

Evaluation of Business Model on E-Commerce PT. XYZ Using Business Model Canvas Approach

Virda Berlianti Pratiwi and Endang Chumaidiyah

Faculty of Industrial Engineering

Telkom University

Bandung, Indonesia

Virdaberliantipratiwi98@gmail.com, Endangchumaidiyah@telkomuniversity.ac.id

Abstract.

PT. XYZ is an application-based e-commerce that focuses on selling women's fashion products. The new business, which has been running since 2016 has experienced decrease in sales and profit because of inability to compete with its competitor such as Marketplace. Seeing from these problems, the business model of PT. XYZ will be evaluated using the Business Model Canvas approach to propose a new business model. Business Model Canvas is mapping the business model of a business into nine blocks that explain the general picture of the business in a short and easy to understand way, consist of Customer Segments, Value Propositions, Channels, Customer Relationships, Key Activities, Key Resources, Key Partnerships, Revenue Streams, and Cost Structure. The nine blocks will be analysed and processed using SWOT analysis to find out the business' weakness, strengths, opportunities, and threats. The result of this research is a new business model for PT. XYZ to compete with its competitors.

Keywords

Business Model, E-commerce, Business Model Canvas and SWOT Analysis

1. Background

In this digital age, organizations or companies must always update the strategy taken as an adaptation process with the inclusion of the digital era (Flanding et al. 2018). The entry of this digital era also caused an increase in the number of internet users in 2018 by 13.3% over the previous year according to (*databoks.katadata.co.id* 2019). The use of the internet forms online shopping activities, namely the activities of buying and selling goods online that are felt to provide more comfort and convenience compared to offline stores (Sramova and Pavelka 2019). One of the platforms for online shopping is e-commerce, which is the activity of distributing, purchasing, selling, and marketing goods and services using the internet and electronic systems (Damanpour and Damanpour 2001).

One example is PT. XYZ which was founded on November 1, 2015. PT. XYZ is an e-commerce that focuses on selling women's fashion, such as clothing, veils and women's shoes. PT. XYZ is an application-based ecommerce that can be downloaded using an android device. Women's fashion is the brand identity that is used by PT. XYZ, therefore PT. XYZ only focuses on women's fashion and does not sell other needs. PT. XYZ applies a membership system for its customers to access content on the application, so that non-member customers cannot purchase products on the application.

Based on existing data, income received in 2018 decreased by 34.5% compared to 2017. This is due to the growth of the Marketplace and people's preferences towards the Marketplace. PT. XYZ must have a value that can distinguish PT. XYZ with its competitors. The membership system that is run also makes it difficult for customers to reach. From these problems, PT. XYZ needs an alternative business model that can be used to compete with other businesses. To discuss solutions, a business model mapping was carried out to PT. XYZ uses the Business Model Canvas and SWOT Analysis.

2. Literature Review

2.1 Business Model Canvas

The Business Model is the overall thing that is done and designed by the company to achieve profitable results and meet the specified target consumers (Wrigley et al 2016). One type of business model is the Business Model Canvas, which is the business model approach of an organization or company by mapping in nine aspects or components, each of which explains how the company generates revenue (Osterwalder and Pigneur 2010). The Business Model Canvas consists of nine interconnected blocks, that are Customer Segments, Value Propositions, Channels, Customer Relationships, Revenue Streams, Key Activities, Key Partnerships, Key Resources, and Cost Structure. Each block is interconnected to create a business model as shown as in the Figure 1.

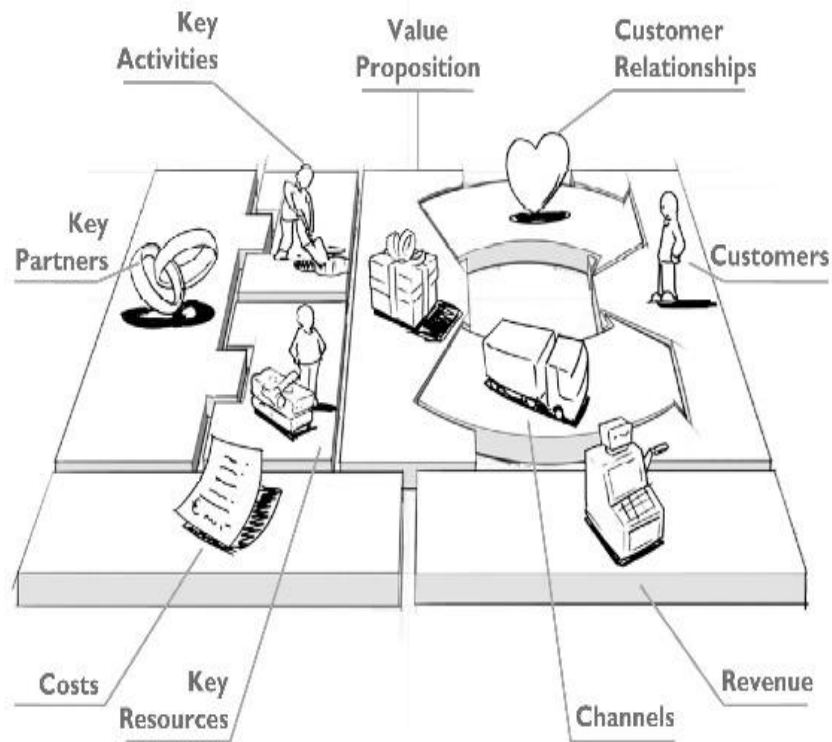


Figure 1. Business model canvas.

2.2 SWOT Analysis

SWOT analysis or Strength, Weakness, Opportunities, and Threats, is a way to predict the best strategy carried out by the company (Shamadiyah 2017). The SWOT analysis is a framework that clearly illustrates the significance of internal and external forces (Gupta and Mishra 2016). In this study there are three variables, namely Strength and Weakness, Opportunities, and Threats, which will then be subdivided into four sub-variables namely Value Propositions, Cost, Infrastructure, and Customer Relationship (Osterwalder and Pigneur 2010). After the SWOT variable indicator has been determined, the next is to determine the weight, rating, and score of each indicator that will be positioned on the SWOT diagram.

3. Methodology

Figure 2 shows the steps taken to conduct this research. This research was conducted in several stages, starting with the processing of existing conditions mapped into the existing Business Model Canvas. The data was obtained from interviews with PT. XYZ owners. After that, the SWOT questionnaire is given to owners, financial managers and production managers of PT. XYZ to be able to do the SWOT Analysis calculations. The results of the questionnaire are then calculated, and positioned on the SWOT diagram to determine the most appropriate strategy. After the strategy has been determined, the final step is to design an alternative business model for PT. XYZ.

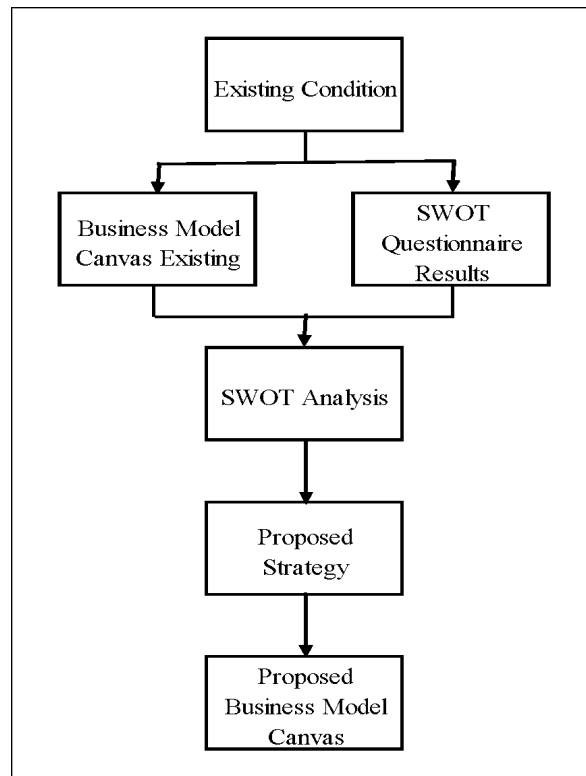


Figure 2. Conceptual model.

4. Data Processing and Analysis

4.1 Business Model Canvas Existing

The existing conditions that have been mapped into nine blocks in the Canvas Business Model based on the results of interviews with the owner. Figure 3 shows the Business Model Canvas existing of PT. XYZ.

Key Partnerships	Key Activities	Value Propositions	Customer Relationships	Customer Segments	
Bank Product Supplier Delivery service Application and Website Developers Hosting/Domain Provider	Supplier Screening	Lower price Get a Free Online Business Module Product Return Guarantee Dropship system	Membership Special Services	Reseller Individual	
	Product Purchase				Channels Website Application Social media Word of Mouth
	Product Management in the Warehouse				
	Product Sales and Marketing				
	Product Payment		Key Resources Human Resources Infrastructure Products / Finished Goods Hardware Server/Hosting		
	Product Packaging				
	Product Shipment				
Cost Structure	Revenue Streams				
Employee salary (15%)	Operating costs (4%)	COGS (80%)	Inventory Cost (1%)	12% Price Markup (95%)	Membership Registration (5%)

Figure 3. Business model canvas existing of PT. XYZ.

4.2 SWOT Calculation

After the existing Business Model Canvas has been mapped, the next step is to confirm to the owner of PT. The XYZ towards the indicator used for the SWOT questionnaire then completes the questionnaire. Filling out the questionnaire aims to find out the weight and rating of each indicator, so they can look for the score of each variable to be positioned on the SWOT diagram. Table 1 shows the result of the SWOT questionnaire of each indicators.

The calculation that has been done shows the score for each sub-variable in each variable. After getting these results, then calculate the score of each sub-variable so that the coordinates obtained in the SWOT diagram as presented in Table 2.

4.3 SWOT Analysis

The SWOT Diagram result as presented in Figure 4 consist of positions of the sub-variables. “VP” stands for sub-variable Value Propositions, “CR” stands for sub-variable Customer Relationships, “RC” stands for sub-variable Revenue Cost, and “I” stands for sub-variable Infrastructure.

Table 1. SWOT questionnaire result from each indicator.

Sub-Variable	Variable	Indicators	Weight	Score	
Value Proposition	Strength and Weakness	Low price products	0.27	0.88	
		Free online business modules attract customers	0.16	0.49	
		The dropship system attracts customers	0.29	1.43	
	Opportunities		Provides a product return guarantee	0.29	1.33
			Cheap and high-quality products become the appeal of consumers	0.37	1.72
			Development of the Fashion Industry	0.32	1.26
			Giving Discounts	0.32	1.16
	Threats	The number of substitute products has increased	1.00	4.67	
Customer Relationships	Strength and Weakness	Resellers generate the main source of income	0.17	0.80	
		Full application features	0.22	0.80	
		Word of Mouth is effective	0.17	-0.63	
	Opportunities		Membership prevents customers from turning to competitors	0.20	-0.74
			provide special services	0.23	1.09
			Customers tend to increase	0.48	2.09
			The entry of the era of digitalization is useful	0.52	2.41
	Threats	The competitor application features are more complete	1.00	2.00	
Costs and Revenue	Strength and Weakness	Sales results meet the target	0.57	-0.19	
		Registration fees make a profit	0.43	0.87	
	Opportunities	The Digital Economy is developing quite well	0.46	1.53	
		E-commerce transactions have increased	0.54	2.35	
	Threats	Inflation in Indonesia	1.00	3.33	
Infrastructure	Strength and Weakness	PT. XYZ HR performance is good	0.14	-0.19	
		Products are always available	0.12	0.52	
		Screening of suppliers is done well	0.14	0.57	
	Opportunities	Product sales and marketing are done well	0.15	-0.51	
		Effective packaging	0.16	0.60	
		Delivery is done well	0.15	0.56	
	Threats	Supplier of products according to criteria	0.12	0.40	
		Transition of conventional business to modern	1.00	2.67	
		Marketing competing products is more attractive	0.58	2.72	
		Inappropriate Supply Chain Stakeholders and Suppliers	0.42	1.53	

Table 2. Sub-Variable Coordinates for SWOT Diagram.

Sub-Variable	Indicator	Score	Coordinate
Value Proposition	Strength and Weakness	4.14	(4.14, -0.53)
	Opportunities and Threats	-0.53	
Customer Relationships	Strength and Weakness	1.32	(1.32, 2.51)
	Opportunities and Threats	2.51	
Costs and Revenue	Strength and Weakness	0.68	(0.68, 0.54)
	Opportunities and Threats	0.54	
Infrastructure	Strength and Weakness	1.96	(1.96, -1.58)
	Opportunities and Threats	-1.58	

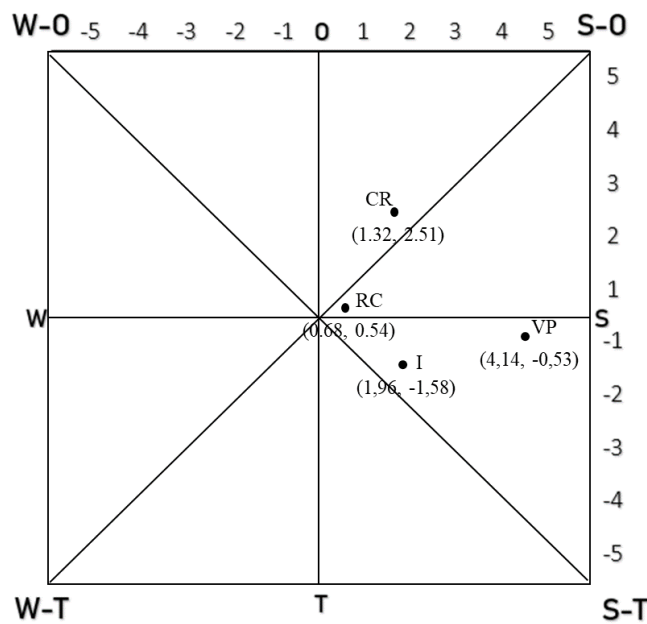


Figure 4. SWOT Diagram.

4.3.1 Value Propositions Analysis

The value proposition variable is in the S-T quadrant, and a good SWOT strategy to apply is massive diversification. Diversification strategy is the company's business in developing its business by adding business variations and market segments (Sulastri 2015).

4.3.2 Customer Relationships Analysis

For the customer relationship variable is in the S-O quadrant, in other words this variable can use its power to get the opportunities available. The right strategy for customer relationship variables is stable growth because PT. XYZ has strengths and opportunities for this variable as a whole. However, if you look at the results of the SWOT questionnaire calculation, there are several indicators that show weaknesses of PT. XYZ namely word of mouth and the use of membership systems.

4.3.3 Cost and Revenue Analysis

Cost and income variables are in the S-O quadrant. The sale of products is the strength of PT. XYZ, because all ofista's funds are derived from sales. PT. XYZ is of the opinion that the results of the sale of its products do not reach the target set, thus impacting on the decline in profits obtained.

4.3.4 Infrastructure Analysis

Infrastructure variables are in the S-T quadrant, the recommended strategy is a large diversification by looking at the strength of PT. XYZ to face the threats.

4.3.5 Proposed Strategy for Each Block.

The proposed strategy for each block of PT. XYZ Business Model are shown in Table 3.

Table 3. Proposed strategy for each block of PT. XYZ's business model

No.	Strategy	Block	No.	Strategy	Block
1	Add product variations	Value Propositions	10	Add resources to business consulting services	Key Resources
2	Improve supplier screening process	Key Activities	11	Add content for Digital Marketing	Channels
3	Improve supplier screening process	Key Partnerships	12	Add content for Digital Marketing	Cost Structure
4	Create free online business guide videos	Value Propositions	13	Increase Product Sales Results (12% price mark-up)	Revenue Streams
5	Creating Discounts or Promotions	Value Propositions	14	Improve the quality of human resources	Key Resources
6	Improved membership system	Customer Relationships	15	Create an employee performance evaluation process	Key Activities
7	Improved membership system	Revenue Streams	16	Improve product quality	Key Resources
8	Improve service	Customer Relationships	17	Improve product quality	Value Propositions
9	Creating business consulting services for Reseller customers	Customer Relationships	18	Benchmarking with competitors	Key Activities

5. Result

Based on the results of research that has been done, Figure 5 is an alternative business model for PT. XYZ of the 9 blocks on the Business Model Canvas, 8 blocks need improvement to be able to survive in the midst of competition with competitors.

Proposed Business Model				
Key Partnerships	Key Activities	Value Propositions	Customer Relationships	Customer Segments
Bank Product Supplier Delivery service Application and Website Developers Hosting/Domain Provider	Supplier Screening	Lower price Get a Free Online Business Module Product Return Guarantee Dropship system Variative Products Quality Products Free Online Business Video Guide Discounts and Promotions		Reseller Individual
	Product Purchase			
	Product Management in the Warehouse			
	Product Sales and Marketing			
	Product Payment			
	Product Packaging			
	Product Shipment			
	Competitor Benchmarks			
	Employee Performance Evaluation			
	Key Resources			
Human Resources				
Infrastructure				
Products / Finished Goods				
Hardware				
Server/Hosting				
Business consultant				
Cost Structure		Revenue Streams		
Employee salary (14%)		12% Price Markup (95%)		
Operating costs (4%)		Membership Registration (5%)		
COGS (79%)				
Inventory Cost (1%)				
Digital Marketing Cost (2%)				

Note: Create, Improve, Reduce, Hold

Figure 5. Proposed business model canvas for PT. XYZ.

Customer Segments does not require changes, because the existing conditions are good.

Value Propositions proposed to add product variations, create free online business guide videos, creating discounts or promotions, and improve product quality.

Channels proposed to add content for digital marketing.

Customer Relationships proposed to improved membership system, improve service, and creating business consulting services for reseller customers.

Revenue Streams proposed to improved membership system and increase product sales results (12% price mark-up).

Key Activities proposed to improve supplier screening process, create an employee performance evaluation process, and benchmarking with competitors.

Key Resources proposed to add resources to business consulting services, improve the quality of human resources, and improve product quality.

Key Partnerships proposed to improve supplier screening process.

Cost Structure proposed to add cost for digital marketing

References

- Damanpour, F., Damanpour, J.A., E-business e-commerce evolution: perspective and strategy. *Manag. Finance. Emerald*, vol. 7 pp. 16–33, 2001.
- Flanding J.P., Grabman, G.M., Cox S.Q., Leading Change in the Digital Era. The Technology Takers. Emerald Publishing Limited, pp. 161–75, 2018.
- Gupta, G., Mishra, R.P., A SWOT analysis of reliability centered maintenance framework. *J. Qual. Maint. Eng. Emerald*; 2016 May 9 ; vol. 22 no. 2 pp. 130–45, 2016.
- Jayani, D.H., "Berapa Pengguna Internet di Indonesia?," Databoks, 9 September 2019. [Online]. Available: <https://databoks.katadata.co.id/datapublish/2019/09/09/berapa-pengguna-internet-di-indonesia>, Accessed Day: April 17, 2020.
- Osterwalder, A., and Pigneur, Y., *Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers*, New Jersey: John Wiley & Sons, 2010.
- Shamadiyah, N., Analisis Swot Strategi Pemberdayaan Masyarakat Program Penataan Lingkungan Permukiman Komunitas Di Kelurahan Suryatmajan, Kota Yogyakarta. *Agrifo : Jurnal Agribisnis Universitas Malikussaleh*. LPPM Universitas Malikussaleh, vol. 2, no. 1, pp. 28, 2017.
- Sramova, B., and Pavelka J., Gender Differences and Wellbeing Values In Adolescent Online shopping. *Int. J. Retail. Distrib. Manag. Emerald*, vol. 47, no. 6, pp. 623–642, 2019.
- Sulastri, U., Pengaruh Strategi Diversifikasi Terhadap Kinerja Keuangan Perusahaan dengan Struktur Modal Sebagai Variabel Intervening (Pada Perusahaan Sektor Properti dan Real Estate di Bursa Efek Indonesia Periode 2009-2013), *Jurnal Akuntansi AKUNESA*, vol. 3, no. 2, pp. 1-29, 2015.
- Wrigley, C., Bucolo, S., and Straker, K., Designing new business models: blue sky thinking and testing. *J. Bus. Strategy. Emerald*, vol. 37, no. 5, pp.22–31, 2016.