U
M
F
F
M
M

Example:

What is the impact of customer churn reduction on my revenue?

Example:

What is the impact of customer churn reduction on my revenue?

Number of Customers

Amount of Churn

Total Revenue

The model you create simply quantifies the attributes.

What is the impact of customer churn on my revenue?

Assumptions

Impact

Churn Reduction Impact = Customers x Revenue x Churn	
Input	
Customer Base	5,000
Annual revenue per customer	$720
Annual Churn Rate	30.0%
Churn rate reduced by 5%	28.5%
Churn rate reduced by 10%	27.0%
Churn rate reduced by 25%	22.5%
Churn Analysis	
Total revenues (no churn)	$3,600,000
Customers lost to churn	1,500
Revenues lost to churn	$1,080,000
Revenues with churn	$2,520,000
Revenues lost with 5% churn reduction	$1,026,000
5% churn reduction revenue impact	$2,574,000