

Analysis for Inventory Control and Management

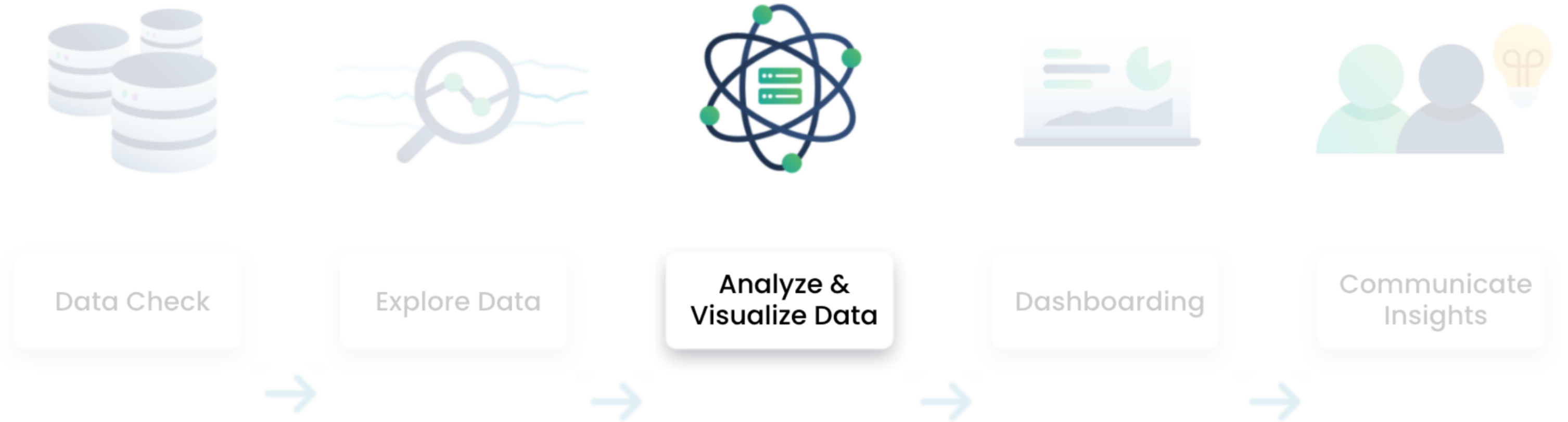
CASE STUDY: INVENTORY ANALYSIS IN POWER BI



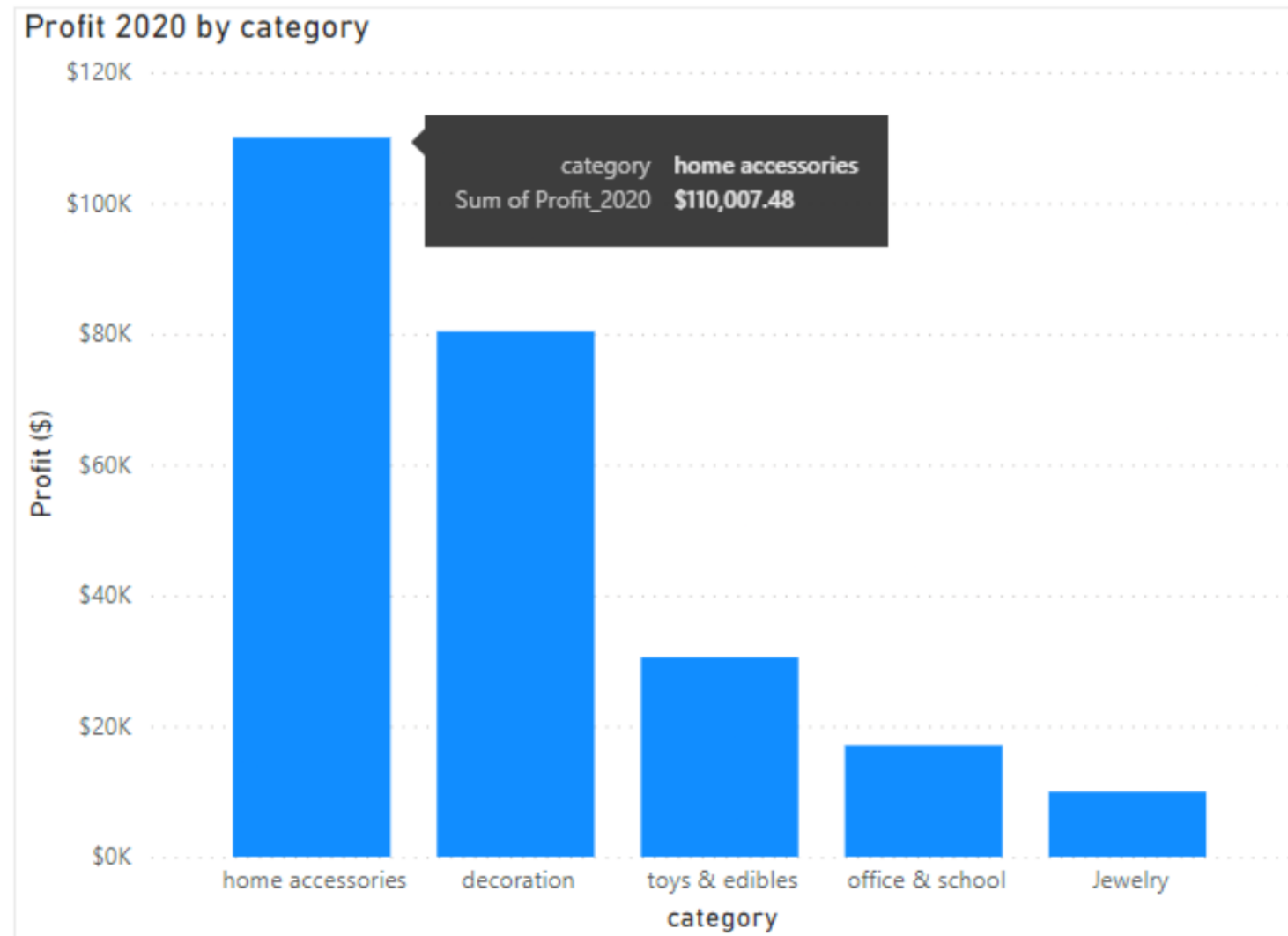
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Analysis workflow



Preliminary insights



- *Decoration* and *Jewelry* items have COGS of around \$5
- Profit dominated by *Home & accessories* in 2020, with \$110K
- "Grow a flytrap or sunflower" is a top seller

Inventory analysis metrics

More insightful calculations:

- Average inventory value
- Inventory turnover
- ABC analysis



Average inventory and turnover

Average inventory value

$$\frac{\textit{Starting value} + \textit{Ending value}}{2}$$

Inventory turnover

$$\frac{\textit{COGS}}{\textit{Average value of inventory}}$$

¹ <https://www.investopedia.com/terms/i/inventoryturnover.asp>

ABC analysis

Four steps:

1. Revenue
2. Percent of total revenue
3. Cumulative increase
4. ABC

Revenue ▾	Percent of total revenue ▾↓	Cumulative percent of total revenue ▾	ABC ▾
\$33,717.97	7.21	7.21	A [High Value]
\$26,176.26	5.60	12.81	A [High Value]
\$24,014.10	5.14	17.95	A [High Value]
\$22,661.31	4.85	22.80	A [High Value]
\$22,600.55	4.83	27.63	A [High Value]
\$22,205.30	4.75	32.38	A [High Value]
\$20,275.92	4.34	36.72	A [High Value]
\$18,360.40	3.93	40.65	A [High Value]
\$17,503.16	3.74	44.39	A [High Value]
\$16,737.56	3.58	47.97	A [High Value]

¹ Handanhal and Misra (2014). ABC Analysis for Inventory Management: Bridging the Gap between Research and Classroom.

Following steps

Using these new metrics will allow you to see hidden relations in your data.



Let's practice!

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