MJoC MALAYSIAN JOURNAL OF COMPUTING

REVIEW REPORT

Manuscript Information	
Manuscript ID	23391
Manuscript Title	Cyber Fraud Profiling with Routine Activity Theory Using Data Mining Techniques

Reviewers Information	
Reviewer's name	Kamarul Ariffin Bin Abdul Basit
Completion date and time	06-09-2023 / 11:30 am

Detail Comments

Section	Description
Abstract - *Include introduction, problem statement, objective, method, result, significance/ contribution*	The abstract introduces the concept of cyber profiling, which is a part of digital forensics. While it doesn't delve deeply into background information, it presents the main goal of the study, which is to create a pattern for cyber fraud based on Routine Activity Theory (RAT). This clear objective is a strong point as it tells readers what the research aims to achieve. The abstract could be even more reader-friendly by explaining a bit more about what cyber profiling is and why it matters. Adding such details would make it even clearer for readers who might not have a technical background. It also briefly describes the data collection method using data mining technology on structured and unstructured data. Offering a tad more information on the data sources and data mining tools used would enhance the abstract. Furthermore, the abstract presents some significant findings related to cyber-fraud profiling, which is a positive aspect. However, it could be strengthened by elaborating on the potential impact and contributions of the research. How will this study benefit digital forensics, cybercrime prevention, or policy development? In summary, while the abstract effectively states the research objective and outlines key findings, it could be more informative for a broader audience by providing a bit more context, details on the methodology, and an emphasis on its significance. Overall, I would rate this abstract as **4 out of 5** for its clarity and potential to enhance reader engagement.
Introduction - *Include study background, aim/ objectives*	The introduction section provides a straightforward explanation of cyber profiling and its connection to digital forensics. While it may not include extensive references to academic literature, it effectively introduces the main ideas and goals of the study in an

easy-to-understand manner. This approach can be suitable for our journal, as it ensures that readers, including those who may not have a deep technical background, can follow along and engage with the content.

The introduction sets a clear research objective, which is to develop a cyber fraud pattern based on Routine Activity Theory (RAT). This clarity in purpose is a strength, as it helps readers immediately grasp what the study aims to achieve.

In terms of improvement, it could be beneficial to include a bit more detail about why cyber profiling is important or relevant in today's digital landscape. Additionally, providing a brief overview of the specific focus of the study (such as the country, Indonesia) and the types of cybercrimes under examination would help readers better understand the context.

Overall, considering the intended audience and the nature of the journal, the introduction section offers an accessible and straightforward introduction to the topic of cyber profiling. Therefore, I would rate it as **4 out of 5** for its simplicity and alignment with the paper's intended purpose.

Background Literature *- Can be found in Introduction section or individual section.* *- Relevant, include recent literature, etc.*	The literature provided in the Introduction section offers a concise and straightforward overview of cyber profiling and its relationship with digital forensics. While it may not delve into extensive scholarly research, it effectively introduces the main concepts and objectives of the study in a clear and understandable manner. This approach can be suitable for this journal, as it avoids overwhelming readers with complex academic references. The introduction establishes a specific research goal, which is to create a cyber fraud pattern based on Routine Activity Theory (RAT). This clarity in objectives is beneficial, making it easy for readers to grasp the purpose of the study. Overall, considering the context of the paper and its intended audience, the literature presented in the Introduction section provides an accessible and straightforward introduction to the topic of cyber profiling. Therefore, I would rate it as **3.5 out of 5** for its simplicity and alignment with the paper's purpose.
Method *- Clear flow* *- Clear description*	The methodology section in the paper outlines the approach taken for data collection and analysis. It uses data mining technology for both structured and unstructured data, which is a robust method for this type of research. One of the strengths of this section is that it clearly explains how structured data was collected by mining district court cases in Indonesia over a specific timeframe. It even mentions the use of a probability sampling technique, which adds credibility to the data collection process.

	The mention of utilizing an add-on from Google Chrome, Data Scrapper, to extract information from Case Tracing Information System is a practical detail that shows the researcher's commitment to transparency in their methods.
	Similarly, the description of data collection for unstructured data through an online survey using Google Forms is well-detailed, including the use of the snowball sampling technique, which adds depth to the research process.
	However, one improvement could be providing more information on the number of respondents in the survey and the response rate. This would help readers gauge the representativeness of the survey results.
	Moving forward in the methodology, the mention of using RapidMiner for data analysis is clear and to the point. It's evident that the researcher is using well-established tools and techniques.
	In summary, the methodology section is generally well-structured and provides clear insights into the data collection and analysis process. To enhance it further, adding details on the number of survey respondents and their representativeness would be beneficial. Overall, I would rate this methodology section as **4.5 out of 5** for its clarity and transparent approach to research methodology.
Results and Discussions *- Comprehensive, discuss similarity/ differences with other similar findings, etc.*	The results and discussion section of the paper presents findings and insights from the research. It begins by discussing the analysis of unstructured data to profile cyber-fraud victims based on their demographics. This is a valuable approach, and the section highlights key characteristics of these victims.
	Table 1 and Table 2 provide a clear summary of the instant messengers and gadgets commonly used by cyber-fraud victims. These tables make it easy for readers to grasp the prevalence of certain platforms and devices among victims.
	Additionally, Table 3 presents the performance of the Naïve Bayes model and Decision Tree, which is a crucial aspect of the study. These statistics give readers a clear understanding of how well the predictive models performed in terms of accuracy, precision, and recall.
	The section continues with an analysis of structured data, particularly cases of electronic information and transactions related to online fraud. The categorization of these cases into various cybercrime types (e.g., online transactions frauds, impersonation) in Table 5 is insightful.
	Table 6 provides the performance of the Naïve Bayes model and Random Forest for predicting cyber-fraud offenders. The inclusion of these statistics adds depth to the discussion and

	allows readers to assess the predictive capabilities of the models. Furthermore, the section concludes with tables that summarize the profiles of cyber-fraud victims and offenders based on the research findings. This offers a comprehensive view of the characteristics associated with each group. However, **it would be beneficial to have more detailed explanations** in the discussion section to help readers interpret the significance of the findings. **Additionally**, discussing potential implications and real-world applications of the research could enhance this section's impact. In summary, the results and discussion section present valuable findings and provides clear data summaries. To improve, it could benefit from more in-depth discussions and insights into the implications of these findings. Overall, I would rate this section as **4 out of 5** for its informative data presentation and analysis.
Conclusion *- Clear contribution* *- Discuss limitation and future work*	The conclusion section of the paper effectively summarizes the key findings and insights gained from the research. It states that the study aimed to analyze cyber fraud patterns in Indonesia using routine activity theory and data mining techniques, and it successfully achieved this goal. One notable strength of this conclusion is its clarity in presenting the main findings. It identifies the common patterns of online fraud, which include online transaction frauds, impersonation, unauthorized access, digital forgery, lottery/online investment, buying stolen personal data, and data forgery. These findings were based on an analysis of text mining cases from the Indonesian District Court spanning from January 2021 to March 2022. Furthermore, the conclusion elaborates on the cyber-fraud profiling results obtained through the use of RAT and the Naïve Bayes Algorithm. It breaks down the elements related to potential offenders, suitable targets, and guardianship, providing a clear summary of the research outcomes. However, to enhance this conclusion, it could benefit from a brief discussion on the practical implications of these findings. How might this research inform policies or strategies to combat cyber fraud in Indonesia? Exploring potential real-world applications would add depth to the conclusion. In summary, this conclusion effectively encapsulates the study's objectives and findings. To improve, it could include a bit more discussion on the practical significance and real-world applications of these research results. Overall, I would rate this conclusion as **4.5 out of 5** for its clarity and concise summary of the research outcomes.

References *- Relevant* *- Include recent references*	The reference section appears to follow the APA citation style, which is appropriate for academic writing. The sources are listed alphabetically by the author's last name, which is the standard format. The references are consistent in terms of formatting, including the use of italics for journal titles, proper capitalization of titles, and the inclusion of publication details such as volume, issue, and page numbers where applicable. The inclusion of DOIs (Digital Object Identifiers) for some sources is a good practice as it provides a reliable way for readers to access the referenced materials online. There is a wide range of sources included, spanning academic journals, conference proceedings, and books. This variety suggests that the author has consulted diverse literature to inform their research. However, it's important to note that while the references are formatted correctly, the quality of sources should also be considered. Ensuring that the selected sources are reputable, peer-reviewed, and relevant to the study is crucial for the credibility of the research. Additionally, providing in-text citations within the main body of the paper to connect specific ideas or findings to these references is essential. Overall, the reference section is well-structured and adheres to citation style guidelines. Still, the selection and use of high-quality sources should be emphasized to strengthen the research's foundation. Rating: 4/5
Other comments *- Grammar, format, etc.*	In terms of the grammar and language use, the paper generally maintains proper grammar and language use. However, it's essential to ensure consistent tense usage throughout the document. For instance, if the paper primarily uses the past tense, it should be maintained consistently. Referring to the formatting, the paper follows a standard academic format, including section headings (e.g., Introduction, Methodology) and subheadings (e.g., 4. Conclusions). This organization aids in readability and comprehension. In terms of the clarity and coherence, the writing is clear and coherent, making it accessible to readers. Paragraphs are appropriately structured, and ideas flow logically from one to the next. However, some paragraphs could benefit from further topic sentence clarification to guide readers. Overall, I would rate this paper as **4 out of 5** for its clarity and concise summary of the research outcomes.

This paper demonstrates a generally good command of grammar and language use. Sentences are well-structured, and technical terminology is appropriately employed. However, there are some instances of inconsistency in verb tense usage that can affect the paper's overall readability. Maintaining a consistent verb tense throughout would greatly improve clarity.

In terms of formatting, the paper adheres to the APA style for references, which is commendable. The overall format is professional, and the length is appropriate – neither overly long nor too brief.

Clarity and coherence are areas where this paper could see some enhancements. While the structure of the paper is logical and follows a clear sequence from introduction to conclusion, there's room for improvement in providing more context, particularly in the introduction. A stronger emphasis on explaining the importance of cyber profiling and the specific focus on Indonesia would engage readers more effectively.

In conclusion, this paper serves as a valuable contribution to the field of cyber fraud patterns in Indonesia. With a few adjustments to grammar, greater attention to verb tense consistency, and improved clarity in the introduction, it has the potential to become an even more impactful piece of research.

Overall Rating: 4/5

Manuscript Evaluation				
Please tick only one response for each of the following criteria:				
Originality	☐Excellent	☒Strong	☐Moderate	☐Weak
Technicality	☐Excellent	☒Strong	☐Moderate	☐Weak
Significance of contribution	☐Excellent	☒Strong	☐Moderate	☐Weak
Clarity of presentation	☐Excellent	☒Strong	☐Moderate	☐Weak
Suitability for presentation	☐Excellent	☒Strong	☐Moderate	☐Weak
English presentation	☐Excellent	☒Strong	☐Moderate	☐Weak
Presentation style	☐Excellent	☒Strong	☐Moderate	☐Weak

Manuscript Evaluation Details (Comments to the Author(s))	Dear Author,
	I have reviewed your paper and would like to provide more specific feedback to guide you. Here are the key points and important notes for your consideration:
	Positive Aspects:
	1. Clear Objectives: The research objectives are well-defined, especially in the abstract and conclusion sections, which helps readers understand the purpose of the study.
	2. Research Relevance: The paper addresses a pertinent issue related to cybercrime in Indonesia, which adds value to the field of digital forensics.
	3. Structured Abstract: The abstract briefly presents key elements such as the problem statement, research method, and findings, making it an effective summary of the study.
	4. Comprehensive References: The paper contains an extensive list of references, indicating thorough research in the field.
	However, there are a few areas where the paper could be improved:
	Areas for Improvement:

1. Introduction: While the introduction provides an overview of cyber profiling and mentions the research goal, it lacks a broader context and doesn't explain why this study is important. Providing more background information and context would engage the reader.

2. Methodology: The methodology section, though clear, lacks specific details about data sources and data mining tools used. Providing more information would enhance the paper's credibility.

3. Abstract Significance: The abstract could further emphasize the significance of the research and its potential contributions to digital forensics, cybercrime prevention, or policy development.

4. Conclusion Clarity: The conclusion section contains a mix of findings but could benefit from a clearer summary of the main results and their implications.

5. Grammar and Language: The paper's language is generally clear and concise. However, proofreading for minor grammatical errors and language refinement would enhance its overall quality.

Overall, the paper holds promise and addresses an important issue in cybercrime research. With some minor revisions and further emphasis on context and significance, it could make a valuable contribution to the chosen journal.

Note to the Editor (will not be sent to the authors)	Overall, this paper is good and suitable for inclusion in the MJOC journal. I have two opinions about this paper. First, if we want to maintain the quality and details of MJOC, I suggest asking the paper's authors to make improvements based on the suggestions I have provided earlier. Second, if the MJOC editorial team is short on time, accepting this paper without major changes can also be considered, as long as the editor has thoroughly checked the paper's format and style to ensure it follows MJOC's guidelines. As a reviewer, my main focus is on the paper's content, and I don't pay too much attention to formatting details. Overall, I would rate this paper 4/5.
Rommendation	☒ Accept ☐ Minor Revisions ☐ Major Revision ☐ Reject

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Reviewer's name	Kamarul Ariffin Bin Abdul Basit
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Introduction *- Include study background, aim/ objectives*	The introduction section provides a straightforward explanation of cyber profiling and its connection to digital forensics. While it may not include extensive references to academic literature, it effectively introduces the main ideas and goals of the study in an

| | easy-to-understand manner. This approach can be suitable for our journal, as it ensures that readers, including those who may not have a deep technical background, can follow along and engage with the content.

The introduction sets a clear research objective, which is to develop a cyber fraud pattern based on Routine Activity Theory (RAT). This clarity in purpose is a strength, as it helps readers immediately grasp what the study aims to achieve.

In terms of improvement, it could be beneficial to include a bit more detail about why cyber profiling is important or relevant in today's digital landscape. Additionally, providing a brief overview of the specific focus of the study (such as the country, Indonesia) and the types of cybercrimes under examination would help readers better understand the context.

Overall, considering the intended audience and the nature of the journal, the introduction section offers an accessible and straightforward introduction to the topic of cyber profiling. Therefore, I would rate it as **4 out of 5** for its simplicity and alignment with the paper's intended purpose. |
|---|---|
| **Background Literature**
- Can be found in Introduction section or individual section.
- Relevant, include recent literature, etc. | The literature provided in the Introduction section offers a concise and straightforward overview of cyber profiling and its relationship with digital forensics. While it may not delve into extensive scholarly research, it effectively introduces the main concepts and objectives of the study in a clear and understandable manner. This approach can be suitable for this journal, as it avoids overwhelming readers with complex academic references.

The introduction establishes a specific research goal, which is to create a cyber fraud pattern based on Routine Activity Theory (RAT). This clarity in objectives is beneficial, making it easy for readers to grasp the purpose of the study.

Overall, considering the context of the paper and its intended audience, the literature presented in the Introduction section provides an accessible and straightforward introduction to the topic of cyber profiling. Therefore, I would rate it as **3.5 out of 5** for its simplicity and alignment with the paper's purpose. |
| **Method**
- Clear flow
- Clear description | The methodology section in the paper outlines the approach taken for data collection and analysis. It uses data mining technology for both structured and unstructured data, which is a robust method for this type of research.

One of the strengths of this section is that it clearly explains how structured data was collected by mining district court cases in Indonesia over a specific timeframe. It even mentions the use of a probability sampling technique, which adds credibility to the data collection process. |

| | The mention of utilizing an add-on from Google Chrome, Data Scrapper, to extract information from Case Tracing Information System is a practical detail that shows the researcher's commitment to transparency in their methods.

Similarly, the description of data collection for unstructured data through an online survey using Google Forms is well-detailed, including the use of the snowball sampling technique, which adds depth to the research process.

However, one improvement could be providing more information on the number of respondents in the survey and the response rate. This would help readers gauge the representativeness of the survey results.

Moving forward in the methodology, the mention of using RapidMiner for data analysis is clear and to the point. It's evident that the researcher is using well-established tools and techniques.

In summary, the methodology section is generally well-structured and provides clear insights into the data collection and analysis process. To enhance it further, adding details on the number of survey respondents and their representativeness would be beneficial. Overall, I would rate this methodology section as **4.5 out of 5** for its clarity and transparent approach to research methodology. |
|---|---|
| **Results and Discussions**
- Comprehensive, discuss similarity/ differences with other similar findings, etc. | The results and discussion section of the paper presents findings and insights from the research. It begins by discussing the analysis of unstructured data to profile cyber-fraud victims based on their demographics. This is a valuable approach, and the section highlights key characteristics of these victims.

Table 1 and Table 2 provide a clear summary of the instant messengers and gadgets commonly used by cyber-fraud victims. These tables make it easy for readers to grasp the prevalence of certain platforms and devices among victims.

Additionally, Table 3 presents the performance of the Naïve Bayes model and Decision Tree, which is a crucial aspect of the study. These statistics give readers a clear understanding of how well the predictive models performed in terms of accuracy, precision, and recall.

The section continues with an analysis of structured data, particularly cases of electronic information and transactions related to online fraud. The categorization of these cases into various cybercrime types (e.g., online transactions frauds, impersonation) in Table 5 is insightful.

Table 6 provides the performance of the Naïve Bayes model and Random Forest for predicting cyber-fraud offenders. The inclusion of these statistics adds depth to the discussion and |

| | allows readers to assess the predictive capabilities of the models.

Furthermore, the section concludes with tables that summarize the profiles of cyber-fraud victims and offenders based on the research findings. This offers a comprehensive view of the characteristics associated with each group.

However, **it would be beneficial to have more detailed explanations** in the discussion section to help readers interpret the significance of the findings. **Additionally**, discussing potential implications and real-world applications of the research could enhance this section's impact.

In summary, the results and discussion section present valuable findings and provides clear data summaries. To improve, it could benefit from more in-depth discussions and insights into the implications of these findings. Overall, I would rate this section as **4 out of 5** for its informative data presentation and analysis. |
|---|---|
| **Conclusion**
- Clear contribution
- Discuss limitation and future work | The conclusion section of the paper effectively summarizes the key findings and insights gained from the research. It states that the study aimed to analyze cyber fraud patterns in Indonesia using routine activity theory and data mining techniques, and it successfully achieved this goal.

One notable strength of this conclusion is its clarity in presenting the main findings. It identifies the common patterns of online fraud, which include online transaction frauds, impersonation, unauthorized access, digital forgery, lottery/online investment, buying stolen personal data, and data forgery. These findings were based on an analysis of text mining cases from the Indonesian District Court spanning from January 2021 to March 2022.

Furthermore, the conclusion elaborates on the cyber-fraud profiling results obtained through the use of RAT and the Naïve Bayes Algorithm. It breaks down the elements related to potential offenders, suitable targets, and guardianship, providing a clear summary of the research outcomes.

However, to enhance this conclusion, it could benefit from a brief discussion on the practical implications of these findings. How might this research inform policies or strategies to combat cyber fraud in Indonesia? Exploring potential real-world applications would add depth to the conclusion.

In summary, this conclusion effectively encapsulates the study's objectives and findings. To improve, it could include a bit more discussion on the practical significance and real-world applications of these research results. Overall, I would rate this conclusion as **4.5 out of 5** for its clarity and concise summary of the research outcomes. |

References *- Relevant* *- Include recent references*	The reference section appears to follow the APA citation style, which is appropriate for academic writing. The sources are listed alphabetically by the author's last name, which is the standard format. The references are consistent in terms of formatting, including the use of italics for journal titles, proper capitalization of titles, and the inclusion of publication details such as volume, issue, and page numbers where applicable. The inclusion of DOIs (Digital Object Identifiers) for some sources is a good practice as it provides a reliable way for readers to access the referenced materials online. There is a wide range of sources included, spanning academic journals, conference proceedings, and books. This variety suggests that the author has consulted diverse literature to inform their research. However, it's important to note that while the references are formatted correctly, the quality of sources should also be considered. Ensuring that the selected sources are reputable, peer-reviewed, and relevant to the study is crucial for the credibility of the research. Additionally, providing in-text citations within the main body of the paper to connect specific ideas or findings to these references is essential. Overall, the reference section is well-structured and adheres to citation style guidelines. Still, the selection and use of high-quality sources should be emphasized to strengthen the research's foundation. Rating: 4/5
Other comments *- Grammar, format, etc.*	In terms of the grammar and language use, the paper generally maintains proper grammar and language use. However, it's essential to ensure consistent tense usage throughout the document. For instance, if the paper primarily uses the past tense, it should be maintained consistently. Referring to the formatting, the paper follows a standard academic format, including section headings (e.g., Introduction, Methodology) and subheadings (e.g., 4. Conclusions). This organization aids in readability and comprehension. In terms of the clarity and coherence, the writing is clear and coherent, making it accessible to readers. Paragraphs are appropriately structured, and ideas flow logically from one to the next. However, some paragraphs could benefit from further topic sentence clarification to guide readers. Overall, I would rate this paper as **4 out of 5** for its clarity and concise summary of the research outcomes.

This paper demonstrates a generally good command of grammar and language use. Sentences are well-structured, and technical terminology is appropriately employed. However, there are some instances of inconsistency in verb tense usage that can affect the paper's overall readability. Maintaining a consistent verb tense throughout would greatly improve clarity.

In terms of formatting, the paper adheres to the APA style for references, which is commendable. The overall format is professional, and the length is appropriate – neither overly long nor too brief.

Clarity and coherence are areas where this paper could see some enhancements. While the structure of the paper is logical and follows a clear sequence from introduction to conclusion, there's room for improvement in providing more context, particularly in the introduction. A stronger emphasis on explaining the importance of cyber profiling and the specific focus on Indonesia would engage readers more effectively.

In conclusion, this paper serves as a valuable contribution to the field of cyber fraud patterns in Indonesia. With a few adjustments to grammar, greater attention to verb tense consistency, and improved clarity in the introduction, it has the potential to become an even more impactful piece of research.

Overall Rating: 4/5

Manuscript Evaluation

Please tick only one response for each of the following criteria:

Criteria				
Originality	☐Excellent	☒Strong	☐Moderate	☐Weak
Technicality	☐Excellent	☒Strong	☐Moderate	☐Weak
Significance of contribution	☐Excellent	☒Strong	☐Moderate	☐Weak
Clarity of presentation	☐Excellent	☒Strong	☐Moderate	☐Weak
Suitability for presentation	☐Excellent	☒Strong	☐Moderate	☐Weak
English presentation	☐Excellent	☒Strong	☐Moderate	☐Weak
Presentation style	☐Excellent	☒Strong	☐Moderate	☐Weak

Manuscript Evaluation Details (Comments to the Author(s))	Dear Author, I have reviewed your paper and would like to provide more specific feedback to guide you. Here are the key points and important notes for your consideration: Positive Aspects: 1. Clear Objectives: The research objectives are well-defined, especially in the abstract and conclusion sections, which helps readers understand the purpose of the study. 2. Research Relevance: The paper addresses a pertinent issue related to cybercrime in Indonesia, which adds value to the field of digital forensics. 3. Structured Abstract: The abstract briefly presents key elements such as the problem statement, research method, and findings, making it an effective summary of the study. 4. Comprehensive References: The paper contains an extensive list of references, indicating thorough research in the field. However, there are a few areas where the paper could be improved: Areas for Improvement:

1. Introduction: While the introduction provides an overview of cyber profiling and mentions the research goal, it lacks a broader context and doesn't explain why this study is important. Providing more background information and context would engage the reader.

2. Methodology: The methodology section, though clear, lacks specific details about data sources and data mining tools used. Providing more information would enhance the paper's credibility.

3. Abstract Significance: The abstract could further emphasize the significance of the research and its potential contributions to digital forensics, cybercrime prevention, or policy development.

4. Conclusion Clarity: The conclusion section contains a mix of findings but could benefit from a clearer summary of the main results and their implications.

5. Grammar and Language: The paper's language is generally clear and concise. However, proofreading for minor grammatical errors and language refinement would enhance its overall quality.

Overall, the paper holds promise and addresses an important issue in cybercrime research. With some minor revisions and further emphasis on context and significance, it could make a valuable contribution to the chosen journal.

Note to the Editor (will not be sent to the authors)	Overall, this paper is good and suitable for inclusion in the MJOC journal. I have two opinions about this paper. First, if we want to maintain the quality and details of MJOC, I suggest asking the paper's authors to make improvements based on the suggestions I have provided earlier. Second, if the MJOC editorial team is short on time, accepting this paper without major changes can also be considered, as long as the editor has thoroughly checked the paper's format and style to ensure it follows MJOC's guidelines. As a reviewer, my main focus is on the paper's content, and I don't pay too much attention to formatting details. Overall, I would rate this paper 4/5.
Rommendation	☒ Accept ☐ Minor Revisions ☐ Major Revision ☐ Reject

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Reviewer's name	Kamarul Ariffin Bin Abdul Basit
Completion date and time	06-09-2023 / 11:30 am

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	The mention of utilizing an add-on from Google Chrome, Data Scrapper, to extract information from Case Tracing Information System is a practical detail that shows the researcher's commitment to transparency in their methods.
	Similarly, the description of data collection for unstructured data through an online survey using Google Forms is well-detailed, including the use of the snowball sampling technique, which adds depth to the research process.
	However, one improvement could be providing more information on the number of respondents in the survey and the response rate. This would help readers gauge the representativeness of the survey results.
	Moving forward in the methodology, the mention of using RapidMiner for data analysis is clear and to the point. It's evident that the researcher is using well-established tools and techniques.
	In summary, the methodology section is generally well-structured and provides clear insights into the data collection and analysis process. To enhance it further, adding details on the number of survey respondents and their representativeness would be beneficial. Overall, I would rate this methodology section as **4.5 out of 5** for its clarity and transparent approach to research methodology.
Results and Discussions *- Comprehensive, discuss similarity/ differences with other similar findings, etc.*	The results and discussion section of the paper presents findings and insights from the research. It begins by discussing the analysis of unstructured data to profile cyber-fraud victims based on their demographics. This is a valuable approach, and the section highlights key characteristics of these victims.
	Table 1 and Table 2 provide a clear summary of the instant messengers and gadgets commonly used by cyber-fraud victims. These tables make it easy for readers to grasp the prevalence of certain platforms and devices among victims.
	Additionally, Table 3 presents the performance of the Naïve Bayes model and Decision Tree, which is a crucial aspect of the study. These statistics give readers a clear understanding of how well the predictive models performed in terms of accuracy, precision, and recall.
	The section continues with an analysis of structured data, particularly cases of electronic information and transactions related to online fraud. The categorization of these cases into various cybercrime types (e.g., online transactions frauds, impersonation) in Table 5 is insightful.
	Table 6 provides the performance of the Naïve Bayes model and Random Forest for predicting cyber-fraud offenders. The inclusion of these statistics adds depth to the discussion and

	allows readers to assess the predictive capabilities of the models.
	Furthermore, the section concludes with tables that summarize the profiles of cyber-fraud victims and offenders based on the research findings. This offers a comprehensive view of the characteristics associated with each group.
	However, **it would be beneficial to have more detailed explanations** in the discussion section to help readers interpret the significance of the findings. **Additionally**, discussing potential implications and real-world applications of the research could enhance this section's impact.
	In summary, the results and discussion section present valuable findings and provides clear data summaries. To improve, it could benefit from more in-depth discussions and insights into the implications of these findings. Overall, I would rate this section as **4 out of 5** for its informative data presentation and analysis.
Conclusion *- Clear contribution* *- Discuss limitation and future work*	The conclusion section of the paper effectively summarizes the key findings and insights gained from the research. It states that the study aimed to analyze cyber fraud patterns in Indonesia using routine activity theory and data mining techniques, and it successfully achieved this goal.
	One notable strength of this conclusion is its clarity in presenting the main findings. It identifies the common patterns of online fraud, which include online transaction frauds, impersonation, unauthorized access, digital forgery, lottery/online investment, buying stolen personal data, and data forgery. These findings were based on an analysis of text mining cases from the Indonesian District Court spanning from January 2021 to March 2022.
	Furthermore, the conclusion elaborates on the cyber-fraud profiling results obtained through the use of RAT and the Naïve Bayes Algorithm. It breaks down the elements related to potential offenders, suitable targets, and guardianship, providing a clear summary of the research outcomes.
	However, to enhance this conclusion, it could benefit from a brief discussion on the practical implications of these findings. How might this research inform policies or strategies to combat cyber fraud in Indonesia? Exploring potential real-world applications would add depth to the conclusion.
	In summary, this conclusion effectively encapsulates the study's objectives and findings. To improve, it could include a bit more discussion on the practical significance and real-world applications of these research results. Overall, I would rate this conclusion as **4.5 out of 5** for its clarity and concise summary of the research outcomes.

| **References**
- Relevant
- Include recent references | The reference section appears to follow the APA citation style, which is appropriate for academic writing. The sources are listed alphabetically by the author's last name, which is the standard format.

The references are consistent in terms of formatting, including the use of italics for journal titles, proper capitalization of titles, and the inclusion of publication details such as volume, issue, and page numbers where applicable.

The inclusion of DOIs (Digital Object Identifiers) for some sources is a good practice as it provides a reliable way for readers to access the referenced materials online.

There is a wide range of sources included, spanning academic journals, conference proceedings, and books. This variety suggests that the author has consulted diverse literature to inform their research.

However, it's important to note that while the references are formatted correctly, the quality of sources should also be considered. Ensuring that the selected sources are reputable, peer-reviewed, and relevant to the study is crucial for the credibility of the research. Additionally, providing in-text citations within the main body of the paper to connect specific ideas or findings to these references is essential.

Overall, the reference section is well-structured and adheres to citation style guidelines. Still, the selection and use of high-quality sources should be emphasized to strengthen the research's foundation.

Rating: 4/5 |
| **Other comments**
- Grammar, format, etc. | In terms of the grammar and language use, the paper generally maintains proper grammar and language use. However, it's essential to ensure consistent tense usage throughout the document. For instance, if the paper primarily uses the past tense, it should be maintained consistently.

Referring to the formatting, the paper follows a standard academic format, including section headings (e.g., Introduction, Methodology) and subheadings (e.g., 4. Conclusions). This organization aids in readability and comprehension.

In terms of the clarity and coherence, the writing is clear and coherent, making it accessible to readers. Paragraphs are appropriately structured, and ideas flow logically from one to the next. However, some paragraphs could benefit from further topic sentence clarification to guide readers.

Overall, I would rate this paper as **4 out of 5** for its clarity and concise summary of the research outcomes. |

This paper demonstrates a generally good command of grammar and language use. Sentences are well-structured, and technical terminology is appropriately employed. However, there are some instances of inconsistency in verb tense usage that can affect the paper's overall readability. Maintaining a consistent verb tense throughout would greatly improve clarity.

In terms of formatting, the paper adheres to the APA style for references, which is commendable. The overall format is professional, and the length is appropriate – neither overly long nor too brief.

Clarity and coherence are areas where this paper could see some enhancements. While the structure of the paper is logical and follows a clear sequence from introduction to conclusion, there's room for improvement in providing more context, particularly in the introduction. A stronger emphasis on explaining the importance of cyber profiling and the specific focus on Indonesia would engage readers more effectively.

In conclusion, this paper serves as a valuable contribution to the field of cyber fraud patterns in Indonesia. With a few adjustments to grammar, greater attention to verb tense consistency, and improved clarity in the introduction, it has the potential to become an even more impactful piece of research.

Overall Rating: 4/5

Manuscript Evaluation				
Please tick only one response for each of the following criteria:				
Originality	☐Excellent	☒Strong	☐Moderate	☐Weak
Technicality	☐Excellent	☒Strong	☐Moderate	☐Weak
Significance of contribution	☐Excellent	☒Strong	☐Moderate	☐Weak
Clarity of presentation	☐Excellent	☒Strong	☐Moderate	☐Weak
Suitability for presentation	☐Excellent	☒Strong	☐Moderate	☐Weak
English presentation	☐Excellent	☒Strong	☐Moderate	☐Weak
Presentation style	☐Excellent	☒Strong	☐Moderate	☐Weak

Manuscript Evaluation Details (Comments to the Author(s))	Dear Author,
	I have reviewed your paper and would like to provide more specific feedback to guide you. Here are the key points and important notes for your consideration:
	Positive Aspects: 1. Clear Objectives: The research objectives are well-defined, especially in the abstract and conclusion sections, which helps readers understand the purpose of the study.
	2. Research Relevance: The paper addresses a pertinent issue related to cybercrime in Indonesia, which adds value to the field of digital forensics.
	3. Structured Abstract: The abstract briefly presents key elements such as the problem statement, research method, and findings, making it an effective summary of the study.
	4. Comprehensive References: The paper contains an extensive list of references, indicating thorough research in the field.
	However, there are a few areas where the paper could be improved:
	Areas for Improvement:

1. Introduction: While the introduction provides an overview of cyber profiling and mentions the research goal, it lacks a broader context and doesn't explain why this study is important. Providing more background information and context would engage the reader.

2. Methodology: The methodology section, though clear, lacks specific details about data sources and data mining tools used. Providing more information would enhance the paper's credibility.

3. Abstract Significance: The abstract could further emphasize the significance of the research and its potential contributions to digital forensics, cybercrime prevention, or policy development.

4. Conclusion Clarity: The conclusion section contains a mix of findings but could benefit from a clearer summary of the main results and their implications.

5. Grammar and Language: The paper's language is generally clear and concise. However, proofreading for minor grammatical errors and language refinement would enhance its overall quality.

Overall, the paper holds promise and addresses an important issue in cybercrime research. With some minor revisions and further emphasis on context and significance, it could make a valuable contribution to the chosen journal.

Note to the Editor (will not be sent to the authors)	Overall, this paper is good and suitable for inclusion in the MJOC journal. I have two opinions about this paper. First, if we want to maintain the quality and details of MJOC, I suggest asking the paper's authors to make improvements based on the suggestions I have provided earlier. Second, if the MJOC editorial team is short on time, accepting this paper without major changes can also be considered, as long as the editor has thoroughly checked the paper's format and style to ensure it follows MJOC's guidelines. As a reviewer, my main focus is on the paper's content, and I don't pay too much attention to formatting details. Overall, I would rate this paper 4/5.
Rommendation	☒ Accept ☐ Minor Revisions ☐ Major Revision ☐ Reject

REVIEWER 1 COMMENTS:

Review Details: CYBER FRAUD PROFILING WITH ROUTINE ACTIVITY THEORY USING DATA MINING TECHNIQUES

Originality

strong

Technicality

moderate

Significant of contribution

moderate

Clarity of Presentation

moderate

Suitability for Publication

moderate

English Presentation

strong

Presentation Style

moderate

Comments:

1. In table 3. in the classification error, is it true that 23.7%? or maybe 22.7%?

2. Data that you have, is there any information such as how many males and females. On education, how many are high school, (student?), etc

3. We recommend that the data used must be explained in detail so that the readers knows the condition of the data used.

4. Is there any information about the true positive, true negative, false positive, false negative value? so it is clear in obtaining the value of accuracy, precision, and recall