

# Class 2

# Information collection

Competitive Intelligence

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# CI is about combining knowledge from different sources

- ▶ Primary sources
  - ▶ People
  - ▶ Direct observations on company behavior
- ▶ Secondary sources
  - ▶ Company internal data - libraries, market research reports, staff files, statistics
  - ▶ External sources - publicly available

# Depth of gathering data depends on...

## Team size

- ▶ Team gathering and analyzing raw data vs single analyst
- ▶ Small team
  - ▶ Secondary sources
  - ▶ Briefing and debriefing company's sales/marketing staff
- ▶ Time available
  - ▶ Primary approach takes more time than secondary
  - ▶ Tracking down information sources
- ▶ Budget

# Categories of secondary sources

Brochures, press releases, catalogues, official web pages

Annual reports, accounts, financial statements

Stock exchange filings

Prospectuses (prior to going public)

Reports of regulatory authorities on certain sectors (e.g. FAS, EEC)

Credit agencies

Financial databases

Published media

Government statistics & reports

Venture capital reports

Trade association reports

Satellite images

# What deficiencies do secondary sources have?

- ▶ Available to everybody, not proprietary or unique
- ▶ Published with delay
- ▶ Worth only for a limited time period if with fixed data
- ▶ Competitors supply the data themselves

# Primary sources

## Internal

- Staff joining from competitors
- Sales staff
- Staff at conferences, seminars, trade shows

## External

- Staff of competitors
- Ex-employees
- Other competitors
- Customers
- Suppliers
- Journalists
- Universities
- Members of professional associations
- Representatives of regulatory authorities

# How to check credibility of sources?

## ▶ 5 “W” questions

- ▶ Who is the author?
- ▶ What is the purpose of the content?
- ▶ Where is the content from?
- ▶ Why does the source exist?
- ▶ How does this source compare to others?

## ▶ SMART Check

- ▶ Source: Who or what is the source?
- ▶ Motive: Why do they say what they do?
- ▶ Authority: Who wrote the story?
- ▶ Review: Is there anything included that jumps out as potentially untrue?
- ▶ Two-Source Test: How does it compare to another source?

## ▶ CRAAP Test

- ▶ Currency: Timeliness of the information
- ▶ Relevance: Importance of the information for your needs
- ▶ Authority: Source of the information
- ▶ Accuracy: Truthfulness and correctness of the information
- ▶ Purpose: Reason the information exists

# How to check credibility of academic journals?

- ▶ Publishing history
- ▶ Editorial structure
- ▶ Content and contributors
- ▶ Area of specialization
- ▶ Review process
- ▶ Indexed in databases
- ▶ Citations



# How does industry affect ways and types of gathered data?

- ▶ Data from consumers - surveys, focus groups, insights, sentiment analysis (B2C)
- ▶ Google alerts to track trends and developments
- ▶ Support documentation and changelogs of competitors' platforms (e-commerce)
- ▶ Win/loss interviews - but actions speak louder than words
- ▶ Tax information, stock exchange filings
- ▶ Backend search engine optimization & marketing data

# How to fit in AI?

- ▶ Automated data collection
- ▶ Data visualization and reporting
- ▶ Market trend analysis
- ▶ Competitor monitoring
- ▶ Sentiment analysis
- ▶ Product and pricing analysis

# Important to remember about limitations!

- ▶ AI is only a tool
- ▶ Depth - it is not specific
- ▶ Hallucinations
  - ▶ Requests for highly specific factual claims or about future events
  - ▶ Requests about very recent events or cutting-edge developments
  - ▶ Deeply technical or specialized knowledge outside mainstream coverage
  - ▶ Hypothetical scenarios with complex variables
  - ▶ Extremely detailed creative writing requests
  - ▶ Misleading requests, or those based on misinformation
  - ▶ Ambiguous or contradictory information provided in the prompt

# Cognitive bias

- ▶ What types of cognitive bias do you know?
- ▶ How it can affect conducting competitive intelligence?
- ▶ How it can affect firm activity?

# Types of bias

- ▶ **Sunk costs fallacy** - tendency to make decisions about a current situation based on what resources you have already invested in the situation
- ▶ **Confirmations bias** - tendency to search for information that supports our preconceptions and to ignore or distort contradictory evidence
- ▶ **Loss aversion** - tendency to regard losses as considerably more important than gains of comparable magnitude
- ▶ **Hedonic adaptation** - tendency to return to a baseline level of happiness regardless of whether you go through a positive or negative experience or event
- ▶ **Endowment effect** - tendency to put more value on things you already own
- ▶ **Herd mentality** - tendency to conform to the behaviors and beliefs of the people around you
- ▶ **Overconfidence** - tendency to be more confident in their own abilities
- ▶ **Halo effect** - taking someone's positive characteristic and ignoring any other information that may contradict this positive perception

# Fighting cognitive bias in interviewing and surveying

- ▶ Confirmation bias

avoid suggestive questions ““Don’t you also find that...”

- ▶ Anchoring bias

options presented to users may prime their responses

- ▶ Order effect

order of questions can affect answers

- ▶ Peak-end rule

users can evaluate their experience based on how they feel at the peak and the end of experience

# Some types of bias in CI

- ▶ Confirmation Bias

have a preconceived idea of where analysis will go. Concentrating on information that fits the perceptions and intentions of senior management and so disregarding other information that could be particularly relevant or have impact

- ▶ Availability Bias

overemphasise highly visible competitor strategies while underestimating less apparent but equally important factors (e.g. focus on prices and portfolio, miss other signs indicating to new move, e.g. job postings)

- ▶ Optimism Bias

overly positive assumptions can lead to disastrous miscalculations

- ▶ Group thinking

those who have different views are not inclined to express them, as they oppose the accepted views of the CI group or others in the firm. Also here - not reaching consensus and inability to make decisions

# Some types of bias in CI

- ▶ Anchoring Bias

ignoring recent information, especially if it is contrary to assessments that already have been made

- ▶ Authority Bias

unconsciously give undue weight to opinions or data from authoritative sources without proper scrutiny

- ▶ Causal Similarity

assume that similar circumstances will yield the same outcomes across different competitors

- ▶ Clustering Illusion

underestimate the amount of variability in random data, detect non-existent patterns.



# Gathering information: the case of anti-dumping investigation

- ▶ Foreign competitors' prices in the market of origin
- ▶ Associated information
  - ▶ VAT
  - ▶ Retailer's share of profit, wholesaler's share of profit
  - ▶ Administrative, selling and general costs
  - ▶ Transport and insurance costs
- ▶ Drawing conclusions from available data

# Sources used

- ▶ Prices on high-density polyethylene (HDPE) from Uzbekistan Commodity exchange (public access)
- ▶ Phone call to representative to clarify whether VAT and other taxes are applicable
- ▶ Analysis of Uzbekistan tax legislation
- ▶ How HDPE is transported
- ▶ Results from cargo transportation calculator

# Financial data in CI analysis - what for?

- ▶ Identify key performance metrics
- ▶ Identify trends and deviations - early warning system
- ▶ Connect competitor analysis actions to results

# Which financial indicators can be tracked?

- ▶ How do they vary depending on industry?
- ▶ What company actions can come out of them?

# Operating KPI

- ▶ First impression of size and efficiency
- ▶ Revenue - Gross sales + further operating revenues - discounts, returns, allowances
- ▶ Expenses - sum of all operating costs.
- ▶ Number of employees, average wages
- ▶ Revenue per employee - how efficiently a company utilizes its employees. Higher value - higher productivity

# Solvency and activity ratios

- ▶ Balance sheet - equity (assets - liabilities)
- ▶ Current ratio - assets/liabilities
- ▶ Long term debt to equity ratio - higher - greater risk
- ▶ Revenue to assets (asset turnover) - firm's efficiency, how well the firm can generate sales with its assets

# Profitability, valuation

- ▶ Annual revenue growth rate for a certain period (e.g. 5 years)
- ▶ Average net profit margin
- ▶ EBIT/revenue, EBITDA/revenue - company's profitability and performance
- ▶ Return on assets (ROA) -  $\text{net income} / \text{assets value}$
- ▶ Price-to-earnings ratio -  $\text{market value per share} / \text{earnings per share}$

# Possible questions

- ▶ What are trend, market potential, risk of the industry?
- ▶ Which are concentration and competition intensity?
- ▶ What are most valuable segments in the supply chain?  
Expand up or downstream?
- ▶ Analysis of financial indicators - where does the company stand in the competitive landscape and how it is ranked?  
Are there any abnormalities?
- ▶ What are strengths and weaknesses relative to competitors?
- ▶ What factors can drive performance in your industry?



# Class activity

- ▶ <https://www.scddata.ai/navigator>
- ▶ Let's choose a company from R&D innovation scoreboard 2024