The Effect of Attribute Framing and Justification on Capital Budgeting Decisions

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ABSTRACT

This study aims to analyze the effect of the attribute framing and justification on decision making through the capital budgeting process. This study also aims to examine the effect of justification as moderation on the effect of attribute framing on capital budgeting decisions. The capital budgeting decision in this study is a decision toward the proposed capital budgeting project in the form of approving or rejecting the proposed project. This study uses a quasi-experimental research design with the data taken is primary data. The quasi-experimental research was designed 2 x 2 between subjects which was conducted to 83 financial students in the Magister of Management, Diponegoro University. Data analysis techniques used in this study were one-way ANOVA and two-way ANOVA. The results of the study shows that attribute framing and justification can influence decision making through the capital budgeting process. In particular, the information that is positively presented has an impact in the higher approval of a proposed capital budgeting project. This research also concluded that justification could not reduce the effect of the attribute framing on capital budgeting decisions. This shows that belief revision theory- foundation approach cannot explain the phenomenon of this study

Keywords: Capital Budgeting; Attribute Framing; Justification

1. INTRODUCTION

1.1 Research Background

Capital budgeting is very important and crucial in the financial management area as well as a challenge for management in maintaining and increasing company value (Rossi, 2014; Mayori & van der Poll, 2012). In the capital budgeting decision-making process, management must determine the amount of company resource allocation appropriately into the most profitable investment projects that can affect the long-term company performance and can increase shareholder value (Hornung, Luther, & Schuster, 2016; Peterson & Fabozzi, 2002), and also must be able to significantly influence stock returns (Durnev, Morck, & Yeung, 2004). Thus, decision making concerning capital budgeting is not easy. Amna (2015) added that the failure rate of innovation projects before being deployed to the market was 26.5%. Amna (2015) also mentioned the causes of the failure of the project include organizational rigidity, financial pitfalls, competency issues, vague decision makers, and others. Thus, capital budgeting project failure can be caused by managerial behavior (Kerler, Allport, & Fleming, 2012) like inconsistency and irrational. This is in accordance with the prospect theory, which explains that a person does not always think rationally in making decisions. As a result, there is a tendency to ignore the other alternative components offered, so that the person will focus only on differentiating these components or referred to as framing. (Kahneman & Tversky, 1979; Kahneman & Tversky, 1981). One form of framing that is used as the focus of this study is the attribute framing.

Attribute framing is the coding, labeling, or presentation of attributes of information, objects, or circumstances both positively and negatively. Differences in the positive and negative cognitive representations of an attribute can cause the evaluation dimensions needed by the subject to be

different in the positive and negative aspects, effectively changing the value of the subjective scale. In addition, the positive labeling of an attribute leads to encoding information that tends to generate beneficial associations in memory (Levin & Gaeth, 1988; Levin, Johnson, Russo, & Deldin, 1985; Levin, Schneider, & Gaeth, 1998). This is consistent with previous empirical studies that found that information that is positively coded has a tendency to positive evaluation or higher approval (Alewine, Allport, & Shen, 2016; Hannah & Cafferty, 2006; Kuvaas & Selart, 2004; Levin, Schneider, & Gaeth, 1998). Thus, it can be assumed that the decision to approve a capital budgeting project is higher when the information attributes are in the form of information that is presented positively.

Another focus in this study is the provision of justification. Based on the accountability theory, giving justification encourages a person to process more complex information (Tetlock, 1983a; Tetlock, 1983b). People who are asked to justify their views will be more vigilant in processing information by carrying out more difficult cognitive tasks and to think more carefully and reduce the use of intuition in decision making (Cvetkovich, 1978; Janis & Mann, 1977). Thus it can be assumed that when participants are asked to make a justification memo, participants will process the information on the proposed capital budgeting project more carefully and cautiously. This prudent behavior will lead to the possibility of evaluating the proposed capital budgeting project for approval. Justification will increase a manager's ability in reflection, critical analysis, and sensitivity so as to cause conservatism in seeing investment opportunities (Lerner & Tetlock, 1999). Justification can influence capital budgeting decisions in causing the managers to be more conservative and do not easily approve the capital budgeting project (Kerler, Allport, & Fleming, 2012).

Justification in this study was also tested as moderation on the effect of attribute framing on decision making in capital budgeting. The justification in this study does not only act as an independent variable, but the researcher also tries to test the justification as a moderating variable on the effect of the attribute framing on capital budgeting decisions. According to the explanation of belief revision theory, a person will change his old beliefs when acquiring new information that has justification or reason for that information (Doyle, 1992; Tennant, 2008; Gardenfors, 2003). So, the participants will change the initial assessment of the proposed capital budgeting project when they are asked to give a reason for the assessment that has been done and try to find and make an argument for the reason requested. Besides, justification also makes a person more careful, more alert, and more cautious in processing information and more sensitive to impression management (Cvetkovich, 1978; Janis & Mann, 1977; Tetlock, 1983a; Tetlock, 1983b). Deeper and more careful thinking tends to avoid someone from mistakes (LeBoeuf & Shafir, 2003). Giving justification can reduce bias (Lerner & Tetlock, 1999). Thus, the researcher assumed that there is a change in participants' assessment who will tend to reject larger capital budgeting project proposals when presented negatively.

1.2 Research Problem

Differences in the positive and negative cognitive representations of an attribute can cause the dimensions evaluation. In addition, the positive labeling of an attribute leads to generate beneficial associations in memory (Levin & Gaeth, 1988; Levin, Johnson, Russo, & Deldin, 1985; Levin, Schneider, & Gaeth, 1998). Therefore, it can be assumed that the attribute framing which positively presented tends to result in a higher approval decision on the proposed capital budgeting project. This is consistent with previous studies which found that the positive oerceotion about one of the proposed capital budgeting can leads to positive evaluation (Levin, Schneider, & Gaeth, 1998;

Kuvaas & Selart, 2004; Hannah & Cafferty, 2006; Allport, Brozovsky, & Kerler, 2010; Kerler, Allport, & Fleming, 2012; Kerler, Fleming, & Allport, 2014; Alewin, Allport, and Shen, 2016).

Another focus of this research is the provision of justification. Based on the accountability theory, justification will encourage someone to process more complex information carefully. Justification is also able to increase the conservatism of managers in seeing investment opportunities (Janis & Mann, 1977; Cvetkovich, 1978; Tetlock, 1983a; Tetlock, 1983b; Lerner & Tetlock 1999). The conservatism behavior in looking at investment opportunities makes researchers assumed that when participants are asked to justify, the possibility of approval of the proposed capital budgeting project will be lower.

Interestingly, previous studies found that this kind of justification only had limited support for framing effects and some even found that this justification could not moderate the effect of framing (Takemura, 1994; LeBoeuf & Shafir, 2003; Kerler, Fleming, & Allport, 2014). This shows that there is unclear empirical evidence, thus encouraging researchers to retest the justification as a variable that is thought to be able to reduce the effect of the attribute framing on capital budgeting decisions.

These problems can be formulated in the form of research questions are:

a) What is the effect of the attribute framing on capital budgeting decisions?
b) What is the effect of justification on capital budgeting decisions?
c) What is the effect of justification as the moderation of the attribute framing effect on capital budgeting decisions?

1.3 Research Purpose

a) To analyze and strengthen the empirical evidence of the effect of attribute framing on capital budgeting decisions.
b) To analyze and strengthen the empirical evidence of the effect of justification on capital budgeting decisions.
c) To analyze and strengthen the evidence of the justification as the moderation of the attribute framing effect on capital budgeting decisions.

2. THEORETICAL FRAMEWORK AND HYPOTHESES DEVELOPMENT

2.1 The Relationship Between Atributte Framing and Capital Budgeting Decision

This prospect theory is the result of criticism from Kahneman & Tversky (1979) on the expected utility theory, which states that every decision maker will always think rationally in making decisions. While in fact, decision makers often violate the axioms of the expected utility theory. A person who is faced with risky possibilities in decision making will show two main trends (Kahneman & Tversky, 1979; Kahneman & Tversky, 1982).The first trend is the certainty effect, which is an individual tendency to weigh on results that are only possible compared to the results obtained with certainty. The tendency in question is when faced with choices that involve sure gains, that individual will behave in risk aversion, and vice versa. The second trend is the isolation effect, which is the tendency of an individual in the matter of having to decide between to discard or ignore alternative components offered by all prospects being considered. As a result, the focus of the decision maker will only be on the components that distinguish it. This approach can cause inconsistent preferences because the presentation of different alternative components can create different preferences.

Attribute framing is useful to increase the understanding of the descriptive power of information that can influence the decision-making process. Differences in the positive and negative cognitive representations of an attribute can cause the evaluation dimensions needed by the subject

to be different in the positive and negative aspects, thus effectively changing the value of the subjective scale (Levin, Schneider, & Gaeth, 1998). Attribute framing occurs because there is some information that is relatively encoded to its descriptive valence/strength (Levin & Gaeth, 1988). Further explained that the positive labeling of an attribute leads to encoding information that tends to generate beneficial associations in memory. Thus, this will lead to a greater tendency towards choice, judgment, or positive decision making or acceptance towards information or objects or events that are presented positively.

The presentation of a different attribute (positive and negative) can cause differences in a person's evaluation of these attributes. An attribute of information that is positively encoded will lead to tendencies to generate beneficial associations in memory. So, managers who are faced with specific information regarding capital budgeting projects that are presented positively tend to produce higher positive ratings. This is consistent with findings that indicate that the attributes of information that are presented positively have a higher positive rating of approval or acceptance than negative information attributes (Alewine, Allport, & Shen, 2016; Allport, Brozovsky, & Kerler, 2010 ; Gamliel & Peer, 2010; Kerler, Allport, & Fleming, 2012; Kuvaas & Selart, 2004; Levin & Gaeth, 1988).

The information attributes that are positively framed are preferred by consumers compared to information attributes that are negatively framed (Levin & Gaeth, 1988). Positive attribute framing leads to the evaluations that are more preferred compared to negative framing (Levin, Schneider, & Gaeth, 1998). In the field of accounting, it has the same findings in the form of higher evaluation results (Alewine, Allport, & Shen, 2016); approval of a higher capital budgeting project assessment (Kerler, Allport, & Fleming, 2012); and more investment gained (Allport, Brozovsky, & Kerler, 2010). Therefore, the first hypothesis proposed in this study is;

H_1: The information attributes that are presented positively will result in a higher capital budgeting project approval.

2.2 The Relationship Between Justification and Capital Budgeting Decision

Justification in this study is a recommendation to support decisions taken. As explained in accountability theory, by giving justification for the actions taken, a person will feel responsible for his actions. Therefore, the person will process more complex information to justify to get a positive assessment (Tetlock, 1983a; Tetlock, 1983b). With justification, someone will be more careful and more cautious in processing information, and that person will reduce the use of intuition in decision making (Cvetkovich, 1978; Janis & Mann, 1977)

Accountability theory explains the perceived need to justify a person's behavior to others, causing someone to reconsider and feel responsible for the process by which decisions and judgments have been reached (Vance, Lowry, & Dennis Eggett, 2015). This concept of accountability arises based on previous studies that have been summarized (Tetlock, 1983a; Tetlock, 1983b) These results show that humans often make choices or make decisions based on simple heuristics, or even practical rules and intuition (Bazerman & Moore, 2012). Humans often avoid mental procedures that require attention, concentration, or continuous computing power and base their decisions or choices on business principles that seem to be ineffective in guiding human decision making (Tetlock, 1983a; Tetlock, 1983b)

As has been explained by accountability theory, a person will feel responsible for decisions made through justification, which encourages that person to process more complex information. This is in accordance with previous research which explained that justification encourages a person to be more vigilant and careful in processing information and reduce the use of intuition in making

decisions (Cvetkovich, 1978; Janis & Mann, 1977). Even with justification, one can get positive consequences like reducing punishments or getting luxurious rewards and can also reduce bias in an assessment and encourage conservatism towards investment opportunities. (Kerler, Allport, & Fleming, 2012; Lerner & Tetlock, 1999).

Accountability, in terms of terminology, states that people who are expected to justify their views will process information more carefully - tend to do more difficult tasks (Janis & Mann, 1977). The implementation of more difficult tasks to justify one's views is a characteristic of making a high-quality decision (Janis & Mann, 1977). This accountability can lead one to a more analyst and less intuitive way of thinking (Cvetkovich, 1978). So, based on this accountability theory, someone (especially a decision maker) will feel responsible for the decisions taken so that he/she will pay more attention to more complex information processing in a more cautious manner.

H_2: Providing the necessary justification will result in a lower amount of the capital budgeting project approval.

2.3 The Relationship Between Attribute Framing, Justification, and Capital Budgeting Decision

Belief revision theory breaks down one's beliefs about information when new information is entered into the belief system. There are two approaches in this theory. The first is the foundation approach. This approach states that a rational person derives his/her beliefs from justification or reasons for that belief. More specifically, a person will hold his trust if and only if it has a satisfying reason. The second approach is the coherence approach. This approach to coherence is contrary to the foundation approach. This approach explains that someone will maintain that origin (pedigree) is not a problem for rational beliefs. This approach also explains that the person will hold onto his beliefs as long as they are consistent with the others' beliefs (AlKulaib, Al-Jassar, & Al-Saad, 2016; Doyle, 1992; Gardenfors, 2003).

Based on belief revision theory, new information can change one's old beliefs into new beliefs (AlKulaib, Al-Jassar, & Al-Saad, 2016; Doyle, 1992; Gardenfors, 2003). The new information referred to in this study is the provision of this justification memo. So, the participants were informed that they would review information about the capital budgeting project and then provide an assessment of the project. In the justification group, participants were also informed that participants would be asked to provide reasons for the assessment that had been made. This second information is new information for participants so that participants will try to find or make an argument in order to give the reasons requested. In addition, the presence of new information in the form of requests for reasons for the assessment that has been made can change the confidence of participants who initially approved to the capital budgeting project to reject the project or even vice versa. Thus, the provision of memo justification is expected to be able to change the assessment or decision on the information framing

As explained in belief revision theory that new information can be believed if it has justification or reason for that information. This shows that one's beliefs can change with new information. So, when the participant was told to make a memo of justification as a reason for the assessment that had been made, the participant would change his/her initial assessment of the capital budgeting project and tried to find and make an argument in order to give the reason requested. Giving justification encourages someone to process more complex information (Tetlock, 1983a; Tetlock, 1983b). Lerner & Tetlock (1999) add that justifying can reduce bias resulting from (a) lack of critical attention to the assessment process, and (b) failure to use relevant signals. Deeper

and more careful thinking tends to avoid mistakes. Based on these explanations (LeBoeuf & Shafir, 2003), the hypothesis is formulated below:

H_3: Giving justification will result in a lower assessment of capital budgeting project when the information attribute is framed negatively.

3. RESEARCH METHOD

3.1 Research Design

The study design was a quasi-experimental study with 2 X 2 factorial, 2 (positive attribute framing and negative attribute framing) x 2 (justified and not justified) between subject. The data analysis technique used to test the hypothesis of this study was ANOVA. The ANOVA used was one-way ANOVA to test hypotheses 1 and 2 and two-way ANOVA to test hypothesis 3. In addition to ANOVA, this study also used the ANCOVA test to test demographic variables.

The instrument of this study was developed from the researches by Kerler, Fleming, & Allport (2014) and Allport, Brozovsky, & Kerler (2010), which consisted of three main parts:

1. Identity and general questions

This section contains an identity form that must be filled out by participants consisting of name, age, study program, and gender. In this section, there are also general questions that participants must answer. Common questions that are asked to participants relate to the work experience of the participants and the work experience of participants in relation to capital budgeting.

2. General information and financial information

This section contained general information about the case of a company that was considering an investment project. It was also stated that this project required an initial investment of Rp 5 billion with an estimated Rp 3 billion net cash flow generated per year with an interest rate of 11%. This general information also explained the participant's role as a manager who would provide a final assessment of the proposed capital budgeting project. In addition to general information, there was also financial information about the feasibility of investment project proposals that were presented positively (failure rate) and negatively (failure rate), as shown in table 3.

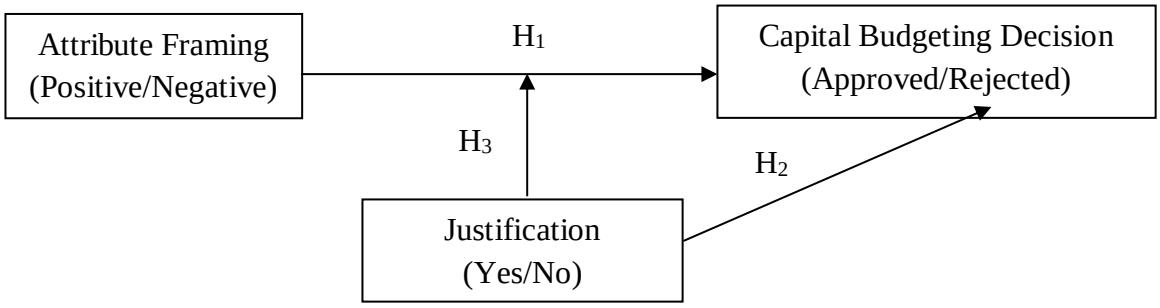
3. Assessment and justification memo

The last part of this research instrument was the assessment column to be filled by the participants after they analyzed the information that has been presented by selecting between scales 1, definitely reject, to scale 9, definitely approve. This section also contained a memo of justification prepared for the group that was asked to make a justification as the reason for the assessment carried out.

3.2 Population and Sample

This study used 83 financial students in the Magister of Management, Diponegoro University as a surrogate of Financial Manager. Liyanarachchi dan Milne (2005) argued that there are proves that students can represent professional or financial managers prespective in making investment decisions. The participants then formed into four groups, group 1 (Positive Attribute Framing), group 2 (Positive Attribute Framing and Justification), group 3 (Negative Attribute Framing) and group 4 (Negative Attribute Framing and Justification).

3.3 Research Framework



Picture 1 Research Framework

4. RESEARCH RESULT AND ANALYSIS

4.1 Descriptive Analysis

The demographics of the study participants are shown in table 1.

Table 1 Participants Demographics

Information	Total	Percentage (%)
Sex		
Male	40	48,2
Female	43	51,8
Age		
20 – 26 years old	63	75,9
27 – 33 years old	6	7,2
34 – 40 years old	7	8,4
41 – 47 years old	7	8,4
Work Status		
Have worked	61	73,5
Have not worked	22	26,5
Investment Project Proponent Team		
Have been in the team	11	13,3
Have not been in the team	72	86,7
Decision-Making Team for Investment Projects		
Have been in the team	11	13,3
Have not been in the team	72	86,7
Current Job Related to Capital Budgeting		
Yes	7	8,4
No	76	91,6

Source: Primary Data Processed, 2018

The details of groups that had been formed in carrying out research with the quasi-experimental design are shown in table 2.

Table 2 Experimental Groups

No.	Group	N	Percentage (%)
1	Group 1 (Positive Attribute Framing)	21	25,3
2	Group 2 (Positive Attribute Framing and Justification)	22	26,5
3	Group 3 (Negative Attribute Framing)	24	28,9
4	Group 4 (Negative Attribute Framing and Justification)	16	19,3
Total		83	100

Source: Primary Data Processed, 2018

Table 3 Financial Information

Net Present Value	
Expected Value	Rp 11 billion
Success rate	49%
Failure rate	51%
Payback Period	
Expected Value	5 years
Success rate	48%
Failure rate	52%
Accounting Rate of Return	
Expected Value	25%
Success rate	53%
Failure rate	47%

Source: Allport, Brozovsky, & Kerler (2010)

4.2 Manipulation Check

This semi-experimental study also tested manipulation checks. The manipulation check test used was a pilot test. The pilot test was carried out before the actual research was conducted on 12 participants included in the population. The results of the manipulation checks test performed are summarized in Table 4.

Table 4 Descriptive Statistics

Information	N	Decision			Theoretical Mean	Std. Deviation
		Max.	Min.	Mean		
Positive Attribute Framing	6	8	6	7,00	5	0,89
Negative Attribute Framing	6	6	2	4,00	5	1,41
Total N	12					
Justified	6	7	2	4,67	5	1,97
Not Justified	6	8	4	6,33	5	1,63
Total N	12					

Source: Primary Data Processed, 2018

Table 4 shows that the mean value of positive attribute framing decision was higher than the negative attribute framing (7,00 > 4,00) with the details that all participants in the Positive AF group chose to approve the proposed capital budgeting project (on a scale of 5). In the Negative AF group, 1 participant chose to approve (on a scale of 5) to the proposed capital budgeting project, 1 participant chose neutral (scale 5), and 4 participants chose to reject (under a scale of 5) the proposed capital budgeting project. The difference in the mean value of this decision means that the tendency of participants to choose to approve the proposed capital budgeting project is higher. Table 4 also provides information that the category of justified has a lower mean value of the decision than the mean value of the decision in the category of not justified (4,67 < 6,33) with the details that 3 participants in the justified group chose to approve (above a scale of 5) the proposed capital budgeting project and 3 participants chose to reject (under a scale of 5) the proposed capital budgeting project. The group in not justified category consisted of 4 participants chose to approve (above the scale of 5) the proposed capital budgeting project and 1 participant chose to reject (under the scale of 5) the proposed capital budgeting project and 1 participant chose neutral on the proposed capital budgeting project. The difference in the mean value of the decisions indicates that the decisions taken by participants tend to reject when asked to provide justification.

4.3 Homogeneity and Normality Test

The first test was the assumptions of the ANOVA test. There were two types of assumption tests carried out, first, homogeneity test. This test was to find out whether the research data were homogeneous or not. The second assumption test was the normality test.

Table 5 Test of Homogeneity and 1–Sample K-S Test

	Attribute Framing	Justification	Decision
Levene Statistic	2,14	0,47	
Sig.	0,15	0,50	
Kolmogorov-Smirnov Z	3,18	3,30	1,54
Sig.	0,00	0,00	0,02

Source: Primary Data Processed, 2018

Table 5 shows that the attribute framing and justification each have a significance value of 0,15 and 0,50, Both of these values exceed the value of 0,05, meaning that both the attribute framing and justification have the same variance. So, it is concluded that the assumption of variance homogeneity is fulfilled. Table 5 also shows that the significance value of 1-Sample K-S for each variable. If the significance value obtained exceeds 0,05, then the data is normally distributed. Based on the results in table 5, the significance value of the decision variable as the dependent variable is 0,02 and the significance value of the attribute framing and justification as independent variables are 0,00 and 0,00 respectively. This shows that the three variables are not normally distributed. However, according to Ghozali (2011), it was suggested that despite normality deviations, ANOVA is still robust. Thus both the attribute framing hypothesis and the justification hypothesis can be tested.

4.4 Research Analysis

The study hypotheses used different statistical tools. H_1 and H_2 were tested using one-way ANOVA because they tested one categorical independent variable on one dependent variable. While H_3 uses the two-way ANOVA test because this hypothesis tests the interaction effect

between attribute framing with justification as moderation. H_1 and H_2 test used a one-way ANOVA statistical tool with the results obtained below in Table 6 and Table 7.

Tabel 6 Tests of Between-Subjects Effects and Descriptive Statistics

Tests of Between-Subjects Effects			
Source	F	Sig.	Adjusted R Square
Attribute Framing	21,11	0,00	0,20
Descriptive Statistics			
Attribute Framing	Mean	Std. Deviation	N
Positive Atributte Framing	5,63	1,31	43
Negative Atributte Framing	4,18	1,57	40
Total	4,93	1,61	83

Source: Primary Data Processed, 2018

Table 7 Tests of Between-Subjects Effects and Descriptive Statistics

Tests of Between-Subjects Effects			
Source	F	Sig.	Adjusted R Square
Justification	4,57	0,04	0,04
Descriptive Statistics			
Justification	Mean	Std. Deviation	N
Justified	4,53	1,41	38
Unjustified	5,27	1,70	45
Total	4,93	1,61	83

Source: Primary Data Processed, 2018

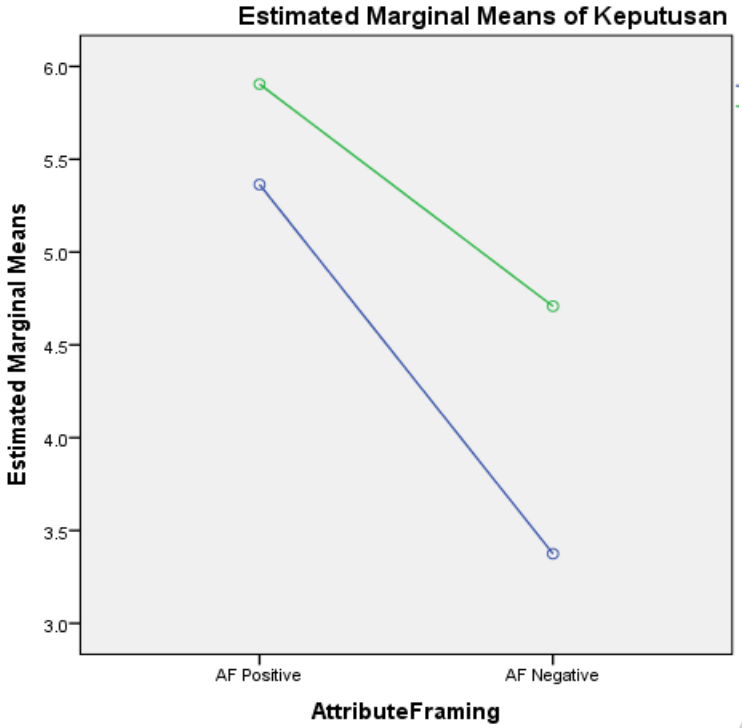
Table 6 shows that the significance value of the attribute framing is 0,000, This value is less than 0,05, meaning that the attribute framing has a significant effect on capital budgeting decision making. Then from the adjusted R square value shows that 0,20 (20%) of the variability of decision making through the capital budgeting process can be explained by the variability of the attribute framing. From table 6, it also shows that the positive attribute framing has a larger decision mean of 5,63 compared to the negative attribute framing with a mean decision value of 4,18. The conclusion that can be obtained from the difference in the mean value of this decision is that the participants' tendency to approve the proposed capital budgeting project is higher when the information attribute is presented positively. Therefore, H_1 is accepted.

The significance value of the justification variable in table 7 is less than 0,05, which is 0,04, so it can be concluded that the justification has a significant effect on decision making through the capital budgeting process. Then the adjusted R square value for the justification variable shows that justification variability can only explain the variability of decision making through a capital budgeting process of 4% (0,04) and the rest is affected by other variances that are not studied here.

The mean value in table 7 shows that the decision means value for the category of not justified is higher, which is 5,27, compared to the mean value of the decision for the justified category, which is 4,53. The conclusion obtained based on this difference is that participants tend to reject the proposed capital budgeting project when they are asked to justify. This indicates that the approved decision for the capital budgeting project obtained is lower when the managers asked to make a memo of justification. Therefore, H_2 is accepted.

Two-way ANOVA statistical tool was also used in this study to test H_3. This H_3 test was intended to determine the effect of justification as the moderation of the interaction between

attribute framing and decision making through capital budgeting. This test is commonly called the interaction effect test. Below is the results of the tests obtained.



Notes :
Green Line : Unjustified
Blue Line : Justified

Picture 2 Profile Plots (Primary Data Processed, 2018)

Based on Picture 2, there are two parallel lines, or it shows the absence of lines that intersects each other. It means that in this study, there is no interaction between the attribute framing and justification. Therefore, it is necessary to see the significance value of the interaction between attribute framing and justification to ensure that there is no interaction between the two.

Tabel 8 Tests of Between-Subjects Effects

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Attribute Framing	49,48	1	49,48	26,48	0,00
Justification	17,03	1	17,03	9,12	0,00
Attribute Framing* Justification	3,18	1	3,18	1,70	0,20

R Squared = 0,302 (Adjusted R Square = 0,28)
Source: Primary Data Processed, 2018

Table 8 explains that there is no interaction between attribute framing and justification. This can be seen from the significance value of the two interactions that exceeds 0,05, which is 0,20, It means that the interaction between attribute framing and justification does not have a statistically significant effect on decision making through capital budgeting process with 28% variability of decision making through capital budgeting process can be explained by the interaction relationship between the variability of attribute framing and the variability of justification. Therefore, it can be concluded that H_3 is rejected.

4.5 Research Discussion

4.5.1 The Effect of Attribute Framing on Capital Budgeting Decisions

Based on the test results, it was found that H_1 is accepted. This shows that humans do not always think rationally in making decisions. Humans will tend to focus only on the components of the comparison to simplify existing alternatives. This causes inconsistency in one's preferences when information is presented differently. This is in line with the prospect theory described by Kahneman & Tversky (1979) that humans have tendencies to inconsistent preferences when facing the same information with different representations. This tendency can be seen from higher approved proposal ratings when the information attributes are presented positively compared to those presented negatively. It also shows that humans will think positively when facing positive information. Thus, when a person is asked to judge based on the information presented positively, the possibility of a positive assessment will be greater. So, it can be concluded that the participant will give a higher level of approval when reviewing the capital budgeting project information presented positively. This is in line with Levin & Gaeth (1988) explanation that positive labeling of an attribute leads to encoding information that tends to generate beneficial associations in memory. The results of this study are also in accordance with the findings of previous research stating that the attributes of information presented or framed positively result in a greater positive assessment (Gamliel & Peer, 2010; Kuvaas & Selart, 2004; Levin & Gaeth, 1988). Even the research in the field of accounting that tests the attribute framing also had a similar finding, assessments in the form of acceptance, approval, or desire to invest higher are more dominant when the information is presented positively compared to information presented negatively. (Alewine, Allport, & Shen, 2016; Allport, Brozovsky, & Kerler, 2010; Kerler, Allport, & Fleming, 2012; Kerler, Fleming, & Allport, 2014).

4.5.2 The Effect of Justification on Capital Budgeting Decisions

Based on the test results of the study, it was found that H_2 is accepted. The acceptance of this hypothesis indicates that when someone is asked to provide justification or reason for the judgment or decision taken, the person will consider more carefully and cautiously in making an assessment or making a decision. Thus, a person will be more responsible for the judgment or decision was taken. When asked to give a reason, a person will process more complex information to provide the reason. This result is in line with the accountability theory described (Tetlock, 1983a; Tetlock, 1983b). This theory explains that justification makes one feel responsible for the decisions taken so that it encourages more complex information processing. Even previous empirical evidence suggests similar things; justification encourages one to be more careful and vigilant in processing information and reduce the use of intuition in decision making (Cvetkovich, 1978; Janis & Mann, 1977). In addition, it was also found that in justification, one can get positive consequences like reducing punishments or getting luxurious rewards and can also reduce bias in an assessment and encourage conservatism towards investment opportunities (Kerler, Fleming, & Allport, 2014; Lerner & Tetlock, 1999).

4.5.3 The Effect of Justification on the Interaction between Attribute Framing and Capital Budgeting Decisions

Based on the results of the test, it was found that H_3 is rejected. This shows that participants hold on to their beliefs even though new information is entered into the participant's belief system so that the effect of the attribute framing remains. This shows that belief revision theory- foundation approach cannot explain the phenomenon of this study. However, this is in accordance with belief revision theory - coherence approach that explains that a person tends to maintain consistency in a

revised epistemic state and make minimal changes from the old conditions which ensure adequate overall coherence (Doyle, 1992; Gardenfors, 2003). So, participants will tend to maintain their decisions when facing similar cases or events in accordance with participants' beliefs both through their experiences and through understood theories. The inability of this justification in reducing the effect of attribute framing on capital budgeting decision making can be caused by the diversity of participants' work experience in the field of capital budgeting. Thus, participant work experience in the field of capital budgeting has a significant influence on capital budgeting decision making. This is consistent with the research of Juliusson, Karlsson, & Garling (2005), which explained that a person's past experiences could influence future retrieval. Sagi and Friedland (2007) also explained that when a person gets a positive result from a decision, the person tends to decide the same way when faced with the same situation. Likewise, people tend to avoid mistakes when, in the past, they get negative results in the same situation.

Based on the results of the H_3 test, it was also obtained that the attribute framing has a strong influence on decision making through the capital budgeting process, either justified or not justified. This finding is in line with previous finding stating that justification only has limited support and there is even some research showed that justification could not moderate framing effects (Takemura, 1994; LeBoeuf & Shafir, 2003; Kerler, Fleming, & Allport, 2014). This was explained by Kahneman & Tversky (1982) that people are often not aware of the effects of framing, once they are made aware, they still cannot determine decisions objectively. This explains the fact that framing has a strong influence on decision making, even though participants improve their thinking. As with Kahneman & Tversky (1982), in explaining the justification reasons, they are not able to moderate the influence of framing, LeBoeuf & Shafir (2003) explained that people understand that losing two-thirds of the threatened group was the same as saving a third of the group. But when there is no basic representation of this, each framing triggers its series of interesting impulses. So, without an explicit presentation, the effects of framing tend to remain the same among careful thinkers.

5. RESEARCH CONCLUSION AND LIMITATION

5.1 Conclusion

Conclusions obtained from the results of tests conducted is that the attribute framing and justification can influence decision making through the capital budgeting process. In particular, the information that is positively presented has an impact in the higher approval of a proposed capital budgeting project. This research also concluded that justification could not to reduce the effect of the attribute framing on capital budgeting decisions. This shows that belief revision theory-foundation approach cannot explain the phenomenon of this study. However, this is in accordance with belief revision theory coherence approach that explains that a person tends to maintain consistency in a revised epistemic state and make minimal changes from the old conditions which ensure adequate overall coherence. This study also contributes to the practitioners by testing two general factors of capital budgeting processes that can have an impact on decision making, which is the attribute framing and justification. Based on empirical evidence that the researcher obtained, it is expected that managers need to understand how to present information, especially the information on a potential project that can have a significant influence on the decision-making process. Managers are also expected to understand that justification causes conservatism that can lead to rejection of potentially successful projects.

5.2 Limitation

Like any other studies, this study also has limitations. The limitation of this study is the many varieties of participants who have experience in the field of capital budgeting so that the decisions taken are only based on the theories obtained and understood. Another limitation is the lack of justification influence in reducing the effect of the attribute framing on capital budgeting decisions. Finally, future research is expected to be able to look for other factors that can reduce the effect of the attribute framing on capital budgeting decisions.

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