INFLUENCE OF GRANULARITY TO PRECISION MODERATED BY THE EXPERTISE OF COMMUNICATOR: A STUDY OF CONSUMER BEHAVIOR IN TAILOR INDUSTRY

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Abstract: *Consumer understanding of the quantitative expression still often deviates from its meaning. Quantitative expression of delivering information influenced choice of granularity where the information disclosed is refined from crude form. The purpose of this study was to examine the effect of the level of granularity to the level of precision with moderation inform an expertise. Research data collection technique is to create a scenario and make record of the consumer-level precision. Primary data were recorded from 120 participants through scenarios that have been prepared. Between subject research design is: 2 (granularity: 2 week vs. 7 days) x 2 (information : master taylor vs customer service)* In testing, some statistical tests used were t-test, test and test assumptions of classical linear regression. These results indicate that there are interaction effects between levels of granularity and resources (F = 0488 df = 1 and the Sig. = 0.486) however, the interaction effect shows that the resources did not moderate the relationship level of granularity to the level of precision consumer.*

Keywords: *granularity, resources, precision, between-subjects design, two-way ANOVA*

PRELIMINARY

Based research laboratory settings by clicking on the 2 study conducted by Zhang and Schwarz (Zhang 2011), to follow up, in doing replication-plus in this study by using the context of the actual situation, and the dependent variable was measured by real measurements or the actual condition or term behavior. Settings are applied to the situation in this follow-up study is in the office of Fashion tailor store, in Jakarta, where participants are customers who have been using the services of this store. Information to be provided is the length of time of receipt of goods with coarse granularity level that is 2 days and a fine level of granularity is 48 hours, the giver of his information was master tailor and customer service (new employee doing an internship) Level of granularity and informants expressed

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as the independent variable while the dependent variable deviation is measured from the time the consumer when asked if the job has accomplished.

In this follow-up study, that consumers tend to trust the expertise of a master tailor than a customer service (new works being an apprentice nun) in matters of import shipments from Singapore to Jakarta, predicted deviation of time consumers ask again whether imported goods have arrived will more precision when information-delivery deadlines given by the chief operating with a finer granularity (48 hours)

LITERATURE REVIEW

Marketing is a social and managerial process by which individuals and groups of obtain what they need and want through creating and exchanging products and value with others (Kotler 2001). While consumer behavior is the study of the processes INVOLVED when individuals or groups select, purchase, use or dispose of products or services, experience or ideas to satisfy needs and desires"(Solomon 2011) Which means it is the study of the process in question when individuals or groups select, purchase, use, or dispose of products goods or services, ideas and experience to satisfy all needs and desires.

Logic Conversation

The main principle of Grice in conversation is to understand the relationship of cooperation, in the sense of one's contribution to be right in the conversation. Cooperation here does not mean always a lawyer-expression of approval, but rather that someone wanted to donate something to associate with the goal of the conversation (Grice 1975) Thus the purpose or direction of the conversation becomes important to understand each actor conversations. Grice proposed four conversational maxims or principles of conversational cooperation to achieve the maxim of quantity, maxim of quality, maxim of relevance, maxim attitude or manners.

All maxims jut out how the speaker should convey quantitative information-tif. In particular, the speaker must provide correct information (maxim of quality) that are relevant to the purpose of the conversation (maxim of relation), and they must do so in a way that is easy to understand (maxim of manner) by providing the relevant level of detail but no more and no less than required (maxim of quantity)

Infringement on this maxim is considered normal in conversation (Grice 1975) However, the body of linguistic research and behavior shows that listeners interpret the speech wa speaker with the assumption that they are trying to ideal

(Clark 1977) Even when listeners doubted that pembi-cooperative way, they must first understand the ter-what the speaker intended them to conclude before they can do significant corrections to the intentions misleading statement unless related to very easily accessible and relevance of knowledge of listeners (Ritcher 2009) Thus, assuming the communication koope Grice-ratif organize conversations in everyday life and guide design of the speaker their own message as well as its conclusion listener (Grice 1975)

The implications of the logic of the conversation go beyond the prototypical Grice's conversational or user conventionalised emotions in every culture. Although Grice analysis focused on private conversations, and then show that the maxims of cooperative conversation shows pragmatic conclusion in all communicative contexts. In fact, the impact on the interpretation of the listener from the speaker's speech is particularly pronounced when there is no"speaker"that was present. This is a problem because of the presence of the speaker made it possible to negotiate the question and mention the collaboration of the meaning is still ambiguous (Clark 1977)

Some opportunity is lost when the speaker is absent, listeners describe the general principles of the conversation and the language used to infer what the speaker might say. Thus, the main conclusion Gricean effect was pronounced in settings that block linkage meaning, as has been observed in a standard setting study, in which researchers and interviewers often encouraged to give explanations and where self-administered questionnaire is presented in the absence of any person who could be asked for clarification (Schwarz 1991)

Constraints communicative same applies to marketing communications, from product descriptions and reviews for company announcements and advertisements (Xu 2010), they did not have a chance at the request of the consumer and therefore advocated pragmatic conclusions based messaging and relationship characteristics. In his research, Zhang admitted in general"conversation"with reference to the participants as a conduit of information and the recipient information than the speaker and listener.

Pragmatics is the science that analyzes the means by basic principles in learning languages (Levinson 1983) Leech added that pragmatics is the study of meaning in conjunction with a speech in certain situations (Leech 1983) In general, pragmatics is one of the study of the meaning of utterances. According to Yule, pragmatics is the science that deals with the meaning of utterances are communicated by the speaker and then interpreted by the hearer (Yule 1986)

Granularity Effects

Granularity is the level of detail contained in each unit of data (Inmon 2002) The more detail the file unit, the lower of the level granularity. Otherwise, the lower the level of detail file unit, the higher of the level granularity. Logic explanation above conversation Grice concludes that considerations will affect the choice of granularity in which information providers disclose quantitative information like the recipient of the information. In general, quantitative communications provide more information when the quantity is expressed in smooth than rough shape.

It is clear when the information is communicated in the form of intervals, for example, when the forecast price is stated as "$ 5,000 to $ 6,000" or "$ 1,000 to $ 10,000". Here, the choice of interval width expressed confidence in the accuracy of the information providers such estimates.

Not surprisingly, recipients of information rather narrow intervals, which provide more information. Moreover, they are willing to sacrifice accuracy for the formal value of information. For example, when the true value is $ 22.5 billion, 80% of participants prefer estimated "$ 18 - $ 20 billion" than the estimated "$ 20-40 billion," although the latter interval includes the true value (Yaniv 1995) While the stated interval estimate expected levels of precision over a wide interval, precision explicit information is lost when the information providers only offer a quantitative value, so as to provide a point estimate. However, be aware that the information receiver comes with a level of uncertainty estimates. Therefore, you will not consider it misleading if a friend is driving from another city said, "I'll be there in two hours," although he was aware that it may take as little as an hour or as much as 1.5 of his 2.5 hours to arrive. On the other hand, you may be wondering what has happened to him if he told you in the same state that he will arrive in 115 minutes but not come until 30 minutes later.

For example, the point estimates come with interval implied, and the size of this interval varies with the level of granularity at which the estimates disclosed. Thus, cooperation furnisher must meet the demand for simplicity Grice, keinformatifan, and the truth by using the level of granularity that is based on their own knowledge, convey no more information and no less than they.

Previous Studies

In study 2 study Zhang and Schwarz, with between subject design 2 (relevance of knowledge: relevant vs questionable) x 2 (granularity: coarse vs fine), using

the 128 participants receiving gifts 10 cents and recruited online (Zhang 2011) Participants read news articles in the world's biggest car manufacturers are developing new types of cars based on cutting edge technology. The article reported that the new car will be released in 2 years (rough unit) or within 104 weeks (smooth unit) To manipulate the relevance of knowledge providers the information, half of the participants was told that the article was based on the announcement made by the" head of the research firm, well-known in the industry as a strong project planning skills"; half were told that the news article was based on" the rumor spread through the website."Furthermore, all participants were asked to determine how likely that a"new kind of car will be successfully launched into the market as planned" (1 = very unlikely and 7 = very likely) Furthermore, participants were asked,"If the launch of a new car for longer than planned, how many months are likely to be delayed?" They answered this question in the response format month.

**Figure 1: Model Hipotesis Penelitian Zhang dan Schwarz**
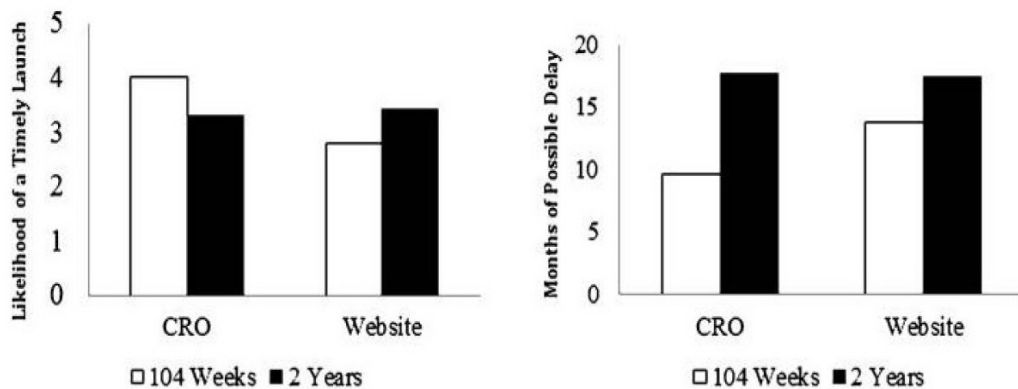
Reason Zhang and Schwarz predict interaction granularity and relevance of knowledge on the exact probability of completion, which is obtained ($F_{(1, 124)} = 5:03$, $p < .05$) (Zhang 2011) Diagnosis of this interaction shows that the effect of granularity is replicated by the announcement of the company's head of research (see Figure 1) In this case, the participants concluded that the timely launch is more likely when the article mentioned"104 weeks"(M = 4.0) than"2 years"(M = 3.3; $t_{(126)} = 1.74$, $p < .1$, for simple effect) When the announcement was linked to a car enthusiast site, and the effect of granularity removed (M = 2.8 vs. M = 3.4 for weeks and years, respectively; $t_{(126)} = 1.42$, $p > .15$, for the simple effect) Estimates of participants ended in a choice of several months that the launch may be delayed following the

same pattern. When the announcement was attributed to chief research officer, participants estimated the delay again in 2 years (M = 17.6 months) compared with the 104-week condition (M = 9.6 months; t (126) = 2.82, p <.002, for the effect Simply put, after log transformation) When the announcement was distributed to the website, the influence of granularity back removed (M = 17.4 vs. M = 13.8 for 2-year and 104-week condition, respectively; t (126) <1, p>.4) This pattern is reflected little credibility and granularity significant interaction (F (1, 124) = 3.03, p =.08, after log transformation) In summary, the results of two research studies Zhang and Schwarz (2011) showed that there was interaction between the granularity and resources. Assessment participants are not affected by the formatting information, malainkan source of information. This result is consistent with the logic of Gricean Conversational Analysis, which became the basis of research and Schwarz Zhang (Zhang 2011)

Model

Figure 2: Research Model
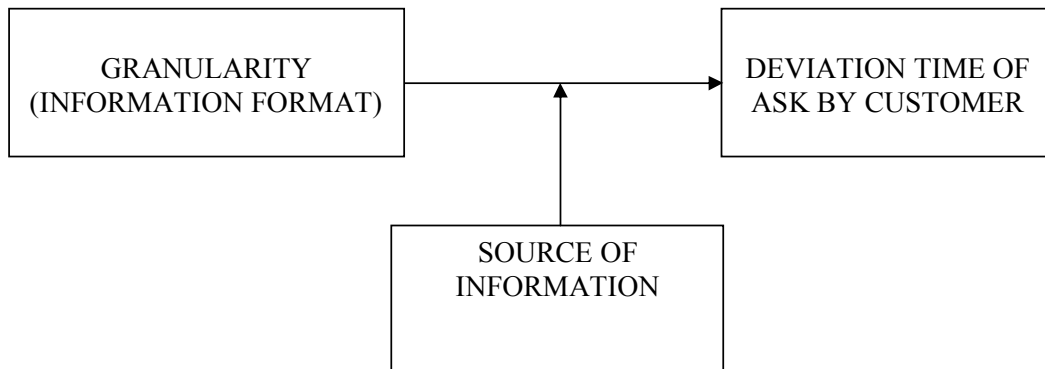
G. Hypothesis

1. There are differences in the level of granularity of information in the form of coarses and fine given by a credible source of information and is not credible to the degree of precision consumer

2. Finer level of granularity in the information provided by a credible source of information most powerful influence on the level of precision consumer (See figure 2.4)

Figure 3: Model Hypothesis (A) Coarse granularity in the information unit that is 2 days granted by master tailor has a stronger influence on the level of precision Fashion tailor store, so it is quite precise. (B) Fine granularity information in the unit is 48 hours given by master tailor had the most powerful influence on the level of precision consumer Fashion tailor store, making it the most precision. (C) Information coarse granularity in the unit that is 2 days given by customer service (new employee was an apprentice), has a strong influence on the level of precision is less consumer, resulting in less precision. (D) Fine granularity information in the unit is 48 hours given by customer service (new employee was an apprentice), has a strong influence on the level of precision consumer, making it more precise.

Presisi

C < D < A < B

A   B   C   D
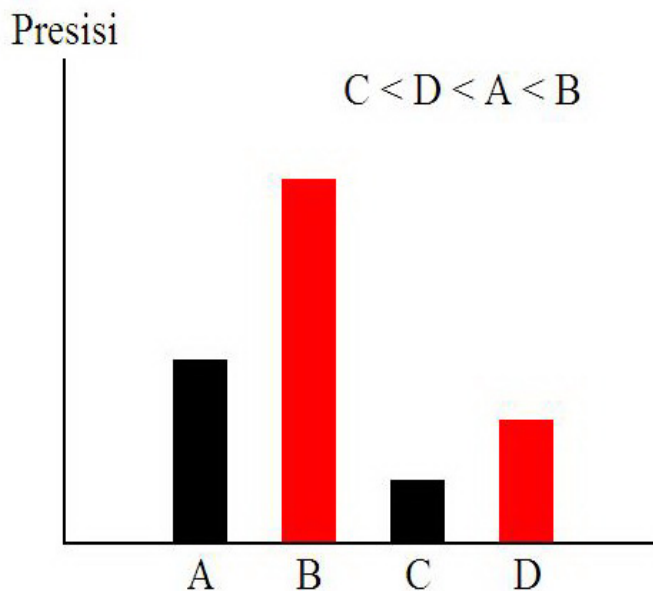
RESEARCH METHODOLOGY

This study uses causal research with its primary method of experimentation (experimentation) Experiment is when the researcher manipulated one or more independent variables and measure the effect of one or more dependent variables (Naresh 2004) the method used in this study is causal Between-Subject Design. Between-Subject Design is a design experiment with a typical experiment the correct (true experiment), in the between-subjects design, participants experienced only one treatment alone. Using a between subject design, namely: 2 (granularity: 2 days vs. 48 hours) x 2 (giver of information: operational heads vs. customer service). Number of participants used in this follow-up study was 120 people, and the research done during weekday (Monday-Friday)

Research data requirements in the Between-Subject Design methods are homogeneous or similar characteristics to participants. Criteria for study participants are all consumers Fashion tailor store are already subscribed for approximately 1 year. The research conducted at the office of Fashion tailor store in Jakarta

Figure 4: Research Procedure
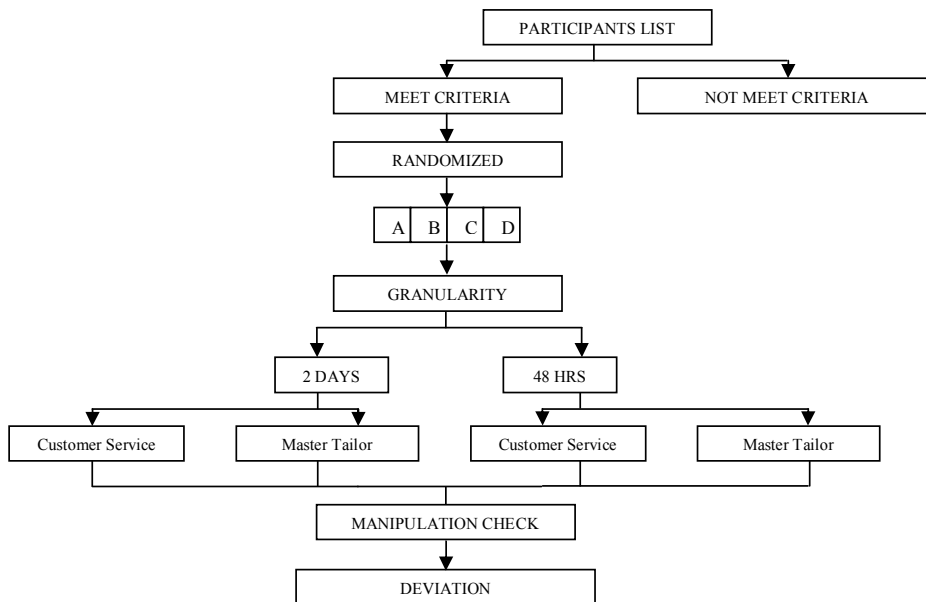
Data Analysis

Statistically, the t test is used to test whether the average of two samples (data) has a significant difference or not (Santoso 2010). In experimental activities, the t test was applied to the comparison as follows: Two samples are two levels that exist in an independent variable; The average value of a sample of the response (the value of the dependent variable) T test for independent samples will be carried out in Microsoft Excel 2007.

Normality test was conducted in order to determine whether group of data to be used in the study are normally distributed or not (Hasyim 2009). Transform the data if abnormal. In concept, a group said to be normal if the data distribution of the data if drawn will form an inverted bell curve, with an area equal to the area left side right side. Data normality test done by looking at chart and graph a normal curve PP plot and the Kolmogorov-Smirnov one sample with SPSS 19.

ANOVA or analysis of variance is a multivariate analysis technique which serves to distinguish an average of more than two groups of data by comparing the variance (Ghozali 2009). Analysis of variance is widely used in many studies involving comparative testing of the dependent variable that is tested by comparing the independent sample groups was observed. Anova Two-Way also called the Two-Way ANOVA or Analysis of Variant 2 factors. Two-way ANOVA factor amounted to two independent variables and the dependent variable (Sawono 2012). Anova two-way compare the average difference between the groups was divided in two independent variables (called factors). Research must have two independent variables and one categorical data scale dependent variable quantitative data or numerical scale (interval or ratio).

RESULTS AND DISCUSSION

Based on the results of normality test on the data in a way that has ditranformasi log (transformation to normalize the data and make the data into homogeneous), while studies with 120 participants were divided into 4 groups of 30 participants each, in which participants who had given information to the level of granu larity rough - and smooth ie 2 days ie 48 hours by the head of operations and customer service, with SPSS 19, then obtained (see Figure 5):

Figure 5: Output Kurva Hasil Uji Normalitas pada SPSS 19

Histogram
Dependent Variable: Deviasi

Mean = 1.99E-15
Std. Dev. = 0.992
N = 120
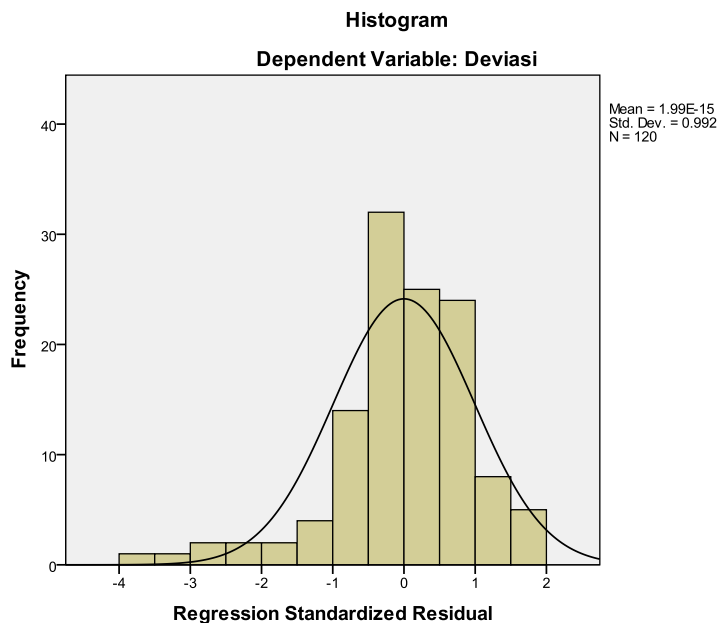
From the above output if the curve is not skewed to the left or skewed to the right (right side and left side of the same width) then the data can be considered normal, but if otherwise then the data is not normally distributed.

Figure 6: Output P-P Plot Normality Test Results in SPSS 19

Normal P-P Plot of Regression Standardized Residual

Dependent Variable: Deviasi
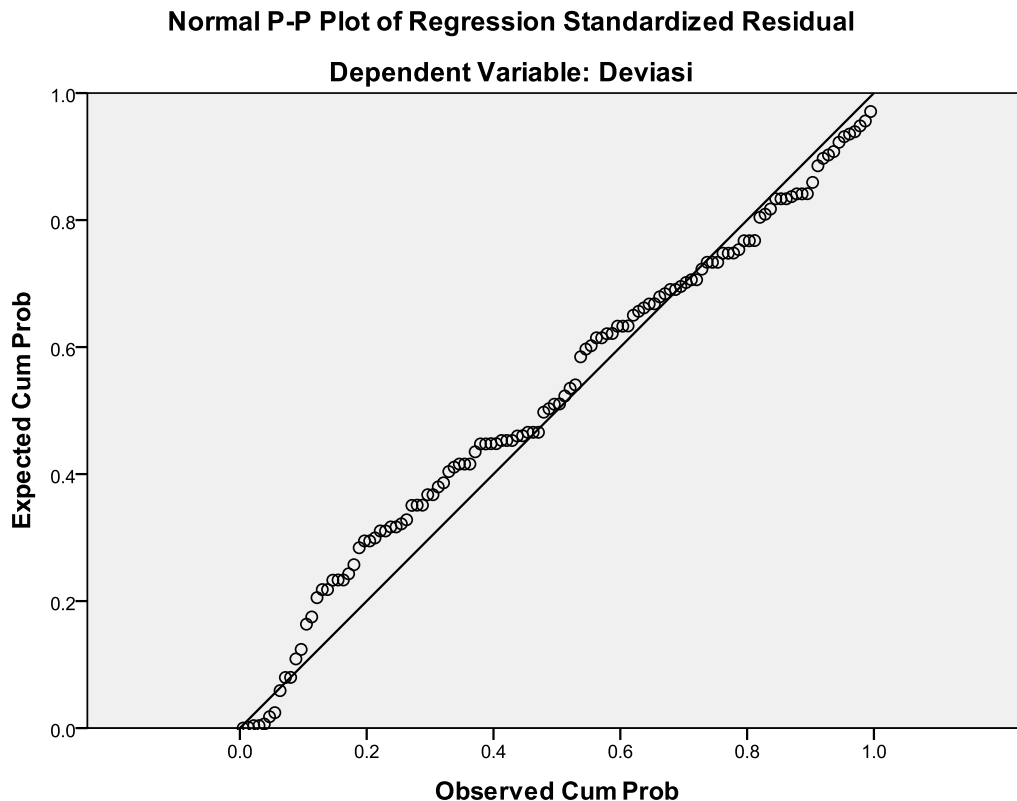
From the above it can be seen the output of where the points spread above the PP plot line with a diagonal line, the data can be considered normal, but if the spread is not in accordance with its diagonal line then the data is said to be normal. By doing a 1-Sample KS Test or One-Sample Kolmogorov-Smirnov Test in SPSS 19 Asymp obtained. Sig. (2-tailed) 0.507, because the 0507 is more than 0.05 then the data can be considered normal, but if its value is less than 0.05 then the data distribution is not normal.

Based on a Two Way ANOVA test at the time of the study with 120 participants, then obtained:

Table 4
Output Factors among Subjects Two Way Anova Test Results

Variabel Independen		Keterangan	Jumlah
Granularity	1.00	Granularity Kasar	60
	2.00	GranularityHalus	60
Informan	1.00	Customer Service	60
	2.00	Master Tailor	60

Outputs are all factors that serve as the independent variable / predictor in making a difference deviation for the two independent variables. These factors are:

- Granularity: level granularity has two levels: coarses and fine.

- Informants: giver of information or resources there are two heads and customer service operations.

In this table looks a summary of the number (n), respectively 60 variables were analyzed on the information providers or granularity for a total of 120.

Table 5
Output Levene test for Equal Error Variant

F	df1	df2	Sig.
2.135	3	116	.100

Levene Tests conducted with the aim to fulfill the assumption of homogeneity of the data. Then perform a hypothesis: Sig. as shown in the above output is at 0.100> 0.05 therefore H0 is accepted. That is an error on the second variant is the same independent variables. Thus the requirements are met.

From Table 6 it is known that there is an interaction effect between the level of granularity and the source or informant information (F = 0488, df = 1 and the Sig. = 0.486) This interaction effect indicates that the source information is not moderate the relationship level of granularity of the deviation.

From the table above, the values of which can be interpreted as follows:

1. Corrected Model: Influence All independent variables (Granularity, Granularity interaction with informants and informant or"Granularity * Informant") together on the dependent variable (Value Deviation) When Significance (Sig.) < 0.05 (Alfa) = Significant. Above the table 0,000 means that the model is valid.

Table 6
Model Output Two Way Anova Test Results of SPSS 19

Keterangan	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	23.688[a]	3	7.896	77.684	.000
Intercept	367.360	1	367.360	3614.274	.000
Granularity	18.236	1	18.236	179.419	.000
Informan	5.402	1	5.402	53.145	.000
Granularity* Informan	.050	1	.050	.488	.486
Error	11.790	116	.102		
Total	402.838	120			
Corrected Total	35.478	119			

Dependent Variable: Deviation a. R Squared =.668 (Adjusted R Squared =.659)

2. Intercept: The value of the dependent variable changes without the presence of the independent variable is affected, meaning without any influence of the independent variable, dependent variable can change its value. When Significance (Sig.) < 0.05 (Alfa) = Significant. The table above is a significant intercept of 0.000 means.

3. Granularity: Granularity Effect of the deviation values in the model. When Significance (Sig.) < 0.05 (Alfa) = Significant. The above table means that 0,000 Granularity significant effect.

4. Informant: Effects of informant against deviation values in the model. When Significance (Sig.) < 0.05 (Alfa) = Significant. The above table is 0.000 mean informant significant effect.

5. Granularity * Informant: Granularity * Effect informant against deviation values in the model. When Significance (Sig.) < 0.05 (Alfa) = Significant. The above table is 0.486 means Granularity * The informant had no significant effect.

6. Error: Error Value models, the smaller the better models.

7. R Squared: Value of multiple determinations of all the independent variables with the dependent. The example above 0.668 where closes to 1, meaning a strong correlation.

**Figure 7: Output Profile Plots Two Way Anova Test Results in SPSS 19**
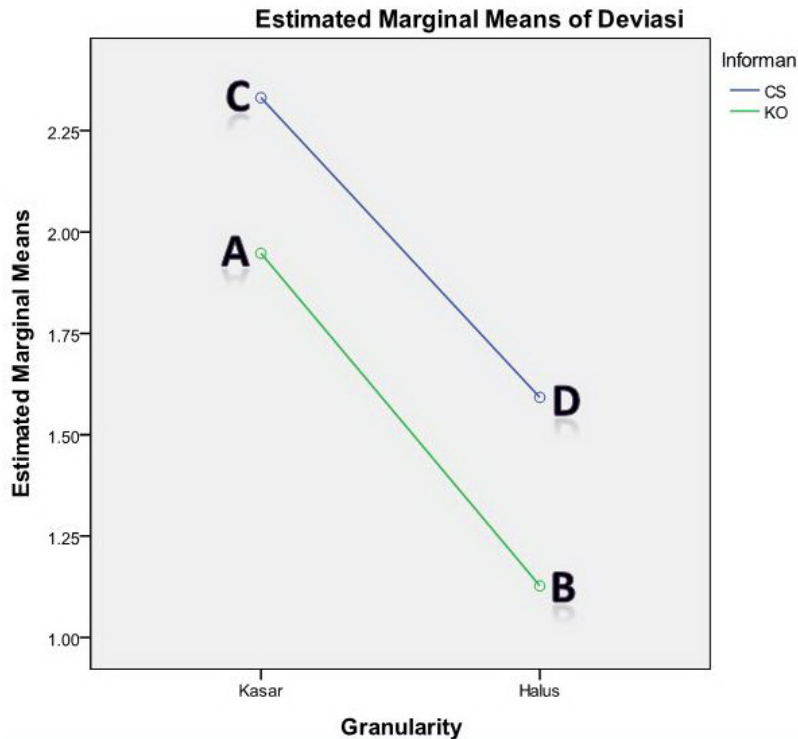
Plot diagram above shows that:

1. Information coarse granularity in units of credible information sources (point A) has a stronger influence on the level of precision consumer Fashion tailor store compared with information from the coarse granularity of the unit that is not a credible source of information (point C)

2. Fine granularity information in units of credible information sources (point B) has a stronger influence on the level of precision consumer Fashion tailor store than in units of fine granularity information from non-credible sources of information (point D)

Consumers are more likely to trust the expertise of a master tailor than a customer service (new employee was an apprentice) in matters of import shipments from Singapore to Jakarta, therefore the prediction deviation consumer time asking back if imported goods have arrived would be more precise if the information delivery deadlines granted by the head of operations at a finer granularity (48 hours) is proved and the results of research by the authors is consistent with the logic of Gricean

Conversational Analysis, which became the basis of a previous study conducted by Zhang and Schwarz (2011) which is rujukkan study authors. And the interaction between the level of granularity and resources does not affect the level of precision. From the above plot profile picture then we can answer the 2nd hypothesis, namely: Group B with smooth unit granularity information from credible resources have the strongest influence on the level of precision consumer Fashion tailor store, it can be seen from the point B on the image profile plots. Point B is the most precise level among all points. To clarify the results of the discussion to answer the hypothesis, see Figure 8:

Figure 8: Model Observations
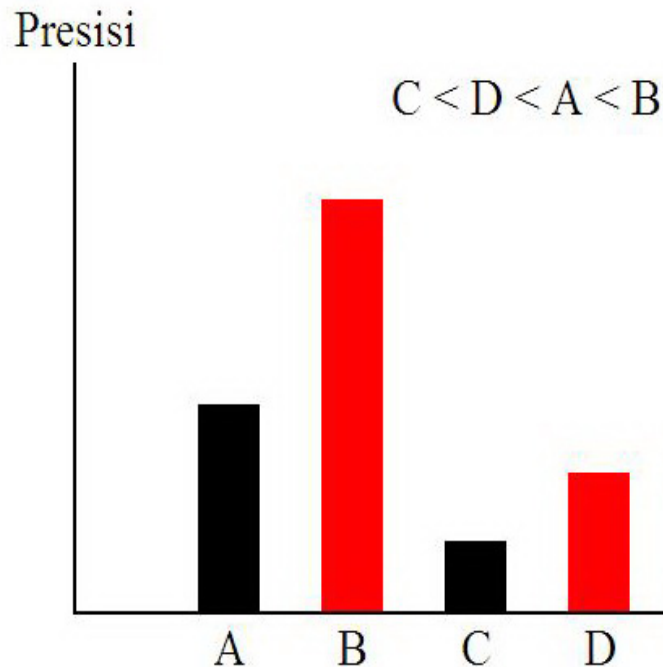
CONCLUSION

By entering two variables and the level of granularity resources as independent variables and the time deviation of the participants asked back with the information provided by the head of operations and customer service (a new employee being an intern) by telephone as the dependent variable was analyzed from 120 respondents with multiple testing of data. The first is the independent sample

t test is used to test whether the average of two samples, namely that there are two levels on an independent variable has a significant difference or not, and the average value of a sample of the response (the value of the dependent variable) Can result in an average deviation of group A (informants operational head with coarse granularity is 2 days) is 1.947571473 while the average deviation of group B (informants operational heads with fine granularity is 48 hours) is 1.12796905. This suggests that the second deviation statistically different. T figure is 8.908038161 and number t table (critical) for 2 side is + / - 2.001717468. Because t > t table (in this case the number 8.908038161 is outside the numbers and +2.001717468 -2.001717468), then H0 is rejected. Thus, it can be concluded out that the existence of a level of granularity at the time of giving the information to make different deviation participants time to ask again. Similarly, with an average deviation of group C (informants customer service with coarse granularity is 2 days) is 2.331180321 while the average deviation of group D (its information providers customer service with fine granularity is 48 hours) is 1.59152557. This suggests that the second deviation statistically different. T figure is 10.39692769 and number t table (critical) for 2 side is + / - 2.001717468. Because t > t table (in this case the number 10.39692769 is outside the numbers and +2.001717468 -2.001717468), then H0 is rejected. Thus, it can be concluded that the level of granularity at the time of provision of information can make a difference.

The second is the data normality test was conducted in order to determine whether the data numerical data on the dependent variable is the deviation of time consumers ask them back if imported goods have arrived already meet the assumptions of data - tribution berdis normal or not. If the data is not normal, it can do data transformation. And the data it is said normal if the normality test data by Kolmo - gorov - Smirnov 1 sample with Asymp results. Sig. (2 - tailed) exceeds 0:05. In this study the results obtained Asymp. Sig. (2 - tailed) 0.507 then the data can be considered normal.

The latter is a Two Way ANOVA analyse, Levene's test was done with the aim to meet the assumption of homogeneity of the data. Sig. as the Levene test is of 0.100 > 0.05 therefore H0 is accepted. This means that the error variance on both the independent variables are the same or homogeneous. Thus the requirements are met. Test of Between Subject Effects and obtained significant results where sig. Corrected Model 0.000 at which the effect of all independent variables (Granularity, informants and Granularity interaction with informants or"Granularity * Informant") together on the dependent variable (Value Deviation) Significant results where sig. Intercept 0.000 on the value of the dependent variable changes without the presence of the independent variable is affected, meaning without any influence of the independent variable, dependent variable can change its value. Significant results where sig. 0,000 at variable granularity which granu

- larity effect on the value of deviation in the model. Significant results in sig. 0,000 on the variables that influence informant informant against deviation values in the model. The results were not significant where sig. 0.486 on Granularity * Granularity* Informants Informants is the influence of the deviation values in the model. From the result of the interaction between the granularity and resources (F = 0488, df = 1 and the Sig. = 0.486), it can be concluded that the level of granularity do not moderate the relationship to the level of precision resources. Plot diagram shows that the information in the unit coarse granularity of credible resources (point A) has a stronger influence on the level of precision consumer PT. Buana Star Express compared with information from the coarse granularity of the unit that is not a credible source of information (point C) and the unit of fine granularity information from credible resources (point B) has a stronger influence on the level of precision consumer PT. Buana Star Express than in units of fine granularity information from non- credible sources of information (point D)

Consumers are more likely to trust the expertise of a master tailor than a customer service (new employee was an apprentice) in matters of import shipments from Singapore to Jakarta, therefore the prediction deviation consumer time asking back if imported goods have arrived would be more precise if the information delivery deadlines granted by the head of operations at a finer granularity (48 hours) is proved and the results of research by the authors, is consistent with the logic of Gricean Conversational Analysis, which became the basis of a previous study conducted by Zhang and Schwarz (2011) which is rujukkan study authors. In this study, consumers tend to prefer the format of the information to the level of fine granularity is 48 hours, it can be seen from the comparison of the level of precision in the groups for customer service information with fine granularity level that results are more precise than the groups for chief information operational to the level of coarse granularity. This means that even if the information was head of operations give, as long as it is not precise, then the consumer consumers tend to choose the precise information even if that information is customer service.

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