

Studies on Customer Attractiveness and Customer Purchase Intention to “LCDC” Vehicles Made in Indonesia

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Abstract—In September 2013, the Ministry of Industrial Affairs, the Republic of Indonesia issued a regulation No.33 /M-IND/PER/7/2013 about Low Cost Green Car (LCGC) in Indonesia. The regulation was made to control the production of LCGC as the solution to reduce energy usage and pollution, and maximize local component usage until 80%. One of the points in the regulation is Indonesia produce LCGC has to put a new logo (Brand Identity) which will be applied to the vehicle body that reflect of Indonesian identity to deliver impression that LCGC is Indonesian product.

This research attempts to study correlation of Indonesian consumers' perception towards new logo of LCGC Indonesia vehicle. That aims for building feeling of nationalism and purchase intention. This study also tries to find out the appropriate communication method in order to support logo as the stimuli to deliver message that LCGC is Indonesia's national product. Qualitative and quantitative methods (mix media) are implemented in this research. The car brands that are studied as the sample of LCGC are 1.Honda Brio Satya, 2.Toyota Agya, 3.Daihatsu Ayla, and 4.Suzuki Karimun Wagon-R.

Process of research; first step is conducted with qualitative approach involving six of key informants from Indonesia automotive industry. The second step do Interview with thirty informants (consumer). The third step, gave the questionnaires to one hundred and eighty-nine respondents from Bandung citizen as the population sample.

The research found that Indonesian consumers' perception on new logo on LCGC has positive and significant correlation to the nationalism (Spearman's $\rho = 0.216$, p-value 0.003 at 99% confidence level). Consumers' nationalism has positive and significant correlation to purchase intention ((Spearman's $\rho = 0.296$, p-value 0.000 at 99% confidence level). Consumer thought that they information of LCGC as national product is important. It also found that social and commercial TV advertisement are the most favorable communication model to inform that LCGC is the Indonesian domestic product.

Keywords—LCGC, new logo (Brand Identity), perception, consumers' nationalism, purchase intention.

I. INTRODUCTION

AUTOMOTIVE industry is a sector that has experienced impressive growth in Indonesia. The outstanding positive trend of car sales in the period of 2005 - 2013 was clearly

demonstrated on the **Figure 1**. Over the same time span, domestic car sales are increased by a compound annual growth rate (CAGR) of 11.1 percent, and this was mainly driven by the sales of commercial vehicles and passenger cars [1].

The growth of car industry in Indonesia is driven by growing domestic consumption and aggressive marketing campaigns on supply side. The most influencing factor is the rising of middle class consumer who afford to purchase their first car. As the automotive industry in Indonesia continues to grow, there will be a direct impact on other supporting industries in the country, especially the automotive components industry which provides auto makers with the necessary components to assemble vehicles [2]. On September 2013, the Ministry of Industry issued a regulation No.33 /M-IND/PER/7/2013 about production development of Low Cost Green Car (LCGC) [3]. The regulation was made to control the production and marketing of Low Cost Green Car as the solution to reduce energy usage and pollution, and maximize local component usage. The main point of the regulation is regarding the technical specification, pricing, model, and other administrative requirement. The foreign brand that will produce this type of car has to delegate most of the production to local component industry in Indonesia. It is expected about 80% of these car components are made in Indonesia. With this government program, LCGC that is produced in Indonesia will get privilege from the tax cutting, so it can be sold to the market with lower price than other car [3]. There are currently four brands that participate on government's LCGC program; they are Honda Brio Satya, Astra Daihatsu Ayla, Astra Toyota Agya, and Suzuki Karimun Wagon R. These four brands are come from 4 largest Japanese car producers in Indonesia.

The article 2 No. 1d on the Low Cost Green Car regulation that issued by Ministry of Industry [3] states that the LCGC car has to use name and logo that reflect Indonesian identity. This is a big deal for the company because they have to change their original brand logo and name that already becomes their source of brand equity for 30 years. **Figure 2** shows the Indonesian logo attached on the LCGC brands. The objective of Indonesian logo addition on those cars is to give national brand image, that the car is domestic product which the local components contribute 80% of overall product composition. But, the

additional Indonesian logo may change the image of those 4 brands, although it is only placed on one side of the car. Are the image changes would bring the positive or negative impact to the brand?

Research Question

From this perspective that has explained above, there are two research questions on the study, they are:

1. Does the new Indonesian logo of LCGC have effect on building consumers' nationalism on using national product?
2. Does the new Indonesian logo on LCGC brands affect the consumers' purchase intention?

Research Limitation

1. Low Cost Green Car (LCGC) is the terminology that is used in this research. Definition of LCGC is described in Indonesia's Ministry of Industry regulation No.33 /M-IND/PER/7/2013 [3]. LCGC is not defined as national car. But, LCGC is car that mainly composed of local car component.
2. The brand element that is explored in this research is only the logo, and not including the brand name.
3. Samples of research are Bandung citizen that have similar profile with target market of LCGC.
4. LCGC brands to be studied are Honda Brio Satya, Astra Daihatsu Ayla, Suzuki Karimun Wagon-R, and Astra Toyota Agya.

There is no research part that is conducted for individual brands. All of the researches purposes are belong to general perception of those four LCGC brands.

II. BUSINESS ISSUE EXPLORATION

Conceptual Framework

To understand the whole idea of the research, the basic conceptual framework has been made and can be seen on the **Figure 3**.

From the previous chapter, it already known that the business issue is the Indonesian logo addition in LCGC. The addition of Indonesian logo is the branding effort to give impression to consumers that most of LCGC production is done in Indonesia, thus it can be called local product by definition. What consumers feel, think, or perceive about this logo is unknown and hasn't been studied yet. So, through this research, the market research will be conducted to obtain the figure on how consumers perceive about the logo. Based on the purpose of the logo addition, the logo is expected to build positive perception of LCGC as car that is mainly composed of local components. In other word, the consumers were being engaged to be proud of local product through the stimuli of logo.

So, there are three consumer behavior aspects that can be utilized as the basic theory of the study. They are; consumers' perception of logo, consumer's nationalism (country of origin), and purchase intention. These aspects, will frame the study in order to do the market research. The market research is conducted to obtain real figure on how do consumers' perceive of the logo. The analytical model to build hypothesis of relationship between the aspects will be presented on the next section after the literature are reviewed. Then, the market research data is analyzed to justify the assumption. This study also will provide alternative solution if there will be any gap between the purpose of logo addition and consumers' perception.

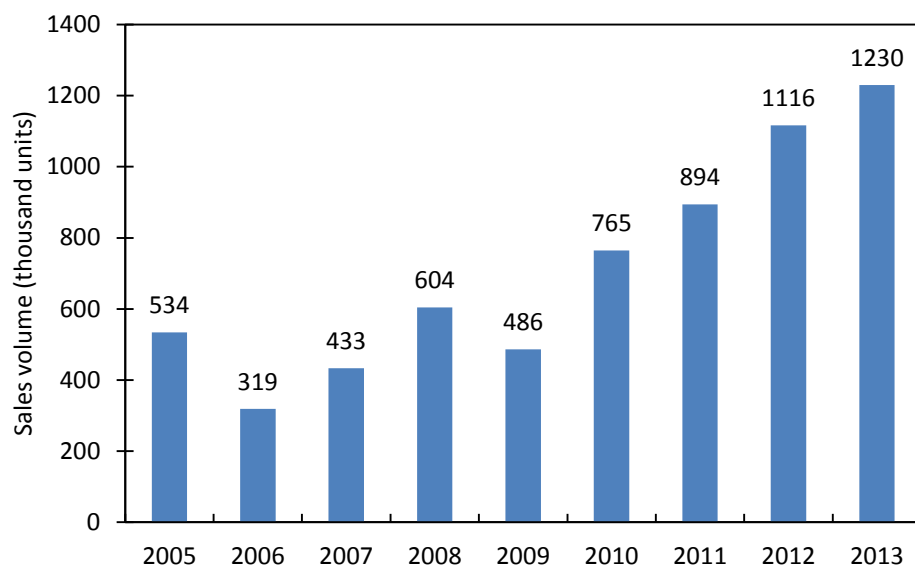


Figure 1 Car sales in Indonesia (2005-2013) (source: Gaikindo Annual Report 2014)



Figure 2 LCGC brands and its new logo (source: otomotif.com)

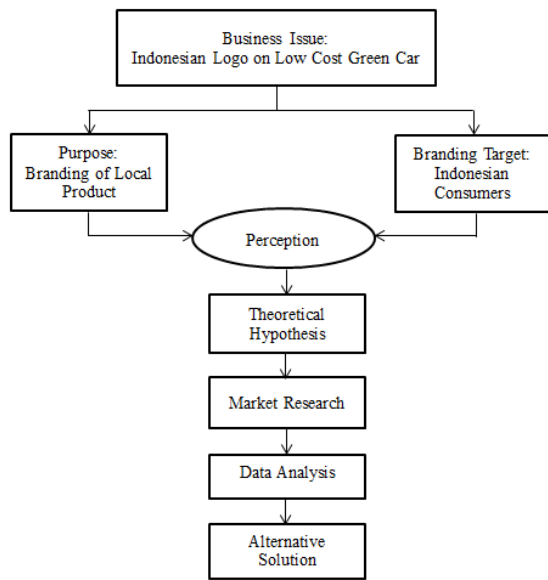


Figure 3 Conceptual framework

Research Analytical Model

Based on the exploration of the literature above, the analytical model from the research is developed, and can be seen on **Figure 4**. The hypothesis is developed based on several similar research that involves the three variables; consumers' perception of logo, consumers' nationalism, and purchase intention. The prior researches that are relevant with this research, and can be utilized to build hypothesis were summarized as follows:

- The influence of logo to purchase decision making was studied in USA in 2011. The research found that logo had lost the influence in consumers' decision making to purchase certain product [4]. Other research by Wang (2006) found that brand image have positive correlation with purchase intention [5]. Since logo is one of the element of brand, it can be deduced that Wang's research could be the basis of hypothesis that logo have positive correlation with purchase intention. But since the preliminary interview result found that most of respondent doubtful that logo has correlation with their purchase intention, then the hypothesis is changed; logo has positive correlation to purchase intention, but it is not significant.
- The influence of consumers' nationalism (country of origin) to purchase intention was studied by Shrimp and Sharma in 1987. It is found that consumer' nationalism had negative correlation with purchase intention of foreign products. [6]. So, this research attempted to prove similar hypothesis that the consumers' nationalism has positive and significant correlation to purchase intention.
- There is no research yet regarding the influence of logo that has local identity to consumers' tendency to purchase local product than foreign product (as called consumers' nationalism). But, 3 of 6 respondents in preliminary interview said that the Indonesian logo will probably influence their preference to use local product and to be proud of it, if the logo design was enough to represent the Indonesian identity. So, this research attempted to prove hypothesis that the Indonesian logo on LCGC has positive correlation with consumers' nationalism.
- H₁₁: There is positive correlation between consumers' perception of Indonesian logo on LCGC (X) and consumers' nationalism (Y).
- H₁₂: There is significant correlation between consumers' perception of Indonesian logo on LCGC (X) and consumers' nationalism (Y).
- H₂₁: There is positive correlation between consumers' nationalism (Y) and consumers' purchase intention (Z).
- H₂₂: There is significant correlation between consumers' nationalism (Y) and consumers' purchase intention (Z).
- H₃₁: There is positive correlation between consumers' perception of Indonesian logo on LCGC (X) logo and purchase intention (Z).
- H₃₂: There is no significant correlation between consumers' perception of Indonesian logo on LCGC (X) and purchase intention (Z).

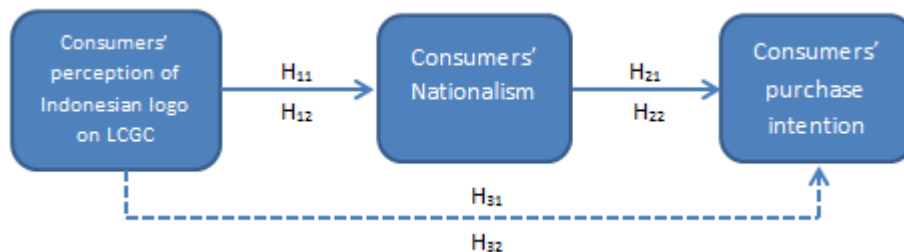


Figure 4 Analytical model of hypothesis

Market Analysis

The primary target market of LCGC is first car buyer, or new families. This segment is the part of Indonesian emerging middle-class. In marketing practice for automobile industry, the indicator called SES (social economic status) is widely used to determine target market [7]. **TABLE I** describes the social economic status for Indonesian consumer based on the expenditure per month, surveyed in 15 big cities in Indonesia.

In Indonesia, target market of LCGC is BC segments, which is in the middle class. This Nielsen's segmentation is not depend on certain occupation, so whether the target market is teacher, civil employee, or entrepreneur, if their expense is around Rp 1.500.000 to Rp 3.000.000, they can be classified as the target market of LCGC has income around IDR 7,000,000 to IDR 10,000,000

This research adopts two methodologies, qualitative and quantitative method. These two methods are combined to obtain specific and accurate findings on the research of consumer perception. The qualitative research is implemented by interview, and there are 6 respondents that are interviewed to obtain depth understanding of consumer. Second is quantitative research that is the main tools of this research. Since the research purpose is to capture the consumer's perception, larger amount of data is needed to obtain representative result. The data collection method is through survey, which was conducted from 7 to 21st July 2014.

TABLE I INDONESIAN SOCIAL ECONOMIC STATUS CATEGORIZATION 2010

SES	Expense per month (IDR)
A	3,000,000 and over
B	2,000,000-3,000,000
C1	1,500,000-2,000,000
C2	1,000,000-1,500,000
D	700,000-1,000,000
E	700,000 and below

source: www.intranet.nielsentam.tv

Research Tools and Analysis

The data that is obtained from the survey will be generated and analyzed using IBM SPSS Statistic tools. In this research, there are two main analytical tools that is implemented with SPSS, they are:

- Descriptive Analysis

Descriptive analysis is statistic method to describe result data of studied object through the sample or population as the result of measurement, without doing analysis and make generalized conclusion. In this research, the descriptive analysis will be explained by tables showing the result of survey.

- Correlative Analysis

Correlative analysis is a statistic method to determine the direction and strength of correlation between variables that is studied. In this research, it is used bivariate correlation, meaning that there are two variables that are tested. The

direction of correlation is stated by negative or positive, and the strength is measured by correlation coefficient. Highest positive correlation coefficient is 1, and the highest negative correlation is -1. Correlation coefficient of 1 means that the two variables has perfect correlation with same direction, and correlation of -1 means that the two variables have perfect correlation with opposite direction. If the correlation coefficient is 0, it means that there is no correlation between two variables. To measure the correlation strength, there are several three coefficients that are commonly used in statistic; they are Spearman's correlation and Contingency coefficient. **TABLE II** below is the interval of correlation strength that will help research findings to compare and interpret the correlation coefficient.

In correlative analysis, the significance test is used to measure how the significant the correlation is, so it is reliable to prove whether the correlation is meaningful or not. The significance of two variable is can be measured by P-value. Confidence level is 99% or 95% are commonly used. Statistically, the significance test will be explained by the hypothesis below [8]:

H_0 : There is no significant correlation between two variables

H_1 : There is significant correlation between two variables

P-value test criterion: H_0 is accepted if p-value is more than 0.05 or 0.01, and rejected if less than 0.05 or 0.01.

TABLE II CORRELATION STRENGTH INTERVAL [8]

Correlation Coefficient Interval	Correlation strength
0.00-0.19	Very weak
0.20-0.39	Weak
0.40-0.59	Moderate
0.60-0.79	Strong
0.80-1.00	Very Strong

Population and Sampling Method

The population of this research is Bandung population. Based on the survey on 2103 the total population of Bandung is 2,483,977. Based on the Slovin's formula, it is calculated that this research requires minimum sample of 156 respondents to fulfill the 92% confidence level. Since the research applies target market analysis, the sample also selected in order to match with target market of LCGC. So, the sample is limited with occupation is no less college students, and the age is limited from 21 - 55 years old. The total sample that is finally obtained during the survey period is 189 respondents, makes the confidence level increase to 92.73%.

Research Variables and Statements

There are 8 variables that are developed in this research. Each variable is measured by several indicators that are obtained by interview and some literature. The variables and statements are showed in **TABLE III**.

TABLE III RESEARCH VARIABLES AND STATEMENTS

Variables	Statements
Consumers' Profile	- Age - Gender - Occupation - Monthly expenses
Consumers' Knowledge	- I am familiar with these logos - I know that LCGC are Indonesia's product
Consumers' Skepticism	- The new logos give impression that the four Indonesian made LCGC have lower quality than Japanese standard - The new logo of Indonesian made LCGC give impression of cheap product. - The new logo of Indonesian made LCGC give impression that those car is not made by Honda, Toyota, Suzuki, and Daihatsu.
Logo design aesthetic	- Those logos have good design - I like the logo design
Logo design conformity with Indonesian identity (X)	- Those LCGC logos represent Indonesian identity - Those LCGC logos represent Indonesian product
Consumers' Nationalism (Y)	- I feel proud to use Indonesian product that has Indonesian logo. - Purchasing Indonesian product with Indonesian logo will help local industry growth. - It is better to buy Indonesian product that has Indonesian logo than let foreign made car sell the product in Indonesia.
Consumers' purchase intention (Z)	- If I have budget to purchase car, I intend to purchase those LCGC that have Indonesian logo. - If I have budget to purchase car, I intend to purchase those LCGC that is made by local industry.
Importance of Information	- I need to know the reason why there is Indonesian logo in LCGC - I need to know that those LCGC are Indonesian made product. - Widely information to Indonesian people that LCGC is Indonesian domestic product is necessary.

TABLE IV THE RELATIONSHIP OF X-Y-Z VARIABLES BASED ON PEARSON'S COEFFICIENT

Variable	Statistics	X	Y	Z
X	Spearman's (ρ)	1	0.216**	0.115
	p-value	-	0.003	0.115
Y	Spearman's (ρ)	0.216**	1	0.296**
	p-value	0.003	-	0.000
Z	Spearman's (ρ)	0.115	0.296**	1
	p-value	0.115	0.000	-

III. FINDING AND IMPLEMENTATION PLAN

Findings of Market Research

Development of conceptual framework is based on hypothesis that consumers' perception of logo may influence the consumers' nationalism, and the consumers' nationalism may influence the purchase intention. The table below shows the correlation analysis of logo design conformity with Indonesian identity (X), consumer's nationalism (Y), and purchase intention (Z).

From TABLE IV above, it can be interpreted with the explanation below:

- H₁₁ is accepted: There is positive correlation between consumers' perception of LCGC logo design conformity with Indonesian identity (X) and consumers' nationalism (Y), proven by the Spearman's correlation coefficient (ρ) of 0.216. Based on the correlation strength interval, the correlation between those variables is classified as weak correlation.
- H₁₂ is accepted: The p-value of consumers' perception of LCGC logo design conformity with Indonesian identity (X) and consumers' nationalism (Y) is 0.003, which is below 0.01. So, the correlation between consumers' perception of LCGC logo design conformity with Indonesian identity (X) and consumers' nationalism (Y) is significant at 99% level.
- H₂₁ is accepted: There is positive correlation between consumers' nationalism (Y) and purchase intention (Z), proven by the Spearman's correlation coefficient (ρ) of 0.296. Based on the correlation strength interval, the correlation between those variables is classified as weak correlation.
- H₂₂ is accepted: The p-value of consumers' nationalism (Y) and purchase intention (Z) is 0.000, which is below 0.01. So, the correlation between consumers' nationalism (Y) and purchase intention (Z) is significant at 99% level
- H₃₁ is accepted: There is positive correlation between consumers' perception of logo design conformity with Indonesian identity (X) and purchase intention (Z), proven by the Spearman's correlation coefficient (ρ) of 0.115.
- H₃₂ is accepted: The p-value of consumers' perception of logo design conformity with Indonesian identity (X) and purchase intention (Z), is 0.115, which is above 0.05. So, the correlation between consumers' nationalism (Y) and purchase intention (Z) is not significant, and can be neglected.

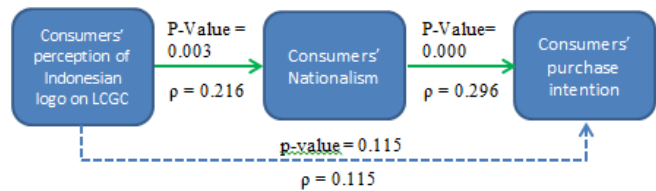


Figure 5 Correlation of consumer's perception on logo, consumers' nationalism, and purchase intention

Based on the research, they are several essential findings:

1. It was found that consumers' perception of Indonesian logo on LCGC has positive and significant correlation with consumers' nationalism. But, the correlation is weak. Probably, the weak correlation is because the logo designs were not enough to represent Indonesian identity.
2. It is found that the consumers' nationalism has positive and significant correlation with purchase intention. The correlation is found to be weak correlation.
3. It is inferred that consumers' perception of Indonesian logo on LCGC has no significant correlation with their purchase intention.
4. Based on the findings above, it can be generally concluded that the logo design was not effective enough to build consumers nationalism and increase the purchase intention.
5. From target market analysis, it is found that generation of consumer, X and Y have influenced their nationalism using local product. There are nationalist consumers in generation Y rather than in generation X. Meanwhile, the social economic status (SES) has influence in purchase intention for LCGC. The higher SES consumer generally has higher purchase intention for LCGC.
6. It is found that most of consumers thought that information of LCGC as Indonesian national product is important. But, the logo itself is not enough to impress consumer that LCGC is Indonesia's national product. Negative consumer perception towards LCGC as imported product that bring negative impact has to be changed into positive way. To change the consumers perception, social and marketing communication has to be implemented

Implementation of Marketing and Social Communication

Changing perception needs communication, and this research attempt to find out the most appropriate communication model to deliver the message about LCGC as

Indonesia's national product. In order to make efficient communication, this research tried to find out the most preferable communication media by consumer, so the communication method will be designed and focused to be performed on that media. Both government and the brand should be able to deliver message about LCGC as national product. For government, it is called social communication, and for the brand it is called marketing communication.

From TABLE V, it can be inferred that most of the respondents, that is 99 persons, (52.4%) prefer television as the most suitable media for communicating message about LCGC as Indonesia national product, followed by social media and printed media that has significant respond. So, it is clear that television is the most effective communication media to inform Indonesian people that LCGC are made in Indonesia. For government, the most conventional way is through public service advertisement, or usually called 'Iklan Layanan Masyarakat'. This kind of advertisement is usually made by certain government institution. **Figure 6** shows proposed messages in order to construct the public service advertisement about LCGC as Indonesian national product.

TABLE V RESPONDENT'S PREFERENCE OF COMMUNICATION MEDIA

No.	Media	f	%
1	Social media	49	25.9
2	Printed media	25	13.2
3	Television Advertisement	99	52.4
4	Direct communication by salesperson	10	5.3
5	Official website of brands	6	3.2
Total		189	100.0

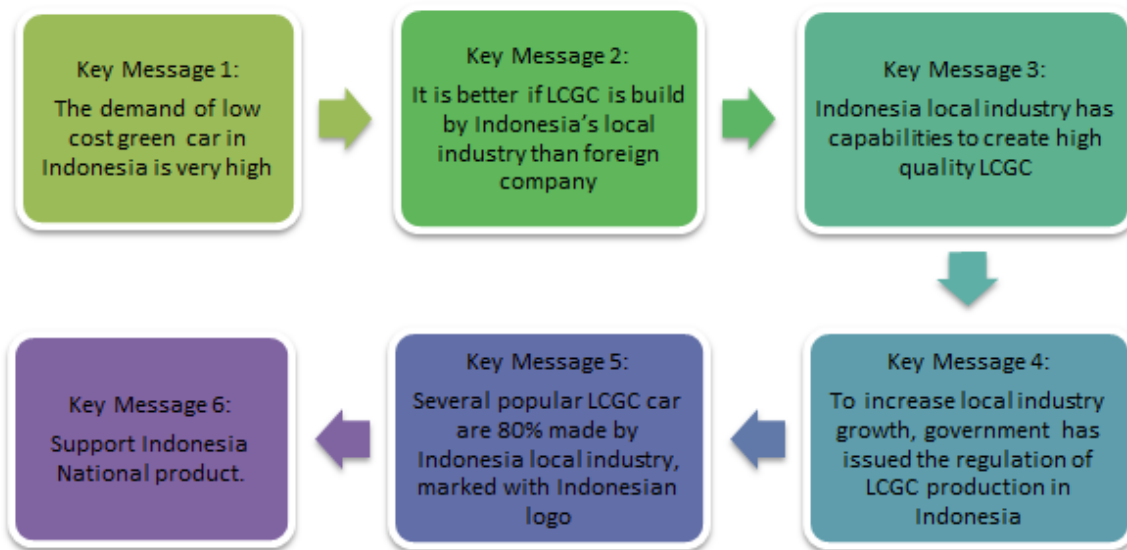


Figure 6 Proposed messages in LCGC advertisement



Figure 7 Proposed storyline of TV advertisement



Figure 8 Proposed design of tagline placement in TV advertisement

Figure 6 consists of main issue that Indonesian people have to know. To make the good TV advertisement, good visualization is important thing. Each key message has to be represented with representative and image that can deliver the message through the storyline. For example, in key message 3, the scene shows the production process of car in manufacturing plans. The illustration of the picture that will be on storyline can be seen on Figure 7.

For Honda, Toyota, Daihatsu, and Suzuki, the message can be put in the middle of the commercial advertisement. Each brand has to present their own tagline for their LCGC. On the TV advertisement, the tagline has to be showed with the appearance of Indonesian logo. The figure below shows how the tagline supposed to appear in TV ad.

Toyota Agya uses English language in their advertisement. This is not a good example, because it will not represent Indonesian product. Among those car brands, only Honda Brio Satya that hasn't make their TV ads, while the other has,

although only Daihatsu Ayla that already appears on TV. This is proposed Indonesian tagline that Honda, Toyota, and Suzuki can put on their TV ads.

1. Honda Brio Satya: Kesetiaan untuk Indonesia
2. Astra Toyota Agya: Totalitas Mobil Indonesia
3. Karimun Wagon-R: Mobil SUPER Indonesia

These commercial ads, together with public service ad, if implemented properly, will deliver proper message to Indonesian people that LCGC are national product, good and effective communication is expected to enhance consumers' nationalism value and increase their purchase intention of local product.

IV. FURTHER RESEARCH SUGGESTION

The statement of consumers' nationalism variable was found to be not specifically mention the term 'LCGC' on the questionnaire. To obtain better result for further research, the repairmen suggestion for the statement in the questionnaire regarding consumers' nationalism has been made, they are:

- I feel proud to use LCGC because it has Indonesian logo
- By purchasing LCGC with Indonesian logo, I involve in helping local car industry growth
- It is better to buy LCGC that is mostly made in Indonesia than let foreign made car sell the product in Indonesia.

The usage of term 'LCGC' will be more related to other variables that were correlated rather than using 'Indonesian product'. If it is implemented, it is expected that the result will be better.

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