

Received: September 17, 2024

Revised: December 06, 2024

Accepted: December 25, 2024

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MARKETING | RESEARCH ARTICLE

Efforts To Overcome the Digital Crime Modus Operandi of Clicking Whatsapp Links that Harm Customers Using the 4c Diamond Framework with Tows Analysis

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Abstract: This research aims to determine efforts to overcome digital crime, the modus operandi of clicking WhatsApp links that harm customers using TOWS analysis at PT. Bank Rakyat Indonesia Kudus branch. The research sample consisted of 8 sources (informants) who were selected based on holding positions starting from Head of Unit as well as additional informants who were competent in their fields, Supervisor, 2 (two) CS and 2 (two) IT officers, who had sufficient time to be interviewed and were willing to become informants. Data was collected through interviews and analyzed qualitatively using the 4c diamond framework using TWOS analysis. The research results showed that efforts to overcome digital crime, the modus operandi of clicking WhatsApp links, was based on the 4c diamond perspective. Where category 4c includes Change, Competitor, Customer and Company. Based on the perspective of change (change), the following crime prevention efforts use Strength and Opportunities strategies. This is due to the tendency for opportunities to be compared to threats and for strengths to be compared to weaknesses, so it is not meaningful for the BRI Undaan Kudus Unit. As well as the Strategy position Based on TOWS Analysis at PT. Bank Rakyat Indonesia Undaan Unit. Based on the TOWS analysis results, the BRI Undaan Kudus Unit is in quadrant 1, where this quadrant indicates that the situation is very favorable for the BRI Undaan Kudus Unit.

Keywords: Whatsapp Digital Crime, BRI Kudus Branch, TOWS Analysis, 4C Diamond Framework.

JEL Classification Code: G21, K24, M15, O33

1. INTRODUCTION

Globalization has changed the pattern of people's lives with the increase in information and communication technology, triggering social, cultural, economic, defense, security, and law enforcement changes. The advancement of communication technology marks the era of globalization, called the information age. Social media, such as WhatsApp, has become the primary means of daily communication, allowing users to socialize with each other, interact, share information, and establish cooperation. In the era of digitalization, mobile banking is essential to support daily activities. Many banking industries are competing to meet customer needs by creating mobile banking that has various benefits and is supported by good security. The banking industry is an essential economic activity because it is inseparable from the flow of money payment traffic.

Banking is needed to save money from the economy safely, quickly, and securely. Bank Rakyat Indonesia (BRI) has a superior product, BRIMO mobile banking, an Internet data-based digital financial application. BRIMO provides easy transactions anytime and anywhere for BRI customers via Android and IOS mobile devices. However, BRIMO mobile banking still has a gap for digital crimes to be committed by criminals with expertise in using the system (Cyber Crime). The rampant crime mode is clicking the link on the WhatsApp application sent by digital criminals so that criminals can tap and control their cell phones. Information such as User ID and PIN can be obtained to access



mobile banking and commit burglary by requesting OTP numbers sent via SMS to aggrieved customers.

The problem of digital crime at the BRI Kudus Branch, especially in the Undaan Unit, shows the need to overcome this crime. The number of WhatsApp fraud complaints in the Undaan Unit reached 30 people in 2023-2024. Therefore, it is necessary to conduct further research to tackle these digital crimes using the 4C Diamond Framework and TWOS analysis to evaluate strengths, weaknesses, opportunities, and threats. This research aims to identify 4C perspectives (opportunities, threats, strengths, weaknesses) using TOWS analysis at PT. Bank Rakyat Indonesia Undaan Unit, analyze strategic positions based on TOWS analysis, and determine strategic steps to overcome digital banking crime in Undaan Unit. Thus, this research aims to identify and overcome rampant digital crimes in the BRI Kudus Branch, especially in the Undaan Unit, through 4C perspective analysis and effective countermeasure strategies.

2. LITERATURE REVIEW

Research conducted by Rahmadani Ningtyas Sekar Putri (2022) with the title *Analysis of Socialization Patterns of Prevention of Social Engineering Modes by Banks Through Website and Twitter social media* shows the results that socialization through the website and Twitter social media makes it easier for customers to understand socialization digitally by making videos or poster images that are attractively designed so that customers are interested in reading.

Research conducted by Muhammad Khairul Faridi (2018) under the title *Cyber Crime in the Banking Sector* shows that the application of Internet technology in the banking world is critical. However, digital crimes, such as skimming, hacking, and malware, are prone to occur. Countermeasures for digital crimes include using triple authentication, namely passwords, tokens, and biometrics. Research by Dian Eka Kusuma Wardani and Maskun (2023), titled "Skimming Crime as One of the Cyber Crimes," shows that skimming is a crime against a person's data. Although the information is very private and confidential, the perpetrator controls it to control the victim's account. Cybercrime refers to the activity of computers or computer networks that are the tools of crime. Therefore, skimming crime is closely related to digital crime.

Research by Dian Alan Setiawan (2019) entitled *The Development of the Modus Operandi of Skimming Crime in Breaking into Bank ATM Machines as Cybercrime* shows that with the help of a skimmer machine, the perpetrator can record and find customer data through the customer's ATM card and then transfer the data to the perpetrator's ATM so that customer funds can be drained. Research by Nurul Khasanah and Tata Sutabri (2018), titled *Cybercrime Analysis on Hacking and Tapping Whatsapp Applications*, shows that hacking and cybercrime actions on the WhatsApp application are criminal acts because the perpetrators can find out important things and break into data through links sent in WhatsApp messages. Saskara and Arthani (2021) conducted research with the title *Tinjauan Krimonologi Terhadap Kejrim Skimming Melalui ATM di Polda Bali*. The study aimed to examine the criminality of crimes that occurred in Bali. The result of the research is that two factors cause skimming. Furthermore, countermeasures can be in the form of pre-motif, namely socialization to the public to be careful in transactions—preventive cooperation with banks to remind customers to be more vigilant. Moreover, repressive arrests are made by providing legal sanctions for the perpetrators of skimming crimes.

3. RESEARCH METHOD AND MATERIALS

This research uses a descriptive qualitative approach that aims to describe the phenomenon of digital crime by clicking WhatsApp links at BRI Unit Undaan, Kudus. This descriptive approach collects data in words, images, and not numbers. The method used is TOWS analysis, focusing on how BRI Unit Undaan makes mitigation efforts in dealing with these digital crimes. Qualitative research was chosen because it relies on the philosophy of postpositivism or interpretative, where research is conducted in natural conditions with the researcher as the vital instrument. Data collection techniques were triangulated, combining interviews, observation, and documentation. The research subjects are parties who understand the problem of digital crime, which is the object of research,

namely the Head of the Unit, the Supervisor, two Customer Service people, and two IT Officers at BRI Unit Undaan. The object of research is a report related to digital crime with the mode of clicking WhatsApp links received by BRI Unit Undaan. The researcher chose the location at BRI Unit Undaan Kudus, which is located on Jalan Kudus-Purwodadi KM 15 because it is the unit that receives the most digital crime reports.

This research is scheduled from January to March 2024, with stages ranging from guidance, data collection, proposal examination, interviews, results seminar, to thesis trial. The primary and secondary data sources used in this research are primary and secondary. Primary data was obtained through direct interviews with informants, which included the Head of the BRI Undaan Unit as the primary informant, and triangulation was conducted with the Supervisor, Customer Service, and IT Officer. Secondary data was collected from documents and digital crime complaint reports owned by the BRI Undaan Unit. The data types analyzed include interview results, the number of complaints recorded, and related documents. Data collection techniques were carried out through three main methods: interviews, observation, and documentation. In-depth interviews were conducted to obtain comprehensive information about this digital crime phenomenon. The researcher conducted the observation using the 4C diamond framework that analyzed the external and internal factors of the informants at BRI Unit Undaan. Documentation includes collecting evidence in the form of photos, reports, and information that supports the research.

The validity of the data in this study was tested using the triangulation method, namely by comparing data from various sources to measure the level of trustworthiness. Triangulation is done by comparing the results of interviews with observations, as well as with relevant documents. The results of this triangulation are expected to provide a more complete picture of the problems studied. This study aims to understand and analyze the mitigation efforts made by BRI Unit Undaan in dealing with the rise of digital crime through the modus operandi of clicking WhatsApp links. By using TOWS analysis and the 4C diamond framework, this research provides insight into the strategic steps that can be taken to tackle this problem. The research results are expected to contribute to BRI and other financial institutions in improving digital security and reducing cases of digital crime in the future.

3.1. 4C Diamond Framework

Hermawan Kertajaya uses the “4C Diamond” model, which consists of change, competitor, customer, and company Hermawan Kertajaya and Muhammad Syakir Sula (2006). Furthermore, before designing a business strategy, it is necessary to review the future business situation. The following will describe the 4C Diamond Framework as follows:

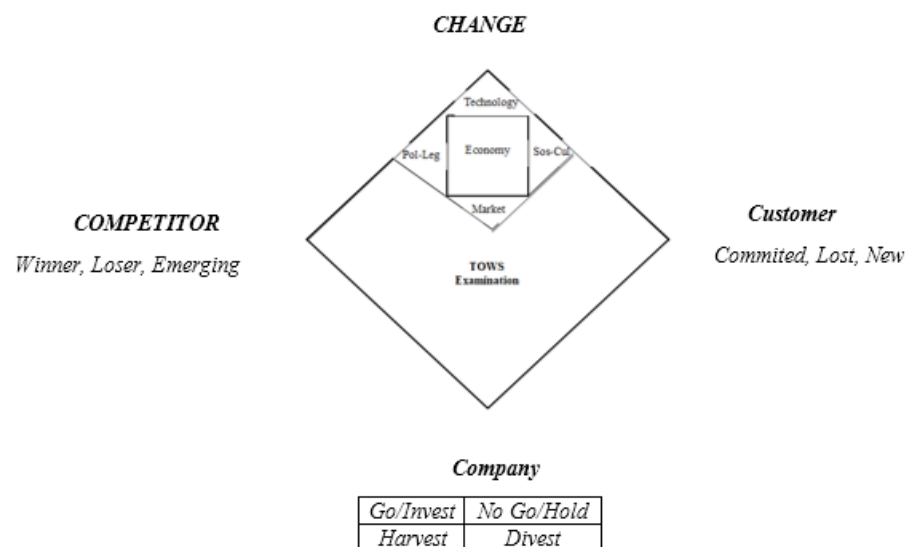


Figure 1. 4C Diamond Framework with TOWS Examination

3.2. TOWS Analysis

The Strength - Weakness - Opportunity - Threat matrix is a matching tool that can assist managers in developing four strategies, as follows: SO (strength-opportunity), WO (weakness-opportunity) strategy, ST (strength-threat), WT (weakness-threat) strategy (David, R. Fread and Forest R. David, 2015: 171). Furthermore, using TWOS analysis can use a diagram approach, which is helpful in planning a strategic policy determination of a company using a TOWS diagram. Using strategic factors as in the EFAS and IFAS tables, we can create possibilities for alternative strategies (SO, ST, WO, WT) based on this. The following will describe the TOWS matrix as follows:

Table 1. TOWS Matrix for Strategic Analysis

IFAS EFAS	STRENGTH (S)	WEAKNESS (W)
	Determine the internal strength factors.	Determine internal weakness factors.
OPPORTUNITIES (O)	Strategi SO Create a strategy that uses strengths to capitalize on opportunities	STRATEGI WO Create strategies that minimize weaknesses to take advantage of opportunities.
THREATS (T)	STRATEGI ST Create a strategy that uses strengths to overcome threats	STRATEGI WT Create strategies that minimize weaknesses and avoid threats.

4. RESULTS AND DISCUSSION

4.1. Research Results

The results of this study show that Bank Rakyat Indonesia (BRI) Kudus Branch faces significant challenges related to digital crime, especially the modus operandi of clicking WhatsApp links that harm customers. This research uses the 4C Diamond Framework and TOWS analysis to identify external and internal factors affecting BRI.

External Factors:

Opportunities: Improving economic conditions in the community, increasing customer demand, and developing banking technology.

Threats: The emergence of digital bank competitors and online lending and the negative impact of unfavorable economic conditions.

Internal Factors:

Strengths: Extensive branch network, the launch of BRIsat, which improves operational efficiency, and good operational services.

Weaknesses: Lack of attention to employees, limited IT resources, and high operational costs.

TOWS Analysis: BRI Unit Undaan Kudus is in the favorable quadrant, which indicates that market development, service, and market penetration strategies are essential to implement.

4.2. Discussion

This discussion focuses on analyzing the factors that influence BRI in facing the challenges of digital crime. The 4C Diamond Framework analysis shows that BRI has opportunities to improve services and attract more customers. However, it is also faced with threats from competitors who offer more competitive interest rates. SWOT analysis shows that although BRI has strengths in the form of an extensive branch network and operational efficiency, weaknesses in attention to employees and

IT resources can affect customer satisfaction. To overcome digital crime, BRI must educate and train employees and increase customer awareness about transaction security. Employees are at the forefront of keeping customer data safe, so they need to keep their knowledge of banking technology up to date. Overall, BRI must continue to innovate and strengthen customer relationships while addressing internal weaknesses to maintain a competitive advantage in the banking sector.

5. CONCLUSION

The TOWS (Threats, Opportunities, Weaknesses, Strengths) analysis of PT. Bank Rakyat Indonesia Undaan Unit involves identifying the 4C Diamond Framework perspective: Change, Competitor, Customer, and Company. In this context, external factors include opportunities and threats, while internal factors include strengths and weaknesses. Change includes changes in the business environment and technology, such as the rise of digital crime through WhatsApp. Competitors involve analyzing other competitors in the banking industry. Customer considers customer needs and behavior, including security and ease of digital transactions. The company assesses internal strengths and weaknesses, such as IT capabilities and employee education. The analysis results show that BRI Unit Undaan is in quadrant 1, which signifies a favorable situation with incredible opportunities and significant internal strengths, such as good service quality and IT capabilities.

Based on this strategic position, BRI Unit Undaan can take strategic steps to overcome digital crime. These steps include providing education and training to employees to prevent and overcome digital crime, especially the mode of fraud through WhatsApp; constantly developing the IT field to monitor and keep pace with the development of digital technology so that customer data security is maintained; and customers who have already clicked on the WhatsApp link must immediately secure personal data by turning off the device, resetting, contacting the call center, and changing the mobile banking user name and password. Thus, BRI Undaan Unit can increase the security and trust of its customers through a comprehensive and sustainable strategy.

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