



# POOR SALE FORECASTING AT **VTB**

PSOFI\_DH47ISB-1 - GROUP 2



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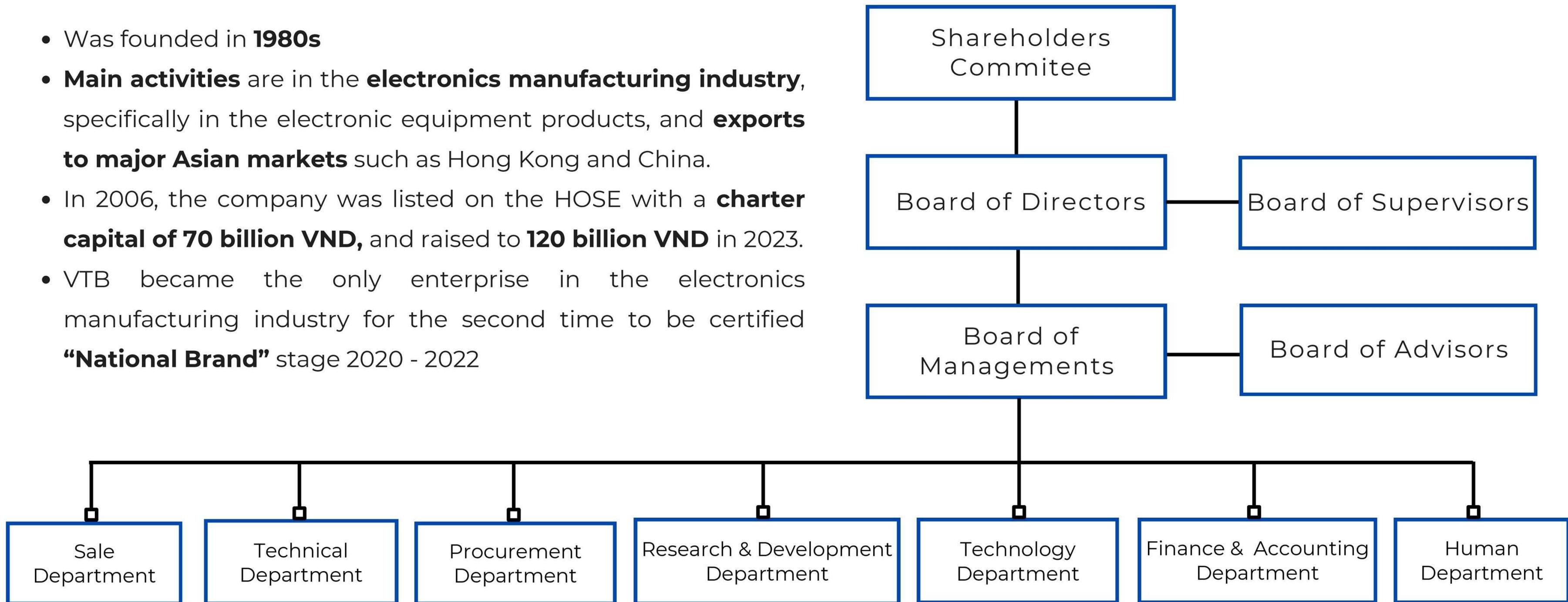
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**06** Action plan

# COMPANY OVERVIEW

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- Was founded in **1980s**
- **Main activities** are in the **electronics manufacturing industry**, specifically in the electronic equipment products, and **exports to major Asian markets** such as Hong Kong and China.
- In 2006, the company was listed on the HOSE with a **charter capital of 70 billion VND**, and raised to **120 billion VND** in 2023.
- VTB became the only enterprise in the electronics manufacturing industry for the second time to be certified **“National Brand”** stage 2020 - 2022



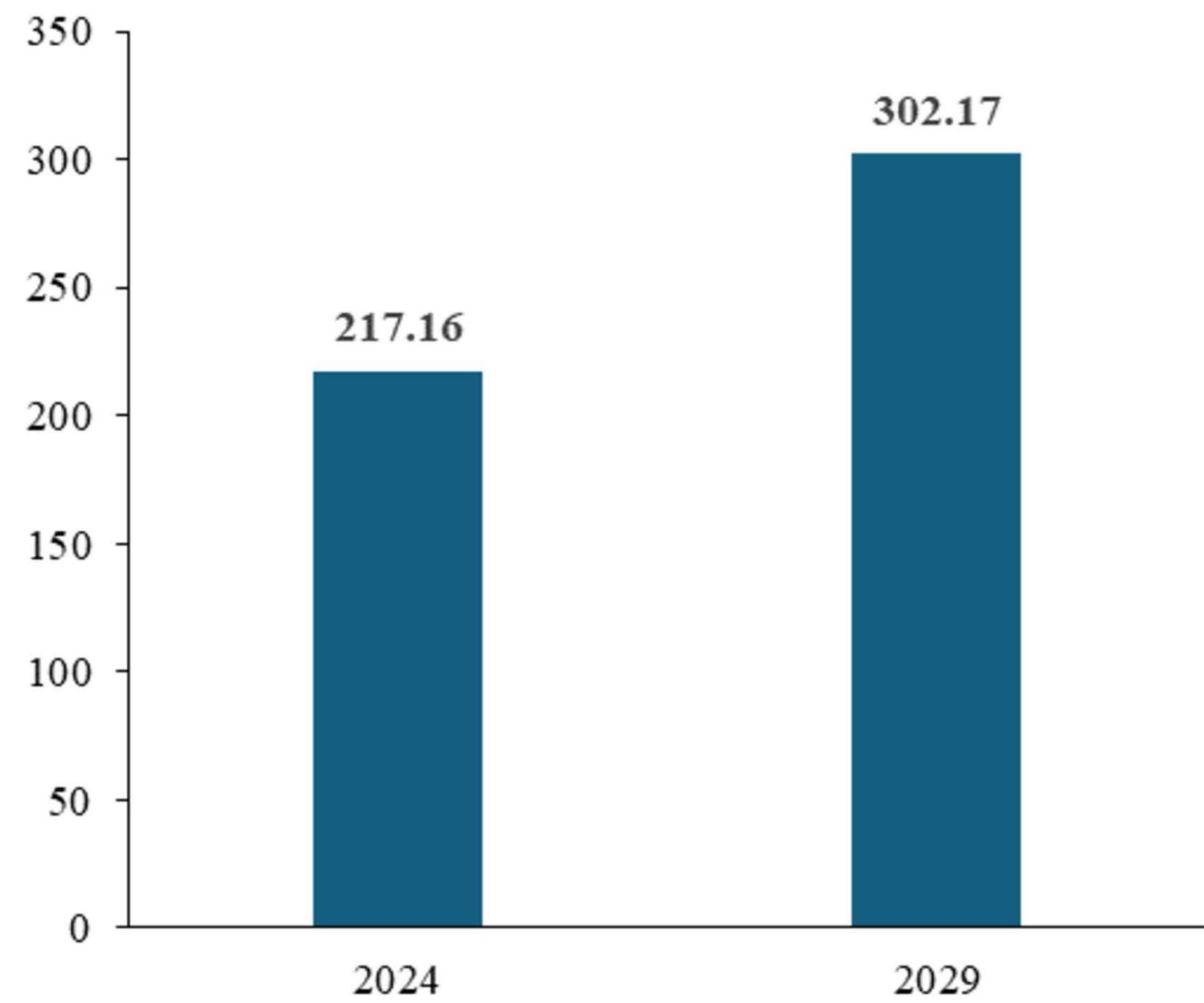
# INDUSTRY OVERVIEW

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A compound annual growth rate **(CAGR) of 7.1%** is anticipated for the industry **from now to 2029**.

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*Global electronic components manufacturing market size.*



**Overview**

**Symptoms**

**Problems**

**Causes**

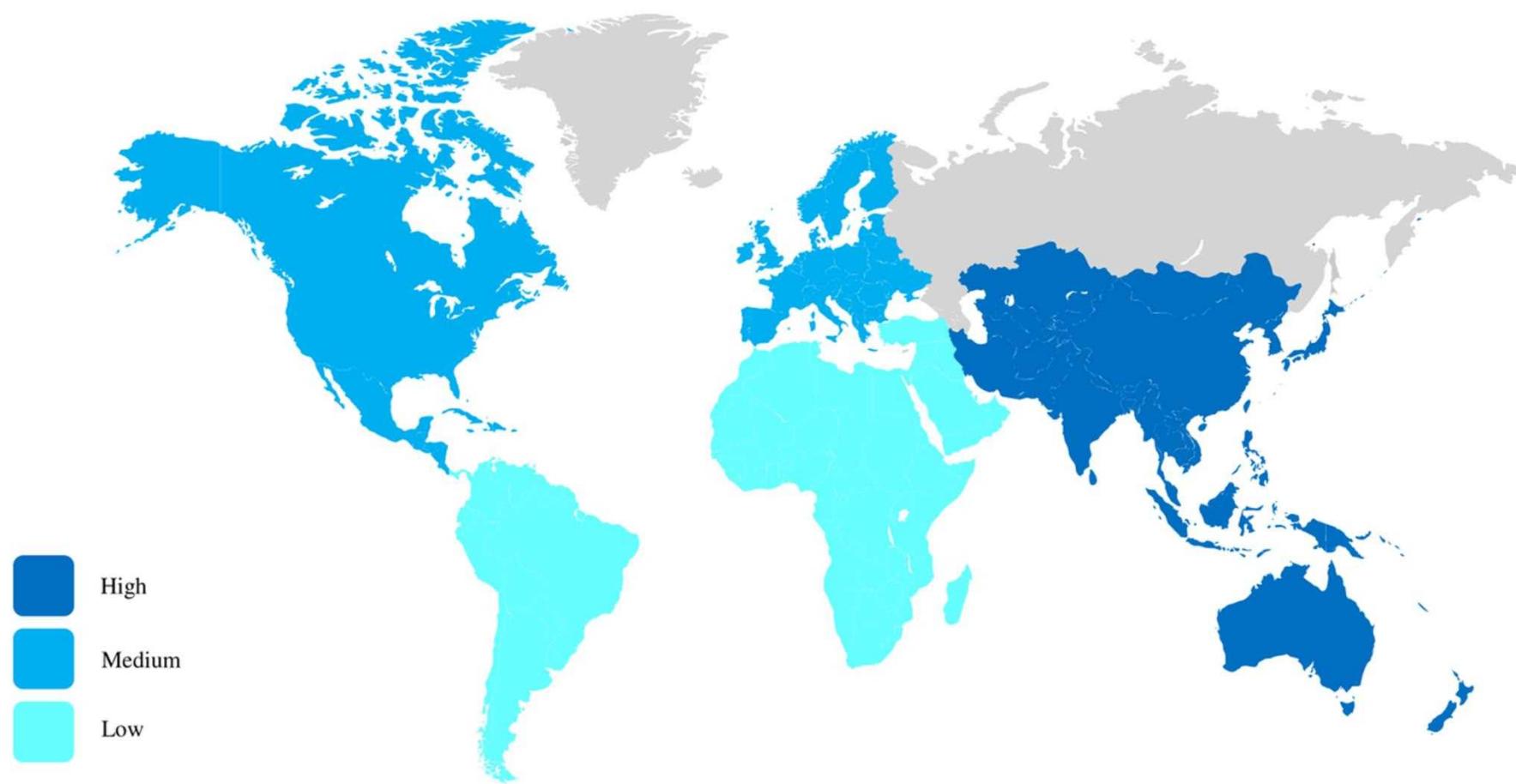
**Solutions**

**Action plan**

The APAC region is expected to witness the **highest growth** during this period

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*Global electronic components manufacturing industry estimated growth.*

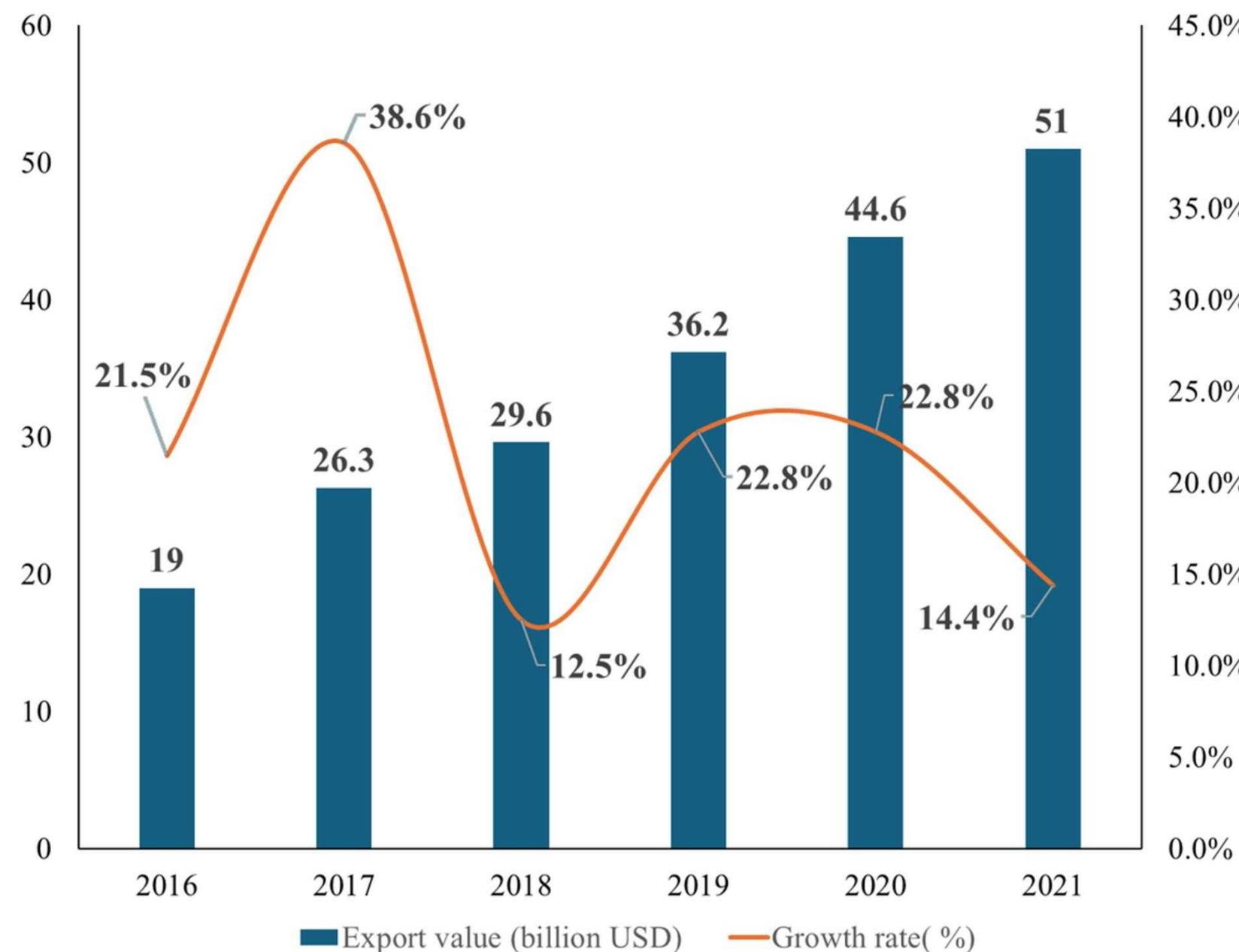


# INDUSTRY OVERVIEW

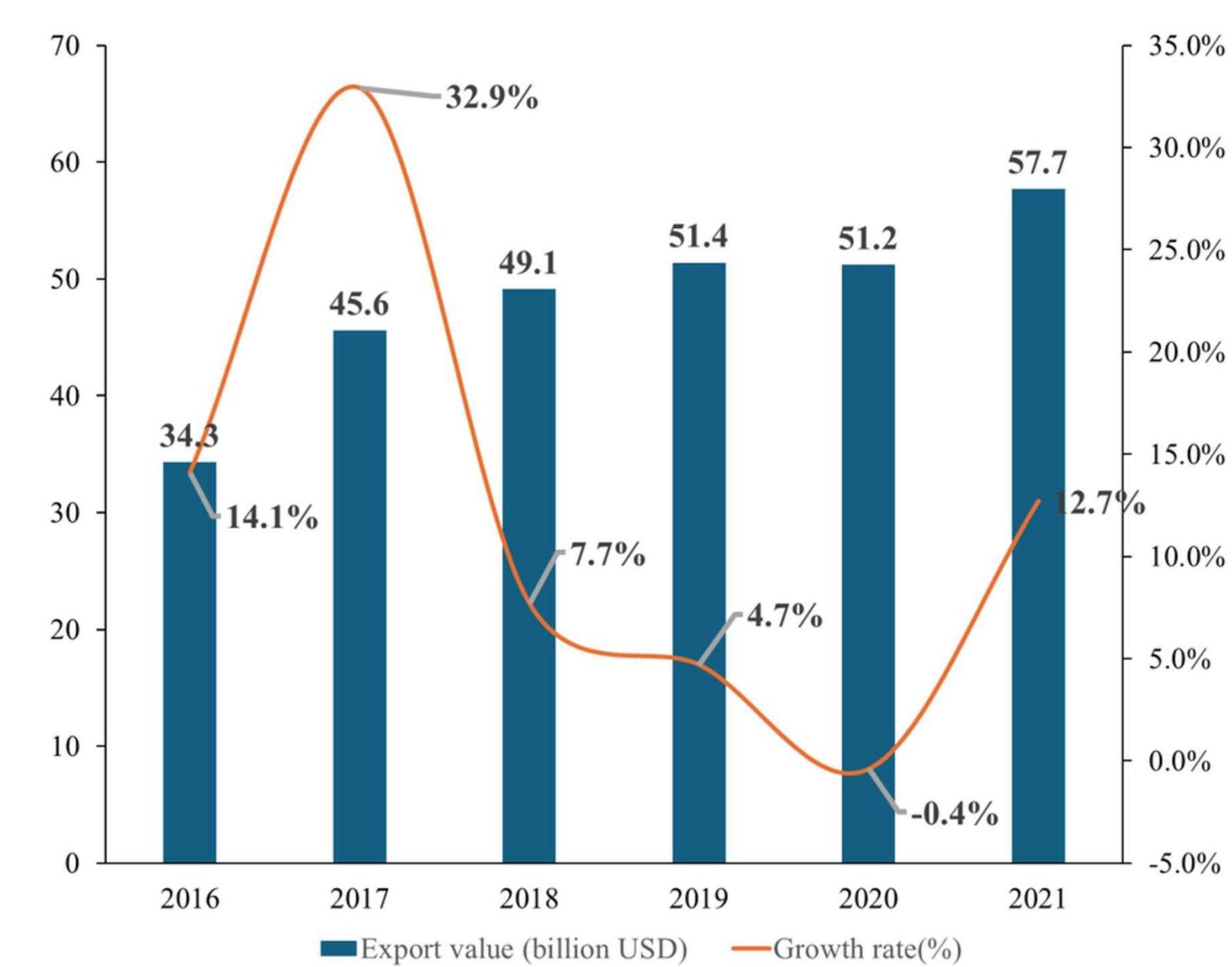
Vietnam's electronics sector has had the **greatest growth**. With an export value that grew from **19 billion USD to 51 billion USD**

Phone and electronic components business **had a rapid growth, became top of the product** with the greatest export value from 2016 to 2021.

*Vietnam's electronics components export value*



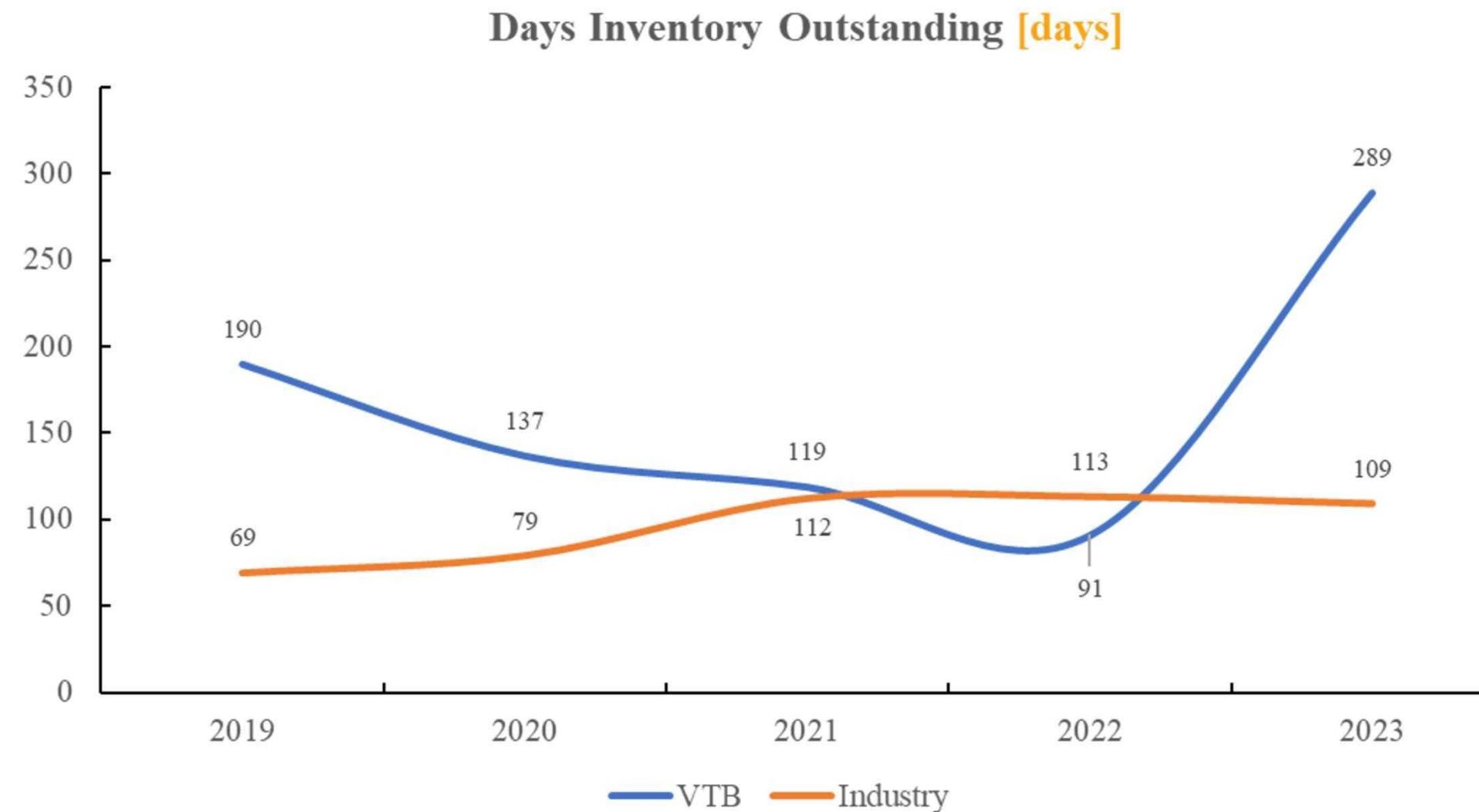
*Vietnam's electronics and mobile export value.*



# POSSIBLE SYMPTOMS

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## S1: Increasing Days Inventory Outstanding



**VTB** 's DIO skyrocketed in 2022-2023 period  
**Peers** steadily increased

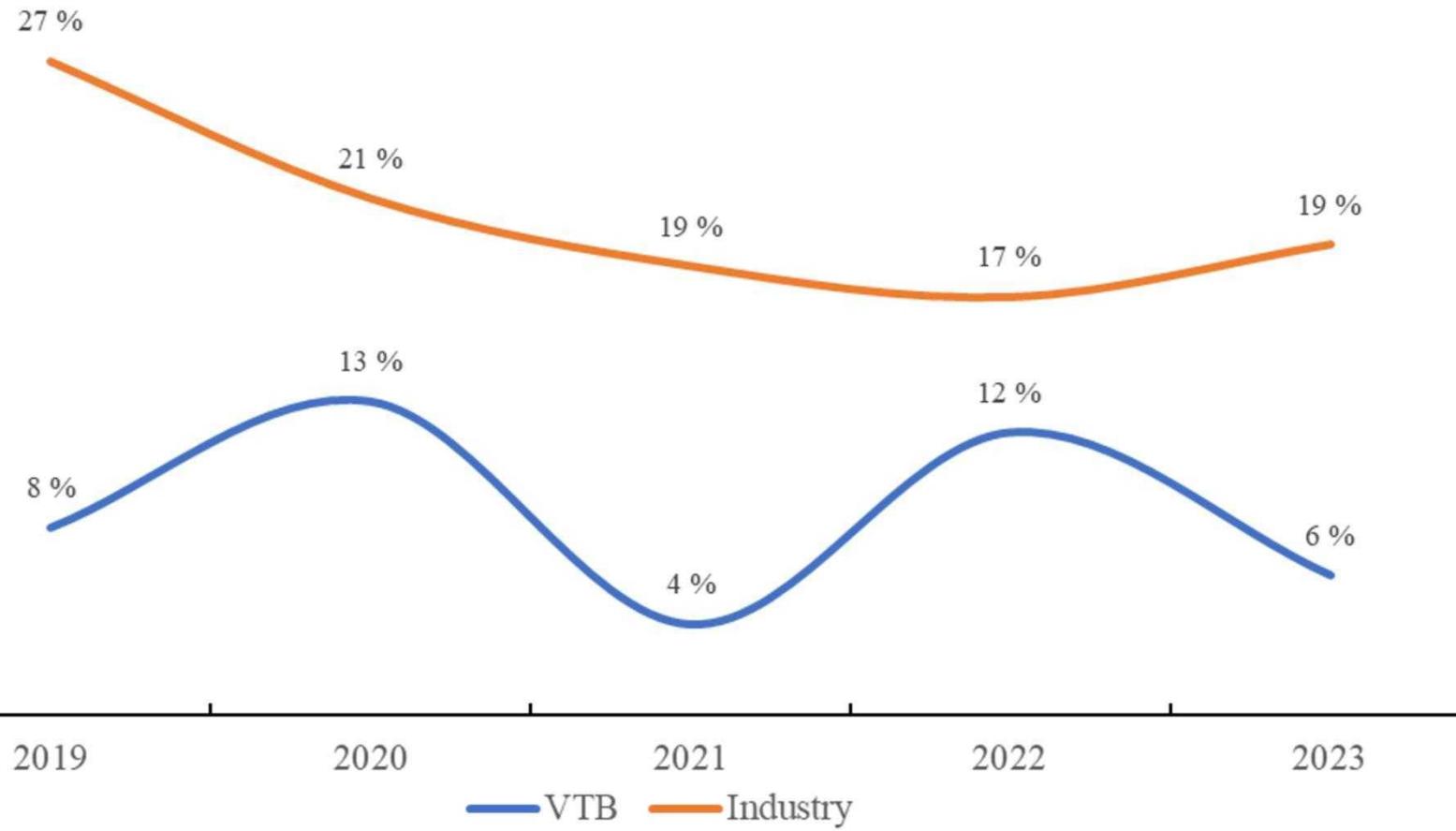
### DIO:

- Indicates a comprehensive ability of Inventory Management and Liquidity.
- Could imply the ability to produce Revenue

# POSSIBLE SYMPTOMS

## S2: Low Return on Equity.

Return on Equity [percentage (%)]



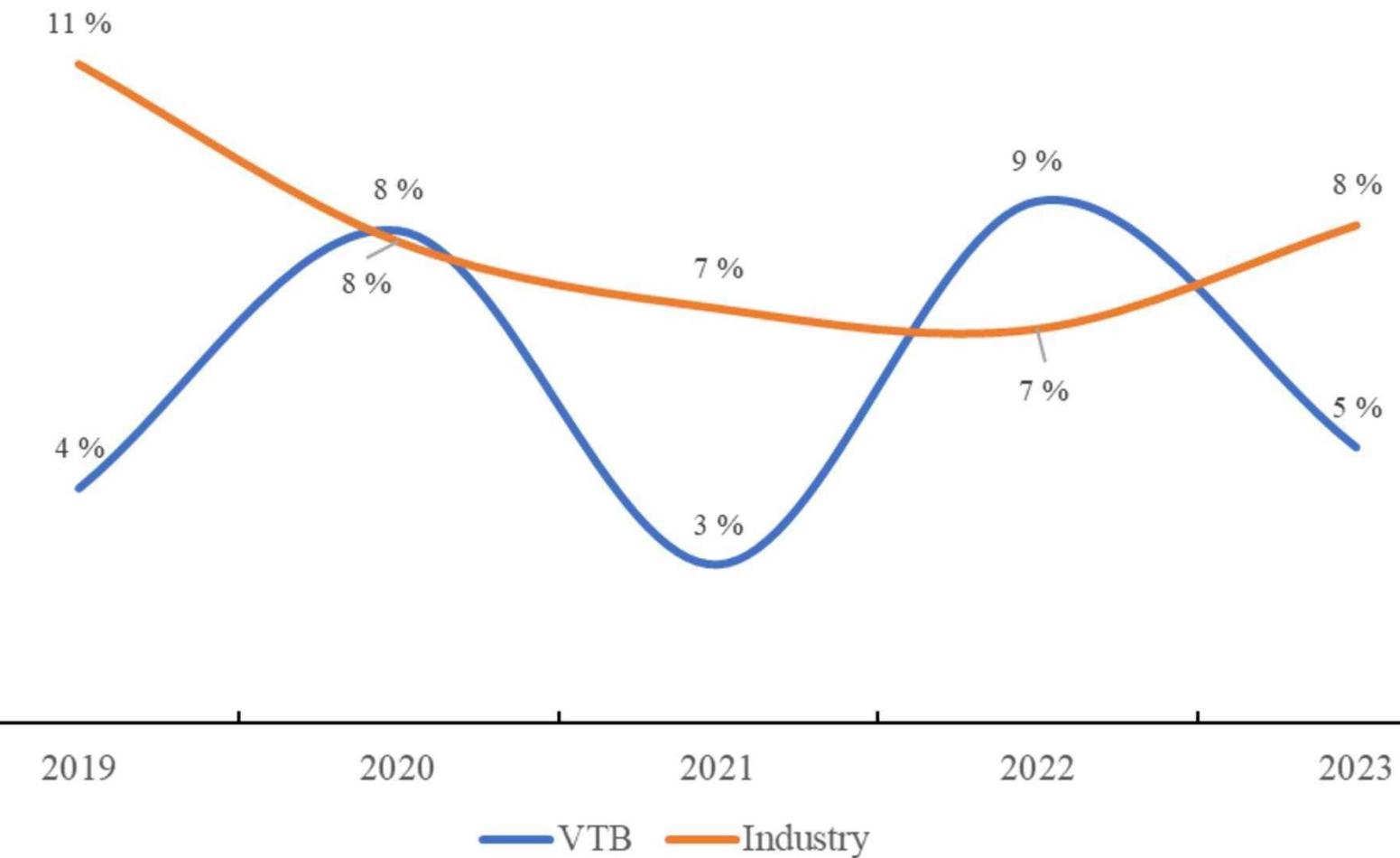
**VTB**'s ROE fluctuated around 8%, approximately 6% in 2023

**Peers** slightly decreased but stable.

**ROE:** Only indicates the ability to use shareholder funds to generate profits.

## S3: Decreasing Return on Asset.

Return on Asset [percentage (%)]



**VTB**'s ROE fluctuated around 6%, approximately 5% in 2023

**Peers** slightly decreased but stable.

**ROA:** Only indicates the ability to generate profits from its asset.

# SYMPTOMS VALIDATION

**Criterion to rank symptoms:** [1] Is the symptom the cause of other symptoms ?, [2] Is it important to solve ?.

Symptoms	Criteria [1]	Criteria [2]
<b>Low in Return on Equity (ROE)</b>	<ul style="list-style-type: none"> <li>Critical metrics of profitability.</li> <li>Mainly influenced by the VTB's revenue.</li> </ul>	-
<b>Decreasing Return on Asset (ROA)</b>		-
<b>Increasing Days Inventory Outstanding (DIO)</b>	<ul style="list-style-type: none"> <li>Reflects the efficiency of both management and converting Inventory into Revenue.</li> <li>High DIO showed VTB facing difficulty converting inventory to revenue (<b>affecting ROA, ROE</b>).</li> </ul>	<ul style="list-style-type: none"> <li>Poor cash flow and inefficient use of Working Capital</li> <li>The inability to sell Inventory might affect liquidity, hindering short-term obligations.</li> <li>Perishable and obsolescence might sell at a discount reduce profitability, and lead to many costs.</li> </ul> <p><b>[PO2] Mr. Phuc shared:</b> "...these items have short lives...become obsolete...so that is why they become hard to sell...could be <b>more challenges for business activities of VTB</b>"</p>

# SYMPTOM DEFINITION & SIGNIFICANCE

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## DAYS INVENTORY OUTSTANDING

DEFINITION



- Inventory Turnover in Days or Days Inventory Outstanding reflects the average number of days from acquiring products to selling these products.
- Days Inventory Outstanding (DIO) indicates the company's inventory management policy.

SIGNIFICANCE



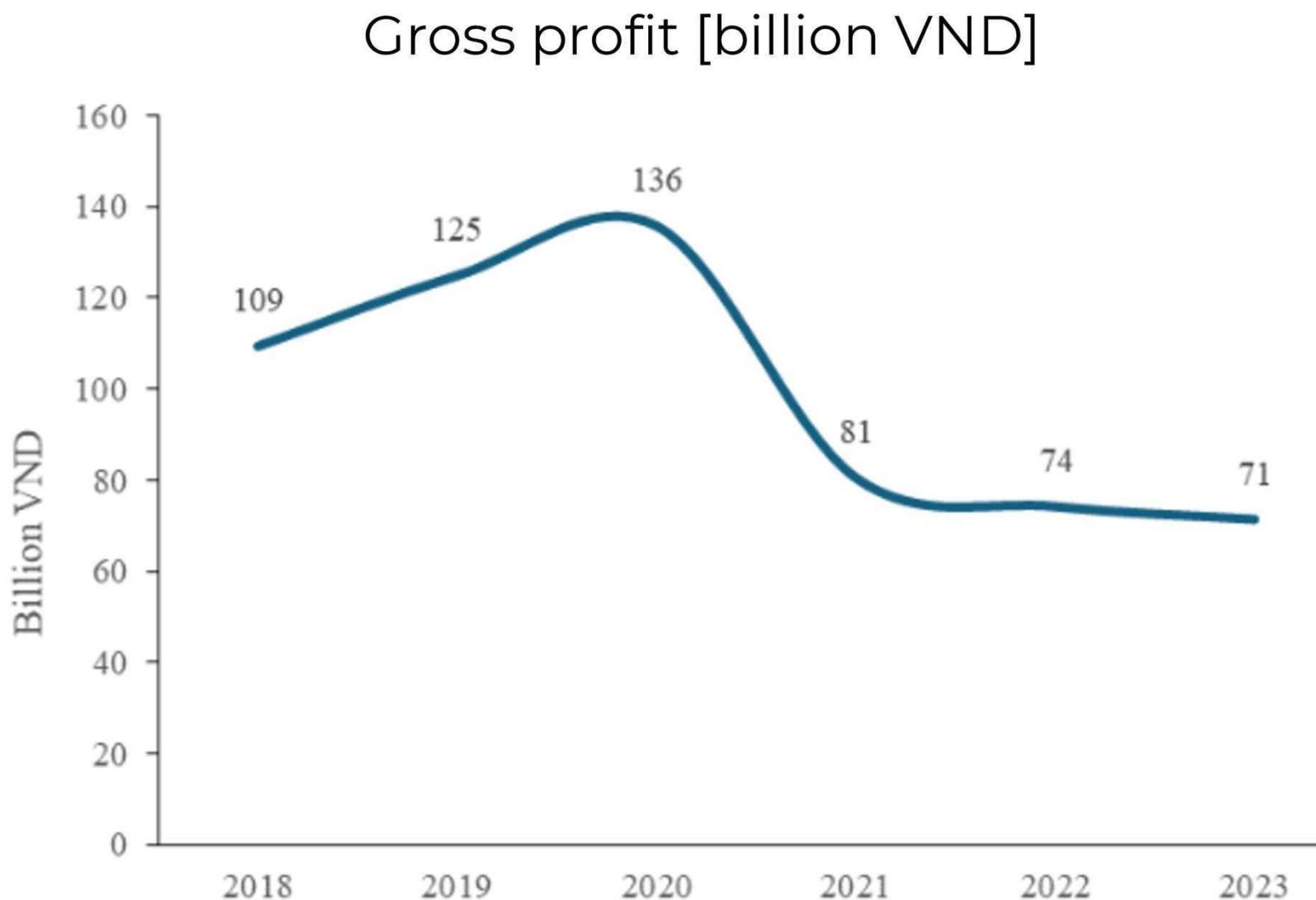
- Days Inventory Outstanding will directly affect and reduce the company's cash flow which could be used to support the process of selling products such as expanding marketing, market research, and factory costs.
- Some of the company's models are stored for too long can make them obsolete and it will be difficult to attract customers in making decisions. intend to buy, when technology will always update continuously and quickly.

# POTENTIAL PROBLEM

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## POOR SALE FORECAST

Poor or inaccurate sale forecasts cause the inventory level to be either underestimated or overestimated, which causes the inventory to be understocked or overstocked.



- The forecast figures are only set by sale department and approved by the BOD, without any research or proper forecasting techniques from F&A department.

# POTENTIAL PROBLEM

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## POOR INVENTORY MANAGEMENT

Poor inventory management refers to the inability to effectively control the flow of goods and materials throughout the business.

“  
[PR2]: “... VTB has lots of **stored items** that have **become old**, so that is why they **become hard to sell**.”

*Mr. Phuc - Head of procurement*

”

**Evidence that the company has poor inventory management.**

The **impact of poor inventory management** is that the company has **countless models** that are **obsolete and unattractive to customers**.

# POTENTIAL PROBLEM

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## MARKET COMPETITION

Fierce competition in the **retail market** in the **electronics industry** is strong not only between VTB and domestic brands but also against international brands.

### International competitor

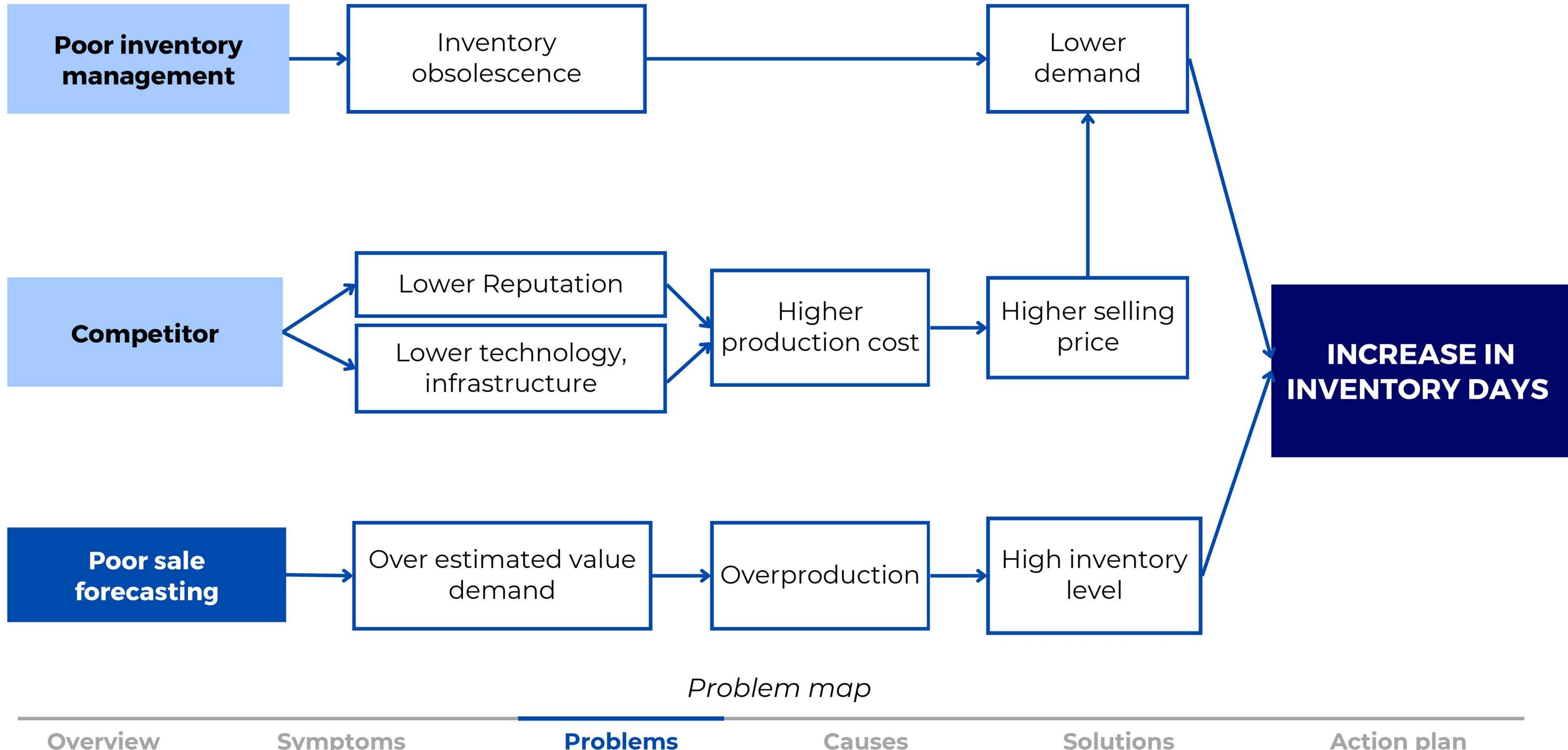
Main competitors are from China, particularly TCL.

- TCL inheritance the **pioneering in technology, infrastructure** and assembly equipment, which **minimize the total cost** from production, s&a → **creating the competitive selling price** specially in Vietnamese market.
- Higher **brand's recognition** compare to VTB.

### Local competitor

Asanzo (a **non-listed firm**) is considered as a domestical competitor of VTB since it has **really competitive selling price** in the same segment with VTB.

# POTENTIAL PROBLEM



# PROBLEM VALIDATION

Criteria: [1] The profit impact of the problem, [2] Whether FA department have control over solving the problems, [3] The priority of the problems

Potential problems	Criteria 1	Criteria 2	Criteria 3
<b>Poor sale forecasting</b>	<ul style="list-style-type: none"><li>• Overstocking</li><li>• High storage cost</li><li>• Lost opportunity costs</li></ul>	Yes	Highest priority
<b>Poor inventory management</b>	<ul style="list-style-type: none"><li>• Can't sell at original price</li><li>• Ongoing and insurance costs</li><li>• Lost sale opportunities</li></ul>	No	
<b>Competition</b>	<ul style="list-style-type: none"><li>• Decrease in sale revenue</li></ul>	No	

Overview      Symptoms      **Problems**      Causes      Solutions      Action plan

# PROBLEM DEFINITION

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## POOR SALES FORECAST

### SALES

- Sales represent the **transactions** between **a business and its customers** where goods or services are provided in exchange for monetary compensation.

### SALES FORECASTING

- A **process** where the future is systematically and rationally assessed to **give a predictive insight** to a company.
- Identify **how many products** need to be **produced**, when they have to be produced, and in which production plant the production should occur.
- **Improving forecast accuracy** can **reduce the need for excess inventory**, freeing up capital and reducing storage costs.

# PROBLEM SIGNIFICANCE

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**Low profitability**



- Lead to excess or stockouts, affecting a company's financial health and profitability.
- When sales forecasts are inaccurate, companies may overestimate demand, causing unnecessary inventory production or purchase.

**Poor cash management**



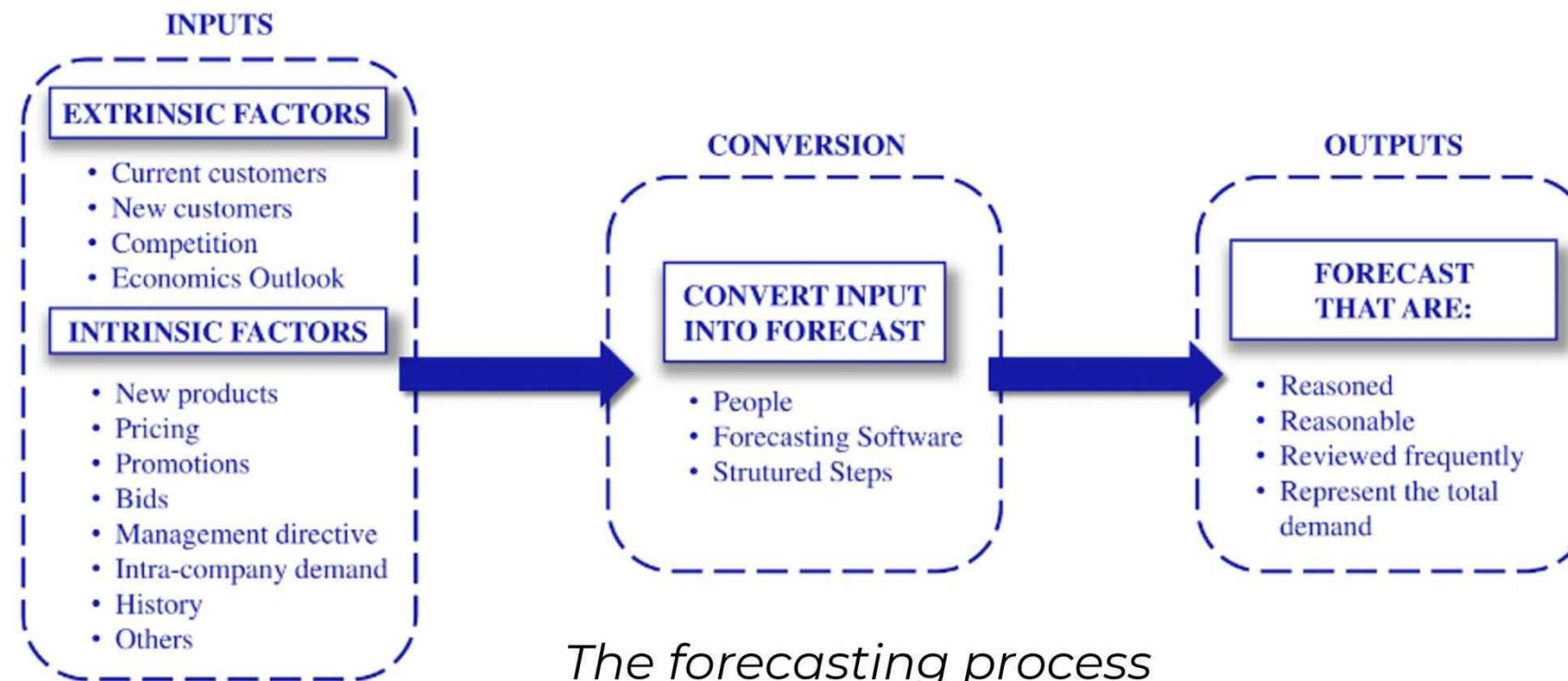
- Excess inventory ties up capital that could be used elsewhere in the business, affecting overall cash management.
- Inadequate forecasts can lead to supply and demand mismatch.

**Liquidity problem and prevention essential**



- When forecasting does not perform well, hard costs materialise in the form of inventory discrepancies.
- Reduce the confidence of investors and partners.

# POSSIBLE CAUSE



## Inadequate input data

- **Incomplete sales prediction information** might be caused by **erroneous data** summarising, which might **impact the forecasting process** later on.
- **Manage data quality** (eg. data consistency and completeness) because it can have a significant **effect** on the intention to **adopt big data analytics**, which has a **major impact** on **decision making and sales forecasting**.

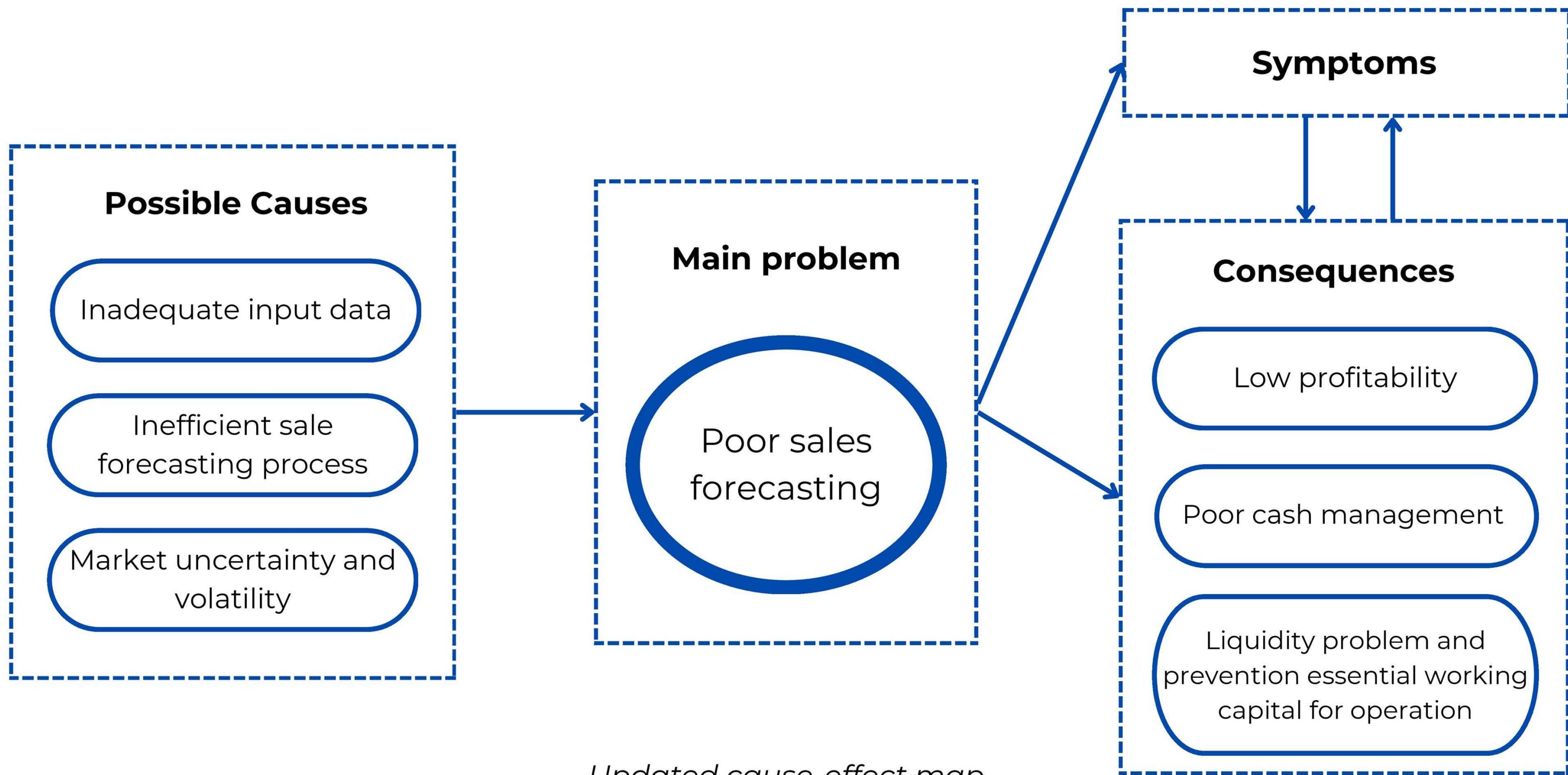
## Inefficient sale forecasting process

- Using such **simple methods** or process to **predict the sales** of different products could lead to **prediction errors** when there's the existence of complicated factors.
- Too **complex prediction models** using advance methods may **not be necessary** for business needs, so forecasters often **do basic analysis** and **rely on experience** to make forecasts.

## Market uncertainty and volatility

- **Unexpected events** can **render** the **forecasts erroneous**, as predicting exactly what may happen in the future is impossible
- Although forecasting methods and experience improve over time, **environmental factors** including **uncertainty and volatility** can have a **substantial impact** on the **accuracy of sales forecasts**.

# POSSIBLE CAUSE



# CAUSE VALIDATION

Causes	Detail	VTB Interview
INEFFICIENT SALES FORECASTING PROCESS	<ul style="list-style-type: none"> <li>Sales department in-charge in sales forecasting process not finance department.</li> <li>Not use of forecasting model or support from other departments</li> </ul>	<p><b>[CA1]:</b> “Because the sales department are people who directly do sales work and have a lot of experience, setting forecast numbers as well as targets is completely done by the sales department...”</p> <p><b>[CA5]:</b> “The company currently has no systems or tools for planning tasks. All activities are conducted using Spreadsheet based on assumptions set by the head of sales.”</p>
INADEQUATE INPUT DATA	<ul style="list-style-type: none"> <li>Only type of input data is the past sales figures.</li> <li>Lacks other types of data such as economic indicators, industry trends, competitor activity, customer surveys.</li> </ul>	<p><b>[CA2]:</b> “Currently, we only stop at collecting numeric data, roughly recording total revenue reports, revenue by each item, specific quantities of which items sell best and worst at stores...”</p>
MARKET UNCERTAINTY AND VOLATILITY	<ul style="list-style-type: none"> <li>Unexpected effects of all the events which could impact the accuracy of the forecast figures.</li> </ul>	<p><b>[CA4]:</b> “It is hard to do that, as you know, there are lots of unforeseen situations that are impossible to predict. We can only know that once the event happened...”</p>

Overview

Symptoms

Problems

Causes

Solutions

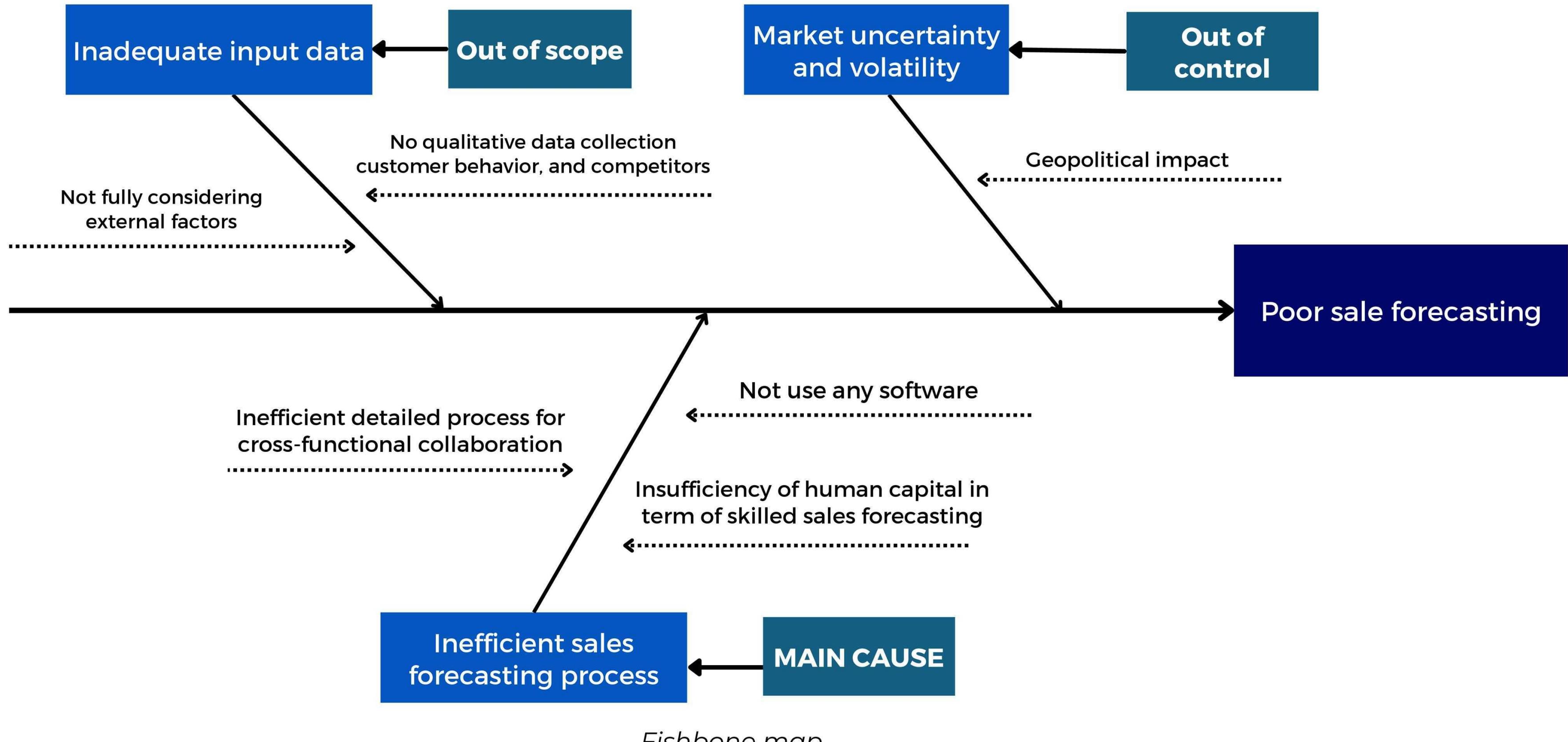
Action plan

# MAIN CAUSE JUSTIFICATION

Criteria: [1] Whether VTB, especially Finance - Accounting Department can control it,  
[2] The feasibility of improving the cause, [3] Financial impact after giving solutions for the cause

Potential problems	Criteria 1	Criteria 2	Criteria 3
<b>Inefficient sales forecasting process</b>	Can control	Yes	<ul style="list-style-type: none"><li>Impacts many important factors such as personnel, methods, and software</li><li>The highest impact on forecasting result</li></ul>
<b>Inadequate input data</b>	Out of scope	Yes	<ul style="list-style-type: none"><li>Increase the accuracy of the data</li><li>Improve the efficiency of the forecasting process and increase confidence in forecasting results</li></ul>
<b>Market uncertainty and volatility</b>	Out of control	No	<ul style="list-style-type: none"><li>Reduce errors in the forecasting process</li><li>Have a backup plan to prevent risks</li></ul>

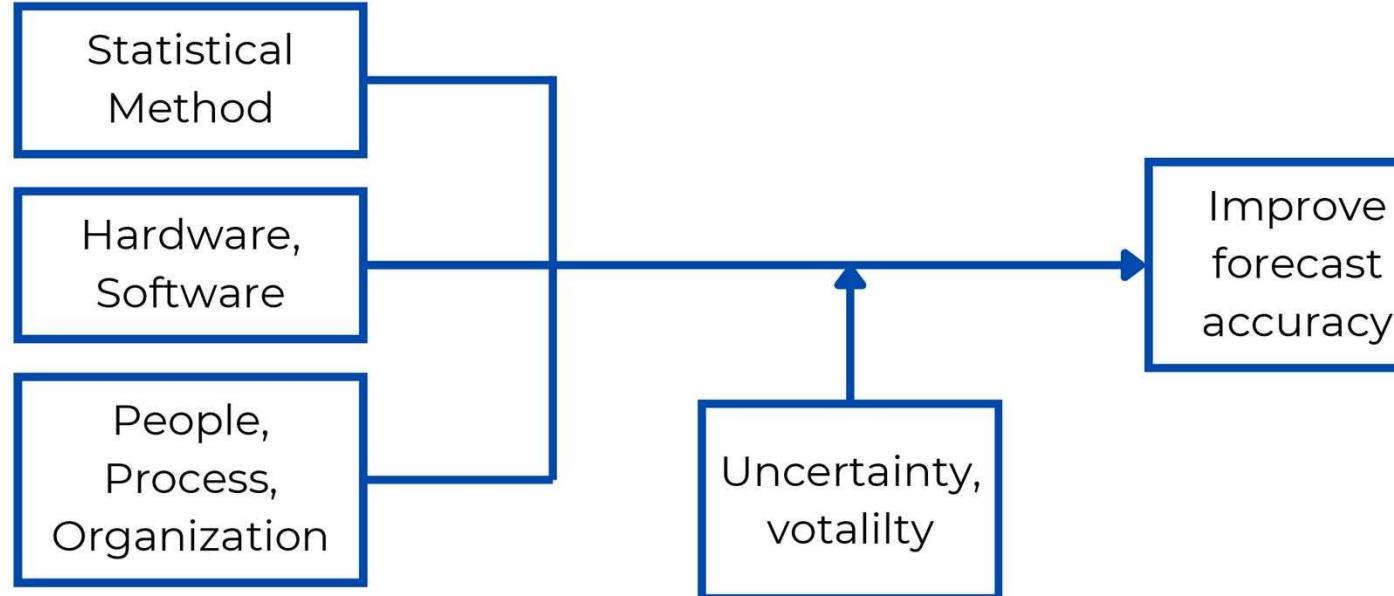
# MAIN CAUSE JUSTIFICATION



Fishbone map

# ALTERNATIVE SOLUTION

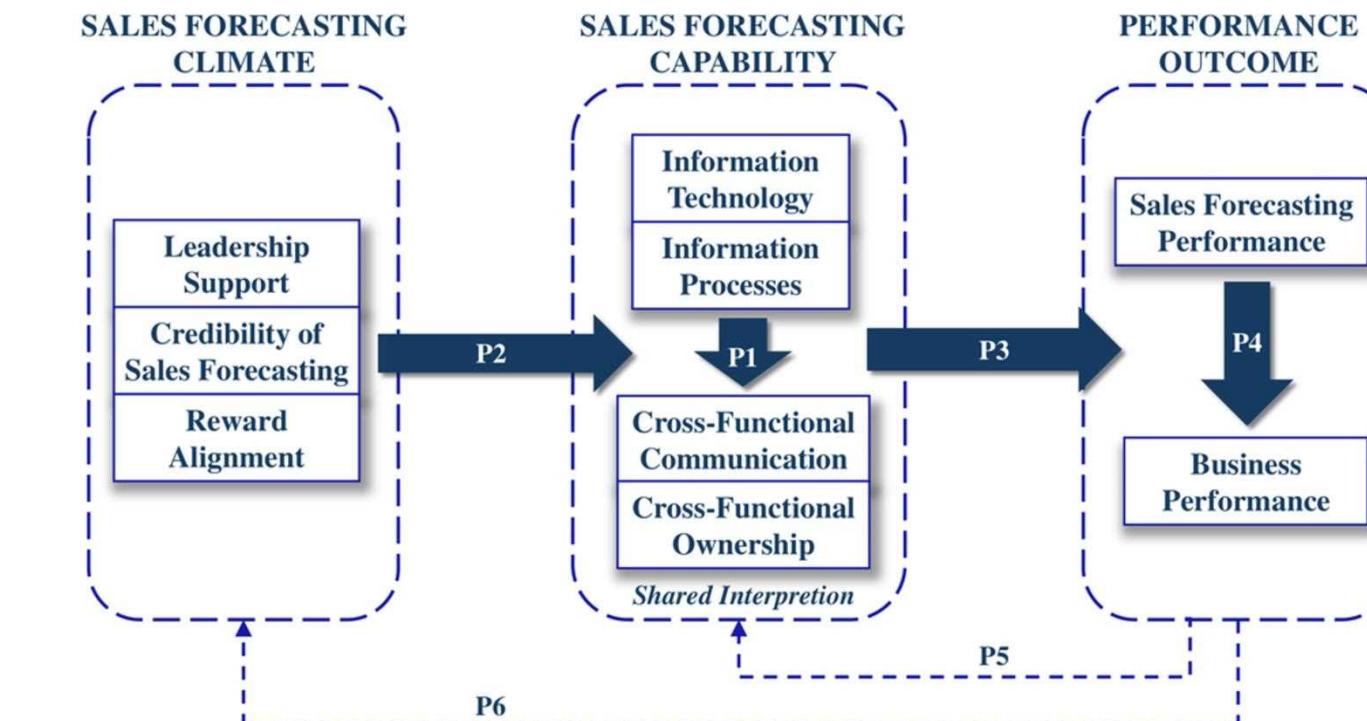
## Implement ERP systems



*The elements affect how to increase forecasting accuracy*

- **Hardware and software** systems are one of the elements that contribute to **enhanced forecasting performance**.
- **Implementing ERP in sales forecast:**
  1. Significantly impact the company profitability.
  2. Connecting the sales forecasting system with the sales management

## Developing a process for cross functional collaboration



*Sales forecasting management (SFM) framework.*

- **Sales estimation** have been significantly **impacted by the collaboration** of several associated departments
- Collaboration **requires reaching consensus** among individuals who undertake **disparate functions**. Therefore, it might able to **fulfill the expectation of multiple department**.

# COST AND BENEFITS

Solution	Benefit	Cost
Implement ERP systems	<ul style="list-style-type: none"><li>• <b>Time savings</b> through streamlined processes and automation.</li><li>• Continuously <b>updating in real-time</b>.</li><li>• <b>Integrated</b> system.</li><li>• <b>Reducing</b> reliance on <b>manual processes</b>.</li></ul>	<ul style="list-style-type: none"><li>• <b>Significant costs</b>, particularly burdensome for smaller companies with limited budgets.</li><li>• <b>Demands a high-tech infrastructure</b>, which can add to the expenses.</li><li>• <b>Requiring extensive training</b> for employees.</li><li>• Troubleshooting <b>technical issues</b> can be arduous and costly.</li></ul>
Developing a process for cross functional collaboration	<ul style="list-style-type: none"><li>• <b>Fostering better communication</b> and information sharing.</li><li>• Holistic view of business processes, allowing for <b>better coordination and alignment</b> of goals across organization.</li><li>• <b>Innovation and creativity</b>, as diverse perspectives and expertise come together to solve complex problems</li><li>• Control processes together to <b>avoid errors</b></li></ul>	<ul style="list-style-type: none"><li>• <b>Time consuming</b> due to the need to unify communication between departments.</li><li>• <b>More complicated process</b> due to the need to combine many departments.</li><li>• <b>Easily causes conflicts</b> when disagreeing.</li></ul>

# SELECTED SOLUTION

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## Developing a process for cross functional collaboration

### Why reject ERP

- VTB once employed a system that were **expensive & not appropriate** with corporate culture
- “Our company also used a software provided by Sony company for internal management, but after a period of operation, the biggest problem was cost. Its relatively high and it would not be feasible for our corporate culture”

### Why select this solution

- Interviewer deemed it **more effective** to assign the work to the Finance department.
- “I see the solution of apply and enhance cross-functional collaboration as feasible to solve the short-term sales forecast problem, thereby improving the company's profits.”

# ACTION PLAN

Stage	Objective	Action	P.I.C	Schedule	Budget
<b>Establish Collaboration &amp; Communication</b>	Create a collaborative environment where sales and finance can work together effectively	1. Kick-off Meeting 2. Define Roles & Responsibilities 3. Communication Channels	<b>Head of sale</b> <ul style="list-style-type: none"><li>Sale personnels</li></ul> <b>Head of finance</b> <ul style="list-style-type: none"><li>Finance personnels</li></ul>	1 - 3 days	None
<b>Data Standardization &amp; Quality</b>	Ensure the accuracy and consistency of the data used for collaborative forecasting	1. Data Requirements Workshop 2. Data Collection & Standardization 3. Data Quality Review	<b>Finance Team</b> <ul style="list-style-type: none"><li>Finance head</li><li>Data analyst</li></ul> <b>Sales Team</b> <ul style="list-style-type: none"><li>Sale head</li><li>Sale personnel</li></ul>	2 - 3 weeks	None
<b>Collaborative Forecasting &amp; Review</b>	Generate a reliable and mutually agreed-upon sales forecast	1. Joint Forecasting Sessions 2. Scenario Planning 3. Forecast Review & Approval	<b>Finance Team</b> <ul style="list-style-type: none"><li>Finance head</li><li>Data analyst</li><li>Budgeting and modeling personnel</li></ul> <b>Sales Team</b> <ul style="list-style-type: none"><li>Sale head</li><li>Sale personnel</li></ul>	Monthly (1 -2 week/month)	None
<b>Continuous Improvement</b>	Ensure the collaborative forecasting process remains effective and adapts to changing circumstances	1. Performance Monitoring 2. Feedback & Refinement 3. Ongoing Training	<b>Finance Team</b> <ul style="list-style-type: none"><li>Finance head</li><li>Management accountant</li><li>Budgeting and modeling personnel</li></ul> <b>Sales Team</b> <ul style="list-style-type: none"><li>Sale head</li><li>Sale personnel</li></ul>	Monthly basis	None

Overview

Symptoms

Problems

Causes

Solutions

Action plan



**THANK YOU  
FOR LISTENING**

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## SUPPORTING INFORMATION

### SUPPORTING DOCUMENT 1: BALANCE SHEET

ITEMS	BALANCE SHEET					
	2018	2019	2020	2021	2022	2023
<b>TOTAL ASSETS</b>	<b>467,096,027,638</b>	<b>332,088,224,529</b>	<b>305,748,641,540</b>	<b>268,570,321,929</b>	<b>234,419,714,559</b>	<b>230,791,834,046</b>
<b>CURRENT ASSETS</b>	<b>393,824,190,103</b>	<b>235,081,365,245</b>	<b>190,067,255,862</b>	<b>150,424,026,579</b>	<b>130,836,948,099</b>	<b>116,368,172,307</b>
<b>Cash and cash equivalents</b>	<b>2,707,937,145</b>	<b>17,828,863,014</b>	<b>16,889,785,033</b>	<b>27,732,795,492</b>	<b>13,991,359,675</b>	<b>4,232,459,666</b>
<i>Cash</i>	2,707,937,145	3,728,863,014	6,889,785,033	3,732,795,492	7,491,359,675	4,232,459,666
<i>Cash equivalents</i>	0	14,100,000,000	10,000,000,000	24,000,000,000	6,500,000,000	0
Short-term investments	27,287,396,250	25,787,396,250	2,787,396,250	38,287,396,250	45,987,396,250	55,587,396,250
Accounts receivable	246,633,998,982	49,577,350,125	56,574,912,942	25,123,606,467	30,605,169,132	19,957,443,969
Inventories	112,391,890,150	135,887,338,099	109,283,151,735	53,955,364,695	34,416,010,566	33,063,387,090
Other current assets	4,802,967,576	6,000,417,757	4,532,009,902	5,324,863,675	5,837,012,476	3,527,485,332
<b>LONG-TERM ASSETS</b>	<b>73,271,837,535</b>	<b>97,006,859,284</b>	<b>115,681,385,678</b>	<b>118,146,295,350</b>	<b>103,582,766,460</b>	<b>114,423,661,739</b>
Long-term trade receivables	8,387,671,360	15,428,961,940	18,357,555,488	18,339,667,540	18,274,667,540	18,215,447,540
Fixed assets	42,951,228,901	39,082,240,997	42,455,815,942	79,092,955,230	73,218,086,074	67,486,012,546
Long-term incomplete assets	11,023,167,846	32,493,148,934	46,199,643,365	9,444,148,637	9,444,148,637	9,444,148,637
Other long-term assets	10,909,769,428	10,002,507,413	8,668,370,883	6,269,523,943	2,645,864,209	1,778,053,016
<b>LIABILITIES</b>	<b>257,728,778,273</b>	<b>126,936,438,257</b>	<b>95,176,692,647</b>	<b>71,289,745,909</b>	<b>47,037,284,376</b>	<b>44,248,047,256</b>
<b>Current liabilities</b>	<b>250,703,782,871</b>	<b>102,523,230,897</b>	<b>81,735,298,806</b>	<b>57,724,923,014</b>	<b>28,261,184,439</b>	<b>21,419,053,798</b>
<i>Trade accounts payable</i>	207,080,349,895	19,109,906,636	14,356,981,241	1,759,404,963	3,610,855,443	2,733,549,590
<i>Advances from customers</i>	21,108,343,066	21,226,471,220	20,935,263,038	21,383,829,447	11,506,523	187,658,961
<i>Taxes and other payable to State Budget</i>	3,742,621,191	2,160,997,926	3,150,920,002	508,314,774	1,275,904,289	1,107,398,808
<i>Payable to employees</i>	5,494,248,980	5,405,673,231	4,866,378,136	5,776,698,073	4,038,604,868	4,789,075,106
<i>Accrued expenses</i>	3,698,486,850	2,734,700,374	6,769,864,476	3,730,645,475	3,116,034,726	5,525,563,058
<i>Intercompany payables</i>	0	0	0	0	0	0
<i>Construction contract in progress payables</i>	0	0	0	0	0	0
<i>Short-term unrealized revenue</i>	94,075,000	72,775,000	51,475,000	30,175,000	8,875,000	0

BALANCE SHEET						
ITEMS	2018	2019	2020	2021	2022	2023
<i>Other payables</i>	222,247,224	498,035,991	7,546,072,768	3,548,735,035	900,377,420	3,549,202,839
<i>Short-term borrowings</i>	0	33,594,884,429	170,000,000	0	8,000,000,000	1,760,000,000
<i>Provision for ST liabilities</i>	7,607,222,000	14,820,612,000	17,557,267,000	17,521,348,000	5,634,200,000	0
<i>Bonus and welfare funds</i>	1,656,188,665	2,899,174,090	6,331,077,145	3,465,772,247	1,664,826,170	1,766,605,436
<i>Price stabilization fund</i>	0	0	0	0	0	0
<i>Government bonds purchased for resale</i>	0	0	0	0	0	0
<b>Long-term liabilities</b>	<b>7,024,995,402</b>	<b>24,413,207,360</b>	<b>13,441,393,841</b>	<b>13,564,822,895</b>	<b>18,776,099,937</b>	<b>22,828,993,458</b>
<i>Long-term trade payables</i>	0	0	0	0	0	0
<i>Long-term advances from customers</i>	0	0	0	0	0	0
<i>Long-term accrued expenses</i>	0	0	0	2,788,898,450	7,946,678,140	11,725,567,985
<i>Intra-company payables for operating capital received</i>	0	0	0	0	0	0
<i>Long-term intercompany payables</i>	0	0	0	0	0	0
<i>Unrealized revenue</i>	0	0	0	0	0	0
<i>Other long-term payables</i>	6,066,017,280	6,234,387,333	7,096,216,852	9,892,163,571	9,968,159,421	10,242,163,097
<i>Long-term borrowings</i>	0	17,277,000,000	5,500,000,000	0	0	0
<i>Convertible bonds</i>	0	0	0	0	0	0
<i>Preferred shares</i>						
<i>Deferred income tax liabilities</i>	958,978,122	901,820,027	845,176,989	883,760,874	861,262,376	861,262,376
<i>Provision for severance allowances</i>	0	0	0		0	0
<i>Provision for long-term liabilities</i>	0	0	0	0	0	0
<i>Technology-science development fund</i>	0	0	0	0	0	0
<b>OWNER'S EQUITY</b>	<b>209,367,249,365</b>	<b>205,151,786,272</b>	<b>210,571,948,893</b>	<b>197,280,576,020</b>	<b>187,382,430,183</b>	<b>186,543,786,790</b>
Capital and reserves	209,367,249,365	205,151,786,272	210,571,948,893	197,280,576,020	187,382,430,183	186,543,786,790
Budget sources and other funds	0	0	0	0	0	0
Bonus and welfare funds (Before 2010)	0	0	0		0	0
Minority Interest	0	0	0		0	0
<b>TOTAL RESOURCES</b>	<b>467,096,027,638</b>	<b>332,088,224,529</b>	<b>305,748,641,540</b>	<b>268,570,321,929</b>	<b>234,419,714,559</b>	<b>230,791,834,046</b>

## SUPPORTING DOCUMENT 2: INCOME STATEMENT

INCOME STATEMENT						
ITEMS	2018	2019	2020	2021	2022	2023
<b>Sales</b>	<b>544,279,118,405</b>	<b>367,903,532,544</b>	<b>465,362,542,430</b>	<b>329,748,114,327</b>	<b>249,825,833,282</b>	<b>113,897,277,047</b>
Sales deductions	(7,761,795,816)	(8,344,319,701)	(6,737,389,280)	(2,260,827,316)	(1,464,066,511)	(463,091,169)
<b>Net sales</b>	<b>536,517,322,589</b>	<b>359,559,212,843</b>	<b>458,625,153,150</b>	<b>327,487,287,011</b>	<b>248,361,766,771</b>	<b>113,434,185,878</b>
Cost of sales	(427,078,626,825)	(234,623,249,993)	(322,785,674,599)	(246,900,515,534)	(174,093,015,821)	(41,975,143,780)
<b>Gross Profit</b>	<b>109,438,695,764</b>	<b>124,935,962,850</b>	<b>135,839,478,551</b>	<b>80,586,771,477</b>	<b>74,268,750,950</b>	<b>71,459,042,098</b>
Financial income	4,429,632,143	3,438,914,767	890,018,696	1,856,924,137	4,078,143,874	4,857,203,521
Financial income	(2,278,036,227)	(2,406,467,873)	(1,297,809,309)	(211,519,094)	(239,956,665)	(160,642,041)
<i>of which: interest expenses</i>	(1,427,481,045)	(1,325,435,313)	(1,064,398,988)	(94,548,764)	(204,056,263)	(151,236,415)
Gain/(loss) from joint ventures	0	0	0	0	0	0
Selling expenses	(70,480,435,120)	(87,341,633,485)	(84,094,719,489)	(57,554,817,072)	(34,855,914,066)	(44,617,831,133)
General and admin expenses	(17,178,336,662)	(17,927,949,198)	(17,668,318,784)	(16,035,372,751)	(15,710,543,812)	(16,898,649,949)
<b>Operating profit/(loss)</b>	<b>23,931,519,898</b>	<b>20,698,827,061</b>	<b>33,668,649,665</b>	<b>8,641,986,697</b>	<b>27,540,480,281</b>	<b>14,639,122,496</b>
<i>Other incomes</i>	108,954,765	302,228,614	107,448,522	544,286,331	672,870,607	23,421,769
<i>Other expenses</i>	(516,792,801)	(60,755,019)	(510,037,121)	(83,820,346)	(973,150,411)	(4,706,647)
<b>Net other income/(expenses)</b>	<b>(407,838,036)</b>	<b>241,473,595</b>	<b>(402,588,599)</b>	<b>460,465,985</b>	<b>(300,279,804)</b>	<b>18,715,122</b>
Income from investments in other entities	0	0	0	0	0	0
<b>Net accounting profit/(loss) before tax</b>	<b>23,523,681,862</b>	<b>20,940,300,656</b>	<b>33,266,061,066</b>	<b>9,102,452,682</b>	<b>27,240,200,477</b>	<b>14,657,837,618</b>
<i>Corporate income tax - current</i>	(5,564,951,128)	(5,944,013,817)	(6,700,660,858)	(1,657,923,771)	(2,211,498,087)	(2,952,185,867)
<i>Corporate income tax - deferred</i>	613,627,377	998,486,270	281,814,243	172,903,548	(2,624,981,696)	(938,053,383)
Corporate income tax expenses	(4,951,323,751)	(4,945,527,547)	(6,418,846,615)	(1,485,020,223)	(4,836,479,783)	(3,890,239,250)
<b>Net profit/(loss) after tax</b>	<b>18,572,358,111</b>	<b>15,994,773,109</b>	<b>26,847,214,451</b>	<b>7,617,432,459</b>	<b>22,403,720,694</b>	<b>10,767,598,368</b>
Minority interest	2,007,856,675	3,482,275,093	7,248,467,745	2,937,118,599	3,803,136,993	(97,372,782)
Attributable to parent company	16,564,501,436	12,512,498,016	19,598,746,706	4,680,313,860	18,600,583,701	10,864,971,150
EPS	1,533	1,158	1,814	433	1,722	1,006
EPS diluted	1,533	1,158	1,814	433	1,722	1,006
EBIT	21,779,923,982	19,666,380,167	34,076,440,278	6,996,581,654	23,702,293,072	9,942,561,016
EBITDA	27,135,566,184	23,791,916,746	37,118,624,928	11,930,412,792	29,327,211,864	9,942,561,016

## SUPPORTING DOCUMENT 3: RATIO CALCULATION

RATIO CALCULATION						
Ratio	Company	2019	2020	2021	2022	2023
<b>Valuation</b>						
<b>P/E</b>	VTB	14.68	6.33	29.1	8.71	14.3
	Peers	6.64	9.25	10.48	10.04	11.8
<b>P/B</b>	VTB	0.9	0.59	0.69	0.86	0.83
	Peers	1.41	1.57	1.65	1.46	1.81
<b>Profitability</b>						
<b>Gross profit margin</b>	VTB	34.75	29.62	24.61	29.9	63.13
	Peers	14.34	12.8	13.01	12.94	13.62
<b>Net profit margin</b>	VTB	4.45	5.85	2.33	9.02	9.48
	Peers	5.34	4.35	4.84	3.85	2.16
<b>ROE</b>	VTB	6.04	9.43	2.3	9.67	5.78
	Peers	26.98	21.32	18.52	17.24	19.59
<b>ROA</b>	VTB	3.13	6.15	1.63	7.4	4.65
	Peers	11.24	8.21	7.07	6.72	8.49
<b>Growth rates</b>						
<b>Net revenue</b>	VTB	-32.98	27.55	-28.59	-24.16	-54.52
	Peers					
<b>Profit before tax</b>	VTB	-10.98	58.86	-72.64	199.26	-46.58
	Peers					
<b>Liquidity ratios</b>						
<b>Cash ratio</b>	VTB	0.17	0.21	0.48	0.5	0.2
	Peers	0.39	0.15	0.09	0.15	0.12
<b>Quick ratio</b>	VTB	0.97	0.99	1.67	3.41	3.94
	Peers	1.66	1	0.68	0.83	0.75

Ratio Calculation						
Ratio	Company	2019	2020	2021	2022	2023
<b>Interest coverage</b>	VTB	16.8	32.25	97.27	134.49	92.24
	Peers					
<b>Efficiency ratios</b>						
<b>Days of sales outstanding</b>	VTB	137.99	34.36	42.77	37.52	67.38
	Peers	35.36	37.87	39.56	30.44	39.07
<b>Days of inventory on hand</b>	VTB	189.95	137.03	119.03	91.04	288.89
	Peers	69.08	79.16	111.59	112.59	107.63
<b>Number of days of payables</b>	VTB	175.94	18.92	11.91	5.63	27.8
	Peers	30.06	34.79	37.57	24.35	17.19

## SUPPORTING DOCUMENT 4: INTERVIEW

In depth – Interview									
Interviewer: Nguyen Phuoc Khiem			Interviewee: Mr. Phuc	- Head of Procurement Department					
Coding	No.	Questions	Answers						
PO1	1	According to the financial statement analysis, there was the increase in inventory outstanding day, so where did reasons come from?	In 2023, the company held relatively high level of inventory, but there is significant decrease in the volume demand. Many inventory items become difficult to solve, and the company also face fierce arising competitors						
PO2	2	Can you share the reasons why many of your inventory becomes hard to sell?	In nature, VTB is a company that specializes in trading technology items. As you know, these items have short lives and will become obsolete when new technology is introduced. VTB has lots of storage items that have become old, so that is why they become hard to sell. Furthermore, recently, there have been lots of competitors in same segment with VTB, thus, there could be more challenges for business activities of VTB.						
PO3	3	You also mention about arising competitors. Please take more about it	I can say that, nowadays, some brands that can be considered as direct competitors toward VTB are TCL - the Chinese firm, Asanzo - the domestic firm. Or some high reputation brands such as Samsung or LG, so there would be lots of competition in this industry. Moreover, one reason for this difficulty is about the pricing, while Chinese's firms they monopolize technology and						

In depth – Interview				
Interviewer: Nguyen Phuoc Khiem			Interviewee: Mr. Phuc	- Head of Procurement Department
Coding	No.	Questions	Answers	
			pioneering in infrastructure and production progress, these conditions have significantly reduced the pressure on production costs of these businesses, leading to their selling prices being easily accessible and more competitive.	
PO4	4	I heard you have given some external factors that impact your selling volume, so there are any internal factors that leading to this problem too?	In this aspect, I think our company is quite confident about product quality, as the company has been recognized as a national brand for 2 consecutive years, so I think it has a great potential to impact purchasing power of consumers towards our products is about brand recognition.	
PO5	5	If the company already knows that there is an decrease in demand in 2023, why not reduce the level of raw material purchase and production to reduce your inventory level	Regarding the high inventory level, there are actually 2 reasons, not just because of our production activities. First, as VTB trades technology, it is essential that the company produces new items that have new inventory to keep customers attracted. Of course, in 2023, we already reduce the production level. The other reason why the inventory level is still high in 2023 is because, we have lots of obsolete inventory that has become obsolete still in storage	
PO6	6	You mention that the company have plans regarding the purchasing & production level. What do those plans come from?	The finance and accounting department is in charge of formulating plans regarding the level of raw material purchase and production levels. Then, those instructions will be sent to the procurement department for execution	
PO7	7	Which method of purchasing does business usually use in procurement process?	The company will implement two methods in parallel. For partners to sign a contract to become a contractor for a project, since the company already has a specific number of orders, it will proceed with bulk-purchasing. In terms of the wholesale branch, it will still proceed Bulk-purchasing initially based on rolling forecast data, but through weekly briefings in case there are additional production needed to meet requirements from retail and wholesale businesses, the company will conduct just-in-time purchasing to promptly meet that customer demand.	
PO8	8	At what times of year do businesses usually import new goods?	Businesses often import new goods in a certain cycle (monthly, quarterly) depending on the product and supply from the supplier grant. At the same time, there will still be unplanned additional imports in cases where orders arise to meet the demand of the market.	
PO9	9	"Why, when recognizing that the general market is difficult due to the impact of the general economic recession, but over the years, businesses still keep quite similar predictions, is that a form of confidence that firm still sell well during	Regarding this issue, we can evaluate it comes from the unexpected outstanding development of competitors in dominating market share, although we have planned to reduce inventory purchases, but it is still not enough. Another part is that electronic items left in stock from the period 2021-2022 to last year have become obsolete, making it even more difficult to sell them. In general, we have also noticed and considered the problem you mentioned above. It can be said that our current difficulty is solving the problem of selling the quantity of obsolete goods due to	

In depth – Interview				
Interviewer: Nguyen Phuoc Khiem		Interviewee: Mr. Phuc		- Head of Procurement Department
Coding	No.	Questions	Answers	
		this period or is it due to shortcomings in the forecasting process?"	time-consuming inventory. how long, as well as whether with new models, in the current economic situation, we will be able to sell as expected or not.	

In depth - Interview				
Interviewer: Nguyen Phuoc Khiem		Interviewee: Mr Cuong		- Staff of Finance & Accounting Department
Coding	No.	Questions	Answers	
SU1	1	Can you share about the way your department come up with the forecast figure?	For the forecasting process, first the sale department collects data regarding sale volume in the past, to come up with the estimated sale volume for the future. After those estimations are agreed by the BOD, they will be transferred to the finance and accounting department. Based on these figures, the finance department devises plan regarding the level of raw material purchase and production level	
SU2	2	Do your department employ any tool or software for the planning tasks?	The company currently has no systems or tools for planning tasks. All activities are conducted using Spreadsheet based on assumption set by the head of sale	