



Paper 19

Proposed Business Strategy And Sales Process Modelling
For Pt XYZ Indonesia As Factory Automation Solution
Provider For Manufacturing Industries

Ferdinand Lo

ICMEM

The 7th International Conference on Management in Emerging Markets

Abstract - PT XYZ Indonesia is factory automation solution provider to manufacturing plants in Indonesia. There are several business issues in this company which related with business strategy, sales process model, and high pricing condition. Internal and external analysis of this company are conducted by using VRIO, PESTEL, and Porter's 5 forces framework to solve the issue. The result of these analysis is summarized by SWOT framework to know about current company situation. After that, TOWS matrix is conducted to develop business strategy considering the strength, weakness, opportunity, and threat. Sales process modelling also established after getting the suitable business strategy. This sales process modelling came from sales funnel B2B framework which classify customer journey from beginning to end. Lastly about product price, the financial investment analysis is conducted for upcoming project about camera inspection system to replace human power. From seller's perspective, the financial analysis will be done by capital budgeting technique considering customer's evaluation factors such as NPV, IRR, and Payback Period calculation. Sensitivity analysis is also conducted to see which variables are the most significant to change the NPV value.

Keywords - camera inspection, factory automation, investment analysis, sales process model, sensitivity analysis, SWOT analysis, TOWS matrix

I. INTRODUCTION

Manufacturing sector in Indonesia accounts for about 19.7% of Indonesia's GDP. Currently, Indonesian government and many business players want to increase the productivity in this manufacturing sector. One of the ways to increase the productivity in manufacturing segment is by implementing factory automation systems. In this case, PT XYZ Indonesia is factory automation solution provider to manufacturing plants in Indonesia. Factory automation is the implementation of technology and systems to automate a manufacturing process with the goal of increasing productivity and reducing costs.

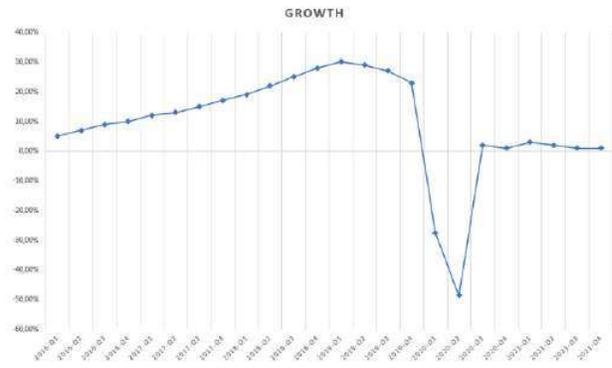


Fig. 1. Stagnant growth and decreasing sales result of PT XYZ Indonesia

The outbreak of coronavirus 2019 (COVID-19) has given huge impact to our lives. This virus infected so many people and bring disaster to everyone health. COVID-19 also give big chaos on global economy. This outbreak is also affecting the business of PT XYZ Indonesia, especially in terms of declining sales amount as shown in Figure 1.

Currently, there are 3 main problems that this company face sales result, business growth, and number of lost projects. Firstly, the sales result has decreasing trend from 2020. This condition even has worse condition until now. Secondly, the business growth is quite stagnant as shown in Figure 2. Stagnant growth means that the company does not expand its market. Thirdly, there are many projects are lost because many customers reject the proposal for factory automation implementation for their production lines.



Fig. 2. Stagnant growth and decreasing sales result of PT XYZ Indonesia

From these problems, the analysis is being conducted to see the main issues and the solution to overcome this condition. Thus, the highlighted part that need to be identify is as follows:

1. Business strategy of PT XYZ Indonesia
2. Sales process model in B2B factory automation segment industries
3. Pricing strategy for customers to solve overprice products problem

II. METHODOLOGY

The business solution that will be brought-up shall be based on the problem occurred in the organization. To know this, the root cause analysis must be identified. Root cause analysis (RCA) is the systematic method of discovering the root causes of problems to identify appropriate solutions. In this case, the root-cause analysis will be conducted by using the 5 Whys framework for each problem that happened to PT XYZ Indonesia in recent years as shown in Figure 3.



Fig. 3. Root cause analysis by five whys frameworks

By implementing the five whys technique for all three problems that stated above, then the solution that must be done is as follows:

1. Develop clear business strategy to overcome stagnant growth conditions
2. Establish sales process model to understand about bottleneck phases
3. Conduct investment analysis about automation product considering customer's evaluation point such as NPV, IRR, and Payback Period

Business strategy development is conducted by implementing SWOT analysis and TOWS matrix. From the TOWS matrix as shown in Table 1, the clear detail action points for PT XYZ Indonesia can be formulated.

Table 1. TOWS matrix framework

Internal Factors \ External Factors	Strengths:	Weaknesses:
Opportunities	SO Strategies: Generate strategies that use strength to take advantage of opportunities	WO Strategies: Generate strategies that take advantage of opportunities by overcoming weaknesses
Threats	ST Strategies: Generate strategies that use strength to avoid threats	WT Strategies: Generate strategies that minimize weaknesses and avoid threats

Sales process model formulation is based on B2B sales funnel as shown in Figure 4. Based on this sales funnel which staging the customer's journey from beginning to end process of the sales, the pain point can be analyzed more deeply.



Fig. 4. B2B sales funnel

Investment calculation for upcoming camera inspection system project by capital budgeting technique is the main tool for PT XYZ Indonesia to understand about their product's price condition. This technique will be done from seller's perspective, but also considering customer's focus point for automation investment such as NPV, IRR, and Payback Period as shown in Figure 5.

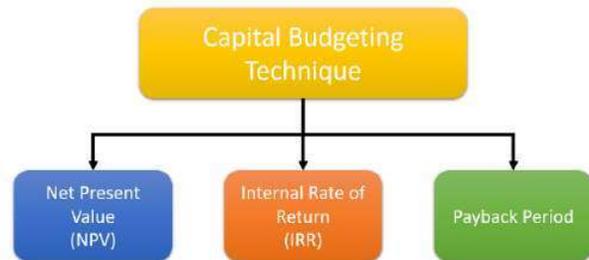


Fig. 5. Capital budgeting technique

A. Business Strategy

Firstly, for formulate business strategy, PT XYZ Indonesia must understand fully about their business situation. In this case, internal and external environment analysis are conducted. External analysis is conducted using PESTEL and Porter's five forces. Internal analysis is conducted by VRIO framework.

Based on PESTEL analysis as shown in Table 2, mostly all the elements are supporting PT XYZ Indonesia because currently many manufacturing plants want to implement factory automation in their production process to be more effective and efficient to generate more profit for their business. Besides that, government also support for factory automation implementation because it could generate more productivity to improve economic situation in Indonesia. The negative impact comes from social aspect where it has a big potential which relates about protest from labor because their jobs are replaced by machine systems.

Table 2. PESTEL analysis

Element	Factor	Business Impact
Political	<ul style="list-style-type: none"> Indonesia government promote development of innovative technologies, especially technology to improve productivity Indonesia government support manufacturing industry with certain policy to get higher profit 	Positive Impact
Economic	<ul style="list-style-type: none"> Faster economic growth in the long run due to automation Increasing labour wage in Indonesia War Trade which affects commodities price 	Positive Impact
Social	<ul style="list-style-type: none"> Public sentiment towards restricting automation to jobs that are dangerous to human Low trust of human manual inspection since many reject products are passed to customers Digital lifestyle in our daily lives 	Negative Impact
Technological	<ul style="list-style-type: none"> Importance of automation in products inspection Business embracing automation to mitigate risks Global sensor market to see growth in the future 	Positive Impact
Environmental	<ul style="list-style-type: none"> Go green via automation Reduce scrap from manufacturing process Reduce emission from manufacturing plant 	Positive Impact
Legal	<ul style="list-style-type: none"> UU Cipta Kerja / Omnibus Law Health and Safety Laws Consumer Protection Laws 	Positive Impact

Porter's five forces analysis is a framework that attempts to analyze the level of competition within an industry and business strategy development. There are five forces that need to be analyzed to evaluate the condition in automation industry in Indonesia: degree of rivalry, threat of new entrants, substitute products or service, bargaining power of buyers, and bargaining power of suppliers. Below is explanation of Porter's five forces analysis:

Table 3. Porter's five forces analysis

No	Porter's Five Forces	Consideration Factors	Analysis
1	Degree of Rivalry	<ul style="list-style-type: none"> -Number of competitors -Quality differences -Switching costs -Customer loyalty -Industry growth 	<p>A. Switching cost to other brands is very easy. In automation industry, most of parts are consumable parts and all competitors already have head-to-head technical data amongst them.</p> <p>B. There are so many existing competitors name which already well established. There are many competitors from Japanese brand and European brand which have similar qualities. The problems are customer preferences when they are using sensor products.</p> <p>C. Difficult to differentiate for some specific products. In this automation industry, the differentiation between each product is quite small. All the players already have the similar products which similar price amongst them.</p>
2	Threat of New Entrants	<ul style="list-style-type: none"> -Cost advantages -Barriers to entry -Technology -Economies of scale -Specialist knowledge 	<p>A. New brand from China with cheaper price. Manufacturing industry in Indonesia is quite promising. All the production lines must need the sensor to make sure the production is running. In this digitalization era, many new brands are more easily to be recognized.</p> <p>B. Many distributors have import-export permit. This reason will make them easier to import unknown brand with low-cost shipping. They have good resources to make sure the items are ready and easily to deliver it to customer's place.</p> <p>C. Indonesia already has the laws which implemented by UU No. 40 Tahun 2007 about Limited Liability Companies and UU No. 25 Tahun 2007 about Capital Investment.</p>
3	Threat of Substitute Products or Service	<ul style="list-style-type: none"> -Switching cost -Number of substitute products -Price of substitute products -Customer preference -Substitute performance 	<p>A. For new projects, engineering or production division will list all the electrical equipment such as sensors and machines. In this case, automation sensor is a must and primary needs for new project without any substitute products.</p> <p>B. All the production lines must be using sensors as consumables. In most cases, there is no substitute product to replace sensors.</p> <p>C. On some occasion, they can replace sensor by human, but cannot guarantee the process of the production since human capability in this case is very limited.</p>
4	Bargaining Power of Suppliers	<ul style="list-style-type: none"> -Number of suppliers -Size of suppliers -Price offering -Service uniqueness -Cost of changing 	<p>A. Many suppliers inside and outside Indonesia can supply to PT XYZ. As electronic parts assembler, PT XYZ has many choices of suppliers, and they can provide their products which have similar price with similar delivery time.</p> <p>B. Written contract agreement based for assembly our products to our suppliers. As long-term agreement, PT XYZ always do the written contract with our suppliers to keep minimize our cost and delivery time.</p> <p>C. Digitalization eras reduce supplier power. PT XYZ is easily to change the suppliers since we are now in digitalization era where we can find the substitutes in single click.</p>
5	Bargaining Power of Buyers	<ul style="list-style-type: none"> -Number of customers -Size of each order -Information access -Price sensitivity -Cost of changing 	<p>A. Low switching cost for buyers. Buyer can change the seller as easy as they want since there are many brands on the market.</p> <p>B. Price sensitivity for big order base. Since sensors are always used in the production process, many buyers will buy it periodically. Slightly cheaper price for one item will affect total cost since they buy it in big quantity.</p> <p>C. Buyers have many available information about our products. They have many data about out stock and delivery time of some similar equipment.</p>

From Porter's five forces framework as shown in Table 3, there are several aspects that PT XYZ Indonesia must focussed on. Rivalry level, new competitors, and buyers powers are the important points because they have big impact to business condition of PT XYZ Indonesia. In this case, the summary illustration of each force can be seen in Figure 6. In Figure 6 also, there are written the points how to handle each forces to strengthen PT XYZ brand in Indonesia:

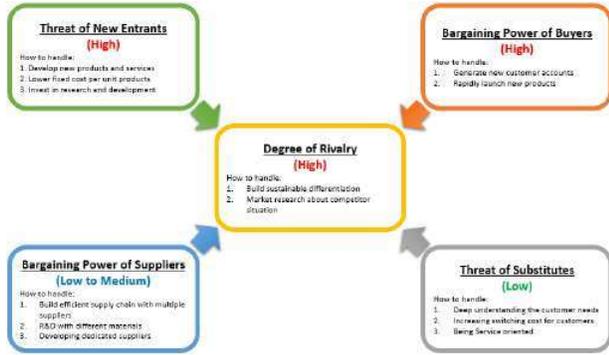


Fig. 6. Porter's five forces analysis

VRIO analysis is conducted to help organizations uncover and protect the resources and capabilities that give them a long-term competitive advantage. VRIO is an acronym for a four-question framework focusing on Value, Rarity, Imitability, and Organization, the criteria used to evaluate an organization's resources and capabilities. The VRIO framework is an internal analysis tool, used by organizations to categorize their resources based on whether they hold certain traits outlined in the framework. Below is the VRIO analysis of PT XYZ Indonesia from several resources and capabilities:

Table 4. VRIO analysis

No	Resources and Capabilities	V	R	I	O	Conclusion
1	Product quality and feature	✓	✓	✓	✓	SCA
2	Direct sales method	✓	✓	✓	✓	SCA
3	Brand Awareness	✓	✓	✓	X	UCA
4	Delivery time	✓	✓	X	X	TCA
5	After sales support	✓	✓	✓	✓	SCA
6	Strong financial performances	✓	✓	X	X	TCA
7	Access to technology providers, platforms, and vendors	✓	✓	X	X	TCA
8	High quality human resources	✓	✓	X	X	TCA
9	Marketing capabilities and planning	✓	X	X	X	CP
10	Proven customer database	✓	✓	✓	✓	SCA
11	Internal approval process	✓	X	X	X	CP
12	One solution system provider	X	X	X	X	CD
13	Employee internal career path	✓	X	X	X	CP
14	Product price	✓	X	X	X	CP

After internal and external environment analysis, SWOT analysis also is conducted to mapping current situation of PT XYZ Indonesia. SWOT analysis is a strategic planning and strategic management technique used to help a person or organization identify strengths, weaknesses, opportunities, and threats related to business competition or project planning. Strength and Weakness come from internal environment analysis, and Opportunities and Threats come from external environment analysis.

Table 5. SWOT analysis

STRENGTH	WEAKNESS
<ul style="list-style-type: none"> Leading player in factory automation with a global network all around the world Forbes Top 100 most innovative companies in the world Direct sales approach to customers 70% products featuring in world's first technology Fast delivery, 1 day shipping Free of charge for after sales service Proven customer database Strong financial support 	<ul style="list-style-type: none"> Cannot sell solution as a system, need other parties as integrator High price compares to benefit for customers High Turnover for employee Low marketing capabilities Complicated approval system internally Door-to-door sales without proper planning
OPPORTUNITY	THREATS
<ul style="list-style-type: none"> Big potential issue for human error in production process IoT trends is increasing nowadays Increasing labour cost yearly Food beverages and pharmacy industry segment which still not yet touched Increasing SME segment which produced final goods Booming of Electric Vehicle (EV) Reduce cost and Kaizen project for every manufacturing plant 	<ul style="list-style-type: none"> Cyber security threats in manufacturing New competitor from China with lower price Natural disaster will affect the supply chain Protest from Labour Union US-China trade war that may increase commodity price Negative economic growth which decreases demands for automotive segments

TOWS Matrix is a strategic tool which is used to develop business strategy by analyzing more deeply about factors which already stated in SWOT analysis. This framework combines all the elements that are identified in previous section to generate multiple strategies as shown in Figure 7. The matrix is shown by analyzing the external opportunities and threats in comparison to the internal strength and weakness.

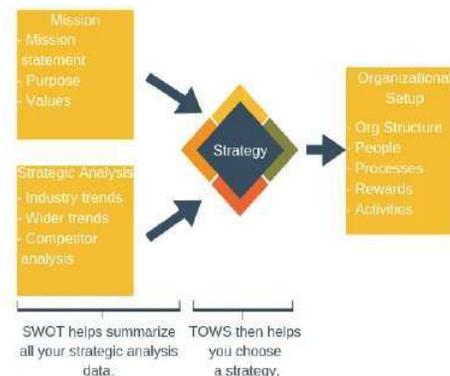


Fig. 7. TOWS matrix strategy generation

Based on previous analysis, the business strategy for PT XYZ Indonesia can be formulated. This business strategy is to scale up the business and capture the business opportunities for PT XYZ Indonesia. Some of important focus strategy that PT XYZ Indonesia must do for their business are:

- o Implement direct sales strategy to stay ahead of the competitor with three approaches: direct approach, comprehensive support, and fast delivery
- o Establish simple internal approval system for special price and CRM to reduce loss time and increase efficiency
- o Develop and establish specific sales model system which suit our business process especially in B2B segment for factory automation products
- o Hire expertise in marketing area to be the market intelligence to get correct strategy to penetrate Indonesian market
- o Focus to specific sensor items which give high benefit to customers such as camera vision, laser sensor, and safety sensor
- o Choose official partners as main integrator to promote single solution system
- o Expand to automotive Electric Vehicle manufacturer since this segment is quite trending in recent years.
- o Expand the customers on food beverage, and pharmacy. F&B and pharmacy sectors quite increasing after COVID-19 situation and have big potential for sales amount
- o Penetrate to SME and home industry segment as new target market. SMEs, which account for 60 percent of Indonesia's gross domestic product (GDP) and 97 percent of domestic workforce, are after all the backbone of the domestic economy.
- o Focus to develop IoT, Industry 4.0, and OEE. These three points are quite trend right now in manufacturing industries. Many manufacturing plants want to implement IoT, Industry 4.0, and OEE as their main standard for digitalization in factory and production processes.

B. Sales Approach

As already stated above in business strategy section, PT XYZ Indonesia must utilize their strength as "direct sales" supplier to their customers. This "direct sales" is one of the main strengths of PT XYZ Indonesia compared to

their competitors. This strength comes with three sales approach as shown in Figure 8.



Fig. 8. Sales approach

Direct approach means that their technically trained sales engineers have extensive product knowledge along with application and industry experience. This experience and specialization allow the most efficient solution to be quickly recommended to customers, saving invaluable time.

Comprehensive support means PT XYZ Indonesia supports customers with extensive on-site manufacturing and automation knowledge. Their sales engineers are ready to provide comprehensive support at every level of business, from the design and research stage to model selection, line operation with on-site instructions, and after product adoption.

Fast delivery means PT XYZ Indonesia ensures that customers get their required products whenever they need them. Products are shipped from warehouse centers in Japan, Singapore, Malaysia, India, Thailand, China, Taiwan, South Korea, U.S. (Chicago), Canada, Mexico, Brazil, the U.K., Germany, France, Belgium, and Italy as well as many other locations worldwide.

C. Sales Process Modelling

Sales models outline how to make a sales process work. Sales process is a set of repeatable steps that a salesperson takes to take a prospective buyer from the early stage of awareness to a closed sale. In this case, PT XYZ Indonesia proposed their own sales process model as shown in Figure 9.

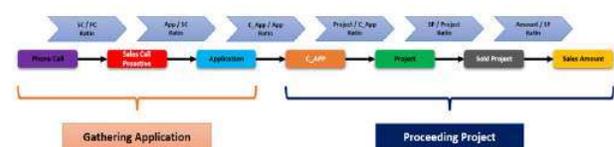


Fig. 9. Sales process model

Basically, there are two main stages in this sales process model which are "Gathering Application" and "Proceeding Project" phases. The first phase is "Gathering Application" where this stage is the process when our sales engineers accumulate the application from their proactive action

such as visiting customers or phone call to correct person to collect meaningful information. The second phase is "Proceeding Project" where this stage is the process where we proceed the application to generate sales amount as our achievements.

In detail of this sales process model, there are 7 detailed stages which show the journey of customers from the beginning they aware of PT XYZ Indonesia until they purchase the factory automation products. Below is detailed explanation of each phase in this proposes sales process model:

- o Phone Call :the first stage where the salesperson call via phone to our prospected customers to arrange meeting together
- o Sales Call :arranged face-to-face meetings between a salesperson and prospect with the goal of making a sale
- o Application :the stage after the sales call where customers have interest about automation products
- o C_App :the stage where salesperson already finished the test report/ proposals, already sent the quotation, and get approval from decision makers.
- o Project :the stage where the applications already have the timeline or schedule, but not yet get the purchase order (PO)
- o Sold Project : the stage where the company got the Purchase Order (PO) from customers.
- o Sales Amount :the amount that PT XYZ Indonesia will get after customer's PO based on invoice sent to customers.

D. Investment Analysis

As already stated in previous chapter, where this investment calculation will be one of the tools for PT XYZ Indonesia to consider about their products price. By using capital budgeting process, PT XYZ Indonesia will calculate the financial aspect from customer's side when they want to buy automation products. Basically, the calculation will be done from seller's perspective, but in this case, the calculation also considers the evaluation focus point from customer's perspective.

Firstly, the cost of equity must be calculated. This cost of equity will be the discount rate for this case analysis. Below is the table for cost of equity calculation:

Table 6. Cost of equity

Variables	Value	Reference
Risk-free rate	7%	Government bond (Bank Indonesia, 2022)
Beta	0,84	Beta of PT ABC Indonesia (Yahoo Finance)
Market risk premium	6,12%	Damodaran country default spreads and risk premiums (Damodaran, 2022)
Cost of equity	12,14%	-

For capital budgeting calculation, there are some general assumptions. These general assumptions are shown in Table 7

Table 7. Calculation general assumptions

No	General Assumptions
1	Working days/month : 20 days
2	Working hour/day : 8 hours
3	Production/minute : 20 products
4	Production/day : 9.600 products
5	Production/month : 192.000 products
6	Product price : IDR 750
7	Inspection operator : 1 person
8	Tax rate : 22%
9	Timeframe analysis : 2 years (24 months)
10	Depreciation method : Sum-of-the-Years Digits
11	After 2 years, the machine will be scrapped without any value

After that, initial capital investment also must be calculated. Initial capital investment is the amount required to start a business or a project. Capital investment is the expenditure of money to fund a company's long-term growth. In this case, the focus will be on camera price, where bracket, service, and other cost are assumed same in all condition.

Table 8. Initial capital investment

Initial Capital Investment (IDR)	
1	Camera (Main Products) 230.000.000
2	Bracket 40.000.000
3	Service 60.000.000
4	Other cost 50.000.000
Total Initial Capital Investment 380.000.000	

Based on this capital budgeting calculation, there will be three different scenarios. Scenario #1 will use normal price camera without any discount. It can be concluded that current camera price with IDR 230 Mill will not give any benefit to customer in 2 years timeframe. The NPV and IRR values are negative, and the payback period is more than 2 years as shown in Table 9. This is the main reason why many customers reject the automation project implementation in their production line.

Table 9. Scenario#1 capital budgeting calculation

Year	1	2	3	4	5	6	7	8	9	10	11	12
Production/Minute	20	20	20	20	20	20	20	20	20	20	20	20
Operator wages	9,000,000	4,000,000	1,000,000									
Number of operator	2	1	0									
Product Price	800	750	850									
Material Cost	520	500	280									
Taxes	25	22	20									
Camera Price	175,000,000	140,000,000	105,000,000									

NPV	-13,540,531
IRR	2.14%
Payback Period	2.66 years

Based on result of Scenario #1, the next calculation will be for Scenario #2, where the calculation is to find the maximum camera price that customers can accept. In this Scenario #2, the calculation will be for the camera price which makes the NPV become 0 as shown in Table 10. Based on this scenario #2, the maximum price for camera part is IDR 157 Mill.

Table 10. Scenario#2 capital budgeting calculation

Year	1	2	3	4	5	6	7	8	9	10	11	12
Production/Minute	20	20	20	20	20	20	20	20	20	20	20	20
Operator wages	9,000,000	4,000,000	1,000,000									
Number of operator	2	1	0									
Product Price	800	750	850									
Material Cost	520	500	280									
Taxes	25	22	20									
Camera Price	157,000,000	122,000,000	87,000,000									

NPV	0
IRR	12.14%
Payback Period	2 years

Considering future potential for this project, the customers still has so many production lines that can use PT XYZ products, there will be Scenario#3. This scenario will give special price to customers with camera parts as IDR 140 Mill. For this special price, the NPV value will be IDR 16,55 Mill where the IRR will be 18,01%. The payback period result is 1,7 years. A positive value of NPV indicates that the earnings will exceed the anticipated costs and is a profitable investment. The complete result for this scenario can be seen in Table 11

Table 11. Scenario#3 capital budgeting calculation

Year	1	2	3	4	5	6	7	8	9	10	11	12
Production/Minute	20	20	20	20	20	20	20	20	20	20	20	20
Operator wages	9,000,000	4,000,000	1,000,000									
Number of operator	2	1	0									
Product Price	800	750	850									
Material Cost	520	500	280									
Taxes	25	22	20									
Camera Price	140,000,000	105,000,000	70,000,000									

NPV	16,540,531
IRR	18.01%
Payback Period	1.7 years

Finally, the sensitivity analysis is carried out on 7 variables that act as input variables using downside, base, and upside condition state. The target financial indicator to be tested is NPV, where the analysis will see the changes of NPV in downside and upside condition as shown in Table 12.

Table 12. Variables movement to NPV

No	Variables	Input			NPV Result			Range
		Downside	Base	Upside	Downside	Base	Upside	
1	Production/Minute	20	20	30	-173,493,913	16,540,531	191,885,493	364,381,399
2	Operator wages	9,000,000	4,000,000	1,000,000	-2,559,216	16,540,531	35,444,014	37,963,300
3	Number of operator	2	1	0	-60,465,186	16,540,531	95,211,843	151,907,019
4	Product Price	800	750	850	-174,405,647	16,540,531	351,918,135	726,771,818
5	Material Cost	520	500	280	-57,560,090	16,540,531	88,262,995	145,823,026
6	Taxes	25	22	20	14,370,859	16,540,531	17,086,978	3,616,124
7	Camera Price	175,000,000	140,000,000	105,000,000	-18,450,469	16,540,531	51,548,531	70,000,000

Tornado chart lists the variables vertically, ordered based on the most important variables in shaping the sensitivity scenario. Through the tornado chart, it can be seen how maximum and minimum the risk can impact the NPV value as shown in Figure 10. A tornado chart is used to depict the sensitivity of a result to changes in selected variables.

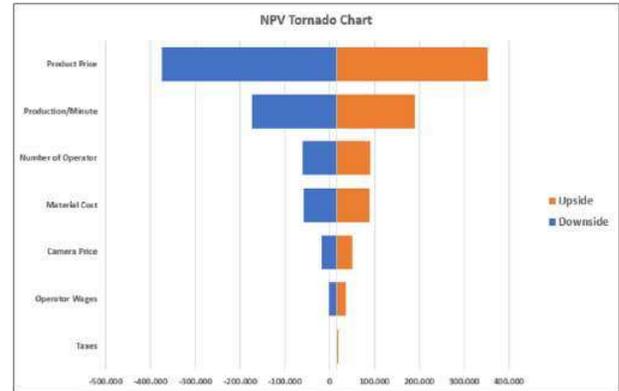


Fig. 10. NPV tomado chart

Another tool for sensitivity analysis is spider chat. Spider chart will display data based on single reference point (base scenario), the data length and position will determine which variables are the most important one in shaping the sensitivity scenario.

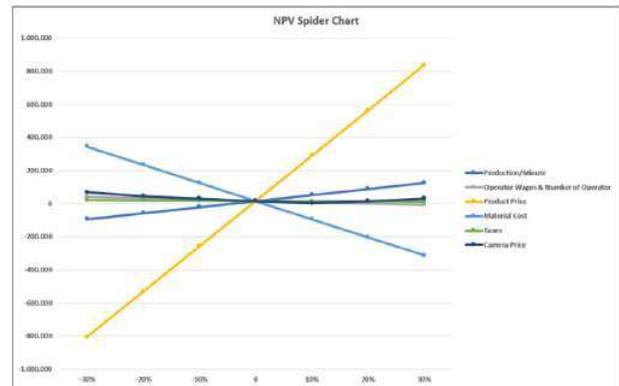


Fig. 11. NPV spider chart

IV. DISCUSSION

A. Strategic and Tactical Action for Business Strategy

As already stated above on business strategy, there are several business strategies that PT XYZ Indonesia can do to improve their current situation. Strategies are developed from 4 ways in TOWS matrix. Considering COVID-19

situation where the social distancing is happening, factory automation implementation can be one of the solutions to minimize interaction between person to person. This is one the reason why PT XYZ Indonesia will focus to developing technologies that enable customers to remotely monitor and control the manufacturing process. In this case, it also includes IoT, Industry 4.0, traceability system, and Overall Equipment Effectiveness (OEE). Many manufacturing plants want to implement IoT, Industry 4.0, and OEE as their main standard for digitalization in factory and production processes.

Targeting the customers is also the important point when PT XYZ Indonesia want to expand their business. Currently, from internal research, PT XYZ Indonesia has quite strong market segment in Japanese automotive manufacturer. As the part of expanding the market, PT XYZ Indonesia will target for new segment in Electric Vehicle (EV), food beverages, and pharmacy. These 3 segment markets are quite arisen in recent years, especially in COVID-19 situation.

From market study, currently one Korean automotive player is the only player for EV in Indonesia. Another big player from Japanese automotive manufacturer also already has planning for Hybrid vehicle. In this case, PT XYZ Indonesia must do mapping for every parts supplier to these 2 EV players to get actual information about EV development in Indonesia.

As already stated above, F&B and pharmacy sectors quite increasing after COVID-19 situation. PT XYZ Indonesia must penetrate these new segments to expand their market in Indonesia. Before expanding this market, PT XYZ Indonesia must study which channel could provide them more projects. Besides that, these new segments must have different characteristics compare to automotive sectors.

Another point that PT XYZ Indonesia can do is hire expertise in marketing and build market research team to get more information about new segment target market. The company can hire expert in marketing area to get better knowledge and decide best action for the strategic action to expand their markets. In this case, the market can also include for SME and home industry segment which are the backbone of Indonesian domestic economy.

Lastly, PT XYZ Indonesia must point official partners as main integrator to promote single solution system. As already stated above, PT XYZ Indonesia cannot provide whole solution system for customers. So, that is the main reason to appoint the official partner to strengthen their position in customer's point of view. This method is customer-oriented approach to penetrate market easily by increasing the channels.

B. Bottleneck Phases in Sales Process Model

Basically, all of activities need to be inputted in our CRM system. Based on the data that already inputted by all sales engineers, management side of PT XYZ Indonesia can see and monitoring about these data. Implementation of this sales model already been done since December 2021 until today.

By using this model, the progress of total team and individual progress by sales members can be seen clearly. Management side of PT XYZ Indonesia can monitor and conclude the problem that every member faced in their daily sales activities. Management side can help their member and give them the best suggestion to handle the obstacles.

Based on the recorder data, the biggest bottleneck on the process is not the quantity aspects instead the quality aspects. It clearly can be seen from Q4-2021 data where the (C_App)Application ratio was very small compared to other stages in the sales model. This problem happened to all sales engineer members and can be seen as red color for the conversion ratio on Figure 12.



Fig. 12. Sales model data Q4-2021

Based on the research, the root problem for this case is because the sales members cannot finalize the technical specification to customers in quick time. They took so much time in making the test report or proposal. It happened because they cannot operate the test unit correctly. Besides that, they do not have the report format to standardize the proposal quality.

After understanding fully about current bottleneck, PT XYZ Indonesia did the corrective action as the improvement point to solve this problem. Below are the 3 main improvement actions from management side

Table 13. Counter measure for C_App/Application bottleneck

No	Problems	Counter Measures
1	Long time for making the report	Training and mentoring from technical team
2	No standard for report quality	Establish proposal or test report format
3	No standard for technical configuration	Establish software as tools for technical configuration

C. Implementation of Sales Process Model in FY-2022

After understood the current situation and bottleneck, PT XYZ Indonesia implemented this new tool in March 2022 until now. They accumulate the data from March 2022 – May 2022. The data shows good improvement from all sales engineer members. The (C_App)/Application ratio improve from 27% to 52%. Besides that, because they can improve this stage, the sales amount that they get in the end also increase quite significant from IDR 2.970 Bill to IDR 7.316 Bill. Below are the data for Q1-2022:

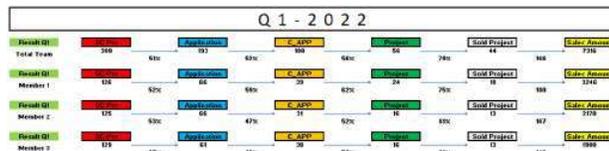


Fig. 13. Sales model data Q1-2022

Good result from Q1-2022 makes us to continue this sales model approach. Considering FY-2022 sales target, PT XYZ Indonesia will focus on the gathering application process right now. They need to accumulate many applications, so they can close it all also in this fiscal year. Below is the illustration for the strategy in remaining FY-2022.

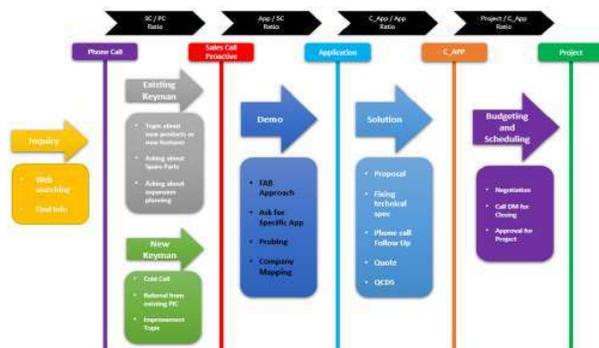


Fig. 14. Sales strategy in FY-2022

In this remaining FY-2022, PT XYZ Indonesia will try to separate the companies and contacts that they will approach. There will be target companies which they will focus more to be visited. Besides that, they also already have the contact list which called as Keyman. These Keyman hopefully can generate more applications.

For closing the project, PT XYZ Indonesia will empower Leader or Manager from to intervene current potential applications. These leaders or managers will contact also to Decision Maker from customer's side to get their opinion about current applications status. The key point in closing the project is about follow-up action where they will combine all resource to get higher sales amount to close this FY-2022 with good achievement.

D. Variables movement to NPV and Pricing Strategy

Based on tornado chart and spider chart in Figure 10 and Figure 11, item price of customers can give highest impact to the NPV value and taxes will not really impact the NPV value. As the seller, PT XYZ Indonesia must analyze about target product price from customers. They can compare their camera system product with customer's item price. This approach can be done by the sales engineer by ask more deeply to customers. Besides that, production capacity from customers also will play important thing to pricing method. These 2 main factors will be the main consideration from customers side to buy automation product. In this case, in future seller must train their members to get correct information about customer's item price and their production capacity.

Pricing plays a strategic role in B2B segments. For this pricing strategy, PT XYZ Indonesia will conduct value-based pricing. Price would be decided accurately based on the value of the product and the price that the customer is willing to pay for them. Value pricing is customer-focused pricing, meaning companies base their pricing on how much the customer believes a product is worth. Below is the illustration of value-based pricing:

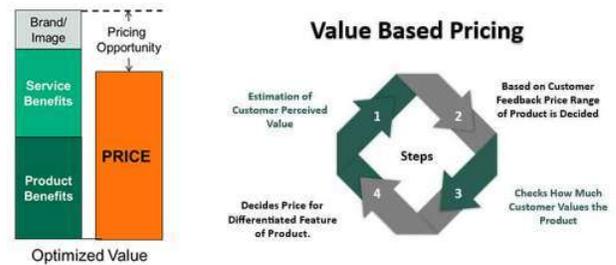


Fig. 15. Value based pricing

This strategy may need complex step and intensive communication with customers. By adopting this strategy, PT XYZ Indonesia can avoid pricing their product higher than what customers are prepared to pay or lower than they will pay. By using effective sales and marketing techniques, they can educate the customers, so customers will have better understanding about the value of automation products.

In this case, the range price for automation products is IDR 120 Mill – IDR 160 Mill. As the company, PT XYZ Indonesia want to keep their profit as high as possible. They believe that IDR 120 Mill is the lowest price that they can give to customer. On other side, IDR 160 Mill is the maximum price that customer can afford based on the investment calculation that already conducted in the previous chapter. This range will help the salespeople to conduct the negotiation with customers. Below is the tactical strategy that PT XYZ can do for the implementation of value-based pricing strategy:

1. Probing and collect data about the customers with much detail. In this step, salesperson must get the important information such as manufacturing cost, profit, production capacity, etc.
 2. Confirm the data by management side from PT XYZ Indonesia. In this case, they can assign sales leader or sales manager to contact to decision maker from customers to confirm about the situation
 3. Finalize technical specification based on customer's inquiry. PT XYZ Indonesia need to solve customer's problems, so that's why the specification must answer and solve current problematic situation.
 4. Decide minimum and maximum price. In this case, salesperson may need apply for special price to management side to proceed for this project.
 5. Confirm the maximum price to customer's side. By telling them about the price, salesperson can see customer's reaction. By this way, salesperson can check how much the customer values the output.
 6. Negotiate to customers until get the best price in the price range. In this case, intensive communication might be needed from seller's side to customer's side
3. Implement value-based pricing based on investment calculation. In this case, the price range for camera inspection is within IDR 120 Mill – IDR 160 Mill. By implement these prices, seller still get the profit amount that they desire, and customer still get the suitable productivity benefit in their factories
 4. Customer's product price, production capacity, and material cost are the main variables that are quite sensitive to NPV value movement. As seller, PT XYZ Indonesia need to train the sales engineer to get correct information about these variables to implement best pricing strategy to customers.

V. CONCLUSION

The conclusion of this paper is per following:

1. PT XYZ Indonesia must implement correct business strategy to scale up the business and capture the business opportunities. Below is the specific action for the business strategy:
 - o Utilize direct sales strategy with three approaches: direct approach, comprehensive support, and fast delivery
 - o Hire expertise in marketing area
 - o Focus to specific sensor items such as camera vision, laser sensor, and safety sensor
 - o Choose official partners as main integrator to promote single solution system
 - o Expand to automotive EV, food beverage, and pharmacy
2. Implement suitable sales modelling approach for B2B sales strategy. The stages are Phone Call, Sales Call, Application, C_App, Project, Sold Project, and Sales Amount.

VI. SUGGESTION

There are still so many improvements that PT XYZ Indonesia can do to strengthen their brand in factory automation industry. Below are the suggestions:

- o Research about market expansion to other big industries outside automotive
- o Research about marketing strategy for B2B factory automation segment
- o Establish 'farmer' and 'hunter' for the sales team
- o Exploration of human capital development
- o Trial new method to improve conversion ratio in sales process modelling
- o Develop plain truth reporting and real time updating in CRM system
- o Develop new simple calculation proposal tools
- o Establish portfolio bank for specialized industrial segments

REFERENCES

1. Agarwal, V., Eloom, K., and Patel, A. 2019, Moving pas the 'pilot trap' to unleash Industry 4.0 in Indonesia. Mckinsey
2. Brent R.J., 2006, Applied Cost-Benefit Analysis (2nd ed.), Cheltenham: Edward Elgar Publishing
3. Gitman, L., & Zutter, C. 2012, Principles of Managerial Finance (13th ed.), Pearson, England.
4. Granot E., Alejandro T.B., Motta P.C., 2012, A Structural Guide to In-Depth Interviewing in Business and Industrial Marketing Research, Journal of Business & Industrial, 1: 1-6

5. Gumanti, T., 2011, Manajemen Investasi: Konsep, Teori dan Aplikasi, Jakarta, Indonesia: Mitra Wacana Media.
6. Hadi, S. 2019. Study on Industry 4.0 for the Application in Indonesia. Jurnal Manajemen Industri dan Logistik
7. Kotler P. & Keller K.L., 2016, Marketing Management (15th ed.), Essex: Pearson
8. Kotler, P. & Pfoertsch, W., 2006, B2B Brand Management, Germany: Springe
9. Lovelock, C. H. & Wright L., 1999, Principles of Service Marketing and Management, New Jersey: Prentice Hall
10. Rothaermel, F.T. 2019. Strategic Management 4e, New York: Mc-Graw Hill Education