

E-Business Case Study Analysis: Using a Qualitative Descriptive Approach to Face Disruption in Telkomsel's Digital Transformation

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Abstract. The telecommunications industry in Indonesia has experienced significant disruption in recent years. The emergence of new players, such as Google and Facebook, and the shift in consumer preferences to digital services, such as e-commerce and streaming, have challenged traditional telecommunications operators, such as Telkomsel. This case study discusses how Telkomsel leverages digital transformation to strengthen its e-commerce and digital services business, and how it helps the company face the disruptive era. e-commerce business development. The method used in this analysis is a descriptive method with qualitative research techniques. The Qualitative Method is non-numerical text-based data analysis to produce a conclusion from the research that has been carried out. Telkomsel has launched several e-commerce platforms, such as Telkomsel HaloPrix, Verena, IndiHome. Digital transformation has become the key for Telkomsel to face the disruptive era. By focusing on e-business development, Telkomsel has succeeded in increasing revenue, customer engagement, and efficiency. **Keywords:** E-Business, E-Commerce, Disruptive Era, Digital Transformation, Telkomsel.

I. Introduction

The emergence of new players like Google and Facebook, along with the shift in consumer preferences toward digital services like e-commerce and streaming, have caused significant disruption to the Indonesian telecommunications industry. To meet these challenges, Telkomsel is undergoing a digital transformation that focuses on a number of areas, including: developing a high-speed, dependable network infrastructure; introducing new digital services like e-commerce, fintech, and education; and enhancing customer experience through an integrated digital platform.

Acknowledging the overwhelming evidence demonstrating the significant impact of digital technologies on innovation and business (Bouwman et al, 2019; Kohli & Melville, 2019; Svahn et al, 2017; Tumbas, Berente, & Brocke, 2018), we think that enterprises now have more chances than ever to innovate because of the introduction of digital technologies like social media, cloud computing, the Internet of Things (IoT), business analytics, and artificial intelligence (AI) (Nylén, 2015; Sedera et al , 2016; Yoo et al, 2012; Yoo et al , 2010).

The majority of digital firms meet one or both of these criteria: either they employ digital technology to boost performance, revenue, and growth in ways that aren't achievable with traditional methods, or they concentrate on adding new value to their core company. Reviewing and contrasting the common components of digital enterprises with their own business models may prove beneficial for organizations. These are some of the developments that set digital workflows apart from conventional ones. (Syarif & Aminda, 2019)

By using diverse digital platforms, Indonesia can grow more quickly and affordably in a number of industries, including education, health, finance, and other areas. These prospects arise from the application of digitalization. According (Nylén, 2015; Walther, et al, 2013; Zittrain, 2009), digital technology may be viewed as a catalyst for innovation and business. It can bring together internal and external stakeholders to create shared value. However, the degree of change brought about by digital technology—also known as digital business transformation—is intricate, deep, and occasionally deviates from what has been established in earlier studies. Citing prior research on the topic, (Nambisan, 2017; Nambisan et al, 2017; Nambisan et al 2019), among others, state that "digital technologies dissolve traditional boundaries and shift the processes of business and innovation outcomes, potentially rendering existing theories obsolete and necessitating the investigation of this intersection as a new phenomenon." (Berger et al, 2021)

As a result, it's critical to have a vast and excellent digital connection infrastructure as well as digital platforms and services that meet community demands. Telkomel is investing in bolstering its digital connection business line, digital platforms, and digital services in order to support the development of a digital society, a digital environment, and a faster-growing digital economy. Businesses need to adapt to survive and grow in an era of disruptive innovation and fast technological advancement.

An actual instance of Telkomsel's digital revolution is the growth of e-commerce companies. Telkomsel has introduced a number of online shopping portals, including:

- a. Telekomsel HaloPrix is an online store that sells a range of goods, including credit, data plans, electronics, and lifestyle items.

b. Verena is an online store that specializes on digital goods including games, apps, and music. c. IndiHome: An online store that provides a range of IndiHome goods and services, including landline phones, cable TV, and home internet.

Telkomsel offers a range of convenient ways for clients to buy for digital goods and services through its e-commerce platform. Consumers can use the website, smartphone application, or USSD to access the Telkomsel e-commerce platform. Additionally, Telkomsel provides a number of simple and safe payment options, including credit cards, bank transfers, and e-wallets. This case study explores how Telkomsel uses digital transformation to fortify its digital services and e-commerce ventures and to better position the organization for the disruptive age.

II. Literature Review

A. E-Business

According to Turban et al, (2002), e-business encompasses a wider meaning of e-commerce than only purchasing and selling products and services. It also includes customer support, working with business partners, and carrying out electronic transactions inside a company. E-business, according to Chaffey, is any information sharing through electronic media that supports different business activities, both inside the company and with outside stakeholders. (Chaffey, 2011). The use of electronic tools to carry out internal and/or external business operations inside an organization is referred to as e-business. Internal e-business operations involve establishing online connections between company personnel to promote knowledge distribution, information exchange, and the generation of management reports. According to Jelassi and Enders (2005), e-business operations also involve working with business partners and providing after-sales assistance. E-business refers to the application of information technology and computer networks (intranet, extranet, and other networks) to corporate communications, e-commerce, and business operations. Thus, it may be argued that e-business encompasses more than just e-commerce. E-business encompasses more than just buying and selling transaction activities; it also provides electronic support for all current company processes. (O'brien & Marakas, 2013)

B. Digital Transformation

According to Westerman et al., (2011), digital transformation is the application of technology with the goal of enhancing a business's performance and reach by fundamentally altering its value propositions, internal procedures, and customer interactions. Digital transformation is the process of using a mix of computers, information technology, communication, and networking to improve a specific business and cause major changes in its features. (Vial, 2021; McGrath & Maiye, 2010). Kane et al (2015) state that prompt completion of this is necessary. It also highlights the need for adjustments in leadership, culture, and mindset in addition to new technology, ways of working, risk-taking mindsets, and a readiness to embrace uncertainty and constant change.

The possible advantages of digital transformation include increased sales and efficiency, value creation innovation, and new consumer engagement channels,(Matt et al ,2015). Heavin and Power (2018) point out that the advent of digital transformation may lead to the use of technologies like analytics and machine learning, which can provide countless possibilities for improving internal efficiency and organizational solutions.

In order to allow business models, operational procedures, and customer experiences to produce value, digital transformation is "an evolutionary process that leverages digital capabilities and technologies" (Morakanyane, et al, 2017). The application of new digital technologies, such social media, mobile, analytics, or embedded devices, that enable major business benefits, including customer experience, optimizing processes, and developing new business models, is known as a company's digital transformation. According to Vial (2021) research, digital transformation is a multifaceted phenomena that is facilitated by technology and affects the economy, politics, and society.

C. Examples of Digital Business

A notable example of a corporation that has transitioned from an electrical to a digital industry is Netflix. At first, Netflix was only a DVD rental and sales firm. These days, Netflix uses technology to rent or sell its films via websites and applications. Its clients may obtain the newest films without ever leaving their houses.

GOJEK The online driving services are among the advancements that offer the most benefits. Among the businesses offering this service is Gojek, a private company based in Indonesia that offers delivery as well as other services. For this reason, Gojek is referred to as a "super app." In Southeast Asia, Gojek is the most

widely used platform for apps that combine many services into one. Gojek is the most popular on demand app in Indonesia since it raises the standard of living for the country's citizens. Gojek is now expanding

quickly as well. Because of the Gojek app's assistance, drivers may reach a larger clientele. (Fauzi et al., 2022)

III. Research Method

This analysis was conducted using a descriptive method that incorporates qualitative research methodologies. The non-numerical text-based data analysis used in the qualitative technique allows researchers to draw conclusions from their work. (Sugiyono, 2016). This study makes findings through the application of inductive reasoning by examining the occurrences that take place in relation to Telkomsel's digital transformation. The benefits and added value of Telkomsel's business model, as well as the continuous change taking place in the present environment. In order to assess and characterize innovation and assist conventional businesspeople in keeping up with advancements in the digital age, this piece incorporates pertinent theoretical sources as part of its literature purpose relating to strategy in business in the contemporary digital era.

To achieve a thorough analysis, primary and secondary data were gathered for this study from a variety of sources. In-depth interviews with key Telkomsel informants, such as upper management and staff members directly involved in the digital transformation project, were conducted in order to gather primary data. These in-depth conversations offered insightful information. Furthermore, firsthand observation of further Telkomsel-created e-commerce efforts was carried out in order to have a better understanding of the difficulties experienced during implementation. A variety of pertinent sources, such as books, papers, scientific journals, official company documents, and Telkomsel's annual report, were used to collect secondary data. The theoretical foundations and background information required for the examination of the main data were supplied by these secondary sources.

The investigation used a number of techniques to gather data. For the purpose of conducting in-depth interviews, semi-structured techniques were employed, which gave participants the opportunity to go into further detail and clarify their responses. A conceptual framework served as the basis for the interview questions. To get knowledge about Telkomsel's digital transformation initiatives and procedures, direct observation was also employed. This approach made it easier to comprehend the conditions and surroundings around the adoption of digital transformation. Furthermore, supplementary materials such as government documents, yearly summaries, and business periodicals were acquired to enhance the core data and provide a more thorough understanding of Telkomsel's tactics and results.

An inductive method was taken in the data analysis, which was done in phases. Condensing and organizing information from observations, interviews, and documentation to concentrate on what was pertinent to the study's goals was the first step in the process, known as data reduction. The data was then arranged into narratives, tables, or graphs to facilitate understanding and interpretation in the data presentation stage. Finally, in order to assess the effects and efficacy of Telkomsel's digital transformation initiatives, inferences were derived from the data's patterns, themes, and relationships.

IV. Results and Discussion

A. Results

In order to survive the disruptive period and compete with both new and established rivals, international organizations have adopted digital transformation. To put the process into practice, a variety of digital transformation techniques are available. However, because each organization has different conditions and needs, not all tactics can be used generally. The amount of research on digital transformation is growing over time. Organizations of all sizes, from small to large, are realizing more and more how critical digital transformation is to their ability to thrive and compete in this disruptive age. Implementing the digital transformation process in a business is not simple. Businesses must take into account a variety of elements to prevent mistakes that might result in losses for the company.

Berthold (2019), identifies five fundamental reasons why businesses need to make the shift to digital.

a. Increasing customer demands

Rapid changes in consumer demands force us to reconsider how we market to and assist clients. Customer-centric is the best option because of this.

b. Higher procurement competence

Business-to-business (B2B) clients' procurement procedures have likewise evolved in tandem with digitization. Clients increase their proficiency in procurement. During the information procurement process, for instance, there has been a noticeable growth in the usage of the Internet and apps. Ninety percent of B2B buyers look up terms online, and seventy percent watch videos to learn more before completing a transaction, according to the study.

c. Growing competition

The emergence of new digital competitors is intensifying the competitiveness of both related and unrelated businesses.

d. Fast pace

Shorter product life cycles result from increased competition, which also increases product diversity and complexity. The need for businesses and their supply chains to operate quickly, adaptably, and transparently is growing. Businesses-to-business enterprises facing mounting pressure are those whose sales strategies are not aligned with this rapid speed.

e. New Technologies

Technology is advancing so quickly these days. An industry that was highly traditional in the past has evolved into one that is highly technological.

1. Gaining Knowledge about Disruptive Innovation

When innovation brings cost, accessibility, ease of use, and simplicity to the market, it's referred to as disruptive innovation. According to digital economic theory, disruptive innovation is the development of new goods or services that will displace established business models in an effort to lower costs and improve accessibility for consumers in particular market sectors. Clayton M. Christensen popularized this idea by describing how new businesses might upend well-established ones by providing goods or services that eventually perform better (Christensen, 2006). He discussed how technology advancements are presently being accompanied with disruptive innovation. According to Clayton Christensen, disruptive innovation pertains to any scenario in which an industry undergoes upheaval and firms that have faced decline in the past are affected. Disruptive innovation is using technology to make items more accessible and simpler to use rather than refining or upgrading products for the same target market. (Christensen et al., 2008)).

2. Telkomsel's Response to the Disruptive Era

The disruptive era has brought major changes to the telecommunications industry. The emergence of new players, such as Google and Facebook, as well as the shift in consumer preferences to digital services, such as e-commerce and streaming, have become challenges for traditional telecommunications operators, such as Telkomsel. To face these challenges, Telkomsel is developing e-business. Telkomsel focuses on developing e-commerce businesses as one of its main strategies to diversify revenue sources and capture opportunities in the digital era. This is done through :

- a. Launching e-commerce platforms: Telkomsel introduced a number of e-commerce platforms that provide a range of digital goods and services, including Telkomsel HaloPrix, Verena, and IndiHome.
- b. Telkomsel engages in partnerships with a range of entities, including finance, e-commerce, and startups, in order to broaden its scope and enhance its range of products.
- c. Technology investment: To enhance the customer experience and customize services, Telkomsel makes investments in cutting-edge e-commerce technologies, including big data, machine learning, and artificial intelligence.

Examining international instances, such as Kodak's inability to adjust to digital photography and Blockbuster's dispute with Netflix, emphasizes how crucial it is to welcome change and creativity. These incidents demonstrate how falling behind might result from being in your comfort zone. The strategy of Telkomsel places a strong emphasis on the value of ongoing innovation and adaptability. To remain competitive, businesses need to make investments in digital skills development, cultivate an innovative culture, and investigate uncharted commercial territory. By promoting skill development in fields like data science, artificial intelligence (AI), software development, and digital marketing, higher education institutions also significantly contribute to prepare the workforce for future disruption.

3. Telkomsel's Gains from Digital Transformation

Telkomsel has benefited greatly from the digital transition, including:

a. Raising Income

The e-commerce division of Telkomsel has grown quickly in recent years. This contributes to the company's revenue growth and revenue diversification .

Tabel 1. Telkomsel Revenue

DESCRIPTION (In billion Rupiah)	2023	2022	2021	2020	2019
PROFIT AND LOSS					
Total Revenues	102,371	89,039	87,506	87,703	91,088
Legacy	10,671	16,709	19,275	24,775	32,852
Digital Business	78,473	72,930	68,231	62,328	58,237
IndiHome B2C	13,227	-	-	-	-
Total Expenses (exclude Depreciation & others)	50,293	38,551	37,485	36,010	41,870
EBITDA	52,078	50,488	50,021	51,094	49,218
Net Income	21,878	18,367	26,160	25,062	25,799

Data Source : (Telkomsel, 2023)

b. Increase customer engagement

Telkomsel's digital platform enables businesses to communicate with clients in real time and more personally. Both consumer happiness and engagement are enhanced by this. Telkomsel IT keeps pushing to deliver the greatest data connectivity and digital products in order to keep driving the digital ecosystem. This is accomplished by keeping the flame of Indonesian service and support burning brightly while the whole country works together to progress the digital ecosystem. Our IT department provides advanced platforms and equipment for marketing and sales. Both DigiPOS for individualized services and the MyTelkomsel application for direct client contact have seen significant upgrades. In 2023, MyTelkomsel enabled access to MaxStream, our video-on-demand service, and Dunia Games with the integration of single sign-on. Telkomsel's digital platform enables businesses to communicate with clients in real time and more personally. Both consumer happiness and engagement are enhanced by this. Telkomsel IT keeps pushing to deliver the greatest data connectivity and digital products in order to keep driving the digital ecosystem. This is accomplished by keeping the flame of Indonesian service and support burning brightly while the whole country works together to progress the digital ecosystem. Our IT department provides advanced platforms and equipment for marketing and sales. Both DigiPOS for individualized services and the MyTelkomsel application for direct client contact have seen significant upgrades. In 2023, MyTelkomsel enabled access to MaxStream, our video-on-demand service, and Dunia Games with the integration of single sign-on.

c. Improving productivity

Telkomsel keeps using segmentation, customization, and service differentiation techniques to maximize customer value. Securing profitability through core revenue management and cost optimization strategies is the company's top priority. As we support the rise in data load and the digital business sector with planned, sustainable, and smart capital investment, we prioritize continuous improvement through network optimization. Telkomsel has seen an increase in the effectiveness of its several business operations thanks to digital transformation. This lowers expenses and boosts profitability for the business. Total equity increased by 2.0% year over year until the end of 2023, mostly as a result of higher retained earnings. Telkomsel has demonstrated impressive profitability, which it has reinvested to promote long-term stability and sustainable growth.

Table 2. Telkomsel's Stability And Sustainable Growth

DESCRIPTION (Rp BILLION)	DEC-23	DEC-22	GROWTH
Current Assets	20,505	15,937	28.7%
Non-current Assets	92,461	85,055	8.7%
Total Assets	112,966	100,991	11.9%
Current Liabilities	40,009	31,272	27.9%
Non-current Liabilities	42,308	39,677	6.6%
Total Equity	30,649	30,042	2.0%
Total Liabilities and Equity	112,966	100,991	11.9%

Data Source : (Telkomsel, 2023)

B. Discussion

The telecommunications industry in Indonesia has seen significant changes due to digital disruption. Key players like Telkomsel, Indosat, XL Axiata, Smartfren, and Axis have adopted various strategies to adapt to this new environment. This discussion focuses on comparing these operators in terms of their digital business processes, highlighting how Telkomsel's approach has been particularly effective.

4. Comparative Analysis

a. Telkomsel

With an emphasis on e-commerce, fintech, high-speed network infrastructure, and enhancing consumer experiences through integrated digital platforms, Telkomsel has implemented a complete digital transformation plan. In order to increase consumer interaction and diversify its income sources, Telkomsel has introduced a number of e-commerce platforms, such as Telkomsel HaloPrix, Verena, and IndiHome, according to the company's Annual Report (2023). To increase consumer satisfaction and operational effectiveness, large sums of money have been invested in big data, artificial intelligence (AI), and machine learning. With strong growth in the adoption of digital services and total market share, this strategic focus has resulted in a noteworthy rise in revenue and customer engagement (Telkomsel, 2023).

b. Indosat Ooredoo Hutchiso

To improve the customer experience, Indosat Ooredoo Hutchison has focused on digital services and apps. In order to provide these digital services, the firm has updated its network infrastructure. To enhance service delivery, it has also launched a number of consumer solutions, including the MyIM3 app. Despite these initiatives, Indosat's market performance in digital services has seen modest growth, with a focus on boosting consumer data use. (Indosat, 2021).

c. XL Axiata

XL Axiata has made significant investments in digital transformation with the aim of improving customer experience and service performance. To increase the range of services it offers, the firm has partnered and collaborated with a number of digital service providers. XL Axiata has increased operational efficiency by streamlining processes using digital tools and platforms and introducing apps and services targeted at enhancing consumer interaction. Through these initiatives, XL Axiata has established itself as a market competitor with modest growth in digital services. (Axiata, 2023).

d. Smartfren

Smartfren has prioritized customer-focused services and digital innovation. The organization consistently broadens and enhances its network infrastructure to facilitate its digital offerings, appealing to a technologically astute clientele. By utilizing digital transformation to strengthen its position in the market, Smartfren has witnessed gradual gains in client acquisition and retention as a result of these activities. (Smartfren, 2023).

Tabel 3. Comparative Data Table

Company	Digital Transformation Focus	Key Platforms /Services	Revenue Growth	Customer Engagement	Technological Investments
Telkomsel	Comprehensive digital strategy, e-commerce	HaloPrix, Verena, IndiHome	High	High	Big data, AI, Machine learning
Indosat	Digital services, network upgrades	MyIM3 app	Moderate	Moderate	Network infrastructure
XL Axiata	Service delivery, customer experience	XL apps	Moderate	High	Digital tools and platforms
Smartfren	Innovation, customer-centric services	Digital products	Moderate	Moderate	Network expansion

Data Source : data processed (2024)

From the comparative analysis, it is evident that Telkomsel's digital transformation strategy has been the most effective in adapting to the disruptive era. Their focus on comprehensive digital business processes, significant technological investments, and diversified service offerings has resulted in substantial revenue

growth and enhanced customer engagement. Other operators like Indosat, XL, Smartfren, and Axis have also made notable strides, but Telkomsel's holistic approach to digital transformation sets it apart as a leader in the industry.

V. Conclusion

Telkomsel's digital transformation path serves as a model for other businesses navigating this disruptive age. Telkomsel has not only survived but has also flourished by embracing digital connections, platforms, services, and an innovative culture, creating endless opportunities for the future. The takeaways from this case study emphasize how crucial it is for companies to keep innovating and becoming ready for constant disruption if they want to stay relevant and expand in a market that is always changing. To confront the disruptive environment, Telkomsel has found success with digital transformation. Telkomsel has achieved success in raising income, customer engagement, and efficiency by concentrating on e-business growth. In order to remain competitive, protect consumer data, and stay abreast of legislative changes, Telkomsel will need to continually come up with new ideas and ways to enhance its offerings. Telkomsel has exhibited a proactive approach to the disruptive period through the implementation of digital transformation, advancement of e-business, bolstering of innovation, augmentation of data security, and improvement of network quality. These initiatives show Telkomsel's dedication to maintaining its position as the industry leader in Indonesia's telecommunications sector and offering its clients the greatest digital services available.

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