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E-COMMERCE BUSINESS DIGITAL TRANSFORMATION

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ABSTRACT

Digital ecosystem has rapidly grown in Indonesia. E-commerce has become the most disruptive among others. XYZ is one of the Indonesian e-commerce platforms. They choose to keep evolving through digital transformation to align with the current need. This research aims to identify XYZ's digital transformation to meet current business, partners, and customers' needs. Data were obtained by interviewing and collecting company documents, and Gupta's framework was chosen for analysis. The transformations which have been done by XYZ are changing the strategy market-based view into a resource-based view. XYZ also transformed from e-commerce to a business segment platform with a B2B2B model. The Gupta framework is used as the foundation for this transformation. The results of the Gupta framework are translated into strategies for achieving new company structure and values.

INTRODUCTION

Indonesia is a country that is experiencing a digital ecosystem growth on all fronts that affects the economy as a whole [1]. The McKinsey report [1] mentions that in 2017 there were formal e-commerce transactions of 5 billion USD and informal e-commerce transactions of 3 billion USD and are expected to increase to 55-65 billion USD in 2022. These e-commerce transactions have increased due to (a) a "mobile-first" market, (b) intelligence of digital services, (c) young consumers, (d) increased participation of small and micro enterprises, (e) increased investment, and (f) policy support from the government [1]. The existence of such a large market and the opportunity to increase consumption in the digital economy in the future has attracted many

companies to become digital players in Indonesia.

XYZ is an e-commerce company that initially focused on selling IT equipment to become a company that provides non-IT products. XYZ has a mission to be the number one online shop in Indonesia that offers (a) easy shopping (b) product completeness, and (c) excellent service by prioritizing a memorable shopping experience for its customers. XYZ's service and product guarantee pillars are (a) original assurance, (b) product completeness, and (c) repair service center. XYZ is engaged in 3 e-commerce business segments, namely B2C, B2B, and B2G. XYZ is still able to survive amid the rise of e-commerce. Almost all of them target the private and business or corporate consumer markets by expanding the demand for the government segment. The business model of XYZ is as follows:

Value Proposition

XYZ's value is a trading platform company that provides value to their consumers in original product guarantees, official guarantees, complete products, and the provision of a service center for customers.

Consumer segment

There are three target consumers from the company today, namely individual consumers (B2C), corporate consumers (B2B), and government consumers (B2G).

Relations with Consumers

In maintaining its relationship with consumers, XYZ creates a loyalty program for consumers in the form of promos. For corporate consumers, the company maintains the relationship by conducting company visits. For all customers, the company also provides after-sales service to handle complaints from customers.

Consumer channels

XYZ makes sales using websites and mobile applications, marketing using social media and offline in delivering value to consumers. The company has also opened a physical store to buy products offline and get customer complaint service. Besides, XYZ also has representative offices in various provinces to help corporate and government consumers provide services. The company also uses sales through calls, conversations, and emails to achieve their sales target.

Key activities

XYZ's main activities are web and mobile application development, product procurement from suppliers, marketing, sales, and product delivery. Besides, there are also product service and after-sales activities, which are key activities that provide competitive value.

Key resources

In supporting its activities, the company has human resources in the form of a development team, infrastructure team, marketing and sales team, service center technician team, and courier. Besides, the company also has a warehouse for storing its products.

Key Partners

XYZ has partners from suppliers of 3C products (Computer/IT, Communication Technology, and Consumer Electronics), merchants for products other than 3C, banking, and payment platforms.

Fee structure

XYZ's costs to run its business include employee salaries, marketing costs, office and infrastructure operations, information technology operations, and warehouses.

Source of income

There are two company income sources: profit from sales, where the largest is from B2G sales. Also, there is revenue from product repair services by consumers.

RESEARCH QUESTIONS

The research questions raised in this study are as follows:

- What form of digital transformation did XYZ take with the influence of digital technology transformation?
- What are the ideal conditions that are expected to be achieved with the digital transformation being carried out?
- What kind of business strategy that XYZ will do to run their digital business transformation?

THEORETICAL BASE

Influence of Digital Technology

The adaptation of technology in business is driven by the benefits obtained by each part of the organization. In business, digital technology is used to obtain more profits or generate new value for the organization. According to Chaffey [2], there are two ways to use digital technology (a) increase in revenue potential due to a broader range of customers and also subscribe invitation and (b) a decrease in the cost of electronic service delivery.

There were two main categories of drivers: efficiency and competitiveness, in the early days of digital technology adaptation[3]. The list below is a breakdown of each of these categories:

- Cost/Efficiency Drivers
 - Increase the speed of supply.
 - Increase the speed of goods delivery.
 - Decrease the cost of sales and purchase.
 - Decrease the cost of organizational operation
- Competitiveness Drivers
 - Fulfillment of customer request.
 - Increase the range and quality of service provided.
 - Avoid losing market share from other businesses that have e-commerce first.

The speed of communication between sellers and customers or vice versa is also affected by digital technology. Digital technology is no longer solely for communication between buyers and sellers, and it also serves as a medium to gather feedback. Digital technology makes it possible for organizations to rent certain service functions or outsource[4]. By outsourcing, the costs incurred will be lower.

Digital transformation

According to Dorner and Edelman [5], the word "digital" in the digital transformation does not focus on one process. Instead it emphasizes how an organization runs its business. This definition can be divided into three focuses:

- Creating value in a new business world.
- Optimizing processes that directly impact the customer experience.
- Build basic capabilities to support the overall business initiatives of the organization.

Schallmo and Williams [6] define digital transformation as transforming from a sustainable organization through business models and business operations resulting from the revision or creation of business models and business operations through added value from digitization initiatives to increase profitability. Digital transformation is often seen as the same as Business Process Reengineering (BPR). Although there are similarities between the two, there are also significant differences. According to Proctor [7], BPR focuses on automation processes based on the rule (rule-based). Meanwhile, digital transformation aims to obtain new data and use that data to reorganize old rules-based processes.

METHODOLOGY

The following is the research methodology used in this research.

Data source

Data sources come from interviews with XYZ's director of strategic expansion and secondary data sources in the form of company documents, company websites, and mass media coverage.

Data processing

The data obtained from the interviews were transcribed. The information contained in it is then taken and used as material to answer research questions. Supporting documents are collected in one storage, which will later be used as analysis material.

Analysis method

The analysis used in this research is done by extracting the information from the interview and documents. Then, by looking at the theoretical basis and the information obtained, the results are used to answer research questions. The Gupta Framework [8] is used to develop a digital transformation strategy because it is transforming into a Resource-Based View.

RESULTS

Here are the results and analysis of the research undertaken.

Digital transformation form

Digital technology allows the procurement process in consumer segments and business suppliers to change. XYZ is a powerful company in the B2B market segment. XYZ is currently transforming to B2B2B [9]. The B2B2B segment's change aims to become a differentiating factor for them with their competitors who mostly play in the B2B, C2C, B2G, and B2C domains. Changes in this market segment require a fundamental change in strategy. The change that occurred was a strategy that shifted from Market Based View (MBV) to Resource-Based View (RBV). The characteristics of the RBV, MBV, and dynamic capabilities can be seen in Figure1[10]. XYZ's current condition is in MBV because it is still competing in the e-retail business line of computer equipment and services fulfilled by XYZ alone. Also, the company has vertical business support components from financing, logistics, and warehousing. XYZ's future condition is a buying and selling platform for business segment partners with a B2B2B model approach.

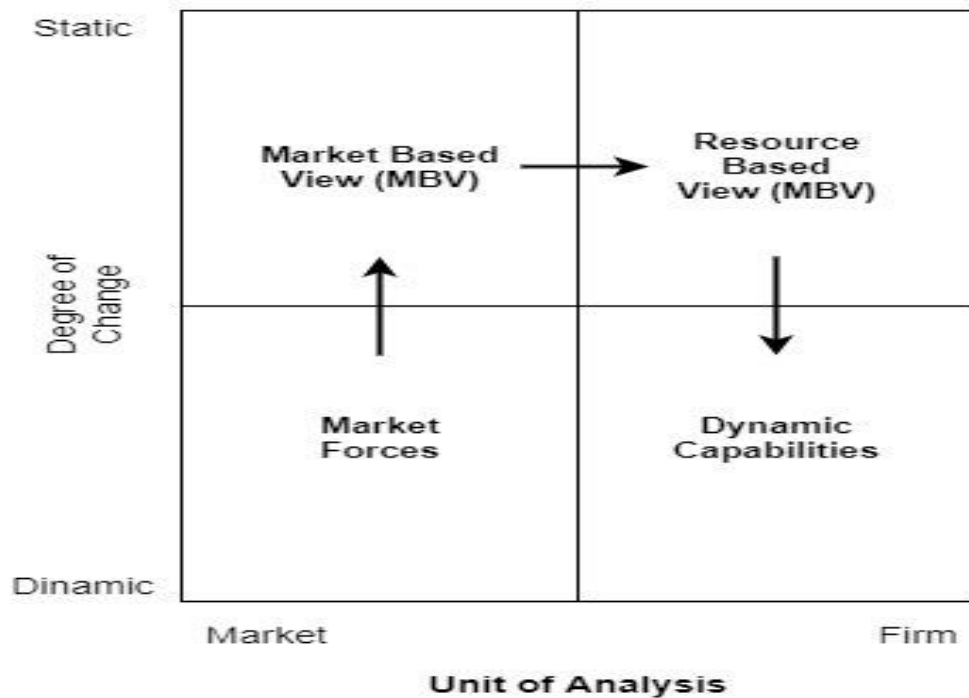


Figure1 Characteristics of RBV, MBV, and dynamic capabilities

Figure2 shows the existing company's business, which was initially an e-retailer of the B2C, B2B, and B2G markets.

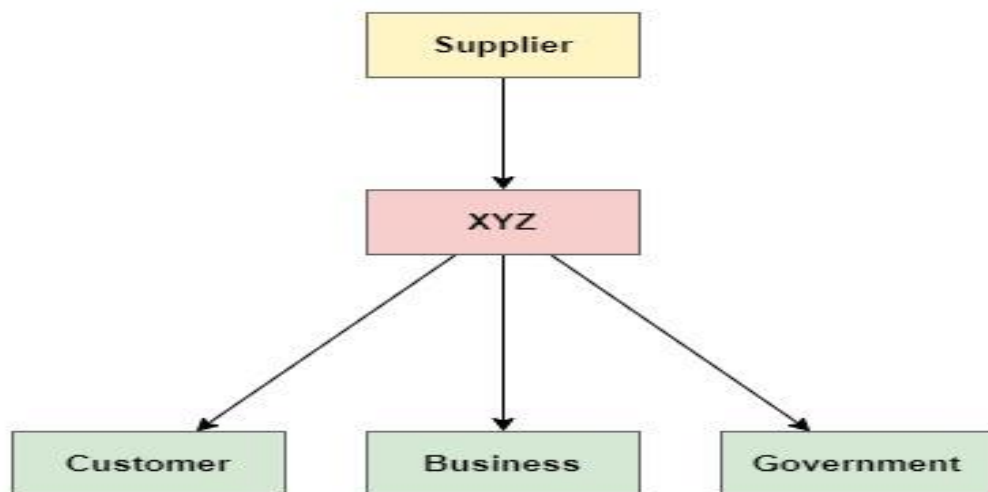


Figure2 Existing XYZ Digital Business

Then there are changes in the company's business, which will shift to B2C, B2B2B, and B2G. The most dominant process changing is B2B to B2B2B. XYZ will be a platform for business segment transactions. This transformation is based on digital technology's opportunity to create a business procurement process where the vertical industry is different. B2B2B allows platform providers to act as entry points to other businesses.

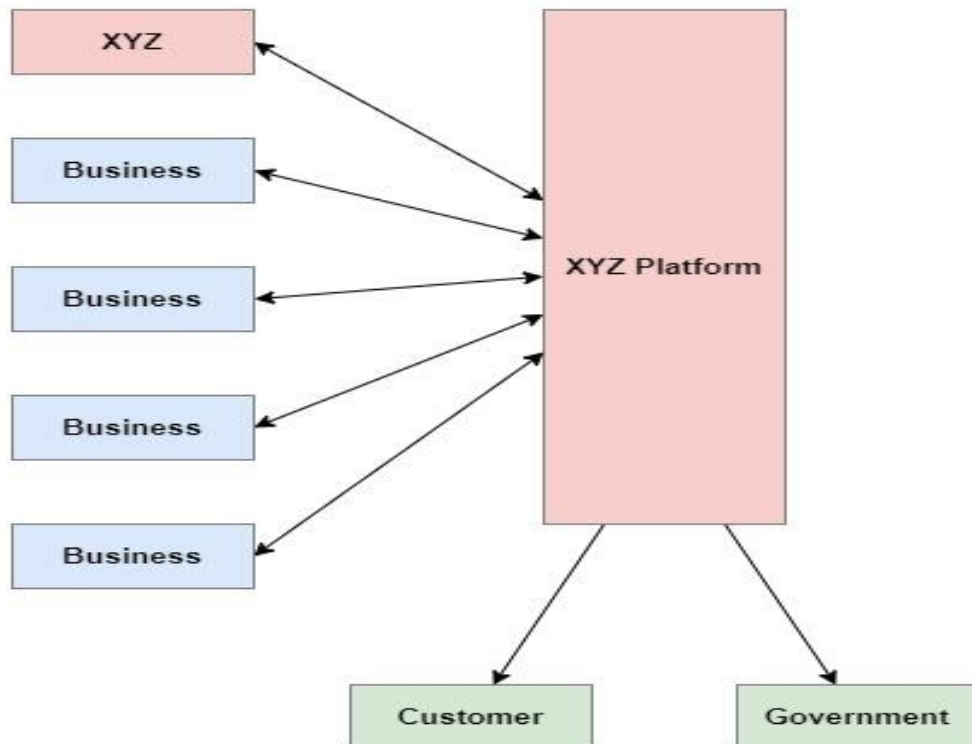


Figure3 XYZ digital business transformation

Expected ideal condition

The future conditions that are expected by the company by placing a strong position on the B2B2B platform are (a) focus on capabilities as an IT equipment supplier, (b) the procurement process is shorter, (c) members of the B2B2B ecosystem can carry out cross-business, inbound transactions, and outbound, (d) service and process standards are established and controlled by XYZ, and (e) individual consumers and the government can still be served.

The changes made are expected to make the company have value and differentiation to continue in the long term. These changes allow XYZ to evolve into an RBV-based enterprise that will be more adaptive to fast-changing environmental conditions if appropriately managed.

Therefore, with the digital transformation, the company hopes to become the leading B2B2B e-commerce player in Indonesia, to be more dynamic, to create differentiation in the market, and to create a comprehensive business ecosystem where every person or organization who wants to do business by making sales and purchases product can be from and to the company.

Digital strategy

Currently, XYZ is preparing itself to transform from MBV to RBV. Some of the strategies that will be carried out by the company are identified by first analyzing the gaps in the current and future conditions (Figure1).

To carry out digital transformation with the expected results, the following are strategies that can be implemented to carry out the digital transformation carried out by XYZ. This strategy was adopted from research conducted by Hansen and Sia. [11].

In this study, there are four keys to carrying out digital transformation, especially in omnichannel companies, namely:

1. Alignment of XYZ brand globally.

Aligning XYZ branding thoroughly, from logo, color, and voice actor. Done across all channels belonging to the company: web, phone apps, Facebook page, Instagram account, and other social media.

2. Increase e-commerce support for the B2B market.

The next strategy is to increase support for the B2B market owned by the company. This strategy focuses on improving digital support for the B2B market by increasing the B2B e-commerce platform's quality. The B2B market is a significant income for XYZ, so that it needs to be improved so that the service quality of XYZ will increase.

3. Build an omni channel customer community.

The company should change the old way of approaching customers from one specific channel into a coordinated marketing program. For example, XYZ's launch of a new product will be advertised on XYZ.com, Google, and social media, commonly used by the general public. Therefore, customers can experience XYZ's campaign aligned in many marketing channels to reach all its target customers.

4. Complete the customers' shopping experience at a physical store.

This strategy will focus on innovating the company's physical stores to enhance the customers' shopping experience.

XYZ's digital transformation strategy analyzed using the Gupta framework can be explained in

Table 1 Digital transformation strategy

Component	Aspect	Strategy
Reimagine the business	Business scope	Refocused on being a specialized provider of IT equipment and turned business into a B2B2B platform.
	Business model	Change the B2B, B2C, dan B2B e-commerce model into B2B2B, B2C, and B2G platform.
	Platform and ecosystem	The B2B2B platform is prioritized by building an ecosystem of business partners from suppliers to business partners.
Re-evaluate the value	Research and development	Turning an asset-heavy organization into a focus on R&D capabilities. Innovation

chain		is used as the main fuel for the company by including business partners in the R & D process's innovation circle in the R&D process.
	Operational	Utilizing automation technology, cloud, and the digital supply chain
	Omni-channel	Strengthening the existing omni-channel condition is unifying online and offline lines (XYZ physical stores) for all business partners, individual consumers, and the government.
Reconnect with consumers	Customer acquisition	Converting suppliers now to business partners, and.
	Attract customer	Promote the B2B2B process to potential new business partners with a network effect strategy.
	Measure and optimize marketing spending	Leverage data analytics to drive consumer acquisition growth and create metrics for consumer conversions and costs. All attributes associated with conversion to data analysis material
Rebuild the organization	Transition management	<p>The transition was accomplished by creating a company extension to focus on R&D and strengthen the platform's operations. The old organizational structure will change gradually as market acceptance increases and the maturity of company extensions.</p> <p>The company's leadership is directed by dividing the XYZ line as a supplier and an extension line for the company that was oriented towards R&D. The transition approach taken is to move the role of factories to be strategic [4].</p>
	Designing organizations to innovate	Establish a company existence focused on R&D and innovation.
	Capabilities and talent management	Continuous capacity building through learning the latest technology. Capabilities are built by <i>linking and matching</i> the individual's ability to coordinate agile and innovation-oriented. Talent management has begun to be directed at individuals who have critical thinking skills, can work agile, and have the drive to revolutionize/rebuild the company's business.

CONCLUSION

The transformation carried out by the company due to changes in the business environment is needed so that the company can survive and find new opportunities. The changing business environment that is increasingly fast and filled with uncertainty requires careful analysis to choose the appropriate transformation strategy. The strategy carried out in the XYZ case is to convert MBV into RBV and turn the e-commerce business into a B2B2B platform. The changes that occur require strong support to change the current strategy, current capabilities, and current values [4] into new adaptive organizational forms and better values than before. The list of strategies generated in this analysis requires strong support from business owners and implementing a transition that requires appropriate leadership. The expected transition is from a factory to a strategic role.

REFERENCES

- K. Das, T. Tamhane, B. Vatterott, P. Wibowo and S. Wintels, "The digital archipelago: How online commerce is driving Indonesia's economic development," McKinsey & Company, Jakarta, 2018.
- D. Chaffey, *Digital Business and E-Commerce Management: Strategy, Implementation and Practice*, United Kingdom: Pearson Education Limited, 2015.
- DTI, "Business in the Information Age – International Benchmarking Study 2000," Department of Trade and Industry, 2000.
- L. Applegate, R. Austin and D. Soule, *Corporate Information Strategy and Management: Text and Cases*, 8th ed., Singapore: McGraw Hill Education, 2009.
- Dorner and Edelman, "What does digital really mean?," McKinsey, 2015. [Online]. Available: <https://www.mckinsey.com/industries/high-tech/our-insights/what-digital-really-means>. [Accessed 30 September 2019].
- Schallmo and Williams, "History of Digital Transformation," in *Digital Transform Now!*, SpringerBriefs in Business, 2018, pp. 3-8.
- J. Proctor, "Digital transformation vs. business process reengineering (BPR)," Inteq Group, 20 June 2019. [Online]. Available: <http://content.inteqgroup.com/digital-transformation-vs-business-process-reengineering>. [Accessed 30 September 2019].
- S. Gupta, *Driving Digital Strategy: A Guide to Reimagining Your Business*, Boston, Massachusetts: Harvard Business Review Press, 2018.
- M. Nabila, "Bangun Ekosistem Khusus Bisnis, XYZ Garap Pasar B2B2B," 18 October 2019. [Online]. Available: <https://dailysocial.id/post/xyz-bisnis-b2b2b>. [Accessed 30 October 2019].
- P. Madhani, "Resource Based View (RBV) of Competitive Advantage: An Overview," in *Resource Based View (RBV): Concepts and Practices*, Ahmedabad, ICFAI University Press, 2009, pp. 3-22.
- R. Hansen and S. K. Sia, "Hummel's Digital Transformation Toward Omnichannel Retailing: Key Lesson Learned," *MIS Quarterly Executive*, 2015.

