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Author Name(s): Edward Zadrach Sawaki, Ferdinandus Christian

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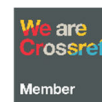
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The effect of the fraud triangle (pressure, opportunity and justification) on the occurrence of fraud

Edward Zadrach Sawaki^{*}, Ferdinandus Christian

Universitas Ottow Geissler Papua, Indonesia

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ABSTRACT

The influence of the fraud triangle (pressure, opportunity and justification) on the occurrence of fraud in Bank Papua. This study first aims to analyze the effect of pressure on fraud partially. Second, to analyze the influence of opportunity on fraud. The third is to analyze the effect of justification on fraud and the fourth is to analyze the influence of the three fraud triangle variables simultaneously or together on the occurrence of fraud with objects on permanent employees of Bank Papua. The research was conducted in five offices each of the Head Office, KCU Jayapura, KC Abepura, KC Sentani and KC Arso. Data collection techniques through primary data through questionnaires and secondary data through literature studies from books, journals and company data. The analysis tool used is a multiple linear regression model using the SPSS version 26 application which is applied to a sample of 89 respondents. The results show that the three independent variables (pressure, opportunity and justification) have an influence on the bound variable (fraud) both partially and simultaneously. And the influence of the three independent variables on the fraud variable is 30.1%.



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Corresponding Author:

Edward Zadrach Sawaki,
Universitas Ottow Geissler Papua, Indonesia
Email: edwardsawaki@gmail.com

Introduction

Fraud or fraud is an illegal act carried out with the aim of obtaining illegal profits through manipulation, fraud, or abuse of trust (Eabrasu, 2020; Ramamoorti, 2019). Fraud can occur in various sectors, including finance, business, and government, and can have a serious impact on economic and social stability (Ahmad et al., 2021; Hilal et al., 2022). In the world of finance, fraud is often associated with crimes such as money laundering, corruption, and credit card fraud (Aradhea & Fadlian, 2024; Rose-Ackerman & Palifka, 2018). According to the research of Ali et al. (2022), fraud detection methods are increasingly developing with the use of technology such as machine learning and anomaly analysis to identify suspicious transaction patterns (Ali et al., 2022). The implementation of artificial intelligence-based detection systems has increased effectiveness in reducing fraud risks by classifying abnormal behaviors that can indicate fraud (Bao et al., 2022; Yuhertiana & Amin, 2024).

Fraud detection methods continue to develop to overcome the increasingly complex modus operandi of financial crime perpetrators (Hasham et al., 2019). A study by Al-Hashedi and Magalingam (2021) highlights how data mining and deep learning can be used to improve accuracy in detecting suspicious transactions, especially in banking and insurance systems (Al-Hashedi & Magalingam, 2021). The pressure experienced by individuals can be in the form of financial demands, work targets that are difficult to achieve, or pressure from a competitive work environment. A study by Dias (2021) shows that financial pressure is one of the main triggers for fraud in organizations (Dias, 2021). Meanwhile, the opportunity to commit fraud is greater when there is weakness in the internal control system or lack of supervision. This is supported by research by Awalluddin and Nooriani (2022) who found that a weak internal control system in a company can increase the likelihood of fraud (Awalluddin et al., 2022).




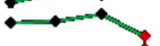







In addition to pressure and opportunity, individuals who commit fraud often seek justification for their actions. This justification can be the feeling that their actions are not directly detrimental or that they are entitled to the benefit because of injustice in the workplace (Susanti et al., 2019). Yusrianti, Ghozali, and Yuyetta (2020) emphasized that rationalization is an important element in an individual's decision to commit fraud, especially in organizations with a work culture that is permissive to unethical actions (Yusrianti et al., 2020).

In recent years, the increase in fraud cases in various sectors shows that understanding the factors that cause fraud is very important in prevention efforts. A recent study by Safitri and Tiswiyanti (2023) shows that a combination of economic pressures, weak internal controls, and strong rationalization are the main factors in the occurrence of fraud in the public and private sectors (Safitri et al., 2023). Therefore, further research is needed on how the three factors in the fraud triangle contribute to the increase in fraud cases and strategies that can be applied to prevent it.

PT. The Papua Regional Development Bank, which has been established since 1966, has now reached the age of 58 years, of course, it has gone through many dynamics in running a business in the financial services sector. Until 2023, Bank Papua's performance has continued to grow since the business transformation carried out in 2017. This is reflected in Bank Papua's financial statements which continue to improve from time to time.

The improvement of business processes, the improvement of the quality of Human Resources and even the reorganization carried out have strengthened the business of Bank Papua to date (Christian, 2018; Meho & Christian, 2019). Intensive monitoring and supervision functions as well as control of non-performing loans are also part of the main focus of Bank Papua's improvement towards a better and more competitive direction. The thing that is also the focus of the improvement of top management is sustainable business growth not only for one or two periods but continuously able to grow positively. Here we can see a recap of Bank Papua's performance on a consolidated basis over the last 4 years (2020 – 2023) as shown in table 1 below.

Table 1. Bank Papua Performance for the 2020 – 2023 Period

| Indicator Kinerja | Periode (Tahun) | | | | Trend |
|----------------------|-----------------|------------|------------|------------|---|
| | 2020 | 2021 | 2022 | 2023 | |
| Total Assets | 25.999.601 | 26.122.560 | 29.812.117 | 32.463.858 |  |
| Credit | 17.034.086 | 17.598.383 | 18.151.862 | 19.589.842 |  |
| Lap | 9.289.682 | 9.087.164 | 12.010.425 | 13.920.145 |  |
| Savings | 8.115.756 | 8.782.011 | 8.619.247 | 9.640.955 |  |
| Warehouse | 3.000.804 | 3.114.592 | 3.551.446 | 2.107.452 |  |
| Total Dpk | 20.406.240 | 20.983.767 | 24.181.118 | 25.668.552 |  |
| Income | 3.394.677 | 2.240.826 | 2.640.990 | 6.366.272 |  |
| Cost | 2.845.533 | 1.888.293 | 2.252.153 | 5.820.685 |  |
| Profit (Loss) | 549.144 | 352.534 | 388.836 | 545.587 |  |
| Excom | 91.397 | 73.413 | 100.847 | 50.146 |  |
| NPL Gross (%) | 4,15% | 3,41% | 2,92% | 2,41% |  |

Source : Bank Papua internal data (2024)

From table 1. As mentioned above, we can see that in general, almost all of Bank Papua's business indicators have increased. Even in 2021, in the midst of the peak of the COVID-19 pandemic outbreak that hit the world, including Indonesia and the Land of Papua, Bank Papua was still able to grow positively in several business indicators.

Currently, Bank Papua's business is managed by 2,579 employees (data as of December 31, 2023) with a total of 2,195 permanent employees consisting of 2,181 active permanent employees and 14 permanent employees with leave status outside the bank's dependents and the rest are contract employees. The complete list is attached to the following table:

Table 2. Number of Bank Papua Employees for the period of December 31, 2023

| Employee Status | Papua | | | Non Papua | | | Total |
|-----------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | M | W | Sum | M | W | Sum | |
| Permanent employees | 532 | 600 | 1132 | 577 | 486 | 1063 | 2195 |
| Active | 531 | 597 | 1128 | 572 | 481 | 1053 | 2181 |
| Leave Outside of Dependents | 1 | 3 | 4 | 5 | 5 | 10 | 14 |
| Contract | 58 | 60 | 118 | 37 | 32 | 69 | 187 |
| Profesional Hire | 0 | 0 | 0 | 1 | 1 | 2 | 2 |
| Internship | 53 | 61 | 114 | 29 | 52 | 81 | 195 |
| Total Amount | 1175 | 1321 | 1364 | 1221 | 1057 | 2278 | 2579 |

Source : Bank Papua internal data (2024)

Meanwhile, the data on the distribution of Bank Papua employees by Work Unit is as follows:

Table 3. Number of Bank Papua Employees Per Work Unit for the period December 31, 2023

| Office/Work Unit | Papua | | | Non Papua | | | Total |
|--------------------|-------|-----|------|-----------|------|------|-------|
| | M | W | Sum | M | W | Sum | |
| Head Office | 79 | 88 | 167 | 203 | 134 | 337 | 504 |
| Branch Office | 564 | 633 | 1197 | 441 | 437 | 878 | 2075 |
| Total Amount | 643 | 721 | 1364 | 644 | 1215 | 2579 | 1215 |
| Head Office | 79 | 88 | 167 | 203 | 134 | 337 | 504 |
| Branch Office | 364 | 389 | 753 | 291 | 288 | 579 | 1332 |
| Sub-Branch Offices | 96 | 146 | 242 | 88 | 110 | 198 | 440 |
| Cash Office | 104 | 98 | 202 | 62 | 39 | 101 | 303 |
| Total Amount | 643 | 721 | 1364 | 644 | 571 | 1215 | 2579 |

Source : Bank Papua internal data (2024)

Meanwhile, the position of the office network as of November 2023 is as many as 224 offices spread throughout the Land of Papua and outside the Land of Papua with details as follows:

Table 4. Number of Bank Papua Office Networks for the period of November 2023

| Office Type | Land of Papua | Outdoor Papua | Total |
|--------------------|---------------|---------------|-------|
| Head Office | 1 | 0 | 1 |
| Branch Office | 39 | 4 | 43 |
| Sub-Branch Offices | 57 | 1 | 58 |
| Cash Office | 122 | 0 | 122 |
| Total Amount | 219 | 5 | 224 |

Source : Bank Papua internal data (2024)

This office network is not included in the Delivery Channel currently owned by Bank Papua, which includes: ATM machines, EDC machines, Online KASDA Services, Online SAMSAT Services, Payment Points, etc. The following is a list of Delivery Channels owned by Bank Papua until the November 2023 period, as follows:

Table 5. Number of Bank Papua Delivery Channels for November 2023

| Delivery Channel | Sum |
|----------------------------------|-------------|
| ATMs (Automated Teller Machines) | 337 |
| Edc (Electronic Data Capture) | 1210 |
| Cdm (Cash Deposit Machine) | 8 |
| Kasda Online | 19 |
| Samsat Online | 23 |
| Kpe (Electronic Employee Card) | 23 |
| Cms (Cash Management System) | 21 |
| Bank Indonesia Cash Deposits | 5 |
| Mobile Cash Car | 2 |
| Payment Point Bank Papua | 51 |
| Total Amount | 1699 |

Source: Bank Papua internal data (2024)

With the breadth of the office network and the availability of Delivery Channels spread throughout the Land of Papua and outside the Land of Papua, this results in a very high level of supervision (span of control). Along with the high level of supervision, commitment and consistency in the implementation of supervision are needed at all levels of operational offices, starting from the Delivery Channel and the Cash Office to the Head Office. To achieve this, the standards that must be set at the leadership level must also be improved and become part of the Human Resource management process at Bank Papua.

Based on the results of the Financial Services Authority Audit for the 2023 period, pointing to the monitoring of the Bank's Risk Profile, there are still weaknesses in management in the Operational Risk and Compliance Risk sectors. This is reflected in the level of violation of applicable regulations, including the number of cases of losses incurred due to fraud incidents. In the period of 2022 – 2023, the number of incidents and the value of losses incurred due to fraud incidents at Bank Papua are 23 cases of fraud incidents with a total loss of ± 31 billion Rupiah.

Bank Papua as a business company engaged in financial services must ensure that the company has a good performance and even a good reputation in managing customer and government funds. In building a good and healthy business, Bank Papua must be able to create honest, clean and conducive internal conditions. Every employee must be able to carry out their duties with full responsibility.

In Indonesia throughout 2023, there are 4 banks that have closed due to fraud cases that occurred (A Series of Bankrupt Banks Due to Fraud, Vocal Association.Pdf, n.d.) and this case has become the concern of the OJK and LPS (Fraud Becomes the Culprit of Bank Bankruptcy, OJK and LPS Take Decisive Steps.Pdf, n.d.). This shows that the impact caused by fraud is not a joke, not only financial losses that must be borne but also non-financial losses such as reputation and even business closures that result in job loss.

According to the results of the 2019 Fraud Survey Indonesia (Association of Certified Fraud Examiners Indonesia, 2019), losses due to fraud are dominated by corruption incidents with the impact value of losses between 100 million to 500 million rupiah per case. In the event that the detected incident is within a span of less than 12 months (< 1 year) with detection media through the means of a complaint report by internal employees from the place where the fraud occurred or with the term internal whistleblowing.

Based on profiles, the majority of fraudsters are most likely at the age of 36–45 years with a working period of 6–10 years in employee positions. At that age, the perpetrator occupies a position and has the opportunity to manage the finances of the company or institution with the educational background of the perpetrator who first holds a Bachelor's degree and the second Masters. And the most disappointing finding of the survey is that most respondents consider that fraudsters have never been punished.

In terms of fraud detection and countermeasures, there is a model developed by Donald R. Cressey in (Cressey, 2017), namely that the factors that motivate a person to commit fraudulent actions are a combination of three components, namely Opportunity, Pressure and Rationalization.

Several previous studies related to the fraud triangle variable or fraud triangle which stated that there was a positive influence between the fraud triangle on the occurrence of fraud simultaneously, including: (Alauddin & Ahalik, 2023), (Suwena, 2021), (Suryandari & Julianto, 2019), (Nuryuliza & Triyanto, 2019) and (Marliani, 2015) which found results that support that the fraud triangle variable simultaneously has a significant effect on the occurrence of fraud.

In other studies, it was also found that not all variables in the fraud triangle have an influence on the occurrence of fraud. This can be found in several research results as follows: Barus et al., (2021) which stated that rationalization/justification has a positive effect on financial statement fraud with the object of research in banking companies listed on the IDX for the period of 2017 – 2019. Next is research from Nurlia & Hermanto (2021) which states that only pressure and rationalization have an effect on accounting fraud study in Public Accounting Firms registered with the OJK in 2019. In the research of Ami Zahara (2017), a study on Class II A Prison in Pekanbaru City also found that only the variables of opportunity and rationalization had a significant and positive effect on fraud (Zahara, 2017). Thus, the fraud triangle variables consisting of pressure, opportunity and rationalization also have a partial or separate influence on the occurrence of fraud.

However, there are several studies that give different results or are said to have research results that do not have an influence between the fraud triangle variable and the fraud variable itself, namely: Gerry Antonio Hormati, David Adechandra Ashedica Pesudo (2019) a study on SKPD East Bolaang Mongondow Regency which stated the results of the study that pressure, opportunity and rationalization have no effect on accounting fraud, in fact, there are other variables in Outside the fraud triangle is the ability to have a positive influence (Hormati et al., 2019).

In this context, there are different results from one study to another, this can be influenced by differences in research objects, determination of research samples and even the validity of the data provided in the research by the respondents. For this reason, further analysis is needed to truly understand the factors that may affect the results of the study.

Specifically, this study will take the research object of PT. The Papua Regional Development Bank where previously there had never been a study that talked about fraud with objects in Bank Papua so that this research will provide new information, especially for Bank Papua and the academic world related to the variables studied.

In general, this fraud-related research raises more about fraud in financial statements or focuses more on the finance or accounting department. However, the research we conducted is more about researching human behavior in accordance with the field of concentration on human resource management.

One of the things that needs to be considered is also the increase in the Labor Load component of PT. Papua Regional Development Bank with the range of 2021 – 2023 which we can see in the following table.

Tabel 6. Trend Beban Tenaga Kerja Bank Papua periode 2021 – 2023

| Year | Description | Nominal | % |
|------|-------------|-----------------|-----|
| 2021 | Labor Load | 669.071.890.918 | 100 |
| 2022 | Labor Load | 740.226.426.917 | 111 |
| 2023 | Labor Load | 775.721.915.659 | 105 |

Source : Bank Papua internal data (2024)

The highest percentage increase in Labor Burden occurred in 2022, which was \pm 71.1 billion rupiah with an increase of 11% from 2021 and then in 2023 it increased again by 5% or 35.4 billion rupiah from the position in 2022. The Labor Load component is positively correlated with the level of employee welfare. Thus, it can be concluded that with the increase in the Labor Load component, employees should feel prosperous and adequate, so it is hoped that the incidence of fraud will be reduced or even nil.

However, the reality is that this condition does not necessarily reduce or eliminate the occurrence of fraud in Bank Papua. Why does this happen..? Do employees still feel less prosperous..? So what are the motives for fraud at Bank Papua..?

Previous studies have examined the influence of the Fraud Triangle—pressures, opportunities, and justifications—on the occurrence of fraud in various sectors. Alauddin and Ahalik (2023) found that pressure and justification have a significant effect on fraud in the financial statements of SOEs, while opportunities do not have a significant impact (Alauddin & Ahalik, 2023). Similar results were obtained in a study by Barus et al. (2021) on banking companies listed on the Indonesia Stock Exchange, where justification is the dominant factor in encouraging fraud (Stevansyah & Suhendah, 2023). On the other hand, Suwena's (2021) research on distribution companies in Bali shows that the three factors in the Fraud Triangle have a simultaneous and partial effect on fraud (Suwena, 2021), in line with the findings of Suryandari et al. (2019) who examined Village Credit Institutions (LPD) in Bali (Suryandari & Julianto, 2019). However, Nurlia and Hermanto's (2019) research focusing on Public Accounting Firms under OJK supervision found that only pressure and justification had a significant effect on accounting fraud, while opportunities and internal control did not show a significant impact (Nurlia & Hermanto, 2021).

The results of your study reinforce previous findings by showing that simultaneous and partial pressures, opportunities, and justifications have a significant influence on fraud in Bank Papua, with a contribution of 30.1%, while 69.9% is influenced by other factors that were not studied. The main difference from previous research lies in the significance of the opportunity, which in some studies does not always have an impact on fraud, depending on the effectiveness of the company's internal control system.

The unique contribution of this research is its focus on the regional banking sector, especially Bank Papua, which has not been widely studied in the context of fraud. In addition, the study also highlights how organizational culture and strict internal controls can affect fraud rates, aspects that were not specifically discussed in previous studies. Thus, this study provides new insights into fraud risk management in the regional banking sector and can be a reference for other financial institutions in implementing more effective fraud prevention strategies.

This study aims to analyze in depth the influence of three main factors on the occurrence of fraud in Bank Papua. First, this study evaluates the effect of partial pressure on the occurrence of fraud. Second, it is also examined how opportunities affect fraud incidence. Third, this study examines the impact of partial justification. In addition, this study also aims to examine the simultaneous influence of the three factors—pressure, opportunity, and justification—on the occurrence of fraud in Bank Papua.

Method

The type of data used is interval data with those classified as quantitative data groups. This quantitative data refers to 4 variables, namely each X Variable which is also called the independent variable consisting of Pressure (X1), Opportunity (X2) and Justification (X3) variables while the Y variable which is also called the dependent variable is Fraud (Y).

The data sources used are primary and secondary data sources. Primary data sources are obtained through questionnaires distributed to research samples while secondary data sources are obtained through books, previous research journals related to research topics and also through company and personnel data.

The population in this study is the total number of Permanent Employees at the Head Office of Bank Papua, which is spread across 18 Division-level Work Units with a total of 491 employees. For 4 (four) Branch Offices located in the Jayapura area, namely: KCU Jayapura, KC Abepura, KC Sentani and KC Arso, based on the nominative employees for the period of December 31, 2023, there are a total of 368 employees, of which employees with permanent employee status amount to 304 people while the remaining 30 PKWT personnel, 32 interns and 2 people who are undergoing leave outside the bank's dependents. The population that will be taken as a reference for determining the sample is 304 permanent employees.

The sampling method used in this study follows the Slovin formula (Widodo, 2017) with a margin of error of 10%. Referring to the total population of 798 people with a margin of error of 10% and using the Slovin formula, the number of samples obtained was 89 people.

The data collection process is carried out through two main stages. First, the field study used a questionnaire with a Likert scale to collect primary data from permanent employees at the Bank Papua Head Office, where respondents chose answers from five options ranging from "strongly disagree" to "strongly agree." Second, literature studies are conducted to collect secondary data from books and journals relevant to the research topic.

Results and Discussions

Validity and Reliability Test Results

The validity and reliability test of the instrument is an absolute requirement that must be carried out to test the validity and reliability of a questionnaire or questionnaire. A questionnaire is said to be valid if it can accurately and carefully measure the object to be measured. Meanwhile, it is said to be reliable, namely if a questionnaire / questionnaire can be consistently used as a measuring tool even though it is used repeatedly at different times.

Validity Test

Validity tests were carried out on 89 questionnaires that had been received to ensure that the questionnaires were able to measure the problems that occurred. Testing is carried out using SPSS version 26, where valid data will be used for the next analysis process while invalid data will be issued and will not be processed. The results of the validity test can be seen in the following table:

Variable Pressure (X1)

The Pressure variable item (X1) is declared valid if it is in accordance with the conditions where the value of r is calculated $>$ the value of the table and the level of significance $<$ value of $\alpha = 5\%$ (0.05). As for the sample of 89, the r value of the table is 0.2084 so that we can see the results of the validity test of the X1 Pressure variable in the following table:

Table 1. Results of the Validity Test of Pressure Variables (X1)

| Questionnaire Items | Correlation Value (calculation) | Correlation Value (rtable) | Significance Level (SPSS calculation results) | α value | Information |
|---------------------|---------------------------------|----------------------------|---|----------------|-------------|
| X1.1 | 0,581 | 0,2084 | 0,000 | 0,05 | Valid |
| X1.2 | 0,593 | 0,2084 | 0,000 | 0,05 | Valid |
| X1.3 | 0,140 | 0,2084 | 0,189 | 0,05 | Invalid |
| X1.4 | 0,569 | 0,2084 | 0,000 | 0,05 | Valid |
| X1.5 | 0,630 | 0,2084 | 0,000 | 0,05 | Valid |
| X1.6 | 0,514 | 0,2084 | 0,000 | 0,05 | Valid |
| X1.7 | 0,405 | 0,2084 | 0,000 | 0,05 | Valid |
| X1.8 | 0,511 | 0,2084 | 0,000 | 0,05 | Valid |

Source: data processed by researchers, 2024

Based on table 1, it is known that of the nine items of the Pressure variable statement (X1), 8 items are valid and 1 item, namely X1.3, is invalid so it is excluded from the research model. Furthermore, the validity test of the Opportunity variable (X2) is shown in table 2.

Table 2. Results of the Validity Test of the Opportunity variable (X2)

| Questionnaire Items | Correlation Value (calculation) | Correlation Value (rtable) | Party Signifikansi (SPSS) | α value | Information |
|---------------------|---------------------------------|----------------------------|---------------------------|----------------|-------------|
| X2.1 | 0,662 | 0,2084 | 0,000 | 0,05 | Valid |
| X2.2 | 0,689 | 0,2084 | 0,000 | 0,05 | Valid |

| Questionnaire Items | Correlation Value (calculation) | Correlation Value (rtable) | Party Signifikansi (SPSS) | α value | Information |
|---------------------|---------------------------------|----------------------------|---------------------------|----------------|-------------|
| X2.3 | 0,737 | 0,2084 | 0,000 | 0,05 | Valid |
| X2.4 | 0,687 | 0,2084 | 0,000 | 0,05 | Valid |
| X2.5 | 0,779 | 0,2084 | 0,000 | 0,05 | Valid |
| X2.6 | 0,777 | 0,2084 | 0,000 | 0,05 | Valid |
| X2.7 | 0,650 | 0,2084 | 0,000 | 0,05 | Valid |
| X2.8 | 0,435 | 0,2084 | 0,000 | 0,05 | Valid |
| X2.9 | 0,698 | 0,2084 | 0,000 | 0,05 | Valid |
| X2.10 | 0,331 | 0,2084 | 0,002 | 0,05 | Valid |
| X2.11 | 0,489 | 0,2084 | 0,000 | 0,05 | Valid |
| X2.12 | 0,298 | 0,2084 | 0,005 | 0,05 | Valid |

Source: data processed by researchers, 2024

Based on table 2, it shows that all 12 items of the Opportunity variable (X2) statement are all Valid. Furthermore, the validity test of the Justification variable (X3) is shown in table 3.

Table 3. Results of the Validity Test of the Justification variable (X3)

| Questionnaire Items | Correlation Value (calculation) | Correlation Value (rtable) | Significance Level (SPSS calculation results) | α value | Information |
|---------------------|---------------------------------|----------------------------|---|----------------|-------------|
| X3.1 | 0,537 | 0,2084 | 0,000 | 0,05 | Valid |
| X3.2 | 0,445 | 0,2084 | 0,000 | 0,05 | Valid |
| X3.3 | 0,612 | 0,2084 | 0,000 | 0,05 | Valid |
| X3.4 | 0,667 | 0,2084 | 0,000 | 0,05 | Valid |
| X3.5 | 0,125 | 0,2084 | 0,244 | 0,05 | Invalid |
| X3.6 | 0,009 | 0,2084 | 0,936 | 0,05 | Invalid |
| X3.7 | 0,559 | 0,2084 | 0,000 | 0,05 | Valid |
| X3.8 | 0,558 | 0,2084 | 0,000 | 0,05 | Valid |
| X3.9 | 0,671 | 0,2084 | 0,000 | 0,05 | Valid |
| X3.10 | 0,589 | 0,2084 | 0,000 | 0,05 | Valid |

Source: data processed by researchers, 2024

Based on table 3, it is known that out of the ten items of the Justification variable statement (X3), 8 items are valid and 2 items, namely X3.5 and 3.6, are invalid so they are excluded from the research model. The results of the validity test of the Fraud (Y) variable are shown in table 4.

Table 4. Fraud (Y) variable Validity Test Results

| Questionnaire Items | Correlation Value (calculation) | Correlation Value (rtable) | Significance Level (SPSS calculation results) | α value | Information |
|---------------------|---------------------------------|----------------------------|---|----------------|-------------|
| Y1 | 0,586 | 0,2084 | 0,000 | 0,05 | Valid |
| Y2 | 0,473 | 0,2084 | 0,000 | 0,05 | Valid |
| Y3 | 0,588 | 0,2084 | 0,000 | 0,05 | Valid |
| Y4 | 0,609 | 0,2084 | 0,000 | 0,05 | Valid |
| Y5 | 0,467 | 0,2084 | 0,000 | 0,05 | Valid |
| Y6 | 0,464 | 0,2084 | 0,000 | 0,05 | Valid |

Source: data processed by researchers, 2024

Based on table 4, it shows that all 6 items of the Fraud (Y) variable statement are all Valid.

Reliability Test Results

After the validity test is carried out, the indicator items in the form of statements from the variables X1, X2, X3 and Y which are declared VALID are then continued to be tested for Reliability. This test is carried out to ensure the consistency of the questionnaire if the test is carried out repeatedly. The test was carried out using SPSS version 26 using the Cronbach's Alpha method, where the instrument will be declared reliable if the value of Cronbach's Alpha > the value of the r table. The results of the reliability test can be seen in table 5 as follows:

Table 5. Reliability Test Results

| Variable | Cronbach's Alpha Values | Table r values | Information |
|----------|-------------------------|----------------|-------------|
| X1 | 0,630 | 0,2084 | Reliable |
| X2 | 0,795 | 0,2084 | Reliable |
| X3 | 0,756 | 0,2084 | Reliable |
| Y | 0,630 | 0,2084 | Reliable |

Source: data processed by researchers, 2024

Table 5 explains that after a reliability test is carried out on the variables Pressure (X1), Opportunity (X2), Justification (X3) and Fraud (Y), it is declared RELIABLE for all indicator items used, because the indicators of the variables X1, X2, X3 and Y have an Alpha Cronbach's value that is greater than the r value of the table of 0.2084.

Classical Assumption Test**Normality Test**

The first test carried out is the normality test, which is to find out whether in the regression model, the perturbator or residual variable has a normal distribution. The High regression model is the one that has a normally distributed residual. The data is said to be normally distributed if the results of the Kolmogorov-Smirnov test on the residual value (perturbrating variable) from the multiple linear regression analysis produce a significance value of > 0.05.

Tabel 6. One-Sample Kolmogorov-Smirnov Test

| | | Unstandardized Residual |
|----------------------------------|----------------|-------------------------|
| N | | 89 |
| Normal Parameters ^{a,b} | Mean | .0000000 |
| | Std. Deviation | 2.64200000 |
| Most Extreme Differences | Absolute | .080 |
| | Positive | .080 |
| | Negative | -.077 |
| Test Statistic | | .080 |
| Asymp. Sig. (2-tailed) | | .200 ^{c,d} |

Source: data processed by researchers, 2024

The results of the Kolmogorov-Smirnov test as shown in table 4.47 above produce a significance value of 0.200 where the value is greater than 0.05 so it can be concluded that the data is normally distributed.

Multicollinearity Test

The next classic assumption test is the multicollinearity test where this test aims to test whether a correlation between independent variables is found in the regression model. In the High regression model, there is no correlation between independent variables or no multicollinearity. The conditions or conditions so that multinearity does not occur are: Tolerance value > 0.10 and VIF value < 10.

The following are the results of the Multicollinearity test as we see in table 7. Based on Table 7, it can be concluded that there is no multicollinearity among independent variables.

Table 7. Multiolinerity Test

| Variable | Tolerance | Condition | VIF | Condition | Keterangan |
|----------|-----------|-----------|-------|-----------|--------------------|
| | Count | | Count | | |
| X1 | 0,963 | > 0,10 | 1,039 | < 0,10 | No Multicollineity |
| X2 | 0,891 | > 0,10 | 1,122 | < 0,10 | No Multicollineity |
| X3 | 0,918 | > 0,10 | 1,090 | < 0,10 | No Multicollineity |

Source: data processed by researchers, 2024

Heteroscedasticity Test

The Heteroscedasticity test aims to test whether in the regression model there is a variance inequality from the residual of one observation to another and one of the models to observe the existence of heteroscedasticity is through the observation of Scatterplot, where if the points are scattered irregularly and do not form a pattern, it can be categorized as not heterokedasticity. Figure 1 below is the result of the Scatterplot diagram generated through SPSS version 26.

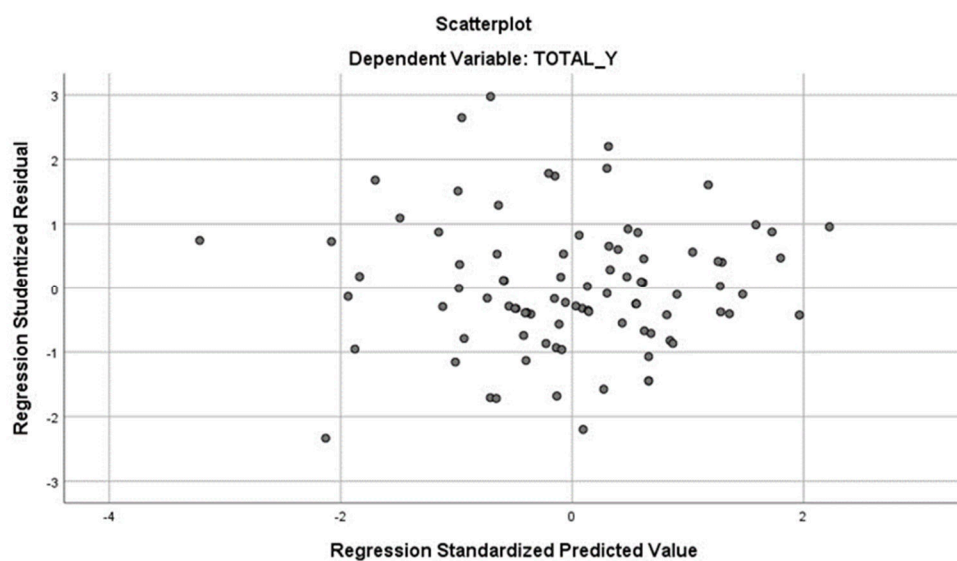


Figure 1 Diagram Scatterplot. Source: data processed by researchers, 2024

From the observation results of Figure 1 above, it is seen that the dots are scattered randomly and do not form a pattern so that it can be concluded that NO SYMPTOMS OF HETEROKEDASTICITY occur.

Multiple Linear Regression Analysis

Multiple linear regression will go through two stages of testing that will be carried out, namely the t-test to test the influence of variable X on the variable Y partially and the test f to test the influence of variable X on the variable Y simultaneously. But before that, we see the regression equation formed from the results of data processing, which is based on the following table 8:

Tabel 8. Persamaan Regresi

| Unstandardized Coefficients | Coefficientsa | | | | Collinearity Statistics | |
|-----------------------------|---------------------------|-------|--------|------|-------------------------|-------|
| | Standardized Coefficients | Beta | t | Sig. | | |
| 1 (Constant) | 18.561 | 2.730 | 6.798 | .000 | | |
| Total X2 | -.112 | .043 | -.240 | .011 | .963 | 1.039 |
| Total_X2 | -.112 | .043 | -2.591 | .011 | .963 | 1.039 |

Source: data processed by researchers, 2024

By looking at table 8 above, the regression equation formed from the results of multiple linear regression is: $Y = 18,561 + 0,285X1 - 0,112X2 + 0,136 X3$

With an explanation: (1) The constant is 18.561 which means that if all variables of X High are Pressure (X1), Opportunity (X2) and Justification (X3) are valued at 0, then the Fraud that occurs is worth 18.561; (2) The coefficient of the Pressure variable is 0.285, meaning that if the Pressure increases by 1 (one) unit, the fraud that occurs is 18.561 added by 0.285 to 18.846. A positive coefficient value means that the higher the pressure, the higher the fraud will also be or in the same direction; (3) The coefficient of the Opportunity variable is - 0.112, meaning that if the Opportunity increases by 1 (one) unit, the fraud that occurs will decrease by 0.112. A coefficient with a negative value (-) means that the higher the Opportunity value, the less fraud will occur or go in the opposite direction.

To this result, several conditions can be explained that occur in real life where the location of this research is located, namely: (a) The object of the research is the Bank Papua Office located in the Jayapura area including the Head Office, KCU Jayapura, KC Abepura, KC Sentani and KC Arso. With locations that are close to each other and easy to monitor from the Head Office and strict supervision, even if there is an opportunity, employees are reluctant and even afraid to commit fraud. In fact, fraud incidents at Bank Papua are dominated by offices that are far from the Head Office or outside Jayapura. Even though there is an incident in Jayapura, it is not at the Branch Office but at the Sub-Branch Office or Cash Office which is located quite far away; (b) The application of strict and measurable sanctions / punishments against fraud perpetrators in the form of financial penalties, dishonorable dismissal and even legal proceedings by serving prison sentences results in employees feeling afraid to try to commit fraud. In addition, another loss is affected by the work unit of the perpetrator who will get a red report card if there is a fraud incident that occurs within the current assessment year period. Thus, the perpetrator will also indirectly receive social sanctions from fellow colleagues because his actions also harm everyone in the work unit; (c) The coefficient of the Justification variable is 0.136, meaning that if the Justification increases by 1 (one) unit, the fraud that occurs is 18.561 added by 0.136 to 18.697. A positive coefficient value means that the higher the justification, the higher or unidirectional the fraud will be.

Test t

The t-test is used to test the influence of each independent variable (partially) on the dependent variable. This will also answer problems 1 – 3, namely to see if each variable X1 (Pressure), X2 (Opportunity) and X3 (Justification) has an effect on the variable Y (Fraud). The requirements in this t-test are to see whether the hypothesis proposed is met or not can be followed through the following rules: (1) If the t-value calculated < t table or the significance value of the independent variable (X1, X2 and X3) > 0.05, then the independent variable has no effect on the bound variable (Y); (2) If the t-value calculated > t table or the significance value of the independent variable (X1, X2 and X3) < 0.05, then the independent variable partially affects the bound variable (Y); (3) Determining the t-value of the table is as follows: Number of respondents (n) = 89, Total number of variables (k) = 4 and df test with n-k formula = 89 – 4 = 85

So, in the T table we see in row 85 with an alpha value of 0.05 in a two-way test, we get a value of 1.98827 which will be a reference for testing with a calculated t-value. The results of the t-test based on the results of data processing using SPSS version 26 can be seen in the following table 9:

Table 9. Test Results t

| Variable | t count | t table | Sig Value | α value | Information |
|----------|---------|---------|-----------|---------|--------------|
| X1 | 3,644 | 1,98827 | 0,000 | 0,05 | X1 affects Y |
| X2 | -2,591 | 1,98827 | 0,011 | 0,05 | X2 affects Y |
| X3 | 2,121 | 1,98827 | 0,037 | 0,05 | X3 affects Y |

Source: data processed by researchers, 2024

Thus, the following things are concluded: (1) The X1 variable (Pressure) has an influence and significance on the occurrence of Fraud and at the same time answers the first problem; (2) Variable X2 (Opportunity) affects the occurrence of Fraud and at the same time answers the second problem; (3) Variable X3 (Justification) has an influence and significance on the occurrence of Fraud and at the same time answers the third problem.

Of the three X variables mentioned above, the one that has the greatest influence is the X1 variable (Pressure). This is in accordance with the fact on the ground that the background of fraud at Bank Papua is currently dominated by actions related to bad habits owned by employees such as playing online gambling, online games and even online loans that exceed the limit of ability so that they are trapped in debt and finally commit theft. Thus, the results of this study are in line with the facts or reality that occur in the field and strengthen the opinion in question.

Furthermore, it is hoped that there will be collaboration between related work units in Bank Papua to prevent similar violations in the future and if necessary, periodic evaluations of regulations and strict selection of prospective leaders of operational units in branch offices, sub-branches and cash offices will be carried out.

Test f

The f test is used to test the effect of all independent variables together (simultaneously) on the dependent variable. This will also answer the fourth problem, which is to see if all variables X1 (Pressure), X2 (Opportunity) and X3 (Justification) affect the variable Y (Fraud). The requirements in this f test are to see whether the hypothesis proposed is met or cannot be followed through the following rules: (1) If the value of f calculated < f table or the significance value of the free variable (X1, X2 and X3) > 0.05, then the free variable simultaneously has no effect on the bound variable (Y); (2) If the value of f calculated > f table or the significance value of the free variable (X1, X2 and X3) < 0.05, then the free variable simultaneously affects the bound variable (Y); (3) Determining the value of the table f is as follows : Number of respondents (n) = 89, Total number of variables (k) = 4, df for numerator (N1) – Column k – = 4 – 1 = 3 and df for denominator (N2) – Lines n – k = 89 – 4 = 85.

So, in table F we see in N1 = 3 and N2 = 85, we get a value of 2.71 which will be a reference to be tested with the value of F calculation as in the following table.

Table 10. Test Results f

| | | ANOVA ^a | | | |
|----------------------|---------|--------------------|-------------|--------|-------------------|
| Sum of Model Squares | | df | Mean Square | F | Sig. |
| 1 Regression | 264.150 | 3 | 88.050 | 12.184 | .000 ^b |
| Residual | 614.254 | 85 | 7.227 | | |
| | 878.404 | 88 | | | |

Source: data processed by researchers, 2024

Based on table 10, it is known that the following things are known: The value of f calculation = 12.184 is greater than the value of f table = 2.71 The value of significance = 0.000 is less than the alpha value of 0.05. Thus, it is concluded that simultaneously variables X1, X2 and X3 have a significant influence on variable Y as well as answer the fourth problem. This also strengthens the opinion that the fraud triangle theory is a tool that can be used to measure the occurrence of fraud.

Coefficient of Determination

The determination coefficient (R²) is used to see the contribution of the influence of the three X variables (Pressure, Opportunity and Justification) to the occurrence of Fraud in Bank Papua shown in table 11. The following.

Table 11. Coefficient of Determination

| | | Model Summary ^b | | |
|---------|-------------------|----------------------------|----------------------------|-------|
| Model R | R Square | Adjusted R Square | Std. Error of the Estimate | |
| 1 | .548 ^a | .301 | .276 | 2.688 |

Source: data processed by researchers, 2024

From the results of the calculation, it is known that the value of the determination coefficient (R Square) is 0.301. This shows that the Fraud Triangle Variables (Pressure X1, Opportunity X2 and Justification X3) have an influence of 30.1% on the occurrence of Fraud in Bank Papua. Meanwhile, the

remaining 69.9% is the amount of other variables that also affect the occurrence of fraud that is not studied in this study or is a deepening of the theory put forward in this study.

Discussion

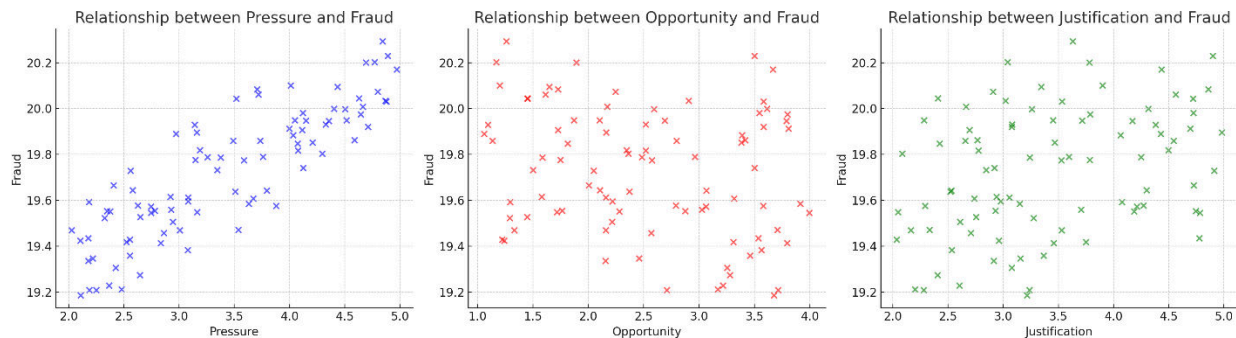


Figure 2 Scatterplot

The scatter plot analysis provides a clear visualization of the relationships between fraud and its three key determinants: pressure, opportunity, and justification. The first plot illustrates a positive relationship between pressure and fraud, indicating that as pressure increases, the likelihood of fraudulent behavior also rises. This finding aligns with the Fraud Triangle theory, which posits that individuals experiencing financial strain, work-related stress, or personal obligations are more prone to committing fraud as a means of alleviating their burdens. In the case of Bank Papua, employees facing high financial pressure—such as gambling debt or excessive loans—are at greater risk of engaging in fraudulent activities.

In contrast, the second plot shows a negative correlation between opportunity and fraud, suggesting that increased oversight and strong internal controls reduce the likelihood of fraud. This finding is particularly significant in the context of Bank Papua, where strict monitoring systems at headquarters and key branches minimize opportunities for fraudulent actions. This contradicts some previous studies in which opportunity was found to be a major enabler of fraud in financial institutions with weak internal controls.

The third plot highlights a positive relationship between justification and fraud, reinforcing the idea that individuals who rationalize their dishonest actions are more likely to commit fraud. Employees may justify fraudulent behavior by perceiving it as harmless or as a means to compensate for perceived workplace injustices. This suggests that beyond strengthening oversight mechanisms, Bank Papua should focus on fostering a corporate culture that discourages unethical behavior and reinforces ethical decision-making. Overall, these findings indicate that fraud at Bank Papua is primarily driven by pressure and justification, while opportunity plays a less significant role due to the bank's strong internal controls. This insight underscores the importance of addressing financial stressors among employees and instilling a culture of integrity to further mitigate fraud risks.

The results of the study at Bank Papua show that pressure, opportunity, and justification have a significant effect on fraud, with pressure as the dominant factor. This is in line with previous studies in the banking sector and other financial institutions that show that individual financial stress, such as debt and excessive lifestyle, are often the main triggers for fraud (Alauddin & Ahalik, 2023). In several other banking studies, stress has also been found to be a major factor, especially related to the demands of high employment targets and economic instability that forces individuals to look for instant ways to meet their needs.

However, there is a significant difference in the role of opportunity against fraud in Bank Papua compared to some studies in other financial institutions. A study by Barus et al. (2021) on conventional banks in Indonesia shows that opportunity has a significant influence on fraud due to weak internal control systems and lack of supervision. In contrast, at Bank Papua, opportunities were found to have a negative correlation with fraud, indicating that strict internal supervision and control had limited the likelihood of fraudulent acts. This difference can be explained by the stricter internal control system in Bank Papua, especially at the head office and main branches, so that the gap for fraudsters becomes

smaller compared to other banks or financial institutions that have weaknesses in their supervision system.

In addition, organizational culture factors can also be the reason why there are differences in these findings. Bank Papua, as a regional banking institution, has a more structured value system and work culture in supervising employees, in contrast to private or national banks that often have a more dynamic work environment with greater target pressure. These differences indicate that in the context of regional banking, strong internal control strategies can reduce fraud risk, although pressure and justification remain the main factors that trigger fraudulent behavior.

Thus, although the results of this study are generally consistent with the findings of other financial institutions, there are differences in the impact of opportunity on fraud. Factors such as the supervisory system, organizational culture, and the effectiveness of internal control play an important role in determining whether the opportunity will increase or even suppress the occurrence of fraud in a financial institution.

Practical Recommendations for Bank Papua and Other Financial Institutions ***Tightening the Internal Supervision and Control System***

Although opportunities are found to have a negative relationship with fraud in Bank Papua, it is important to continue to strengthen the supervision system, especially in branches far from the head office. Bank Papua can develop a technology-based real-time monitoring system to monitor suspicious transactions and employee behavior. In addition, strengthening regular internal audits and more effective whistleblowing policies can help detect potential fraud early.

Overcoming Employee Financial Pressure

Pressure is the dominant factor that drives fraud in Bank Papua, especially due to negative employee habits such as online gambling and excessive debt. Therefore, financial literacy programs for employees need to be strengthened to help them manage their personal finances more wisely. In addition, companies can consider providing financial and psychological consulting services to help employees overcome economic pressures that can lead to fraudulent actions.

Strengthening Integrity-Based Organizational Culture

Justification for fraud occurs when employees feel they have a reason to justify their actions. To overcome this, Bank Papua needs to build an organizational culture based on transparency, accountability, and integrity. The implementation of regular ethics training and a reward system for employees who demonstrate high compliance with company rules can help instill the values of honesty in the organization.

Evaluation and Adjustment of Sanctions Policy

The implementation of strict sanctions against fraudsters has become part of the supervisory system at Bank Papua, but periodic evaluations are needed to ensure its effectiveness. In addition to administrative and criminal sanctions, companies can implement an incentive-based prevention policy, where employees who report or prevent fraud receive certain rewards.

Development of Anti-Fraud Technology

Bank Papua can adopt artificial intelligence (AI) technology and big data analytics to detect suspicious transaction patterns and the behavior of employees who are at high risk of fraud. The application of machine learning-based monitoring systems has been proven to increase the effectiveness of fraud detection in various financial institutions.

By implementing these measures, Bank Papua can strengthen its internal control system and reduce the risk of fraud more effectively. This recommendation can also be adapted by other financial institutions that face similar challenges in managing fraud risk in their work environment.

Conclusions

Based on research conducted at Bank Papua Head Office and several of its branches, it was found that the variables Pressure (X1), Opportunity (X2), and Justification (X3) have a significant influence on the occurrence of fraud. Pressure was described in a fairly high condition with an average score of 3.21,

and the test results showed that Pressure had a significant influence on fraud, with a t-value of 3.644 which exceeded the t-table of 1.98827 and a significance value of 0.000 which was smaller than alpha 0.05. Chance was also in a fairly high condition with an average score of 3.10, and although testing showed that Opportunity had a significant effect on fraud, the effect was negative with a t-value of -2.591 which was smaller than the t-table of 1.98827 and a significance value of 0.011. Justification, with an average score of 2.69, showed a significant influence on fraud with a t-value of 2.121 which was greater than the t-table of 1.98827 and a significance value of 0.037. Overall, the variables Pressure, Opportunity, and Justification had a significant simultaneous effect on the occurrence of fraud in Bank Papua, as can be seen from the f-count value of 12.184 which exceeded the f-table of 2.71 and the significance value of 0.000.

Some of the suggestions that can be given based on this research include several important aspects. First, because the influence of the fraud triangle variable on the incidence of fraud at Bank Papua is only 30.1%, it is recommended to conduct further research to identify additional variables or factors that can affect the occurrence of fraud in the institution. Second, the object of the study, which only includes five offices of Bank Papua, is considered not to represent all employees, considering that there are 43 branch offices spread inside and outside the Land of Papua. Future research should reach the entire office network to get a more comprehensive picture. Third, the results of the descriptive analysis need to be followed up by Bank Papua with efforts to minimize the potential for fraud in the future, including the enforcement of strict sanctions against the perpetrators and periodic reviews of applicable regulations to remain relevant to current conditions.

This research contributes to the Fraud Triangle literature by showing that in a highly supervised environment such as Bank Papua, pressure and justification are more dominant in driving fraud than opportunity, which actually has a negative relationship. From the perspective of organizational behavior, these findings confirm that a culture of integrity and a strong internal control system can limit the chances of fraud, although financial pressures and rationalization remain key factors. This research enriches the understanding of how internal organizational factors, including work stress and employee satisfaction, play a role in mitigating or exacerbating fraud risk. Therefore, fraud prevention strategies need to include not only increased oversight but also stress management and the strengthening of ethical culture in the workplace.

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