

## GUIDELINES OF MOOD – THINKING – LOGIC PROFILING & ANTI-HOAX FRAMEWORK: DETECTING SOMEONE'S MOTIVES ON SOCIAL MEDIA

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**Abstract:** Social media is a lifestyle, starting from how to think and behave towards something. Understanding what is on social media requires a systematic guide to distinguish between true and false information. Therefore, this article will provide a guide to overcome hoax by examining two concepts, namely Mood-Thinking-Logic Profiling and Anti-Hoax Framework. Two important parts of this article are discussing mood-thinking-logic which is the basis of every human's thinking, which then results in two attitudes, namely doing the right or wrong thing. This article complements the two articles that have been published. Because the problem regarding hoaxes is still an unfinished debate and still has problems finding the right formula or guide, in this article we create two concepts to solve this problem. the first concept produces guidelines of mood-thinking-logic profiling, which are concepts for understanding the layers of feelings, thoughts and logic of a person and the motives he does in social media, then the second concept is anti-hoax framework which discusses seven levels of hoaxes and solutions to overcome hoaxes. Both of these concepts will be accompanied by examples of case studies that discuss these matters, so that readers will understand the two concepts. Furthermore, this research is still being developed because it still needs a lot of refinement, and this research is part of the text mining research that we are currently doing.

**Keywords:** Mood, Thinking, Logic, Profiling, Anti Hoax

### 1. Introduction

Social media is a change. Changes that start from our lifestyle, mindset and the way we behave. Social media is one of the pillars and means of disseminating information and the way we communicate. Therefore, systematic social media management is needed, and a guide and application are needed to detect in detail what things must be done on social media (Wooley, 2013; Pulido et al., 2018). Difficulties such as reading the intentions and thought patterns of others and the emotions they express are problems that must be resolved. It is very important and must find a solution because reading a book is not the same as reading someone's mind while doing social media. We showed huge amounts of data, shared information, and every statement that gives an opinion on social media. If we do not understand deeply, we will be easily influenced and cannot distinguish these sentences' meaning. We call this the invisible emotion (mood-thinking-logic profiling).

Before we go any further, several articles from several experts also explain the same thing about social media, especially about social interactions, functions, data and emotion detection. Some of these experts include (1) Stefan Stieglitz (2018): "The growth of social media opens up opportunities for Analysis of several things and patterns in communication. For example, social media can be used to analyze trends, influences and types of information. In the field of information systems, social media data used to study the dissemination of information, while in other fields, Twitter data analysis used to study the moods of people who are changing" (Stieglitz et al., 2018), (2) Sonia Xylina Mashal (2017): "Most of the

communication has moved from face to face. Advance to be online. Therefore, a lot of social media data can be used for emotional Analysis and identification of the user's thoughts when he writes the post. This Analysis can influence us in making future decisions" (Mashal and Asnani, 2017), (3) José van Dijck (2013): "The logic of social media refers to the processes, principles and practices those platforms use to process information, news and communication and can generally be referred to as social traffic" (van Dijck and Poell, 2013), (4) Bharat Gaind (2019): "Analysis and classification of text based on emotions is a big challenge and can consider as an advanced form of sentiment analysis. There are six classifications of emotions, including happiness, sadness, fear, anger, surprise and disgust" (Gaind, Syal and Padgalwar, 2019), (5) N. Berry (2018): "Expressing emotions is an important thing in social relationships, but this must be to maintain relationships and exchange opinions. Positively" (Berry et al., 2018), (6) Fatemeh Torabi Asr (2019): "Educating the public can be improved starting with media literacy and responsible general education, this must raise positive values and be able to increase competence in competing globally" (Torabi Asr and Taboada, 2019), (7 ) Liuyan Chen (2019): "An emotional trigger can define as an emotional stimulus that causes a reaction. Research has found that understanding what triggers a reaction helps people regulate their emotions and prevents and doesn't create negative feelings. Many social science studies have explored the relationship between a series of emotional triggers and certain moods. It can be studied using qualitative methods or survey data. Sentiment analysis is also one way to detect sentiment in the text" (Chen and Golab, 2020). These experts put forward important things and what elements should be included in social media.

This mood-thinking-logic is also related to hoaxes on social media. This illustrates that feelings, thoughts and logic will be able to influence the way we communicate on social media. Hoax is one of the elements in social media that requires a detailed discussion because it includes information and the formation of culture and mindset. Hoax is one of the main obstacles that may be to this day very confusing how to solve it. Furthermore, many are trying to overcome hoaxes by making software or other tools to be able to detect hoaxes and then provide the appropriate punishment for the perpetrators. Moreover, some important components in fake news must consider; the detection of harassment matters must also receive attention; identifying hot streaks and behaviour in using social media must also receive special attention (Nyilasy, 2019; Chen, McKeever and Delany, 2019; Garimella and West, 2019; Geigle et al., 2019). However, there is a very basic and important thing that hoaxes can occur because of human nature—moreover, the domain of psychological factors that cannot be detected. Moreover, a character formation from a small age who do not get a proper education in their families to produce a hoax attitude, other factors such as genetics, heredity, nature, etc. These things can also influence, so it can be said that the factors are because hoaxes are so complex that it can be difficult to solve hoax cases (Siswoko, 2017). The definition of Hoax fake news is very well defined. Furthermore, the right category can produce so that understanding the history of the occurrence of fake news must also be understood by the users of social media because these things will be able to affect a person's entire lifestyle and future decisions (Pierri and Ceri, 2019; Chukwuere, 2017).

This article is a development of two previous articles published at the IEEE conference: (1) Guidelines of Influencer Intelligence: Positive & Negative Impact of Influencer to Community. (2) Designing the Concept of Leadership Intelligence (CI2.1) Version 2.0 inside social media Using Ken Watanabe Problem Solving 101 Methods. Furthermore, the method we use in this article is still the same as the two articles that were previously published because this article is a continuation of the previous article. The results of this article are guidelines for mood-thinking-logic profiling and anti-hoax framework.

## 2. Research Methodologies

### 2.1. The roadmap of research



Figure 1. The Roadmap of Research in Social Media Profiling

Figure 1 describes the long-term research process, where this research has gone through several stages in its research, and several articles published. You can get information about articles published through google scholar, and this research has reached the tenth stage, there are still two more concepts to complement the concept so that the basic strengths will be well built. Why did we explain this at the beginning of the article? Readers can understand that the articles we make are a long-term, continuous process, and the final goal of our research is an application. Before that, we have to complete all the concepts to build systematic, structured and perfect research. Pablo Martí (2019) said: “Automatic retrieval of content created by social media users is a technological advance. Traditionally large surveys and long observation periods have been required to collect the amount of data required for research” (Martí, Serrano-Estrada and Nolasco-Cirugeda, 2019)

Furthermore, May Zin Oo (2020) said, "In this case, it is necessary to answer the question why, because information must be used as an objective in developing understanding, by comparison, relating it to other factors and testing concepts. Thus, research means finding out "what" and "why" questions through descriptive and analytic methods” (Oo, 2020). Finally, Bogdan Batrinca (2015), said: "Social media data is the greatest and most dynamic evidence of human behavior that brings new opportunities to understand individuals, groups and society” (Batrinca and Treleven, 2014).

### 2.2. The process of research – mood, thinking, logic profiling.



Figure 2. The Process Of Research

Figure 2 explains the stages of our research. We conducted a literature review at the

initial stage, a survey of 300 people (50 lecturers, 150 students, 80 private employees, 20 small traders).

The questions posed in the survey are: (1) When reading information on social media, do you immediately believe or understand it? (1: believe it immediately and disseminate the information regardless of its impact, 2: trust the information a little but ask friends or family first for the truth of the information, 3: trust and understand a little, but keep spreading the information because they feel it is necessary to know by other people, 4: trusting but not understanding, then sharing the information with other people and people closest to, 5: understanding and being careful in sharing the information) (2) Can you understand the motive of the information obtained on social media? (1: do not understand but immediately share the information, 2: understand a little and comment on the information without thinking about the impact, 3: hesitate in understanding the motives of the information and prefer not to care about it, 4: sufficiently understand motive and purpose of the information, to share information the person and then discuss the information, 5: know and understand the information then share the information but beforehand discuss it first before spreading the information. (3) Are you active on social media? (1: very active and likes to comment and share information, 2: active but doesn't like to share information and tends to only chat with those closest to you, 3: quite active, and likes to comment and spread information to others, 4: active but prefer to discuss logically and do not like to spread the information, 5: be active and discuss logically and share the information

Other data were obtained from published literature reviews and analyzed the problems from the survey conducted. Next is the discussion and data processing. The final result is the mood-thinking-logic profiling guidelines contained in social media or the mood-thinking-logic profiling framework.

### **3. Results and Discussions**

#### **3.1. Survey results & data set**

##### **3.1.1. Survey results**

Survey results from 300 participants:

Question 1: 24.7% Understanding and being careful in sharing the information, 25.3% Trusting but not understanding, then sharing the information with other people and people closest to, 16.3% Trust and understand a little, but keep spreading the information because they feel it is necessary to know by other people, 14% Trust the information a little but ask friends or family first for the truth of the information, 19.7% Believe it immediately and disseminate the information regardless of its impact.

Question 2: 28.3% Know and understand the information then share the information but beforehand discuss it first before spreading the information, 15% Sufficiently understand motive and purpose of the information, to share information the person and then discuss the information, 17.3% Hesitate in understanding the motives of the information and prefer not to care about it, 20.3% Understand a little and comment on the information without thinking about the impact, 19% Do not understand but immediately share the information

Question 3: 27.7% Be active and discuss logically and share the information, 14.7% Active but prefer to discuss logically and do not like to spread the information, 19.7% Quite active, and likes to comment and spread information to others, 15.7% Active but doesn't like to share information and tends to only chat with those closest to you, 22.3% Very active and likes to comment and share information.

##### **3.1.2. Data set**

According to data obtained from George Mavridis, entitled Fake News and Social

Media: How Greek users identify and curb misinformation online, there are several important data obtained, including 64.95% of the users highlighted that when it comes to fake news produced by media outlets, they also comment on the post by saying that this is a fake story, 59.79% of the users choose to flag the post as untrustworthy visibly, 34.02% of the users said that they report the post and the media or the user who shared the fake story, 17.53% of the participants in this study prefer to reshare the post with the fake story to warn other users not to read it, 6.19% who directly contact the media that has produced the fake story and ask them to delete it, 6% of the users who ignore the post and take no action. 96% of the users believed that Facebook is the best place to post fake news since it provides an environment to produce and share fake stories easily, 28% of the users, Twitter is also a social media which offers the tools to distribute fake stories easily, 5% stated that Instagram provides a fertile environment, 2% of the users described YouTube as a social medium which is a fertile ground to generate and circulate fake stories, 1% underlined that the spread of fake news has to do with the users and not with the social media and that the users are the ones responsible for the production and distribution of a fake story. 76% of the users believed that the users should be responsible for identifying a fake story distributed on social media and stopping its spread, 60% of the users stated that the social media platforms should take actions in order to spot the fake news and curb their distribution, 43% of the participants of this study believed that an independent body can play a significant role in this process and it is crucial to creating an independent authority responsible for spotting fake news on social media, 15% who underlined that the government should also be responsible for curbing fake stories on social media, 8% who said that they do not know who should take actions and stop the distribution of fake news on social media, 2% of the users believed that the independent body described above should consist of journalists who will judge the content of the fake news, 2% of the users pointed out that there should be penalties initiated by the social media for users who produce and share the fake news. Moreover, other data was also presented by Eugenio Tacchini, et al., in 2017, with the title of the article: Some Like it Hoax: Automated Fake News Detection in Social Networks. Furthermore, Bc. Martin Bažík, in 2020, also presented data, and the title of his thesis was Automatic Detection of Fake News. These three data sources can use as a reference for developing solutions in overcoming problems in social media (Wahab, 2012; Mavridis, 2018; Bažík, 2020).

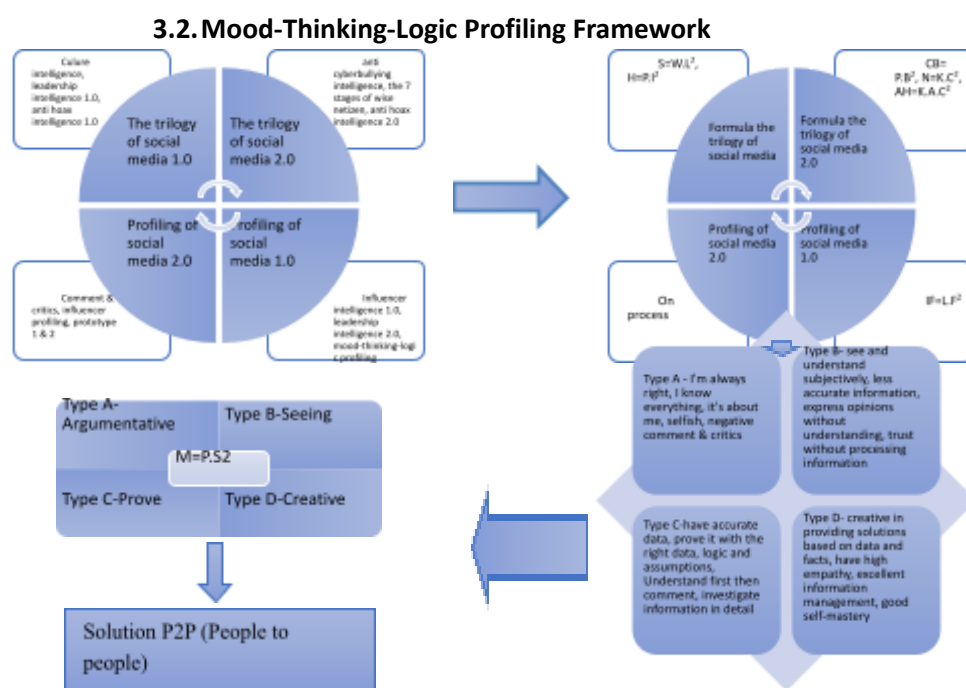


Figure 3. Guidelines of mood-thinking-logic profiling

Figure 3 explains the stages contained in the guidelines of mood-thinking-logic profiling. A first stage is several articles that have been published and have several special formulas in each discussion; some do not have formulas but frameworks. These formulas can be formulated as follows:  $(S = W.L2) + (H = P.I2) + (CB = P.B2) + (N = K.C2) + (AH = KAC2) \Rightarrow IF = I.F2 + M = P.S2$ . These formulas are a process in producing the next formula and these are related to one another. At this stage, the special formula for mood-thinking-logic profiling is  $M = P.S2$ , where: M-mood, P-people, S-solution, S1-Solution based on logic, S2-Solution based on data and logic. Here, the mood and personality of the person cannot separate from one another. People mean mood and mood means people, are people who do it on social media. The mood can be influenced by two important things, feelings that can still control well, which is called mood based on logical self-control, and mood based on feeling self-control. The two have significant differences. In logical self-control (CL), people before doing and saying something will hold themselves first and think of the impact it will cause if they do this. This type is a person with a high maturity level, where thoughts and feelings can be controlled properly.

In emotional self-control (CF), a person who tries to control himself with the feelings he feels at that time, this type always expresses his opinion without trying to understand the information first. The tendency to say sarcastic sentences will also be done or insinuate with subtle sentences to cover up his dislike. This type only pays attention to his feelings at that time and does not think long about the impact that occurs after he does this. It is a sign of immaturity in attitude. There are also two important things in formulas, namely solutions based on logic and solutions based on data and logic. The two also have significant differences. A solution based on logic is a solution based on his past experiences and rationale for expressing his opinion. This logic can be said to be free logic. We can think without data and maybe even a little data/information that we have and then justify ourselves in defending an opinion and an assessment.

Meanwhile, solutions based on logic and data are the main signs of maturity in thinking. This type of person uses their logic well but based on valid data, information and facts, not imagination. It is not wrong to imagine, but if imagination harms society, then it is not good, back to the discussion. This type has characteristics: details, Analysis and investigation of information and prior discussions with competent and trustworthy people, to obtain definite logic and when expressing opinions and judgments are all based on deep understanding, data/information valid, honesty in assessing and paying attention to other people's feelings, or in other words having empathy, and able to maintain a balance between knowledge-logic and feelings. There is an important question here: What if someone has the ability but does not have charisma? The answer is easy. A person who has the ability, logic and valid data/information indirectly will have charisma because he attracts other people to himself. What needs to be trained is how he conveys or communicates so that other people will see something unique about that person.

Another thing that needs to be understood is that the person can build charisma by developing the ability to provide good solutions. The difference between opinion and judgment is that opinion is subjective, only by what we think is right or wrong without doing a more in-depth investigation into it, only saying disagreement without a solid basis. The fact is that the person does not have the same abilities as what others have. The assessment is objective, where a person investigates the advance of the facts revealed, and this feature is found in solutions with logic and data. Assessment should only be made if we have experience and abilities above that person, the same competence as that person, or experience in the field; then we can make a correct assessment. For example, someone who likes to play golf, but

criticized by people who have never played golf is illogical and is just an opinion and not an objective judgment. Someone can say freely like it or not, and it is the prerogative of every individual, but to make an assessment, one absolutely must first know the truth before saying this. this can describe as follows:

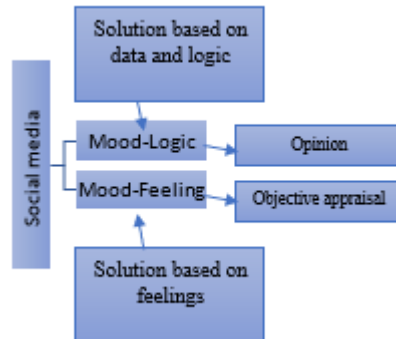


Figure 4. The process of formula  $M=P.S^2$

The third stage is four types of mood-thinking-logic profiling guidelines; these are classified to make it easier for people to analyze the motives and intentions of what the person wants to do on social media. These four types will continue to develop in the next two articles, which are further research. This article will explain someone's intentions and motives or say something on social media in a big picture.

### 3.3. Type A-Argumentative

This type has main characteristics in communication, namely "I'm always right". "I know everything". "It's about me". "My opinion is always right and there is no need to listen to other people". "selfish". " Negative comments " and try to bring down other people directly or indirectly. The main characteristics of this type are: (1) trusting himself more than others and arguing that he is always right in saying and doing something and does not want to listen to other people's thoughts, (2) like to argue, and in every argument, he justifies himself and does not want to listen to other people's opinions, (3) feel that they have high power without realizing that there are still many people who have more power than themselves, it can say that they like to hallucinate and their imagination is too high, (4) have excessive narcissism so that others see them as someone who likes to seek sensation and seek attention, (5) does not have empathy for others, the point of view used is himself, (6) hide something in the words he utters and tends to think of bringing others down in any way, (7) As if you want to change the world but don't realize that to be able to change the world, someone one must change oneself first, for the world existed before him. These seven characteristics are the big picture; the next is the more specific ones:



Figure 5. The four categories of type A

Figure 5, explains more specifically type A. Type A is divided into A1-selfish. This type is selfish in behaving towards others. It does not pay attention to the feelings and opinions of others. A2-no empathy, this type has no feelings

deep; in other words, do not want to understand and listen to other people deeply so that the impact is a misunderstanding in communication. A3-Do did not want to listen. The difference between A1 and A2 is that type A3 talks more and expresses her opinion and tries very hard to make her opinion justified and always right to have difficulty communicating with this type. A4-defensive, this type always uses logic or data to defend the truth of its opinion; in other words, this type may have data or information that he thinks is valid. Still, the data and information it possesses are not necessarily correct.

### 3.4. Type B-Seeing Type

This type is seeing. Before going into the discussion, we need to understand "what we see with our eyes is not necessarily a real fact. But if the way we see is changed by staying still for a few minutes and controlling ourselves and thinking more deeply, this way of seeing is justified. Characteristics of this type are: (1) seeing and understanding subjectively, (2) inaccurate information, (3) expressing opinions without understanding, (4) trusting without processing information, (5) seeing but being ignorant and not disseminating information, (6) sometimes commenting on criticism or information given on social media but after that did not provide any comment, (7) just wanted to know and did not investigate the information. This characteristic is a big picture, then type B when categorized into several categories:

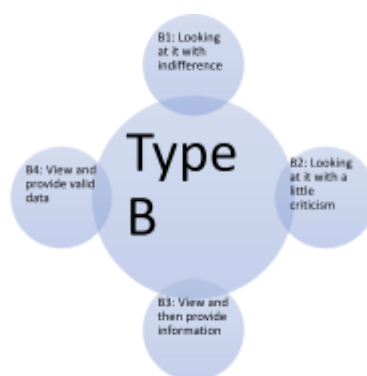


Figure 6. The four categories of type B

Figure 6 explains four categories in type B: B1- seeing with an indifference attitude. When viewing or reading information/data on social media, this type tends to be indifferent and indifferent but will still read the information/data. In other words, this type only keeps information to itself. B2-Looks in a slightly critical manner, this type will comment a little about what they see on social media but do not continue the criticism in-depth, only briefly state their dislike or opinion. B3-Seeing and then sharing information, this type sees information on social media and then shares that information with people he trusts and then does nothing else. B4-sees and provides valid data. The difference with B3 is type B4, has data also when he reads and sees information on social media then shares it with people he trusts and discusses things but only to discuss, nothing more than that, to disseminate the information discussed.

### 3.5. Type C-Prove

Type C is the type who believes if you have valid data to submit against him, the

information you have just come from a trusted source so that Type C will believe what you have and say. Characteristics of type C are: (1) Having accurate data, (2) being able to prove with valid logic and data, (3) being able to make correct assumptions about a problem with strong logic and database, (4) trying to understand first the intentions and motives of other people will then comment on this, of course with valid data, (5) investigating data or information in detail, (6) not easily trusting others and investigating first until they are sure of the information valid or invalid, (7) have a strong self-confidence because they have reliable and very valid data and information. Type C divided into several more specific categories, including:

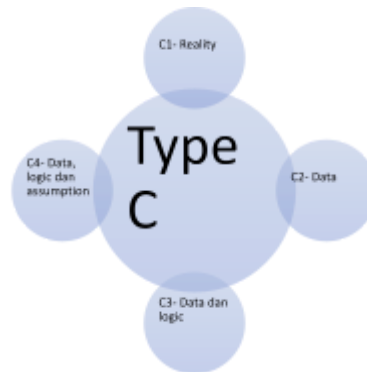


Figure 7. The four categories of type C

Figure 7 explains that there are four categories in type C, including C1-reality, type C1 believes more in facts and events that occur at this time, in the short term, in their argument, this type always shows the reality that is happening at this time. It is more likely what he sees now than later. The discussion carried out by type C1 is about current realities, current events, and a quick solution to overcome these events, C2-data, C2 type emphasizes data. When the debate occurs, this type will display the data it has, even strengthened by strong sources so that other people must also present data that is as strong as what type C1 has presented. This type is very good at collecting data and detailed information. Many other people who hear it will know valid and reliable data, C3-data and logic, this C3 type has valid data and has strong logic towards the data. Therefore, the arguments put forward by this type are capable of seeing and analyzing what data errors have resulted, causing chaos in the process. This type is also able to provide solutions. The solutions still given tend to be technical and require explanations that are easier for the general public to understand, C4-data, logic and assumptions. This type can be said to be the highest type in terms of Analysis, where its ability to analyze data, argue based on data and see an imperfection of a process can be trusted. This type can make reasonable assumptions and opinions combined with judgments so that it is almost close to solving the problem.

### 3.6. Type D-Creative

This type is almost the same as type C, but not the same; type D has more innovative ideas and new concepts in solving problems. The main characteristics of type D are: (1) creative in providing solutions, (2) having high empathy, (3) excellent management of information and being able to present it in language that easily understood by the general public, (4) having self-control which is good, (5) can incorporate various ideas it gets from other people, (6) has a lot of questions and a great curiosity about something in a positive way, (7) has a long-term mindset in solving problems. Type D divided into several categories, including:

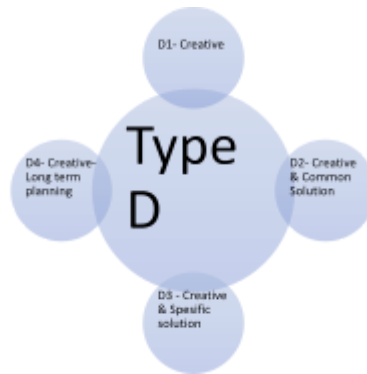


Figure 8. The four categories of type D

Figure 8 explains, D1- creative, meaning that this type only has creative abilities in general, where there is nothing special in it, but its experimental ability can make people like it. D2- creative & common solutions, the difference with D1 is that D1 is common to everyone. Can do it, whereas, in D2, this type has specialization in a certain field and can express it uniquely so that people can understand it easily. D3-creative & specific solution, this type has a balanced general and special knowledge. The ability is based on the experience they get so that when arguments are shared on social media, this type will tell a specific experience and provide examples of more specific case studies. D4- creative & long-term planning. This type has the power in concepts and can create ideas -new ideas and maybe ideas combined with previous ideas and being able for a process that in the end can be implemented, ideas that are expressed sometimes in the eyes of others seem impossible to do. Still, this type has the consistency to finish what he has done in the beginning.

**3.7. Implementation and application of the mood-thinking-logic profiling framework Case study A- profiling and implementation**

Table 1. Combination of type A and B

Type	B1	B2	B3	B4
A1	✓		✓	
A2		✓		✓
A3	✓			✓
A4		✓	✓	

Notes:

- A1- selfish
- A2- no empathy
- A3- does not want to listen
- A4- be defensive
- B1- looks on with indifference
- B2- looks a little critical
- B3- viewing and then sharing information
- B4- view and provide valid data

**3.7.1. Case A1, B1, B3**

Someone on social media has a combination of selfishness, looks indifferent, sees and then shares information. For example, someone has spread information on social media without first investigating whether the information is true or not. This attitude is an attitude of selfishness, which means that regardless of the impact of the information shared, it will cause chaos in society regarding the truth of something. What makes it fatal is an attitude of ignorance. Without an in-depth analysis of information, it results in the spread of hoaxes that can damage communication, culture, attitudes, and words of the community because they are affected by the information disseminated massively and without first investigating the truth of the information.



Figure 9. The case of A1, B1, B3

**3.7.2. Case A2, B2, B4**

Someone on social media has a combination of no empathy, sees with a little criticism, sees and provides valid data. For example, someone does an act of criticizing another person or something on social media, which then this person has data that he thinks is true, but this person does not want to mention where he got the data. The main thing this person does is presenting data on social media to make the actual data invisible so that this person can justify the data they have without explaining the source of the data.



Figure 10. The case of A2, B2, B4

**3.7.3. Case A3, B1, B4**

Someone on social media has a combination of listening, looking indifferent, seeing and providing valid data. For example, someone on social media shares information and says that the data he has is the most correct, but does not want to explain the method and where it was obtained. Furthermore, this person is doing what is called sharing untrue data and justifying what he is doing regardless of the major impact it causes, causing cultural damage and communication between other people in general in society.

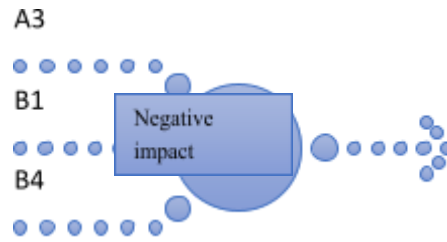


Figure 11. The case of A3, B1, B4

**3.7.4. Case A4, B2, B3**

Someone on social media has a combination of being defensive, seeing with a little criticism, seeing and then sharing information. For example, someone doesn't want to be criticized for what he has done, then argues about it. The result is that he shares information added with something so that people on social media react negatively to something. The criticism this person throws at someone else or something by acting smart and expert in his field, but the main motive is to drop and justify himself.



Figure 12. The case of A4, B2, B3

**3.8. Case Study B – profiling and implementation**

Table 2. The combination of C and D

Type	D1	D2	D3	D4
C1		✓		✓
C2	✓		✓	
C3	✓	✓		✓
C4			✓	✓

Notes:

C1- reality

C2- data

C3- data and logic

C4- data, logic dan assumption

D1- creative

D2- creative & common solution

D3- creative & specific solution

D4- creative – long term planning

**3.8.1. Case C1, D2, D4**

Someone on social media has a combination of reality, creative-common solutions, creative-long term planning. For example, someone says something and gives their opinion on social media and sticks to the reality or facts that are happening now. That person provides general solutions and long-term solutions that are temporary to solve the problem correctly.



Figure 13. The case of C1, D2, D4

### 3.8.2. Case C2, D1, D3

Someone on social media has a combination of data, creative, creative-specific solutions. For example, someone has data that can be justified from the source and then provides an example of a case study in solving the problem at hand. This person has positive and detailed things and can be quite specific in providing solutions so that many people on social media feel helped by the data and solutions they provide.

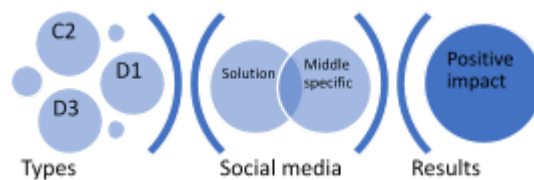


Figure 14. The case of C2, D1, D3

### 3.8.3. Case C3, D1, D2, D4

Someone on social media has various data and lobbying, creative, creative-common solutions, and creative-long term planning (I. Gamayanto, 2020). For example, someone who has very good information, can provide examples of good problem solving in general and specifically. It can provide examples of case studies that can provide very specific comparisons and politely give their opinion based on data and discuss politely. Many people greatly helped develop general knowledge, special knowledge, and arousing creativity positively and forming a very positive social media environment.

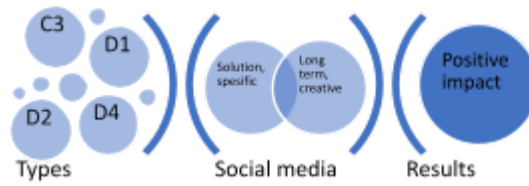


Figure 15. The case of C3, D1, D2, D4

**3.8.4. Case C4, D3, D4**

Someone on social media has a combination of data, logic and assumptions, creative-common solutions, creative - long term solutions (F. Alzami, 2020). For example, someone can share information creatively, by making the information easier for others to understand, the assumptions made make others think. Still positive, on the other hand, this person is also able to present long-term solutions to problems in a way that is unique and positive.



Figure 16. The case of C4, D3, D4

**3.9. Connection Between Guidelines of Mood-Thinking-Logic Profiling and Anti-Hoax Framework**

After we examine the Mood-Thinking-Logic Profiling, we will examine the hoax component which is one of the essential parts of social media. The relationship between the Guidelines of Mood-Thinking-Logic Profiling and the Anti-Hoax Framework can be described as follows:

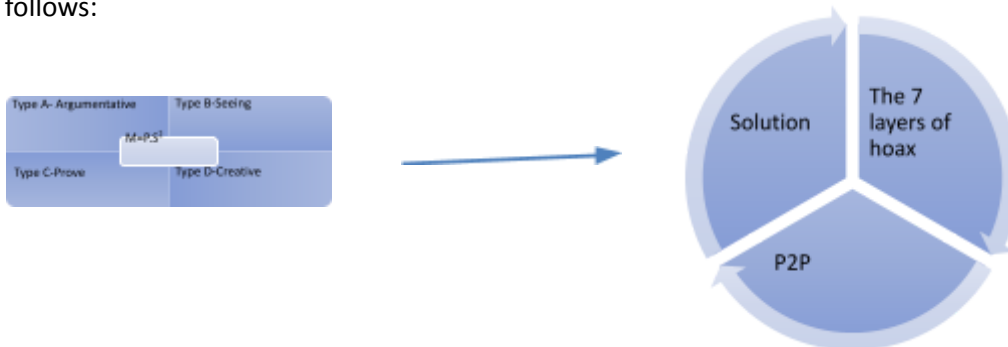


Figure 17. The Connection between Guidelines of mood-thinking-logic profiling and the layers of hoax

Figure 17 explains that after we complete the first concept, then we continue to examine the next concept, namely Seven Layers of Hoax that will create a series called P2P (People to People). After both analysis of 7 Layers of Hoax and People to People (P2P) is done, a solution can be concluded to overcome hoaxes. These concepts are called Anti-Hoax Framework. The following is an explanation for the second concept: Hoax consists of 7 important parts shown in Figure 18.

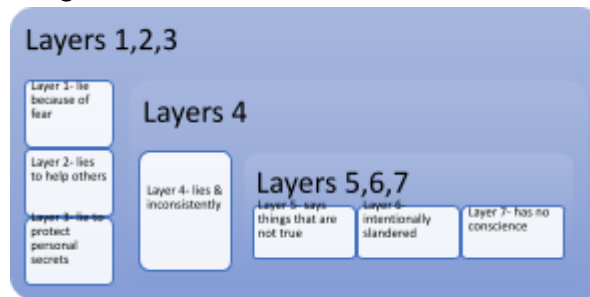


Figure 18. The seven layers of Hoax

Figure 18, shows, the seven layers of Hoax, layers 1-3 consist of three parts: layer 1- lying for fear; layer 2- lying to help others; layer 3- lying to protect personal secrets; layers 4- lie relatively; layers 5-6 consists of 3 parts: layer 5- says things that are not true; layer 6- accidentally says things that aren't right - slander; layer 7- lies totally and has no conscience. This has a very large impact on the occurrence of hoaxes and can cause excitement to make the level of discomfort on social media increase and will be able to cause damage to relations between humans and generate negative thought patterns. We need to understand, among the seven things, not all of them have negative impacts, some layers have positive aims and protect themselves from unwanted problems. These layers explained as follows:

**Layer 1-** lie because of fear. At layer 1, this happens in general and specifically for every human being. In general, humans lie when they want to protect themselves from a problem. For instance, a child breaks a plate, and the mother finds out, then the child says that he didn't break the plate; specifically, humans lie when there are rules that felt to bind freedom. Therefore, psychological factors can influence someone in using social media (Guntuku et al., 2019). For instance, someone feels pressured by a rule and obligation, which in the end, that person takes action that is contrary to what should be done (Robertson, Aiello and Quercia, 2019).

**Layer 2-** lies to help others. At layer 2, this is very complex and is an illogical case. Morally, we know that lying is wrong, but what happens, if we are faced with a situation that forces us to lie to protect something or someone, is this allowed? It answered: yes, in special situations and no, if this was done intentionally. On layer 2, this is lying for good only if we are very sure that what we have justified is true and can be justified.

**Layer 3-** lie to protect personal secrets. At layer 3, this is a common thing that happens and becomes a special right that is owned by every human being. Lying to protect personal secrets means that someone has the prerogative not to say anything, anything he considers privacy.

**Layer 4-** lies inconsistently. At layer 4, lying inconsistency reflects the unpredictable nature of the meaning: a person lies based on concepts and principles that are difficult to understand, but the problem is, that person lies using the understanding that lying can be done

anytime in any situation, as long as it can benefit personal to him (Gelfert, 2018; Dai and Mason, 2019; Dai & Mason, 2019; Alemanno, 2018).

**Layer 5-** says things that are not true. At layer 5, saying things that are not true, is wrong and cannot be justified, but the problem at layer 5 is that someone lies using a specific event and this is done intentionally (Staller, 2019; Piedra, 2019; Allcott, Gentzkow and Yu, 2019). Things that are not true mean telling lies that are intentional and planned to bring down others negatively. It can result in other people being directly and indirectly affected by slander.

**Layer 6-** intentionally slandered. At layer 6, someone is slandering at several stages: the initial stage - planning to bring down others through gossip; social media or other media that can cause widespread nature of spread; the next step is to emphasize the news so others can believe it; the final stage - the person will need to hit and run to be able to continue to take action, usually at layer 6, the Hoax or slander uses data that falsified so that others believe it.

**Layer 7-** has no conscience. On layer 7, one does not care about others, in terms of feelings and the consequences of what they do. At this stage, people who do hoaxes are said to be a sociopath or psychopath. Sociopaths also have a volatile and very impulsive form of emotion. They are also more impatient, tend to be spontaneous, and lack detailed preparation in any case. The crimes of a sociopath are quite easy to detect because they are reckless and not smart enough to cover their tracks or devise strategies. Sociopathic traits are more obvious. After all, when a crime or lie is exposed. They will usually be irritable and irritated because they are not able to control expressions properly in contrast to psychopaths who are more able to manipulate the situation, even though it was to show how he does not feel guilty. A psychopath will very easily blend in and place themselves in the surrounding community. They generally have above average intelligence in capturing the interlocutor. Besides, a psychopath is also able to imitate emotions, although not able to feel it. Remarkably again, other people will not be suspicious and assume what they are doing is just normal. However, the best thing about a psychopath is his ability to calculate manipulative qualities in great detail. That's why then 2002 research from the National Center for Biotechnology Information (NCBI) showed that 93.3% of psychopathic murder cases planned. When committing a murder, they are very likely to enjoy it because of the lack of empathy when witnessing others in pain. Lesions influence the lack of fear and remorse of a psychopath in the part of the brain known as the amygdala: a part that is responsible for emotional perception, controlling aggression, and regulating memory. The damage usually occurs due to hereditary or inborn (Mullins-Sweatt et al., 2010; Johnson, 2019).

Previously in Part 1, 7 layers were discussed, which are the basis for understanding "types of hoaxes." After discussing the types of hoaxes, the following will describe four categories of hoaxes and formulas, to produce an anti-hoax framework

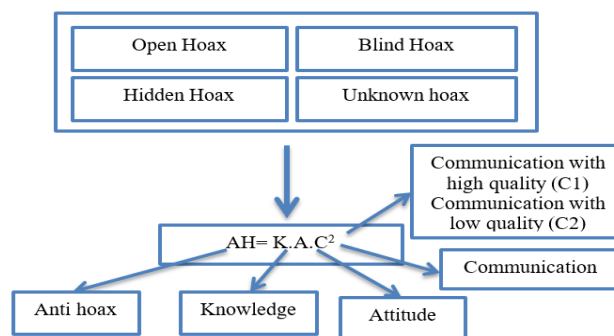


Figure 19. The four category of anti-Hoax – Formula AH=K.A.C<sup>2</sup>

The relationship between  $S = W.L2$  with the formula  $Anti\ H = KAC2$  when someone says something, and it has a broad social impact. That person can be said to be a leader who is chosen from one of the categories: a small level leader (who only influences 10-50 people on social media); mid-level leaders (who influence 50-200 people on social media); top-level leaders (affecting more than 200-1 million people more). These three categories explain that every person who says something if what he said is not understood correctly, it will turn into a hoax and even trigger instability of communication on social media. The impact it produces is twofold, namely: information that has a positive charge and can motivate others to spread the information to be able to change people for the better or the impact with a very large negative content, where the resulting impact is very negative, thus damaging perceptions, communication, and attitude.

Figure 19 finished as follows:

(1) Open Hoax: a hoax that is done openly, boldly and does not take into account the risk. For example, someone gives information without checking whether the information is true or not, then disseminates it and even adds other information so that the information turns into a trusted hoax. Open hoaxes are also directly self-destructive because people who do it do not think further than being punished by applicable law.

(2) Blind Hoax: Hoax that is done brutally and does not see the other side. For example, someone makes a video clip or information which is uploaded on social media, then is commented on that corners another person or organization/company or others so that the victim experiences undue social punishment treatment. In this section, a person is said to do a hoax when cutting video or information and used as punishment material. One must see the integrity of the video and understand the information first. If you do not do so, it is said that the person is a hoax too. Evidence can only be said to be authentic and complete evidence when it can present the integrity of the video and information. Some things do not need to present wholeness, but it is better if our perceptions are not only limited to what we see but to a deeper understanding before taking action (Shu, Bernard and Liu, 2019)

(3) Hidden Hoax: This category has certain characteristics, which are planned before taking the Hoax. The problem is that these actions aim to bring down others negatively; they are evil and lead to destroying the future of others. For example, if we look at social media, there is some information that is constantly repeated, and the thing that is worsening is to include data with unclear sources. It certainly will lead to confusion in the community, so people do not know which information is true and which information is a hoax. Still, because this type of repetition continues, this causes the public to believe what is reported

(4) Unknown Hoax: a category that is difficult to understand because we do not know who is spreading hoax or gossip information that damages the social media environment. In this section, people who like to cyberbullying other people on social media are categorized into unknown hoaxes. The opinion is permissible, but if an opinion based on perceptions and understanding that lacks knowledge, then people who make comments without thinking long-term can be said to be hoaxes indirectly. Another example such as video, information posted by people who do not know, needs to be examined very well and made a rule that can control the use of social media with an identity.

The things above are four important categories, which are useful for completing seven types of hoaxes, to produce an initial hypothesis. Next from the hypotheses that formed from seven types and four categories, the guidelines of anti hoax intelligence produce a formula:

$AH = K.A.C2$  (AH: Anti hoax; K: knowledge; A: Attitude; C (C1: Communication with high quality (C1); Communication with low quality (C2))). The explanation is as follows:

First, to be able to make proper communication on social media, a person must have

sufficient knowledge or a high level to be able to understand a piece of information. Knowledge is divided into two parts: general knowledge and special knowledge. General knowledge is the knowledge that is owned by someone, where many people know it, and this knowledge is not detailed. Specific knowledge is the knowledge that a person has and is a particular field of competence. This formula developed into a framework guideline of anti Hoax, which is the breakdown of the formula into several important pieces in more detail.

**3.10. The framework of anti hoax (P2P concepts & Solution)**

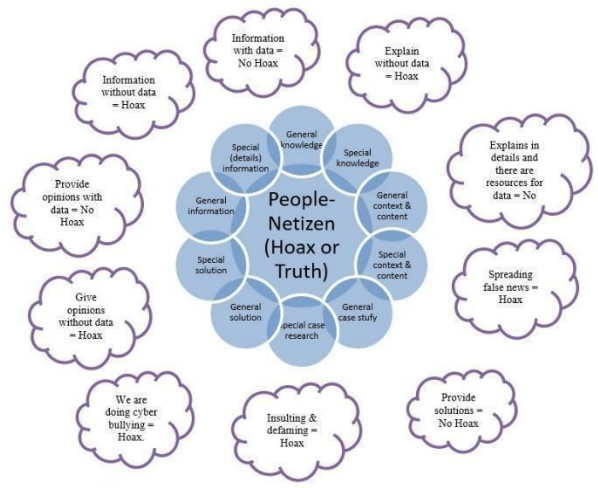


Figure 20. Anti-Hoax Framework

Circle 1: People-netizens (Hoax or truth)

Circle 2 (The circle of knowledge): General knowledge; special knowledge; general context-content; special context-content; general case research; special case research; general solution; special solution; general information; special information

Circle 3 (The circle of action & effect):

- A. Hoax: Explain without data; spreading false news; insulting & defaming; doing cyberbullying; give opinions without data; information without data
- B. No Hoax: explains in detail and there are resources; provide solutions; provide opinions with data; information with data

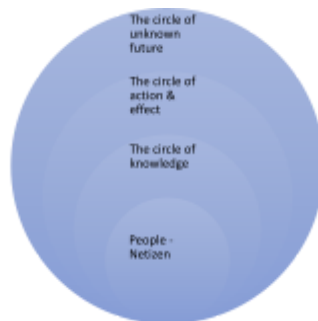


Figure 21. The circle of Anti hoax

Figures 20 & 21 explain that circle 1 is a netizen, netizens are people who are active on the internet. In this journal, we find that the definition of a netizen extends to "someone who

has a wide impact on others, thus changing the future". Why do we say that? We find that everyone will be able to make an impact on others, both directly and indirectly, the problem is some impacts realized and impacts that are not realized by others.

(1) The circle of knowledge explained as follows:

General knowledge and special knowledge: a social media user must know about communicating on social media (Fogg et al., 2002), for example, netizens must be able to have sufficient knowledge about the things that are expressed or information posted on social media, not give wrong information about a thing, special knowledge that must be possessed by netizens must have high competence in discussing a matter on social media. It is not intended to limit freedom of communication or expression, but to be able to uphold the ethics of social media, namely providing information, sharing knowledge/information correctly and based on facts and data.

General context and special content: context is the topic and content is the content of the topic. A social media user must be able to connect between context and content. It meant in discussing a matter, focusing on what is discussed and not widening the speech so that other people will experience "information disturbances", meaning that they do not obtain facts, knowledge, whatever information is correct. Netizens must be able to have a focus on what is discussed (Quintanilha, Da Silva and Lapa, 2019; Feingold et al., 2017). For example, the context discussed is how durian fruit can be useful for improving health, but the content discussed is in the opening section discussing durian, then more about other fruits. The essence of context and content is to focus on what is discussed first and master the context and content in general, which in turn will produce context and content specifically so that others can obtain high-quality knowledge on social media (Mehraj, Bhat and Mehraj, 2014).

General case research and special case research: in this section, a social media user or netizen must have the ability to "explain", meaning when discussing a matter, should be able to find examples of case studies in general with the topics discussed or criticized and have data with special case research. For example: when someone discusses the application of smart city and criticizes a smart city implementation, then netizens should be able to provide examples of case studies, in general, the application of smart cities in other countries, then the data they have provides a more detailed explanation. specific about its application, this is called a special case research

General solutions and specific solutions: in this section, a social media user must be able to provide solutions, be they opinions or judgments correctly. Opinions are matters that are expressed in a general and subjective manner. Whereby a person may express his opinion openly but must return to the ethical requirements. Namely having general and special knowledge, correctly mastering the context and general + special content, having general and special case research data, this stage did not skip so that a social media user does not spread hoaxes in providing solutions. must be based on solving problems positively, not to attack, but rather to focus on improving others, institutions/organizations/companies Assessment has data that accounted for in providing appropriate solutions

General information and special information: a social media user must have accurate data, not based on perception or logic that does not have a solid knowledge base, changing other people's data without confirmation is a hoax act, and this is violating social media ethics. Netizens must-have information that can help others obtain real information and communication must occur first or have accurate research or information before providing information that can cause chaos on social media.

(2) The circle of action & effect:

A. Hoax: (1) Explain without data: is an unethical act, where someone expresses an opinion without having any data, (2) Spreading false news: taking unethical actions in providing incorrect and incomplete information, (3) Insulting and defaming: bad-mouthing others or institutions/organizations/companies without having accurate data and concrete evidence, (4) Committing cyberbullying: carrying out acts of bullying against other people/institutions/organizations/companies, with negative expressions, do not have data that can support this (Zsa Zsa Tajol Asanan, Ibiwani Alisa Hussain, 2018), (5) Provide opinions without data: act subjective and only based on feelings and do not use logical thinking and concrete data (Mavridis, 2018), (6) Information without data: changing other people's data without confirmation and using that data as a basis for taking action (Mavridis, 2018)

B. No Hoax: (1) Explain in detail, and there are resources: a social media user can explain in detail and have a reference source as the basis for communication, (2) Providing solutions: focus on positive and not negative solutions (Akram and Kumar, 2017), (3) Provide opinions with data: able to provide opinions by explaining the data they have, (4) Information with data: information held is not based on perceptions without data, sees and decides without knowing whether this is true or not, makes decisions based on incomplete data (Najafrou et al., 2015), (5) The circle of unknown future: in this section are things that do not predict its impact, because there must be restrictions in using social media, both in terms of giving opinions, sharing information, discussions and sharing data.

Notes: This combination can be done flexibly, in this article, we do not explain all combinations due to limited journal pages, so we provide examples of combinations that generally occur on social media.

#### 4. Conclusions

1. This article is a long-term research process. In this article, the guidelines of mood-thinking-logic profiling (mood-thinking-logic profiling framework) are produced, which have four types, namely types A, B, C, D.
2. Types A, B, C, D further divided into several important categories including A1, A2, A3, A4, B1, B2, B3, B4, C1, C2, C3, C4, D1, D2, D3, D4. These types will discuss in more detail in the next article that will discuss comments & critics.
3. The formula produced in this article is  $M = P.S2$ , where this formula produces several important things, including solutions, opinions and judgments that are explained more specifically.
4. There are seven layers of Hoax on social media which include: Layer 1- lying for fear; Layer 2- lies to help others; Layer 3- lying to protect personal secrets; Layer 4- lies inconsistently; Layer 5- says things that are not true; Layer 6- deliberately slanders; Layer 7- has no conscience and four categories of hoaxes: open hoaxes; blind Hoax; hidden Hoax; unknown Hoax
5. This research produces a formula:  $AH = KAC2$  (AH: Anti hoax; K: knowledge; A: Attitude; C (C1: Communication with high quality (C1); Communication with low quality (C2)), where this formula produced from a combination of 7 layer hoaxes and four hoax categories
6. Guidelines of Anti-Hoax Intelligence 2021-2025 (The Cloud of Anti-Hoax Intelligence), which is the framework of anti-hoax intelligence, which is as a guide in overcoming hoax problems
7. Improving the ability of the community regarding the use of social media is urgently needed to reduce the level of spread of hoaxes, and social media ethics needs to be given to the world of education so that people can use social media more wisely

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