



### Monthly Sales Forecast

of Siemens' Smart Infrastructure division

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of companies with industry-leading forecasting processes achieve their sales quotas.

55% of those without such processes compared to only

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3 DATA INSIGHTS

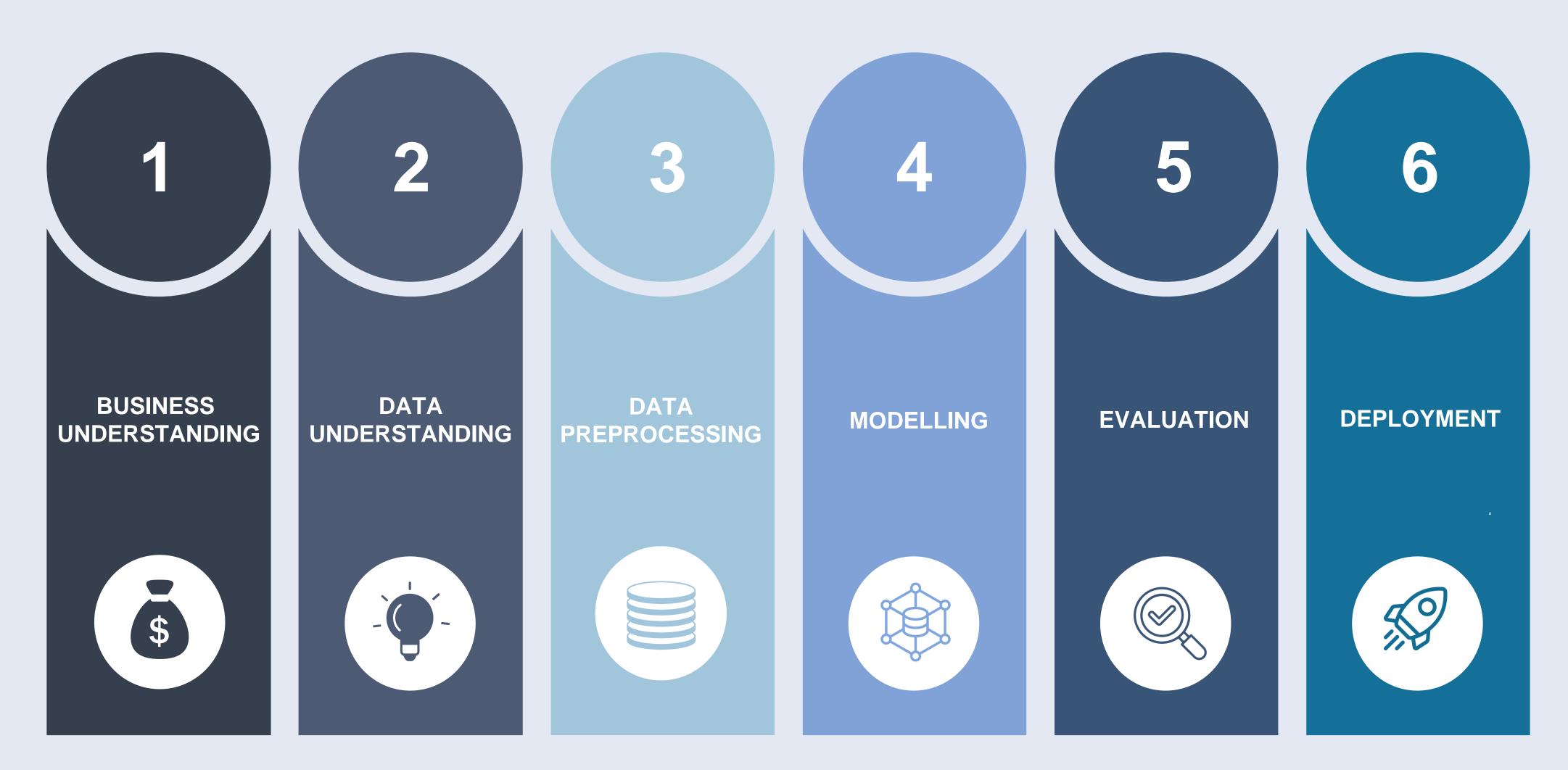
4 RESULTS EVALUATION

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4 RESULTS EVALUATION

The project followed the CRISP-DM methodology, as it provides a structured framework, based on practical, real-world experience of how people do data mining projects

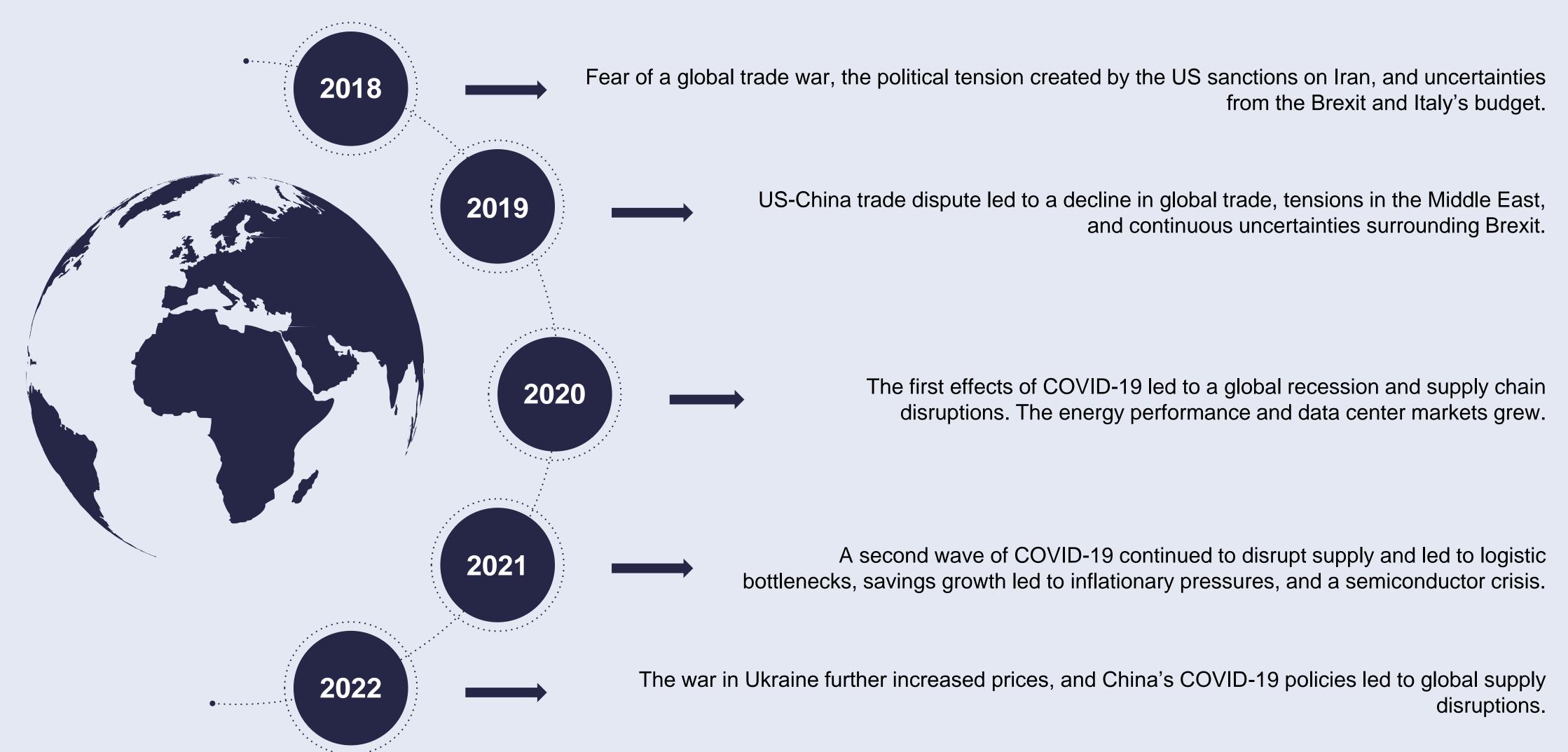


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The everchanging economic environment was particularly challenging from 2018 to 2022, with trade wars, a global pandemic, tensions in the Middle East, and the war in Ukraine



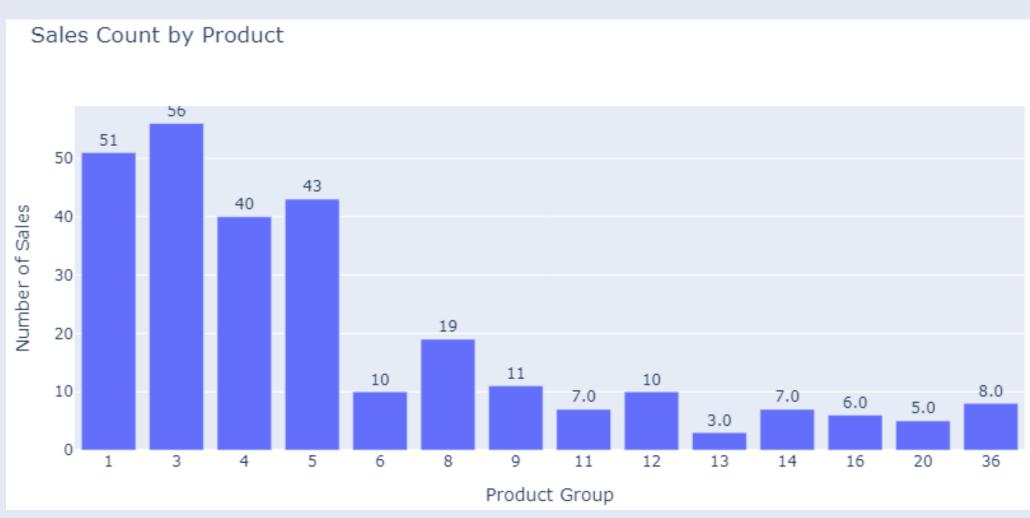
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An analysis of the Sales data was conducted, aiming to find inconsistencies and to get a better understanding of these values





### Remarks

### **Negative values**

Assumptions - Production Errors Leading to Returns:

- Defective Components discovered upon
- Wrong Specifications delivered for projects

#### Findings:

Overall returns are proportionate to sales amount, with few exceptions

### **Product Sales Count** (estimation)

By estimating product sales count, we gained insight into **product pricing** or, at the very least, identified products that are typically purchased in larger quantities.

### **Total Sales**

Products with most sales: 1, 3, and 4

Products with the least sales: 20, 9, and 14

### We clustered the different products based on common macroeconomic indicators to identify shared demand drivers

### Products 3, 4, 8, 14 and 20:

- Electrical equipment supply
- EU (France and Italy) and Japan
- Energy Costs and Raw Materials
- Production requires a strong electrical and raw input

### Products **5**, **9** and **11**:

- Dependency on UK-based manufactured electrical equipment
- Weaker dependece on the world production and shipment index
- China, Japan and the US

### Products **1**, **6** and **12**:

- US driven electrical equipment
- Sensitivity to prices
- European goods
- Oil and other Raw Materials

### Products **13**, **16** and **36**:

- Switzerland's high connection to the production index of electrical equipment
- Demand with the elasticity of American and European markets

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According to the forecast, most products will see sales growth in the next 10 months



Products	Average Sales	Sales by Product			
		Sales Growth	Products	Average Sales	Sales Growth
Product 1	43 019 464 €	16.42%	Product 11	1 722 006 €	-9.57%
Product 3	14 858 782 €	10.26%	Product 12	281 314 €	-8.93%
Product 4	339 579 €	-21.96%	Product 13	18 352€	19.43%
Product 5	10 834 543 €	-6.16%	Product 14	19 182 €	40.32%
Product 6	259 748 €	-42.20%	Product 16	120 845 €	-35.84%
Product 8	1 532 561 €	20.24%	Product 20	1 919 €	209.06%
Product 9	10 777 €	35.53%	Product 36	17 576 €	6.19%

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For the next steps, we hope to meet soon with Siemens' team to further discuss project implementation, platform development and continuous adjustments



The next phase will integrate the model with the ERP system to track real-time data against forecasts. Sales teams can monitor product performance live, while logistics teams gain better stock forecasting for improved inventory management.



### **SIEMENS**

### Our team



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## Thank You!

Any questions?