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**МЕНЕДЖМЕНТ ТА ПІДПРИЄМНИЦТВО:
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THE RELATIONSHIP BETWEEN CORPORATE GOVERNANCE AND FINANCIAL PERFORMANCE IN CHINESE LOGISTICS-RELATED LISTED COMPANIES

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Abstract. The purpose of this study is to examine the relationship between corporate governance and financial performance of Chinese logistics-related listed companies. *Methodology:* We use Stata 16.0 as a data analysis tool, using panel data of 53 listed companies from 2013 to 2019 for analysis. In the multiple regression analysis, ROA is the dependent variable, the six corporate governance factors related to the ownership structure, board of directors, and governance structure are independent variables, and the company size, asset-liability ratio, and market-to-book ratio are control variables. Subsequently, we used ROE instead of ROA to conduct a test, which verified the robustness of the analysis results. *Findings:* The results show that management ownership, institutional ownership and proportion of the largest shareholder are significantly positively correlated with performance. There is a non-linear relationship between board size and financial performance, while there is no significant relationship between the proportion of independent directors and financial performance. In large companies, CEO duality is significantly negatively correlated with financial performance. *Originality/value:* Previous research generally used a certain industry as the research object for analysis, and seldom had cross-industry analysis. This research uses listed companies in the entire logistics industry chain as the research object. The research results should also be applicable to listed companies in the logistics industry in other countries.

Keywords: corporate governance, financial performance, logistics industry, panel data

JEL Classification: G34, R41.

INTRODUCTION

For the past several decades, the relationship between corporate governance and financial performance has been a hot topic of concern in academia, companies and regulatory authorities. Since the Enron incident in 2001 and the financial crisis in 2008, there have been more and more studies on corporate governance (Bhagat and Bolton, 2019). Although good corporate governance will improve financial performance, the characteristics of corporate governance still vary by country and industry.

The characteristic of modern companies is the separation of ownership and management rights, which creates agency and corporate governance issues. The ownership structure is the basis of property rights for corporate governance and reflects the relationship between shareholders. The board of directors represents the interests of all shareholders and is responsible for coordinating the relationship between stakeholders. The ultimate goal of the company's operation is to maximize the interests of shareholders, and financial performance is the most important evaluation indicator.

China began to introduce corporate governance in the market economy reform in the late 1970s. The Chinese government has established a modern enterprise system in state-owned enterprises with the purpose of improving financial performance. For these state-owned enterprises, the first was to separate ownership from operating rights, give operators the power to operate independently and mobilize the enthusiasm of operators to improve financial performance. From 2001 to 2003, the China Securities Regulatory Commission required listed companies to establish independent directors and clarified the supervision responsibilities of independent directors (Chen and Al-Najjar 2012; Clarke 2006).

The agency theory argues that strengthening the supervision of management can reduce agency costs, and a suitable ownership structure can also reduce agency costs, which can improve company performance (Aluchna and Idowu 2017; Jensen and Meckling 1976; Panda and Leepsa 2017). At the same time, the theory of neo-institutionalism argues that the influence of corporate governance structure on financial performance depends on factors such as the operating environment and legal system, and there is no "good corporate governance" suitable for all countries and industries (Dian 2014).

Against this background, we are going to examine the relationship between corporate governance and financial performance in Chinese logistics-related listed companies. In China, the logistics industry provides basic support for the rapid development of E-commerce and provides support and collaboration for the production, wholesale, and retail of commodities. We used the classification method of the financial information portal Eastmoney.com (Dong Fang Cai Fu Wang) and selected 53 active logistics-related listed companies as samples. Choosing listed companies according to industry relevance helps us deeply understand the impact of corporate governance on financial performance in this industry.

There are two main contributions to this article. First, there are few studies on the logistics-related industry in the past, our research has enriched the literature related to the corporate governance practice in the logistics-related industry. Second, we choose the price-to-book ratio as the control variable. The price-to-book ratio is an indicator based on market information and can better reflect the performance of the company. In the case of the same price-to-book ratio, comparing the relationship between corporate governance and operating performance of different companies has enhanced the value of research.

The paper is structured as follows. The paper commences with a review of relevant literature which provides the theoretical framework used in this study and a basis for hypothesis development. This is followed by a method section depicting the study's methodology. The penultimate section presents the main findings of the paper. The final section concludes with consequences for theory and practice.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Board size

Lipton and Lorsch (1992) proposed from a theoretical point of view that when the board size exceeds 10, the cost of coordination and communication will exceed the benefit of increasing the number of people. Yermack (1996) studied 452 US companies from 1984 to 1991 and found that there is a U-shaped curve relationship between board size and company performance. De Andres,

Azofra and Lopez (2005) studied 450 non-financial companies in ten countries in Western Europe and North America and found that there is a negative correlation between the size of the board of directors and the value of the company. Li and Naughton (2007) found board size is positively related to short-term returns. Jackling and Johl (2009) study on top Indian companies found that the size of the board of directors is positively correlated with company performance. The reason is that board members can provide various resources for company development to improve performance. Kao et al. (2019) found that the smaller the size of the board of directors, the better the performance of the company. Saidat et al. (2019) analyzed 12 banks from 2013 to 2017 and found that the board size is positively correlated with company performance. The members of the board of directors have rich experience and professional knowledge. Within the scope of the number specified by the China Securities Regulatory Commission, the members of the board of directors can provide intellectual support and even resource support for the development of listed companies. Therefore, we propose hypothesis 1:

H1: The size of the board of directors is positively correlated with financial performance.

Independent directors

The study by Borokhovich et al. (1996) shows that independent directors have a stronger supervisory effect on managers' business activities, and there is a positive correlation of independent directors with corporate performance. Zabri et al. (2016) researched the top 100 listed companies in Malaysia and found that there is no significant relationship between board independence and company performance. Shao (2019) conducted a comprehensive survey on the relationship between the corporate governance structure and corporate performance of Chinese listed companies from 2001 to 2015, using a large unbalanced sample of more than 22,700 observations of Chinese listed companies, and found that there is no relationship between independent directors and company performance. Bhagat and Black's (2005) study of American companies found that the independence of the board of directors has nothing to do with the company's long-term performance. Shukeri et al. (2012) randomly selected 300 Malaysian listed companies, and the analysis showed that board independence and ROA were negatively correlated. Pucheta-Martínez and Gallego-Álvarez (2019) analyzed the annual panel data of 10314 companies in 34 countries and found that board independence is positively correlated with company performance. Western scholars generally believe that independent directors and financial performance are positively related, but independent directors play a limited role in China (Li et al. 2012). Therefore, we propose hypothesis 2:

H2: Independent directors have no significant correlation with financial performance.

CEO Duality

Rechner and Dalton (1991) studied 141 companies' 6-year data and found that CEO duality is negatively correlated with company performance. Peng et al. (2007) analysis of 1202 company-year data of 403 listed companies in China shows that CEO duality in China is positively correlated with company performance. Elsayed (2007) found that for companies with low performance, CEO duality is positively correlated with financial performance. Arora and Sharma (2016) analysis of Indian manufacturing data from 2001 to 2010 shows that CEO duality has no significant correlation with company performance. Freihat et al. (2019) analyzed the data of manufacturing companies on the Amman Stock Exchange from 2011 to 2014 and found that CEO duality is positively correlated with company performance. Shao's (2019) survey of Chinese companies found that CEO duality has a significant negative correlation with company performance. Merendino and Melville (2019) analyzed the data of Italian listed companies from 2003 to 2015 and found that the impact of CEO

duality on performance varies from company to company. Pucheta-Martínez and Gallego-Álvarez (2019) analysis of 34 countries shows that CEO duality is positively correlated with company performance. For Chinese companies, CEO duality can improve the execution efficiency of management decisions, make the company more sensitive to market changes, and therefore improve financial performance (Peng et al. 2007). Therefore, we propose hypothesis 3:

H3: CEO duality is positively related to financial performance.

Ownership concentration

Berle and Means (1932) first studied the relationship between ownership structure and company performance, and they found that the concentration of company ownership is positively correlated with company performance. Waheed and Malik (2019) analyzed the unbalanced panel data of 309 non-financial companies listed on the Pakistan Stock Exchange from 2005 to 2016 and found that a high degree of ownership concentration helps alleviate agency problems. According to Shao (2019), the concentration of ownership has a significant positive impact on company performance.

Agency theory states that when the company's ownership concentration is high, the major shareholders strengthen the supervision of the management, and the benefits brought by it will exceed the supervision cost, and the major shareholders have sufficient motivation to supervise the management (Jensen and Meckling 1976). In this case, agency costs will be reduced and company performance will improve. Therefore, we propose hypothesis 4:

H4: Ownership concentration is positively related to financial performance.

Management ownership

Fishman et al. (2008) conducted a study on 50 companies listed on the Australian Stock Exchange from 2002 to 2003 and found that manager ownership hurt company performance. Huang and Boateng (2013) used the 1999-2010 data of all listed real estate companies in China to conduct an analysis and found that the management shareholding ratio is positively related to company performance.

If the management's shareholding ratio is low, and improving the company's financial performance brings fewer benefits to the management, the management will not have enough motivation to improve the company's performance to increase personal income. Conversely, if the management holds a high proportion of shares, the improvement of the company's performance will bring about the improvement of the management's income, and the management will have the motivation to improve the company's financial performance. We propose hypothesis 5:

H5: The management shareholding ratio is positively related to company performance.

Institutional ownership

Pound (1991) argues that institutional ownership can effectively exercise supervision, thereby affecting management decision-making and company performance. Bai et al. (2004) analyzed the panel data of Chinese listed companies from 1999 to 2001 and found that foreign investors' shareholding is positively correlated with the company's market value. Kyereboah-Coleman (2007) found that institutional shareholding improves market value. Lin and Fu (2017) studied the impact of institutional ownership on corporate performance in a new sample of Chinese listed companies from 2004 to 2014, they found that institutional ownership has a positive impact on company performance. Therefore, institutional shareholding is considered a mechanism to control agency costs. Based on this, we propose hypothesis 6:

H6: Institutional ownership is negatively related to company performance.

METHODOLOGY

Sample selection

According to the industry classification of the China Securities Regulatory Commission in the second quarter of 2020, there are 7 sub-categories in the transportation, storage and postal industry, with a total of 104 listed companies. The seven sub-categories are railway transportation, road transportation, water transportation, air transportation, loading and unloading and other transportation agencies, warehousing, and postal services. There are 5 listed companies in the "postal industry" where the logistics company is located (China Securities Regulatory Commission 2020).

Since our research object is an upstream and downstream listed company closely related to logistics, we chose the classification standard of Eastmoney.com. Eastmoney.com has 58 companies related to the logistics industry. Excluding 5 delisted companies, there are 53 remaining companies. The data of 53 logistics-related listed companies from the China Stock Market and Accounting Research (CSMAR) database. Since the listing year of some companies is later than 2013, our data set is unbalanced panel data. See Table 1 for details.

Table 1
Year and industry distribution of research samples

Industry / Year	2013	2014	2015	2016	2017	2018	2019	Total	N%
<i>Transportation, storage and postal</i>	20	20	23	26	35	38	40	202	68.70%
<i>Leasing and business services</i>	1	1	3	4	6	7	7	29	9.90%
<i>Manufacturing</i>	7	7	7	6	1	0	0	28	9.50%
<i>Wholesale and retail</i>	3	3	3	3	3	3	3	21	7.10%
<i>Real estate</i>	1	1	1	1	1	1	1	7	2.40%
<i>education</i>	0	0	0	1	1	1	1	4	1.40%
<i>Information transmission, software and IT service</i>	0	0	0	0	1	1	1	3	1.00%
Total	32	32	37	41	48	51	53	294	
N%	10.88%	10.88%	12.59%	13.95%	16.33%	17.35%	18.03%		

Dependent and independent variables

Because this article studies the relationship between corporate governance and corporate performance, we choose ROA as the proxy variable of financial performance. ROE is also a proxy variable of financial performance and is used in robustness testing. In our study, the board characteristics and the ownership structure are two particularly important issues. The independence of the board of directors includes the board size, the proportion of independent directors, and CEO duality. The issue of equity structure includes shareholder concentration, management shareholdings, and institutional shareholdings, etc.

In terms of shareholding structure, we selected three variables: management's shareholding ratio, institutional shareholding ratio, and the largest shareholder's shareholding ratio. In terms of the characteristics of the board of directors, we selected three variables: the size of the board, the proportion of independent directors, and CEO duality. To control the differences between companies of different sizes and profitability, we choose total assets, asset-liability ratio and price-to-book ratio as control variables. Variable definitions are shown in Table 2:

Table 2

Variables Definition

Variable	Abbreviation	Definition
Dependent variables		
Return on Assets	ROA	Net income / Total assets
Return on Equity	ROE	Net income / Total equities
Independent variables		
Management shareholdings	ManOwn	Management shareholding/total share capital
Institutional shareholding ratio	InstOwn	Institutional shareholding/total share capital
Ownership Concentration	Top1	Shareholding ratio of the largest shareholder
Board Size	BoardSize	Total number of board
Independent directors ratio	INDR	Percentage of independent directors
CEO Duality	Duality	1 = Chairman and CEO are the same person, 0 = Other Situation
Control variables		
Firm Size	LnSize	Natural log of total assets
Leverage	Leverage	Total liabilities / total assets
Price to Book ratio	PBR	Market price per share / Book value per share

Empirical Method

Multiple regression analysis is a standard method for estimating the relationship between variables. We developed the following model:

$$\text{Performance}_{i,t} = \beta_0 + \beta_1 \text{ManOwn}_{i,t} + \beta_2 \text{InstOwn}_{i,t} + \beta_3 \text{Top1}_{i,t} + \beta_4 \text{BoardSize}_{i,t} + \beta_5 \text{INDR}_{i,t} + \beta_6 \text{Duality}_{i,t} + \beta_7 \text{LnSize}_{i,t} + \beta_8 \text{Leverage}_{i,t} + \beta_9 \text{PBR}_{i,t} + u_{i,t}$$

Ownership structure variables: $\text{ManOwn}_{i,t}$ is the shareholding ratio of management, which is the board of directors, board of supervisors and senior management; $\text{Top1}_{i,t}$ is the shareholding ratio of the largest shareholder.

Board characteristic variables: $\text{BoardSize}_{i,t}$ is the number of board members including the chairman; $\text{INDR}_{i,t}$ is the ratio of independent directors to the number of board members; $\text{Duality}_{i,t}$ is the separation of the roles of the chairman and the chief executive officer, when the chairman and CEO are the same person 1, other cases are 0.

Control variables: $\text{LnSize}_{i,t}$ is the logarithm of the company's total assets at the end of the year; $\text{Leverage}_{i,t}$ is the asset-liability ratio; $\text{Year}_{i,t}$ is the year of the data.

RESULT AND DISCUSSION

Descriptive Statistics

Table 3 reports the results of descriptive statistics. The average ROA of the logistics industry is 0.041, and the average ROE is 0.061. The average management shareholding ratio is 0.081, while the average shareholding ratio of the largest shareholder is 39.4%, which is higher than the average of 34.143 for Chinese listed companies (Rathnayake et al. 2019).

The board size is 5-15 people, with a median of 9 people, which is consistent with the overall situation of listed companies in China (Shao 2019). The minimum proportion of independent directors is 27.3%, the maximum is 50%, and the average is 33.3%. This is consistent with the requirement of the China Securities Regulatory Commission that the proportion of independent directors of listed companies in China is not less than one-third. The ratio of CEO duality is 24.2%, which is higher than the average of Chinese companies (Shao 2019).

The average natural logarithm of company size is 22.164, which is lower than the average of 22.182 for Chinese listed companies. The average asset-liability ratio is 0.452, which is the average level of Chinese listed companies (Shao 2019).

Table 3

Descriptive statistics

VarName	Obs	Min	Max	Mean	Median	SD
ROA	294	-0.466	0.401	0.041	0.039	0.076
ROE	293	-3.622	0.462	0.061	0.079	0.281
ManOwn	288	0.000	0.697	0.081	0.003	0.159
InstOwn	292	0.000	0.887	0.140	0.000	0.251
Top1	294	0.059	0.767	0.394	0.392	0.147
BoardSize	294	5.000	15.000	8.653	9.000	1.581
INDR	294	0.273	0.500	0.360	0.333	0.039
Duality	289	0.000	1.000	0.242	0.000	0.429
LnSize	294	19.436	26.412	22.358	22.164	1.420
Leverage	294	0.058	1.280	0.452	0.441	0.206
PBR	275	0.322	30.741	3.296	2.460	3.079

Correlation Matrix

Table 4 reports the results of the correlation analysis. The results show that, except for the management shareholding ratio, independent director ratio, and CEO duality, other variables are significantly correlated with ROA, and the signs of the correlation coefficient are also the same as expected. Besides, the correlation between all other variables is lower than 0.6.

Table 4

Correlation matrix

	ROA	ROE	ManOwn	InstOwn	Top1	BoardSize	INDR	Duality	LnSize	Leverage	PBR
ROA	1										
ROE	0.775***	1									
ManOwn	0.067	0.034	1								
InstOwn	0.358***	0.187***	-0.003	1							
Top1	0.303***	0.164***	-0.108*	0.454***	1						
BoardSize	0.131**	0.107*	-0.135**	-0.021	0.054	1					
INDR	-0.052	-0.092	0.163***	0.039	0.034	-0.540***	1				
Duality	0.083	0.056	0.086	0.347***	0.150**	-0.110*	0.292***	1			
LnSize	0.099*	0.111*	-0.206***	-0.052	0.300***	0.438***	-0.210***	-0.113*	1		
Leverage	-0.410***	-0.248***	0.018	-0.147**	0.006	0.042	-0.096	-0.077	0.289***	1	
PBR	-0.067	-0.082	0.155**	0.204***	-0.068	-0.131**	0.074	0.190***	-0.375***	0.026	1

Source: Authors' calculations. Significance at the 10%, 5%, and 1% levels is indicated by *, **, and ***, respectively.

Regression Results

Table 5 reports the results of the regression analysis. Regression (1) tested the relationship between the ownership structure, the characteristics of the board of directors, and ROA. The results showed that the management shareholding ratio ($p < 0.05$), the legal person shareholding ratio ($p < 0.01$), and the largest shareholder's shareholding ratio ($p < 0.05$) are positively correlated with ROA. Board size, the proportion of independent directors, and CEO duality are not significantly correlated with ROA. Regression (2) is a robustness test, which tests the correlation between ownership structure, board characteristics and ROE, and obtains similar results to regression (1).

Table 5

Regression Results

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	<i>ROA</i>	<i>ROE</i>	<i>ROA</i>	<i>ROA</i>	<i>ROA</i>	<i>ROA</i>	<i>ROA</i>	<i>ROA</i>
			BoardSize<=9	BoardSize>9	INDR<0.36	INDR>=0.36	Duality=0	Duality=1
<i>ManOwn</i>	0.079***	0.156***						
	(2.73)	(2.92)						
<i>InstOwn</i>	0.058***	0.117***						
	(3.15)	(3.04)						
<i>Top1</i>	0.108***	0.181***						
	(2.84)	(2.62)						
<i>BoardSize</i>	0.003	0.004	-0.003	0.027***	0.006	-0.008	-0.002	0.007
	(0.84)	(0.63)	(-0.37)	(7.95)	(1.22)	(-1.15)	(-0.31)	(0.91)
<i>INDR</i>	-0.094	-0.162	-0.116	-0.212*	-0.052	-0.207	-0.105	0.164
	(-0.70)	(-0.61)	(-0.60)	(-1.76)	(-0.10)	(-0.71)	(-0.60)	(0.64)
<i>Duality</i>	-0.001	-0.013	0.012	-0.028**	-0.008	0.018	0.000	-0.460**
	(-0.12)	(-0.64)	(1.08)	(-2.10)	(-0.60)	(1.13)	(.)	(-2.05)
<i>LnSize</i>	0.010**	0.024***	0.016***	0.011***	0.011**	0.022***	0.012**	0.023**
	(2.38)	(2.90)	(2.95)	(4.91)	(2.03)	(2.96)	(2.20)	(2.25)
<i>Leverage</i>	-0.160***	-0.111**	-0.194***	-0.160***	-0.142***	-0.214***	-0.163***	-0.256***
	(-6.24)	(-2.36)	(-6.15)	(-10.49)	(-4.42)	(-4.90)	(-4.92)	(-4.69)
<i>PBR</i>	-0.000	-0.001	0.001	0.007***	0.004**	-0.003	0.000	0.001
	(-0.12)	(-0.31)	(0.60)	(3.60)	(2.53)	(-1.11)	(0.23)	(0.64)
<i>_cons</i>	-0.167*	-0.478**	-0.174	-0.377***	-0.175	-0.209	-0.106	0.000
	(-1.66)	(-2.49)	(-1.05)	(-4.59)	(-0.85)	(-1.08)	(-0.79)	(.)
<i>N</i>	264	264	232	38	160	110	203	67

*Source: Authors' calculations. Significance at the 10%, 5%, and 1% levels is indicated by *, **, and ***, respectively.*

In order to further test the relationship between the board size and financial performance, we use the median of the board size of 9 as the boundary and divide the companies into two types of board size less than 9 and greater than 9 for regression analysis. The results are shown in Table 6.

Table 6

Two-sample t test with equal variances

	obs	Mean	dif	St_Err	t_value	p_value
BoardSize <= 9	254	22.106	-1.851	.216	-8.55	0.000
BoardSize > 9	40	23.957				

The results show that the results of companies with a board size less than 9 remain unchanged, while for companies with a board size greater than 9, the board size ($p < 0.01$) and CEO duality ($p < 0.05$) are positively correlated with financial performance. This result shows that board members can provide more experience and professional knowledge for company progression, which can be instrumental for listed companies to enhance their financial performance.

At the same time, we also conducted a t-test on the size of the two types of companies according to this classification method, and the results showed that larger companies have larger board sizes. From this, we can conclude that in smaller companies, the board size and financial performance are not significant, while in larger companies, the board size and financial performance are significantly positively correlated. This correspondence also appears in CEO duality.

Similarly, to further test the relationship between the proportion of independent directors and financial performance, regression (5) is for companies with an independent director ratio lower than the average (36%), and regression (6) is for companies with an independent director ratio equal to or higher than the average. The results indicate that the proportion of independent directors has no significant relationship with financial performance. This is very much congruent with the findings of other researchers. The role of independent directors in Chinese listed companies has not been effectively played yet.

Regression analysis (7) and (8) are the situations where the chairman is not concurrently the CEO and the chairman is concurrently the CEO. The results show that the concurrent chairmanship of the CEO is significantly negatively correlated with financial performance. In the case of CEO duality, the board's supervision of the management will be weakened, and the company's performance may be reduced due to the encroachment of the interests of small shareholders by large shareholders. Also, it is possible that the management cannot obtain effective disagreements when making decisions, causing the CEO to make wrong management decisions.

CONCLUSION

This paper studies the relationship between corporate governance and financial performance in Chinese logistics-related listed companies. Employing the panel data of 53 listed companies from 2013 to 2019, we displayed the statistical description of the equity structure variables and the board structure variables and performed OLS analysis on these two types of variables.

Our study indicates that for the logistics-related listed companies in China, the higher the management's shareholding ratio, the more the management's interests and the company's interests will be aligned, which can reduce agency costs and improve the company's financial performance.

The higher the institutional shareholding ratio, the greater the supervision and support for listed companies, which is also conducive to improving financial performance. The increase in the shareholding ratio of the largest shareholder, the benefits obtained by strengthening supervision are greater than the cost of supervision, which gives the largest shareholder an incentive to strengthen supervision of management and improve financial performance.

We found there is a non-linear relationship between the board size and financial performance. In companies with small assets, the size of the board of directors is relatively small, and there is no significant correlation between the size of the board and financial performance; in companies with large assets, the size of the board is relatively large, and the board size and financial performance are significantly positively related. There is no significant relationship between the proportion of independent directors and financial performance. The reason is the independent directors of listed companies in China have not played their due role. In smaller companies, the chairman concurrently serving as CEO is positively correlated with financial performance, but not significant; but in larger companies, the chairman concurrently serving as CEO is significantly negatively correlated with the company's financial performance.

Our analysis shows that the financial performance of logistics-related listed companies is significantly related to the ownership structure, while the correlation with the characteristics of the board of directors depends on the size of the company. This is just an analysis of the relationship between board characteristics and company performance based on experience. However, there may be a more complicated mechanism between the characteristics of the board of directors and financial performance, and further research can explore the theoretical basis and influence mechanism.

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ВЗАЄМОЗВ'ЯЗОК МІЖ КОРПОРАТИВНИМ УПРАВЛІННЯМ І ФІНАНСОВОЮ РЕЗУЛЬТАТИВНІСТЮ ДІЯЛЬНОСТІ В КИТАЙСЬКИХ ЛОГІСТИЧНИХ КОМПАНІЯХ

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Метою цього дослідження є вивчення взаємозв'язку між корпоративним управлінням та фінансовими показниками китайських публічних логістичних компаній. Ми використовуємо Stata 16.0 як інструмент аналізу даних, беручи дані 53 компаній за період 2013-2019 рр. При багаторазовому регресійному аналізі ROA є залежною змінною, шість факторів корпоративного управління, пов'язані зі структурою власності, радою директорів та структурою управління, є незалежними змінними, а розмір компанії, коефіцієнт активів і зобов'язань та співвідношення ринкової до балансової вартості - це контрольні змінні. З метою перевірки тесту надійності результатів ми використовували ROE замість ROA. Результати показують, що власність з боку менеджменту, частка інституційних інвесторів та частка найбільшого акціонера суттєво позитивно корелюють з результатами діяльності. Існує нелінійна залежність між розміром ради директорів та фінансовими показниками, тоді як не існує значної залежності між часткою незалежних директорів та фінансовими показниками. У великих компаніях подвійність ролі виконавчого директора суттєво негативно корелює з фінансовими показниками. Попередні дослідження зазвичай використовували певну галузь як об'єкт дослідження для аналізу, і рідко проводили міжгалузевий аналіз. Це дослідження використовує компанії, що перелічені в усьому ланцюгу логістичної галузі, як об'єкт дослідження. Результати дослідження також можуть бути застосовні до публічних логістичних компаній в інших країнах.

Ключові слова: корпоративне управління, фінансові результати, логістична галузь, панельні дані

ВЗАИМОСВЯЗЬ МЕЖДУ КОРПОРАТИВНЫМ УПРАВЛЕНИЕМ И ФИНАНСОВОЙ РЕЗУЛЬТАТИВНОСТЬЮ ДЕЯТЕЛЬНОСТИ КИТАЙСКИХ ЛОГИСТИЧЕСКИХ КОМПАНИЙ

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Целью данного исследования является изучение взаимосвязи между корпоративным управлением и финансовыми показателями китайских публичных логистических компаний. Мы используем Stata 16.0 как инструмент анализа данных, анализируя данные 53 компаний за период 2013-2019 гг. При многократном регрессионном анализе ROA является зависимой переменной, шесть факторов корпоративного управления, связанные со структурой собственности, советом директоров и структурой управления, являются независимыми переменными, а размер компании, коэффициент активов и обязательств и соотношение рыночной к балансовой стоимости - это контрольные переменные. С целью проверки теста надежности результатов мы использовали ROE вместо ROA. Результаты показывают, что собственность со стороны менеджмента, доля институциональных инвесторов и доля крупнейшего акционера существенно положительно коррелируют с результатами

деятельности. Существует нелинейная зависимость между размером совета директоров и финансовыми показателями, тогда как не существует значительной зависимости между долей независимых директоров и финансовыми показателями. В крупных компаниях двойственность роли исполнительного директора существенно негативно коррелирует с финансовыми показателями. Предыдущие исследования обычно использовали определенную отрасль как объект исследования для анализа, и редко проводили межотраслевой анализ. Это исследование использует компании, перечисленные во всем цепи логистической отрасли, как объект исследования. Результаты исследования также могут быть применимы к публичным логистическим компаниям в других странах.

Ключевые слова: корпоративное управление, финансовые результаты, логистическая отрасль, панельные данные

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EMPLOYEE PERFORMANCE ENHANCEMENT THROUGH INNOVATIVE BEHAVIOR AT PT KAI

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Abstract. Human resource management cannot be separated from the factors of employees who are expected to perform as well as possible in order to achieve company goals. This research aims to examine the effects of individual characteristics and intrinsic motivation on innovative behavior and employee performance, and the influence of innovative behavior on employee performance. This research is quantitative analysis which obtains the sample data from 150 employees. Furthermore, the data is processed by Structural Equation Modeling (SEM) which assisted from the application program of Analysis of Moment Structure (AMOS) version 18.0. According to the result of the analysis, it is concluded as the followings: an individual characteristic has a positive effect on innovative behavior; intrinsic motivation has a positive effect on innovative behavior; individual characteristics has a positive effect on employee performance; intrinsic motivation has a negative effect on employee performance and innovative behavior has a positive effect on employee performance.

Keywords: individual characteristics, intrinsic motivation, innovative behavior, employee performance.

JEL Classification: M500, M510, M590.

INTRODUCTION

Human resource management cannot be separated from the factors of employees who are expected to perform as maximum as possible in order to achieve the company goals. PT Kereta Api Indonesia (PT. KAI) as one of big transportation company in Indonesia currently faced the challenges that should be able to enhance human resources' qualities and achieve special skills in order to be able to compete with the business world. Human resources are a crucial factor in the company. In a large-scaled company, human resources are considered as a very determining element in the business development process, the role of human resources becomes even more crucial (Tadjudin, 2013). Human resources is considered the most strategic position among other resources, thus the performance of human resources will affect how the company performs completely.

LITERATURE REVIEW

Human Resources (HR) is the most important element, as mentioned by Hardyansyah (2016) that human as manpower in an organization an important role in achieving goals and providing good services for organizations and society. Employees are the most important factor of production; therefore they must have the willingness and ability to carry out the tasks assigned by the company.

Performance is a specific target which is a management commitment that can be achieved by human resources or the bank (Poh and Zi, 2001). Pohdan Zi, (2001) stated further that performance does not stand alone but is related to job satisfaction and compensation, influenced by skills, abilities and individual traits.

According to the research of the analysis on Corporate Governance Influence Implementation (Zeptian and Rohman, 2013), it is obtained the result of characteristics as a features or traits that have the ability to improve the quality of life, while individual characteristics are typical traits that indicate a person's differences regarding motivation, initiative, the ability to remain strong in facing tasks to completion, solve problems or how to adapt to changes that are closely related to the environment that affect performance individual.

Etimologically, Winardi (2008) explained that motivation derives of the Latin word move, which means to move. The word is absorbed in English and became motivation which means giving a motive, the arising of a motive or things that encourage or circumstances that give rise to encouragement.

Human resources are one of the most important factors in a bank, because the quality of the bank itself is very dependent on the quality of human resources as human resources and service performer in a bank. (Huson, Auch, Qi, and Schuster, 2007)

According to Yuniarti and Fadila MS (Hengky, 2013), some experts reckon that the key to company's competitive advantage is its human resources. The success of a company, both large and small, depends on its ability to develop and manage human resources within the company (Hasibuan, 2011). Human resources are considered as a factor that greatly affects the company in achieving its goals. Human resources (HR) are a very important asset for an organization, which is the focus of the organization in order to create value that aims to maintain its existence in a competitive environment. It is valid to say that in facing global challenges, the agenda for competition is human resources (Siagian, 2015). Competent human resources are those who are able to maintain and be able to advance the company to become superior among other similar companies and capable of the going concern status (Gathiira, Muathe, and James Kilika, 2020).

The study only analyzes the problem of employee performance from one dimension or one point of view, from the employee's point of view, but does not explore from other perspectives, for example the company's top management / top management or from the point of view of managers in charge of employees so that more research results can be produced and Describes the several dimensions of factors that lead to increased employee performance.

In achieving its targets, the company must also be supported by human resources who are considered to be competent and experts in their respective fields of work (Caesar and Fei, 2018). Employees who are able to work well have high work motivation and an innovative spirit in their workplace (Peiró and Tetrick, 2011).

Moreover, based on the explanation above, this research aims to examine the effects of individual characteristics and intrinsic motivation on innovative behavior and employee performance, and the effect innovative behavior on employee performance at PT Kereta Api Indonesia (PT. KAI).

PAPER OBJECTIVE

Paper objective is to examine the effects of individual characteristics and intrinsic motivation on innovative behavior and employee performance, and the influence of innovative behavior on employee performance.

METHODOLOGY

This research is a quantitative research. Quantitative methods emphasize objective measurements and the statistical, mathematical, or numerical analysis of data collected through polls, questionnaires, and surveys, or by manipulating preexisting statistical data using computational techniques (Sugiyono, 2016).

The sampling determination is using guidelines from Hair, et al (1995) in Ferdinand (Ferdinand, 2011) which states that a minimum sample size of 5-10 parameter locations is estimated. According to Ferdinand (2011), the appropriate sample size is 100-200. If the sample is too large, e.g. 400 samples, the method becomes very sensitive, making it difficult to obtain good goodness-of-fit measures. The sample is the smallest part and the characteristics possessed by this population (Sugiyono, 2016a). The sampling technique used in this research is the improbability sampling technique, since all populations do not have the same opportunity. Improbability sampling is using purposive sampling. In this study, 150 employees who have worked for two years at PT KAI Headquarters in Bandung will be selected as samples. After obtaining the sample, thus, the data will be analyzed by Structural Equation Modeling (SEM) which assisted from the application program of Analysis of Moment Structure (AMOS) version 18.0.

The variables uses here are individual characteristic, innovative behavior, intrinsic motivation and employee performance.

RESULT AND DISCUSSION

Validity Test

Validity test can be used to examine the accuracy and precision of a reliable measuring instrument. Measuring instruments consider as valid if the corrected item total correlation is higher or equal to 0.4 (Santoso and Tjiptono, 2002). In this case, this validity test uses factor analysis. And the result of every variable obtain the number that higher or equal than 0,4. Therefore the variables consider as valid.

Reliability Test

Reliability test is a test that has a function to find a reliable or trustworthy measuring instrument. Reliability testing of all questions in this study uses Alpha Cronbach formula (Alpha Cronbach Coefficient), generally considered reliable if the coefficient value is higher than 0,6. In this case, each variables indicated the score more than 0,6. Thus, the variables consider as reliable to be tested.

SEM Test (Structural Equation Modeling)

A study requires data analysis and interpretation that aims to answer research questions in uncovering certain social phenomena. The method chosen to analyze the data should be related to the research pattern and the variables to be studied. In this study, The Structural Equation Modeling (SEM) of the AMOS statistical software package is used in model development and hypothesis testing. In this research, SEM Test used to analyze the structural relation of every variable.

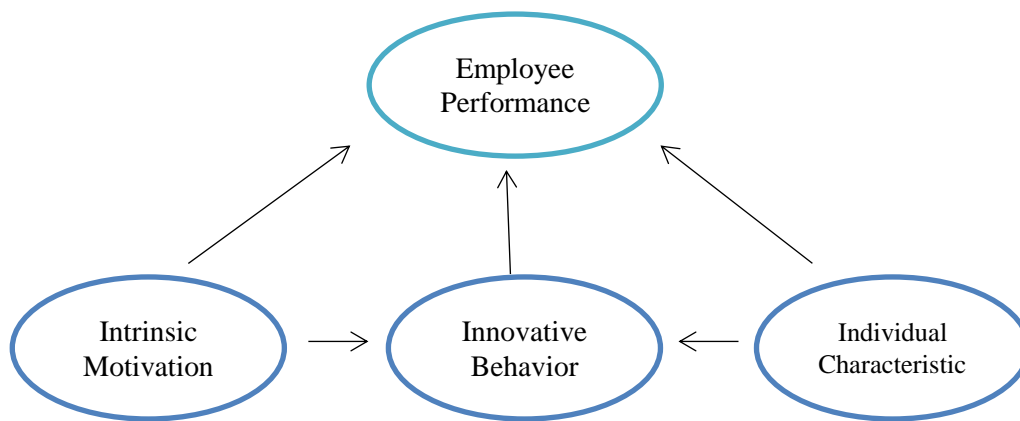


Figure 1. The structural relation of variables

Based on the figure above, it can be indicated that every variables are related to employee performance variables. Intrinsic motivation and individual characteristic has an influence toward innovative behavior.

Hypothesis Test

Hypothesis test used to examine whether the hypothesis is Accepted or Rejected. The standard of Acceptance should obtain the CR Value of 2,648 or higher and a probability test should be smaller than 0,05.

Table 1

Hypothesis Test Result

	CR Value	Probability	Result
H ₁	2,648	0,008	Accepted
H ₂	2,046	0,041	Accepted
H ₃	2,594	0,009	Accepted
H ₄	-0,008	0,993	Rejected
H ₅	2,337	0,019	Accepted

Hypothesis Test 1

The estimated parameter for the hypothesis of influence of individual characteristics on innovative behavior obtained a CR value of 2.648 and a probability of 0.008. The two values obtained meet the requirements for H1 acceptance because CR value of 2.648 is higher than 1.96 and a probability of 0.008 which is smaller than 0.05.

Based on the table above, Hypothesis 1 is accepted which means individual characteristic has significant influence toward innovative behavior.

Hypothesis Test 2

Testimonial parameter for testing the effect of Intrinsic Motivation on Innovative Behavior shows a CR value of 2.046 and a probability of 0.041. The two values obtained meet the requirements for H2 acceptance, namely a CR value of 2.046 which is greater than 1.96 and a probability of 0.041 which is smaller than 0.05. Thus it can be concluded that intrinsic motivation has a positive effect on innovative behavior.

Based on the table above, Hypothesis 2 is accepted which means intrinsic motivation has significant influence toward innovative behavior.

Hypothesis Test 3

The estimated parameter for testing Individual Characteristics on Employee Performance shows a CR value of 2.594 and with a probability of 0.009. The two values obtained meet the requirements for acceptance of H3, namely the CR value of 2.594 which is greater than 1.96 and the probability of 0.009 which is smaller than 0.05. Thus, it can be concluded that individual characteristics have a positive effect on employee performance.

Based on the table above, Hypothesis 3 is accepted which means individual characteristic has significant influence toward employee performance.

Hypothesis Test 4

The estimated parameter for testing Intrinsic Motivation on Employee Performance shows a CR value of -0.008 and with a probability of 0.993. The two values obtained do not meet the requirements for acceptance of H4, namely the CR value of -0.008 which is smaller than 1.96 and the probability of 0.993 which is greater than 0.05.

Based on the table above, Hypothesis 4 is rejected which means intrinsic motivation did not influence employee performance.

Hypothesis Test 5

The estimated parameter for testing the effect of innovative behavior on employee performance shows a CR value of 2.337 and a probability of 0.019. The two values obtained meet the requirements for acceptance of H5, namely the CR value of 2.337 which is greater than 1.96 and the probability of 0.019 which is smaller than 0.05. Thus it can be concluded that innovative behavior has a positive effect on employee performance.

Based on the table above, Hypothesis 4 is accepted which means innovative behavior has significant influence toward employee performance.

Policy Implications

There are several policy implications that should be applied as a way to develop the company's quality. The policy implication can be seen through the following points:

- 1) Every management of PT KAI should update their knowledge, thus it can be shared among employees. And it will influence the employee performance. The employee will be more innovative on carrying their duty.
- 2) Management needs to conduct an employee performance appraisal which includes an increase in quantity of work

CONCLUSION

Based on the explanation above, it can be concluded that four of five hypotheses fulfill the requirements to be accepted. The hypothesis regarding individual characteristic influence innovative behavior is accepted, it means that individual characteristic has significance influence toward innovative behavior. The second hypothesis regarding intrinsic motivation effect toward

innovative behavior is accepted, which means that intrinsic motivation has significance and positive influence toward innovative behavior. The third hypothesis regarding individual character that influence performance is also accepted, which means that individual character has significance influence toward employee performance. The fourth hypothesis regarding the intrinsic motivation influence employee performance is the only hypothesis that is not accepted (declined) – it means that that the intrinsic motivation did not influence employee performance. And the last hypothesis regarding Innovative behavior influence on the employee performance is accepted, because innovative behavior has significance influence toward employee performance.

Moreover, it can be indicated that the enhancement of employee performance is influenced by Innovative Behavior in PT Kereta Api Indonesia (PT KAI).

SUGGESTION

Based on the result and conclusion above, there is a suggestion that can used for further analysis such as, in order to be used as a source of ideas and input for the development of the future research, the suggested expansion of this research are recommended at the same time from two perspectives, namely the perspective of the leadership / top management / manager and also the perspective of the employees themselves.

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ПІДВИЩЕННЯ ЕФЕКТИВНОСТІ РОБОТИ ПРАЦІВНИКІВ ЗАВДЯКИ ІННОВАЦІЙНІЙ ПОВЕДІНЦІ В РТ КАІ

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Управління людськими ресурсами не можна відокремити від фактору співробітників, які, як очікується, будуть працювати якнайкраще для досягнення цілей компанії. Це дослідження має на меті вивчити вплив індивідуальних особливостей та внутрішньої мотивації на інноваційну поведінку та результати діяльності співробітників, а також вплив інноваційної поведінки на результати діяльності співробітників. Це дослідження є кількісним аналізом, який отримав вибіркові дані від 150 співробітників. Крім того, дані оброблялися за допомогою Моделювання структурних рівнянь (SEM), яке допомогло прикладній програмі Аналізу структури моментів (AMOS) версії 18.0. Згідно з результатами аналізу впливає наступне: індивідуальна характеристика позитивно впливає на інноваційну поведінку; внутрішня мотивація позитивно впливає на інноваційну поведінку; індивідуальні особливості позитивно впливають на результати роботи працівника; внутрішня мотивація негативно позначається на роботі працівника, а інноваційна поведінка, у свою чергу, позитивно позначається на роботі працівника.

Ключові слова: індивідуальні особливості, внутрішня мотивація, інноваційна поведінка, продуктивність працівника.

ПОВЫШЕНИЕ ЭФФЕКТИВНОСТИ РАБОТЫ СОТРУДНИКОВ БЛАГОДАРЯ ИННОВАЦИОННОМУ ПОВЕДЕНИЮ В РТ КАІ

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Управление человеческими ресурсами нельзя отделить от фактора сотрудников, которые, как ожидается, будут работать лучше для достижения целей компании. Это исследование имеет целью изучить влияние индивидуальных особенностей и внутренней мотивации на инновационное поведение и результаты деятельности сотрудников, а также влияние инновационного поведения на результаты деятельности сотрудников. Это исследование является количественным анализом, который получил выборочные данные от 150 сотрудников. Кроме того, данные обрабатывались с помощью Моделирования структурных уравнений (SEM), которое помогло прикладной программе анализа структуры моментов (AMOS) версии 18.0. Согласно результатам анализа, вытекает следующее:

индивидуальная характеристика положительно влияет на инновационное поведение; внутренняя мотивация положительно влияет на инновационное поведение; индивидуальные особенности положительно влияют на результаты работы сотрудника; внутренняя мотивация негативно сказывается на работе сотрудника, а инновационное поведение, в свою очередь, положительно сказывается на работе сотрудника.

Ключевые слова: индивидуальные особенности, внутренняя мотивация, инновационное поведение, производительность работника.

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THE INFLUENCE OF COMMUNICATION SKILL TOWARD EMPLOYEE PERFORMANCE IN RADIOLOGY INSTALLATION UNIT OF HOSPITAL

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Abstract. Staff performance is the result in quality and quantity that an employee can achieve in carrying out tasks related to the assigned responsibilities. Effective communication will help to create a healthy and open performance. This is very important in order to increase creativity and dedication of employees or staff at hospital. This research aims to analyze significant influence of leadership style and communication skills on staff performance by job satisfaction as intervening variable. Research method used here is quantitative research method with causality research. The data source consists of primary data. The subjects of analysis were the employees in emergency radiology and diagnostic radiology. Data analysis was done by AMOS-path analysis. The results of the study showed that leadership style, communication skills and job satisfaction have a positive and significant effect on staff performance. Partially, there is a significant influence between communications on performance. The research findings show that leadership and communication styles may have a large direct influence on staff performance without influenced by job satisfaction. Leadership style has a negative influence on job satisfaction compared to staff performance. Communication skills have the greatest impact on improving staff performance compared to leadership styles and job satisfaction.

Keywords: communication skills, job satisfaction, staff performance.

JEL Classification: A130, M540, M520.

INTRODUCTION

Hospital is a business of service that provides social services in field of clinical medical aspect. Management of hospital as business unit has its own unique aspect apart from being a business service, hospital also has social mission. Radiology services are services that inseparable from the health care system in hospitals. Therefore, they need to be directed and motivated in order to provide optimal capabilities for organization. Thus, it is considered as a job and challenge for the head of each unit in Hospital

According to (Mathis, 2012), Individual's performance influenced by various factors, including: workforce ability, motivation, support received by individual variables, and their relationship with organization (communication). Schuller (1987) stated that "Employee

performance can be seen from productivity aspects such as quality and quantity levels performed by employee, and the attendance list”.

The effective communication will create a healthy and open-minded work environment. This is very important in order to increase creativity and dedication of employees or staff at hospital. Performance is the quality of work both in quality and quantity of organization. According Gibson et al (2006) Job Satisfaction has an influence toward attendance, rotation or mutation, morale, personalia problems, and work complaints (Halid, 2007). According Gibson et al. (2006), work performance influenced by three variables (1) individual variable consist of: abilities and skills: mental and physical, background: family, social level, payroll, demographics: age, culture, gender (2) Organizational Variable, consist of: resources, leadership, rewards, structure, job design, and (3) Psychological variables: perception, attitude, personality, learning, motivation. The performance of medical workers, especially nurses, is very important issue to maintain and improve the quality of health services. Job satisfaction is defined as a pleasant or unpleasant emotional state of employees in obtaining their work (Spector, 2017).

Performance assessment in Hospital X toward the entire employees and management uses the employee performance unit (SKP) which is reported to the company administration at the beginning of each month based on reports from daily work records which made every day by all employees after completing their duties or services. Performance assessment data can be used to make personalia decisions or the administration department, therefore the policies able to answer personalia problems.

Purwanto (2016), Jayusman and Khotimah (2012), Hartono and Rotinsulu (2015) stated that work performance positively and significantly influenced by communication aspect. However, different result was found by Utami and Hartanto (2010), which in his research, it was found that communication had no significant influence on performance

If the head of unit and employees did not have an effective communication in constant conflict, then work motivation will become weak and productivity will decrease. Effective communication will influence employee satisfaction and productivity, improve of achievement of result and goals that will be achieved by hospital.

Based on the explanation above, this study aims to analyze the significant effect of communication skills on staff performance with job satisfaction as an intervening variable in the radiology installation of Hospital X.

METHODOLOGY

This research was conducted at Hospital X Lebak Banten which is located in Lebak Banten. This research carried out from June 2020 to July 2020. Activities carried out by collecting theoretical data to support research, distributing questionnaires and drawing the conclusions from the conducted result. From the data questionnaire, the distribution of respondents was taken from 72 respondents who were studied at Hospital X, the number of female respondents was more than male respondents with the percentage of 38 female (52.8%) and 34 male (47, 2%). Most of respondents aged 26-35 years were 34 people (47.2%). Most of the respondents had D3 education as 34 people (47.2%). For central diagnostic radiology unit and emergency radiology unit, there were 24 nurses (33.3%), 13 radiographers (18.1%), 2 sonographer (2.8%), 1 fismed (1.4%), 3 Dr.Sp.Rad (4.2%), a radiophotography officer (1.4%) and other medical support (38.8%).

This research is a quantitative analytic study with a causality research design. Causal research design is a research design that useful for analyzing the influence of a variable on another. The influence characteristic that might happen among variables is symmetric, asymmetric and reciprocal. Data collection was done by distributing questionnaires. The data collection was processed by descriptive and quantitative analysis tools. The analysis technique used to analyze the SPSS data is path analysis.

Data collection techniques in this study using saturated sample data (Total Sampling). The questionnaire is the research instrument based on different set of questions for the purpose of gathering information from the respondents across various fields (Farooq, 2018). The validity test is a measuring tool that shows the level of accuracy of instrument. Validity test uses Pearson Product Moment Correlation, a variable considered valid if the value of $r_{count} > r_{table}$. Reliability test is a measuring tool to determine which instruments can be consistently trusted. Reliability test using measurement techniques of *Chronbach Alpha*, the data result can be said as *reliable* if *Chronbach Alpha* $> 0,6$. The three box method analysis aims to determine a descriptive of respondents. The scoring technique used is a range of maximum score of 5 and minimum score of 1.

RESULT AND DISCUSSION

Validity Test and Reliability Test

Significance test was carried out by the criteria of r_{table} at significance level of 0.05 with 2-sided test. If the value is positive and $r_{count} \geq r_{table}$ then the item is considered valid, if $r_{count} < r_{table}$, then the item is considered invalid. While reliability test used coefficient alpha Cronbach's Alpha is a reliability coefficient that shows how well the items in a set are positively correlated with each other. (Cronbach's Alpha) was calculated in terms of the average intercorrelation between items measured concepts. The closer Cronbach's Alpha to a value of 1, the higher internal consistency reliability. Questionnaire items that have an alpha value above 0.6 considered as reliable (Hair, J. F., Black, W. C. and Anderson, 2010). A variable construct can be said as good if it has Cronbach's Alpha more than 0.60. Here are the results of reliability test for research variables:

Table 1

Reliability Test result

	Variables	Alpha Cronbach's	Minimum value	Information
1	Communication Ability	0.871	0.6	Reliable
2	Work Satisfaction	0.911	0.6	Reliable
3	Employees Performance	0.695	0.6	Reliable

The reliability test results show that all variables of Communication Ability, Job Satisfaction and Employees Performance, have Cronbach's Alpha coefficient above 0.6. Thus, the questionnaire in this study declared as reliable.

Analysis of Hypothesis Test

Normality Test

Normality Test has an aim to examine whether in path analysis model, dependent variable, independent variable or both has normal distribution or not. A research equation / model consist of several variables with tens or hundreds data on each variable. Before the data analysis stage is carried out, it must be proven that the data is normally distributed; therefore it is feasible to be analyzed for the next stage. Multivariate normality can be seen from cr value of kurtosis on the last row higher than ± 2.58 . In table 2 below, it can be seen that cr value in last row kurtosis is 2.070 (normal).

Table 2

Assessment of normality (Group number 1)

Variable	min	max	skew	c.r.	kurtosis	c.r.
Communication	2.714	4.643	-.198	-.684	.199	.344
Leadership style	2.700	5.000	.088	.304	-.491	-.851
Satisfaction	2.625	5.000	-.001	-.002	-.147	-.255
Performance	2.571	4.857	-.213	-.738	.595	1.031
Multivariate					3.380	2.070

Source : the result of data analysis AMOS-path analysis

Based on the results of processing data shown in the Table above. It can be seen that p-value is 0.255, which indicates that p-value (0.255) > 0.05 (α), Thus, that the data used in this study are **normally distributed**.

Multicollinearity Test

This test was done by observed determinant of the covariance matrix. if the value were small, thus it indicates a multicollinearity. In this research, the determinant value of covariance matrix was 0.001 (positive results and higher than 0.000) it means that there was no multicollinearity.

Simultaneous Test

Measurement model test is testing the relation between indicators with the latent variable. It combined the structural test model and measurement that allow the researcher to test the *measurement errors* inseparable part AMOS-path analysis after the analysis factor along with hypothesis test. In measurement model test, Chi-square result is 2,760 (it has small value, therefore simultaneous test is accepted), 1 degrees of freedom and a probability level of 0.097 > 0.05, indicates that the first hypothesis (H1) is accepted.

Determination Coefficient Test (R²)

The analysis of determination influence inside AMOS-path analysis used to know the contribution of exogenous variable toward endogenous variables. Determination coefficients can be seen in the Squared Multiple Correlations table.

Table 3

Squared Multiple Correlations (Group number 1- Default model)

	Estimate
Satisfaction	0.228
Performance	0.303

Source: AMOS processed data

Based on table 3, the estimated value of job satisfaction variable is 22.8% and the estimated performance variable is 30.3%. In this study, job satisfaction variable influenced by leadership style and communication. Performance variable is influenced by leadership style, communication and job satisfaction. From the results of determination analysis, it can be concluded that the influence of leadership style, communication and job satisfaction on performance is 30.3%, while the remaining 59.7% is influenced by other factors outside the research such as work motivation, leadership style, work environment and other.

Partial Test

Based on the table below, it shows that the influence of leadership style on work satisfaction has CR value of -0.766 ($p = 0.443 > 0.05$), while the influence of communication on job satisfaction has CR of 4,120 ($p=0,000 < 0,05$). For the effect of job satisfaction on employee performance has CR of 2,615 ($p=0,009 < 0,05$), the influence of leadership style toward work performance has CR of -3,519 ($p=0,000 < 0,05$), and the influence of communication toward job performance has CR value of 3,103 ($p=0,002 < 0,05$).

Table 4

Regression Weight (Group number 1 – Default model)

Variables	Estimate	S.E	C.R	P	Ket
Leadership style toward performance	-0.274	0.078	-3.519	0.000	H2 accepted
Communication toward performance	0.391	0.126	3.103	0.002	H3 accepted
Leadership style toward job satisfaction	-0.079	0.103	-0.766	0.433	H4 rejected
Communication toward Satisfaction	0.618	0.150	4.120	0.000	H5 accepted
Satisfaction toward performance	0.235	0.090	2.615	0.009	H6 accepted

Source : data processed from 2020 AMOS

Hypothesis test result

1. The influence of leadership style and communication skills toward job satisfaction by career development as intervening variable

Based on the research result, it obtain Chi-square of 2,760, 1 degrees of freedom and probability level of $0,097 > 0,05$, thus the simultant test is accepted. The results of analysis on determination coefficient (R2) showed that leadership style; communication and job satisfaction

toward work performance was 30.3%, while the remaining 59.7% was influenced by other factors outside the research such as work motivation, leadership style, work environment and others.

H1, there is significant influence of leadership style and communication skill toward staff performance through job satisfaction as Intervening variable, accepted.

2. The influence of leadership style toward staff work performance

Through statistical calculations by Amos V23, it is known that the estimated influence of leadership style on staff performance is -0.274, the CR value is -3.519 and p-value is 0.000 <0.05. Therefore, H0 is rejected and H2 is accepted, it means that there is a negative and significant influence of leadership style toward staff performance. Based on the estimated value of leadership style, it has influence of 27.4% on staff performance, the remaining 72.6% is influenced by other variables, it can be concluded that there is a significant influence of leadership style toward work performance.

H2, there is an effect of leadership style toward staff performance in Radiology Installation of Hospital X

3. The influence of Communication toward Staff Performance

Based on the results of statistical testing on estimated value, it is known that the effect of communication on staff performance obtain 0.391, CR value is 3.103 and p-value is 0.002 <0.05, therefore H0 is rejected and H3 is accepted. It means that communication has positive and significant influence toward staff performance. Based on the estimated value, communication has an effect of 39.1% toward staff performance, the rest 60.9% influenced by other variable, it can be concluded that there are significant influence on communication toward work performance.

H3, there is an effect of communication skill toward staff performance in Radiology Installation of Hospital X, this hypothesis is approved.

4. The Influence of Leadership style toward Job Satisfaction

Based on the results of statistical testing on estimated value, it is known that the influence of leadership style on job satisfaction is -0.079, CR value is -0.766 and p-value is 0.443 > 0.05, it means that there is no positive and significant influence on leadership style toward job satisfaction, therefore H0 is accepted and H4 is rejected. From the estimated value, the influence of leadership style toward job satisfaction is 7.9% and the remaining 92.1% is influenced by other variables. Based on the result above, it can be concluded that there is no significant influence on leadership style toward job satisfaction.

H4, There is no influence of leadership style toward job satisfaction in Installation Radiology of Hospital X, Hypothesis rejected.

5. The Influence of Communication toward Job Satisfaction

Based on the results of statistical testing, it is known that the estimated value on the influence of communication toward job satisfaction is 0.618, CR value is 4.120 and p-value is 0.000 <0.05, this value indicated the results that meet the requirements, <0.05 for P, it can be concluded that H0 is rejected and H5 is accepted. From the estimated value, the influence of communication toward job satisfaction obtains 61.8%, and the remaining 38.2% is influenced by other variables. Based on those results, it can be concluded that there is significant influence on communication towards job satisfaction.

H5, There is an influence of Communication toward Job Satisfaction of Installation Radiology Hospital X, Hypothesis approved.

6. The Influence of Job Satisfaction toward Staf Performance

Through the calculation of statistical testing by Amos-path analysis V23, it is known that the estimated value on the effect of job satisfaction toward staff performance obtain 0.235, CR value is 2.615 and p-value is 0.009 < 0.05. This value shows the results that meet the requirements, are less than 0.05 for P, thus it can be concluded that H0 is rejected and H6 is accepted. Based on the estimated value, the effect of job satisfaction toward staff performance is 23.5%, the remaining 66.5% is influenced by other variables. Based on the result above, it can be concluded that there are significant influence of job satisfaction toward work performance.

H6, There is an influence of Job Satisfaction toward Staf Performance in Installation Radiology of Hospital X. Hypothesis approved.

Intervening Test

The intervening test is carried out by comparing the direct effect and indirect effect of independent variables, such as leadership style and communication on dependent variable, such as staff performance. The direct effect occurs when a variable affect other variables without any third variable intervening the relationship between those two variables. Indirect Influence occurs if there is other third variable occur as intervening variable.

The intervening test was calculated by looking at the value of standardized direct effects and standardized indirect effects on estimated parameters which indirect effect is higher than direct effect (PTL > PL).

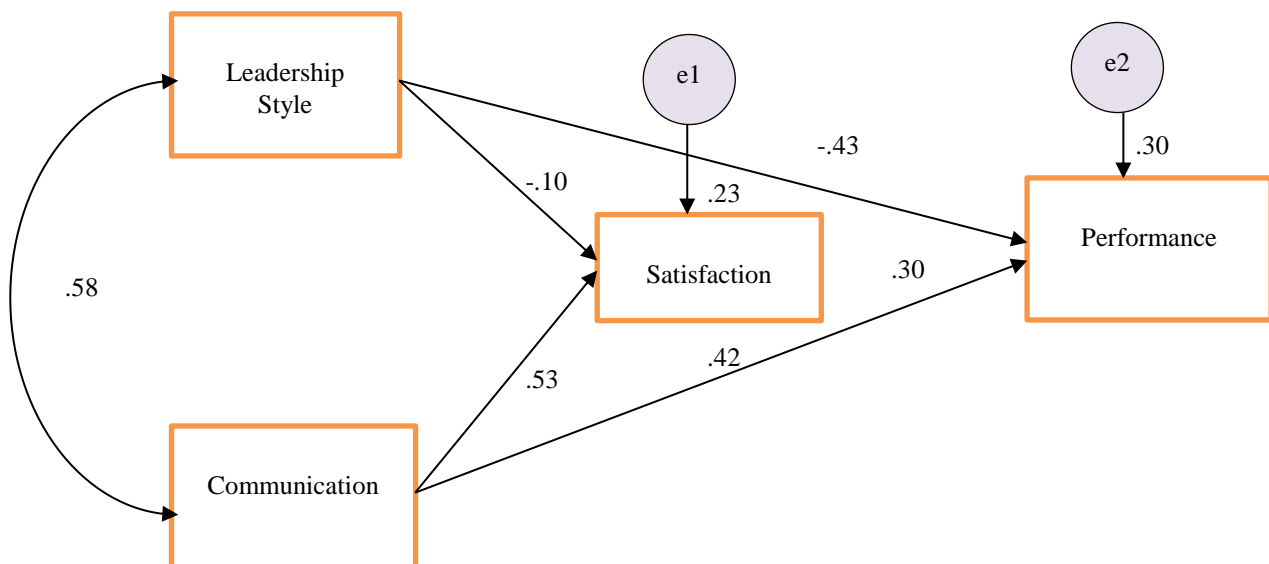


Figure 1. Intervening Test

Source: output AMOS-path analysis

The direct effect given by leadership style variable on employee performance is -0.431, while indirect effect of leadership style through job satisfaction on staff performance is -0.029, thus, direct and indirect influence given by leadership style on performance is $PTL < PL$ ($0.029 < -0.431$). It means that there is no intervening, where job satisfaction does not affect leadership style on performance. Staff performance can be directly affected by leadership style. The direct effect given by communication variable on performance is 0.421, while indirect effect of communication through job satisfaction on staff performance obtain 0.156, therefore direct and indirect influence given by communication on staff performance is $PTL < PL$ ($0.156 < 0.421$). This means that staff performance can be directly affected by communication. The more effective communication at hospital, the higher staff performance will be.

DISCUSSION

The influence of leadership style and communication skill toward the employee performance with Job Satisfaction as intervening variable in Radiology Installation of Hospital X

Based on the research results, Chi-square results were 2,760, degrees of freedom of 1 and a probability level of $0.097 > 0.05$, therefore simultaneous test was accepted. The analysis results of determination coefficient (R^2) showed that leadership style; communication and job satisfaction on performance was 30.3%, while the remaining 59.7% was influenced by other factors such as work motivation, leadership style, work environment and others.

Based on the distribution analysis of respondents by three box method, the highest index value has high personal responsibility. It means that employees already have the confidence to commit to hospital but the commitment is not strong yet because most of employees choose to not doing a work outside their main task from hospital.

This research conclude that a good leadership style consider leaders with a clear vision for organizational progress. Leaders provide motivation and good examples supported by effective communication among employees and provide opportunities for employees to develop their careers by rising positions. And it will help to increase employee performance in hospital.

The influence of leadership style on staf work performance at Radiology Installation of Hospital X

Based on statistics of AMOS V23, it is known that the estimated influence of leadership style on staff performance is -0.274, with CR value of -3.519 and p-value $0.000 < 0.05$, thus H_0 is rejected and H_2 is accepted, it means that there is a negative and significant influence of leadership style toward staff performance. Based on the estimated value, leadership style has influence of 27.4% on staff performance, the remaining 72.6% is influenced by other variables, it can be concluded that there is a significant influence of leadership style toward staff performance.

It can be concluded that leadership style is an effective strategy to influence a group on achieving their goals. Effective leaders not only use their power to encourage employees but also provide motivation, inspiration and loyalty for employees thus, the employee able to devote all the focus of their abilities to achieve optimal performance.

The influence of communication skill on the staff performance at Radiology Installation Hospital X

Based on the results of AMOS V23 statistical test on estimated value, it is known that the effect of communication on staff performance obtain 0.391 with CR value of 3.103 and p-value is $0.002 < 0.05$, therefore H_0 is rejected and H_3 is accepted. It means that communication has positive and significant influence on staff performance. Based on the estimated value, communication has

39.1% effect on staff performance, the rest 60.9% influenced by other variables, therefore it can be concluded that there is significant influence of communication skill toward staf performance.

Based on descriptive analysis by three box method, the highest index value is an indicator of information regarding organizational procedures and practices. Employees feel that social relationship in hospital such as communication among employees consider as good, however in terms of facilities, employees feel that hospital did not provide a good facilities.

It can be concluded that communication in service organization determined by internal communication and simultanously influence toward work improvement.

The Influence of Leadership style toward Job Satisfaction in Radiology Installation of Hospital X

Based on the results of AMOS V23 statistical test on estimated value, it is known that the influence of leadership style on job satisfaction is -0.079, CR value is -0.766 and p-value is 0.443 > 0.05, it means that there is no positive and significant influence of leadership style toward job satisfaction, then H0 accepted and H4 rejected. From the estimated value, the influence of leadership style on job satisfaction is 7.9% and the rest 92.1% is influenced by other variables. Based on these results, it can be concluded that there is no significant influence of leadership style on job satisfaction.

Based on descriptive analysis, the lowest index value was found in the indicators of developing the current system. About 20% of employees disagreed with this question. It means that employees feel that leadership style of the room's head and the installation's head comes from different work experience and different educational backgrounds. Therefore, their leadership style also different

Based on the research results which supported by previous research, it can be concluded that the results of leadership style do not have a significant effect on job satisfaction. It is because the variable of leadership style and job satisfaction variable consist of several kind of dimensions. Therefore, in certain research objects, the conditions of leadership style variable on the job satisfaction variable cannot be completely fulfilled.

The Influence of Communication skill toward Job Satisfaction of Radiology Installation at Hospital X

Based on the results of AMOS V23 statistical test, it is known that the estimated value of communication influence toward job satisfaction is 0.618, with the CR value of 4.120 and p-value of 0.000 < 0.05, this value indicates that the results meet the requirements, < 0.05 for P, therefore, H0 is rejected and H5 is accepted. The estimated value of communication influence toward job satisfaction is 61.8%, and the rest 38.2% is influenced by other variables. Based on these results, it can be concluded that there is significant influence of communications toward job satisfaction.

Researchers conclude that if the leaders and it subordinates did not have effective communication and currently in constant conflict, work motivation will be weak and the productivity will be declined. Effective communication will develop employee satisfaction and productivity; improve the achievement of work and achieve the goals.

The Influence of Job Satisfaction toward Staff Performance in Radiology Installation of Hospital X

Based on the calculation of statistical testing AMOS-Path analysis V23, it is known that the estimated value on the effect of job satisfaction toward staff performance is 0.235, with CR value of 2.615 and p-value is 0.009 < 0.05, this value indicates that the result qualifies less than 0.05 for P, therefore it can be concluded that H0 is rejected and H6 is accepted. From the estimated value, the effect of job satisfaction toward staff performance is 23.5%, and the rest 66.5% is influenced by

other variables. Based on these results, there can be a significant influence between satisfaction and performance.

Based on descriptive analysis by three box method, the highest index value is an indicator of obtained work or expected work (income, promotion), there are 56.4% of employees agree with job promotion system in hospital. Career development system in hospital has been implemented; however the level of career development promotion system made by hospital management is not related to employee expectations.

Researchers obtain the conclusion that job satisfaction has significant positive effect on staff performance. This indicates that the higher employee's job satisfaction, employees will show their best performance. If hospital or company always implements the career system and compensate it properly, a good relation among co-workers, the motivating attitude of leader, and conducive physical work environment will help the employee become more comfortable on working. And it causes maximum performance of employee and can be seen by how the employee begin to work their best and always tries to provide the best service to customers.

CONCLUSION

A capable communicative leadership style will create job satisfaction within each subordinate, and it will help to improve staff performance. This is because the leadership style variable and job satisfaction variable consist of many dimensions therefore in certain research objects, the conditions of leadership style variable influence the job satisfaction variable cannot be fulfilled completely.

Another finding is that effective communication is the most influential factor in staff performance. From this effective communication a good relationship was created between leader and staff. In this communication there is satisfaction and motivation, therefore staff performance will increase. It is showed a positive direction of relationship between communication and performance and it can be interpreted that, the more effective communication, the more employee's performance increase, it is related to Abraham Maslow's hierarchy theory of needs.

Leadership style, communication skills and job satisfaction simultaneously have positive and significant effect on staff performance. Communication skills have positive and significant effect on staff performance. Leadership style and communication skills partially influence staff performance.

SUGGESTION

Hospital Management system should have an effort to establish a remuneration system for workloads, years of service, education, experience and work performance of employees. By providing good compensation, it can be directly improve employee welfare and make employees want to have a commitment for hospital. Provide a reward system in form of training and skills development for those who has a good performance, therefore employees will feel motivated to obtain more achievements at work.

Provide a punishment system for employees who have bad behavior, thus it encourage them to improve their performance and provide facilities to support more effective and efficient work, such as repair and refine the hospital information system (SIMRS) into an integrated system.

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ВПЛИВ КОМУНІКАТИВНОЇ МАЙСТЕРНОСТІ НА ЕФЕКТИВНІСТЬ РОБОТИ СПІВРОБІТНИКІВ У РЕНТГЕНОЛОГІЧНОМУ ВІДДІЛЕННІ ЛІКАРНІ

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Результати роботи персоналу – це результат, який має якісні та кількісні показники, які працівник може досягти при виконанні завдань, пов'язаних із покладеними на нього обов'язками. Ефективне спілкування при цьому допоможе створити ефективне виконання службових обов'язків. Це дуже важливо у процесі підвищення креативності та відданості працівників або персоналу лікарні. Це дослідження має на меті проаналізувати значний

вплив стилю керівництва та навичок спілкування на ефективність роботи персоналу через задоволеність роботою як визначену змінну. Метод дослідження – метод кількісного дослідження з урахуванням причинних зв'язків. Джерело даних складається з первинних даних. Предметом аналізу є співробітники екстреної радіології та діагностичної радіології. Аналіз даних проводився за допомогою аналізу AMOS. Результати дослідження показали, що стиль керівництва, навички спілкування та задоволеність роботою позитивно і суттєво впливають на результати роботи персоналу. Частково між комунікаціями існує значний вплив на продуктивність. Результати дослідження показують, що стиль керівництва та спілкування можуть мати великий безпосередній вплив на результати роботи персоналу без впливу на задоволеність роботою. При цьому стиль керівництва негативно впливає на задоволеність роботою порівняно з результатами роботи персоналу. Навички спілкування найбільше впливають на підвищення ефективності роботи персоналу порівняно зі стилями керівництва та задоволенням від роботи.

Ключові слова: комунікативні навички, задоволеність роботою, продуктивність персоналу.

ВЛИЯНИЕ КОММУНИКАТИВНОГО МАСТЕРСТВА НА ЭФФЕКТИВНОСТЬ РАБОТЫ СОТРУДНИКОВ В РЕНТГЕНОЛОГИЧЕСКОМ ОТДЕЛЕНИИ БОЛЬНИЦЫ

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Результаты работы персонала – это результат, который имеет качественные и количественные показатели, которые работник может достичь при выполнении задач, связанных с возложенными на него обязанностями. Эффективное общение при этом поможет создать эффективное выполнение служебных обязанностей. Это очень важно в процессе повышения креативности и преданности работников или персонала больницы. Это исследование имеет целью проанализировать значительное влияние стиля руководства и навыков общения на эффективность работы персонала через удовлетворенность работой как определенную переменную. Метод исследования – метод количественного исследования с учетом причинных связей. Источник данных состоит из первичных данных. Предметом анализа являются сотрудники экстренной радиологии и диагностической радиологии. Анализ данных проводился с помощью анализа AMOS. Результаты исследования показали, что стиль руководства, навыки общения и удовлетворенность работой положительно и существенно влияют на результаты работы персонала. Частично между коммуникациями существует значительное влияние на производительность. Результаты исследования показывают, что стиль руководства и общения могут иметь большое непосредственное влияние на результаты работы персонала без влияния на удовлетворенность работой. При этом стиль руководства негативно влияет на удовлетворенность работой по сравнению с результатами работы персонала. Навыки общения имеют наибольшее влияние на повышение эффективности работы персонала по сравнению со стилями руководства и удовлетворением от работы.

Ключевые слова: коммуникативные навыки, удовлетворенность работой, производительность персонала.

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MEDIATION OF LAND DISPUTES BETWEEN PT PERKEBUNAN NUSANTARA (PTPN) VII CINTA MANIS AND RENGAS VILLAGE FARMERS, OGAN ILIR REGENCY SUMATERA SELATAN PROVINCE

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Abstract. Dispute resolution is indeed difficult to do, but that does not mean that it is impossible to materialize. The main capital of settlement through mediation is the willingness and good faith of the disputing parties to end the dispute that occurs between the two disputing parties. The purpose of this study was to analyze the mediation of land disputes between PT Perkebunan Nusantara (PTPN) VII Cinta Manis and Rengas Village Farmers, Ogan Ilir Regency, Sumatera Selatan Province. The research method used in this research is descriptive qualitative method. Data collection techniques are by means of interviews, observation and documentation. The findings in this study are that there is no neutrality of the mediator in resolving land disputes so that the mediation fails to reconcile the two parties to the dispute. The factors that determine the success of the mediation process are volunteerism to carry out mediation, confidentiality, and neutrality of the mediator. The conclusion in this study is that mediation will work well if the parties voluntarily agree to mediate and the mediator can be neutral in resolving land disputes.

Keywords: mediation, disputes, land, plantation companies, Rengas Farmers.

JEL Classification: D74, Q24.

INTRODUCTION

Land management in Indonesia is not good enough and often causes social upheaval in the community. Social turmoil that arises in the land sector is due to the amount of land that is not balanced with the size of the community's needs, such as houses, agricultural land, mining land, industrial land and road construction as an access to distribution of community needs. According to Astuti (2011), almost all regions of Indonesia, both in Java, Sumatra, Kalimantan and Papua, have land disputes. The land dispute is in the form of reclaiming or control and taking back land by

issuing a right to cultivate (HGU) for entrepreneurs on land controlled by the people from generation to generation. A similar problem was raised by Larson (2012). Overlapping land tenure in Indonesia occurs due to legal pluralism. Legal pluralism is a situation in which two or more legal systems interact in one social life (Hooker, 1975). This situation resulted in mutual claims of land rights. According to data published by Kompas.com, land disputes in Indonesia in 2018 totaled 10802 cases, with details shown in Table 1 below:

Table 1

Number of Land Disputes in Indonesia in 2018

Types of Land Disputes	Total	
	Land dispute	Percentage
Individuals	6071	56.2
Community - Government	2866	26.53
Individual - Legal Entity	1668	15.44
Legal Entity - Legal Entity	131	1.21
Community Groups - Community Groups	66	0.61
Total	10802	99.99

Source: Kompas.com

The data published by Kompas.com shows that the most disputed individuals are 56.2% of the individuals. The dispute data is also supported by data issued by the Consortium for Agrarian Reform. According to data from the Consortium for Agrarian Reform (2018: 17) the plantation sector occupies the highest position as a contributor to agrarian conflicts by 60%. The high eruption of agrarian conflicts in the plantation sector indicates that there has been no serious effort by the government to resolve agrarian conflicts caused by policies and practices of development and expansion of plantations in Indonesia. According to the Consortium for Agrarian Reform (2018: 20), conflicts in plantation areas occur due to decisions of public officials relating to state HGU (BUMN or Pemprov assets), private HGU, due to the failure of the transmigrasi, HGB, HPL and so on programs that violate procedures and to date, these areas have not received full recognition from the government, and are left in a status of conflict with private and state plantation companies. Based on these data, it can be interpreted that plantation conflicts that often occur are land disputes in plantation areas between communities and plantation companies. According to the Consortium for Agrarian Reform (2018: 20), conflicts in plantation areas occur due to decisions of public officials regarding state HGU (BUMN or Provincial Government assets), private HGUs, due to failed transmigrasi, HGB, HPL and similar programs. violated procedures and until now the area has not received full recognition from the government, and has been left in the status of a conflict with the private sector and state plantation companies. Based on these data, it can be interpreted that plantation conflicts that often occur are land disputes in plantation areas between communities and plantation companies.

One of the dispute cases in the plantation area that has not been resolved until now is the case between PT Perkebunan Nusantara (PTPN) VII Cinta Manis Unit which manages sugar cane plantations and Rengas Village Farmers, Ogan Ilir Regency, Sumatera Selatan Province. According to the Chairman of Komnas HAM, Ihdhal Kasim (Vivanew, 2012), the clash between residents and Brimob in Ogan Komering Ilir Regency started with the construction of PT. Perkebunan Nusantara (PTPN) VII Cinta Manis Unit which forced farmers in 20 (twenty) villages from 6 (six) sub-districts in Ogan Ilir Regency to have to give up their land to be used as sugar cane plantations. The sugar cane plantation was built on community agricultural land, PT. Perkebunan Nusantara (PTPN) VII Cinta Manis evicted community plantations without adequate compensation. The eviction involved the local Brimob apparatus so that it was marked by intimidation and repressive behavior by the security forces which led to a physical clash on 27 July 2012. Land conflict between Rengas farmers and PT. Perkebunan Nusantara (PTPN) VII Cinta Manis in Ogan Ilir District, South Sumatra Province, starting in 1981. The root of the conflict was land that had been managed from generation to generation as a land preparation area by the local government at that time limiting local people's access to the land.

Conflict conditions fluctuate and there has been no resolution until now. According to Kholek's (2011) study in studying the dynamics of conflict between residents and PT Perkebunan Nusantara (PTPN) VII Cinta Manis in Ogan Ilir, it is indicated that recurring land conflicts have led to violence caused by the absence of comprehensive conflict resolution. The findings in research conducted by Kholek (2011) state that the cycle of conflict occurs when violence appears and peaks, the government handles these conflicts as a formality, then in the end the conflict is eliminated. This condition caused the conflict to become more massive and increase significantly. Conflicts between farmers and PT Perkebunan Nusantara (PTPN) VII Cinta Manis were not only in Rengas village, but also in other villages such as Betung and Seri Bandung villages. The conflict involving PT Perkebunan Nusantara (PTPN) VII Cinta Manis has been going on for a long time starting from the New Order era to the reform era, this conflict has never been resolved and seems to have been ignored without any permanent resolution. In 2019, to be precise, in March, dozens of farm workers from PT Perkebunan Nusantara (PTPN) VII Cinta Manis held a demonstration at the office of the Governor of South Sumatra Province, they demanded that the local government help resolve land dispute problems as well as farm labor wages that have not been paid by the company.

According to the head of the Ogan Ilir Peasant Movement, said that this land dispute has been going on for a long time. His party has also attempted joint mediation with the district government, but has not yet received confirmation of the dispute. Therefore, the community hopes that the government can immediately mediate and re-measure the land claimed by PT Perkebunan Nusantara (PTPN) VII Cinta Manis. Based on this description, this research will discuss how to mediate land disputes between PT Perkebunan Nusantara (PTPN) VII Cinta Manis and farmers in Rengas Village, Ogan Ilir Regency, Sumatera Selatan Province.

LITERATUR REVIEW

Disputes are defined by The Permanent Court of International Justice (PCIJ) and International Court of Justice (ICJ) as disagreements in law or facts, views of conflict, or differences in interests between the disputing parties. The definition of this dispute was put forward in the case of the Mavrommatis Palestine Concessions. J.G Merrills has almost the same definition. J.G Merrills states that a dispute is a special disagreement regarding facts, laws or policies in which a claim or statement from one party is responded to with rejection, counter-claim or rejection by another party. Based on these two definitions, it can be interpreted that a dispute is an issue regarding a matter of fact, law or politics in which a party's claims or statements are rejected, countered or denied by the other party. An dispute will become a dispute if the party who feels aggrieved has expressed his dissatisfaction in concrete actions such as making complaints and lawsuits to the authorities. To

prevent this, an effective dispute resolution pattern is needed.

Settlement of land disputes that often occurs in Indonesia tends to use a litigation mechanism, namely settlement through courts, so that the end result of these disputes is often in favor of companies and people who have legal documents in the form of land certificates. This legal document proves ownership or rights to management over land areas. This often disadvantages the people and farmers who generally do not and do not have a certificate for the land. The people and farmers only have customary evidence such as stories or testimonies which are not recognized by the court. Based on this incident, according to Sudrajat in the journal entitled *Aspirasi Reformasi Hukum dan Penegakan Hukum Progresif Melalui Media Hakim Perdamaian Desa (Aspirations of Legal Reform and Progressive Law Enforcement through the Media of Village Peace Judges)* stated that dispute resolution is not always measured through a normative perspective, but it requires consideration and wisdom, so a persuasive and accommodative media is needed.

Based on the description above, according to Alting (2013), land dispute resolution is adjusted to the style and characteristics of the dispute itself. According to him, the original cultural view of the Indonesian people prioritizes peace, harmony, mutual cooperation, mutual assistance and tolerance, is a basic concept in dealing with a dispute, the settlement is not directly to court (litigation) but usually takes a family way outside the court, namely mediation. The mediator assists the parties in reaching consensus. It is the parties who form their agreement. The mediation process is categorized by Riskin (1987) as an informal process. According to Riskin (1987) mediation is an informal process in which a neutral third party helps others resolve their problems but does not have the power to force a solution.

Mediation is a form of dispute settlement that is held outside the court, where the disputing parties request or use assistance from a neutral third party to help resolve disputes between them. This statement is almost the same as that put forward by Fuady. According to Fuady (2003) mediation is a process of dispute resolution in the form of negotiations to solve problems through a neutral and impartial external (third) party, to help find a solution in resolving the dispute satisfactorily both parties. This mediation is different from other alternative forms of dispute resolution such as negotiation or arbitration, because in this mediation apart from presenting a neutral mediator, in theory it is built on several philosophical foundations such as:

1. *Confidentiality*

Confidentiality, namely: Insights into everything that occurs in meetings organized by mediators and disputants (warring parties) is confidential and may not be broadcast to the public or the press by either party.

2. *Voluntariness*

Voluntariness, namely: each disputing party (disputants) comes to mediation on their own accord voluntarily and there is no coercion from outside parties.

3. *Empowerment*

Empowerment, namely: the assumption that people who want to come to mediation actually have the ability to negotiate their own problems and can reach the agreement they want.

4. *Neutrality*

Neutrality, namely: the role of the mediator is only to facilitate the process and its contents remain the property of the disputants (warring parties), while the mediator only controls the process. In mediation, a mediator does not act like a judge and jury who decides whether one party is right or supports the opinion of one of them, or imposes an opinion and resolution on both parties.

5. *Unique Solution*

Unique solution, namely: the solution generated from the mediation process does not have to comply with legal standards, but is produced from a creative process and therefore the results may be more.

The above statement was made by Ruth Charlton, quoted by Spence and Brogan (2006: 84-85). This opinion was also expressed by Goodfaster (1997), which defines mediation as a process of

negotiating a problem-solving in which outside, impartial, neutral parties work with disputing parties to help them reach a satisfactory negotiation agreement. This opinion is corroborated by the statement of Faulkes (1999) which defines mediation as follows: Mediation involves a third party intervening in a dispute to assist the parties in reaching an agreement. Both parties must agree to the mediator's intervention, which can be appointed by the authorities, or approached by the parties.

Broadly speaking, the two experts have the same understanding of the concept of mediation, therefore it can be said that mediation is a problem-solving process that uses an impartial and neutral third party to work to assist the disputing parties in reaching a mutual agreement that satisfies all parties. Neutrality in dispute resolution is also contained in the definition of mediation put forward by Folberg and Taylor as follows: a process whereby participants, together with the help of a neutral person or persons, systematically isolate dispute issues in order to develop options, consider alternatives, and reach a consensual resolution that will accommodate their needs. Mediation was also formulated by Moore under the title *The Mediation Process Strategic for Resolving Conflict*, as an intervention in a dispute or negotiation by an acceptable, impartial and neutral third party who does not have the authority to make decisions in helping the disputing parties in an effort to achieve voluntary agreement in resolving the disputed problem. Acceptability means that the disputing parties allow the third party to be involved in the dispute and assist the parties to reach a settlement. This acceptability does not mean that the parties always wish to do or fully accept what is stated by the third party. This definition of Mediation was strengthened by Boulle who said that the decision-making process of the disputing parties would be assisted by a third party, namely the mediator. The mediator only assists the disputing parties to reach a decision agreed upon by the disputing parties but does not have the authority to make decisions about the contents of the agreement.

The ideal mediation process must meet several parameters as a reference. These parameters according to Bretherton are as follows:

- a. The mediator does not have the authority to make decisions about the contents of the agreement, but only on the process.
- b. The mediator makes no recommendations about the results
- c. Evidence rules do not apply
- d. Decision-making rest with principals (or their representatives in special circumstances)
- e. Its main objective is an honest and thorough discussion of issues, and the principles of negotiation.
- f. The mediator, whatever conclusions mediator may reach or reach about the dispute, must avoid taking sides.

Based on the parameters put forward by Bretherton, the mediator does not have the authority to make decisions about content, only in the mediation process. A mediator does not provide recommendations on the results achieved by the disputing parties. Provisions and regulations relating to evidence cannot be used. The final decision depends entirely on the disputing parties. Finally, and most importantly, a mediator must be neutral and not take sides in any conclusions that the disputing parties will reach.

METHODOLOGY

The method used in this research is a descriptive qualitative method. According to Bogdan and Taylor, qualitative research is a research procedure that produces descriptive data in the form of written or oral words from people and observable behavior directed at the background and individual holistically (whole). The analysis technique used in this study is a qualitative method with descriptive research techniques. Miles and Huberman (1984) in Sugiyono argued that data analysis in qualitative research carried out interactive activities and continued until complete. Data analysis is very important in a study in order to provide answers to the problems studied, before

data analysis is performed, data collection is first carried out, then analyzed qualitatively and interpreted logically and systematically. This research uses descriptive research to examine how the mediation of land disputes between PT Perkebunan Nusantara (PTPN) VII Cinta Manis and farmers in Rengas Village, Ogan Ilir Regency and the factors that contribute to the mediation process. This descriptive research was conducted to describe these phenomena. The data collection technique used to analyze the mediation of land disputes between PT Perkebunan Nusantara (PTPN) VII Cinta Manis and Rengas Village Farmers in Ogan Ilir Regency used interviews, observation, and documentation.

RESULT AND DISCUSSION

Mediating land disputes between PT Perkebunan Nusantara (PTPN) VII Cinta Manis and farmers in Rengas Village, Ogan Ilir Regency, Sumatera Selatan Province.

Disputes can happen to anyone and anywhere. Disputes can occur between individuals and individuals, between individuals and groups, between groups and groups, between companies and companies, between companies and countries, between countries. Disputes can be public or civil in nature and can occur either locally, nationally or internationally. To resolve these dispute cases, it is carried out through mediation.

Based on the Regulation of the Minister of Agrarian and Spatial Planning / National Land Agency Number 11 of 2016 concerning Settlement of Land Cases, the dispute resolution process begins with a public complaint report in the form of a mediation request submitted to the Regency Land Office where the dispute occurs. Furthermore, the request for mediation is forwarded to the subsection of Dispute, Conflict and Land Case Handlers with Disposition from the Head of the Land Office to settle the complained case. Mediation activities are carried out based on the agreement of the disputing parties in accordance with Article 38 paragraph (1) of the Regulation of the Minister of Agrarian Affairs and Spatial Planning / Head of the National Land Agency of the Republic of Indonesia No.11 of 2016 which reads: If the parties are willing to carry out the mediation as referred to in Article 37 paragraph (1), then the mediation shall be carried out based on the principle of deliberation to reach a consensus for the benefit of all parties.

After a request for mediation comes into the Land Office. The Land Office collects data and information regarding the land dispute that is being filed so that the case can be identified whether the dispute case is under the authority of the National Land Agency or the authority of the Regency Government or other ministries. Once identified, the National Land Agency will summon the disputing parties. Summoning of the two disputing parties is useful for assessing the roots and history of the dispute; this is done to determine the factors of a dispute. Summons to the two disputing parties must be scheduled so that both parties meet and show each other evidence that the disputed land belongs to them. This evidence is in the form of documents, certificates, measuring letters, and hereditary mastery, as well as oral complaints made by the public.

Disputes related to land, especially in the plantation sector on the island of Sumatra, have never subsided. The results of a study conducted by CARE LPPM IPB (Sumardjo, 2008) in several plantation company locations in Sumatra show that the current conflicts in plantation areas are the result of previous conflicts that have not been resolved. This dispute has roots in land ownership rights. The dispute cannot be resolved because the parties in charge of resolving it do not start from the root of the land dispute problem.

In the land dispute case between PT Perkebunan Nusantara (PTPN) VII Cinta Manis and residents of Ogan Ilir Regency based on evidence that on December 29, 2009, the South Sumatra Land Agency issued a letter stating that the area of PT Perkebunan Nusantara (PTPN) VII Cinta Manis in Ogan Ilir who has the right to cultivate (HGU) is only 4,881.24 hectares (ha). Their principle permit covers an area of 20 thousand ha. Based on this evidence, the Land Agency as the

mediator only provides a recommendation that the right to cultivate must be resolved first with the community. This recommendation was not accepted by PT Perkebunan Nusantara (PTPN) VII Cinta Manis because the company felt that they owned the land from 1981.

The land dispute between PT Perkebunan Nusantara (PTPN) VII Cinta Manis versus farmers in Rengas village, Ogan Ilir Regency, South Sumatra Province is not only part of a structural conflict stemming from economic and development interests but about an imbalance of sense of justice. Inequality in the sense of justice in society is one of the causes of disputes. A dispute that is not resolved will lead to contention. The dispute resolution that has recently been used in various fields is mediation. Mediation is basically an effort to resolve disputes between the parties by mutual agreement through a mediator who is neutral, and does not make decisions or conclusions for the disputing parties, but supports the facilitator to carry out dialogue between the disputing parties to reach a consensus.

In the land dispute case between PT Perkebunan Nusantara (PTPN) VII Cinta Manis, the mediation had a long process. This long settlement process is because the disputing parties do not want to give way to one another. Land dispute resolution in Ogan Ilir Regency will generally be processed through court channels; this is because the two parties have never agreed to take the mediation. The land dispute case between PT Perkebunan Nusantara (PTPN) VII Cinta Manis and farmers in Rengas Village, Ogan Ilir District, South Sumatra Province has experienced ups and downs of disputes. The community had stopped fighting or fighting for their land. However, in 2009, the people of Rengas Village again organized themselves to reclaim their land. This dispute happened again because there was no agreement to take mediation.

Mediation is the settlement of land disputes through peaceful means in the form of deliberation and consensus carried out by mediators, namely the government through the National Land Agency and the Provincial Government of Sumatera Selatan. Based on the concept of mediation, the farmers in Ogan Ilir took the right action by asking the Sumatera Selatan Provincial Government to mediate the dispute that occurred between the farmers and PT Perkebunan Nusantara (PTPN) VII Cinta Manis. However, the dispute between the residents of Rengas Village and PT Perkebunan Nusantara (PTPN) VII Cinta Manis has not been resolved until now. This needs to be studied further regarding the resolution of disputes which even though it has been mediated, there are still further conflicts. The dispute mediation analysis between PT Perkebunan Nusantara (PTPN) VII Cinta Manis and residents of Rengas Village was carried out by examining the Volunteerism of the disputing parties, empowerment in determining agreement options, mediator neutrality, confidentiality of information related to disputes and solutions offered by the mediator so that the parties those who dispute reconcile. The following is the discussion:

1. Volunteer

Conciliation made in the mediation process is very difficult to do because the mediation process will work if the disputing parties are willing to do so voluntarily. Dispute resolution is indeed difficult to do, but that does not mean that it is impossible to materialize. The main asset of settlement through mediation is the willingness and good faith of the disputing parties to end the dispute between the two disputing parties. This good faith in the mediation process is considered important because mediation will be carried out if the disputing parties voluntarily ask a third party to mediate the dispute.

The willingness of the parties to meet in a mediation process shows that both parties are in good faith to resolve the dispute amicably. In the case between PT Perkebunan Nusantara (PTPN) VII Cinta Manis and farmers in Rengas Village, Ogan Ilir Regency, only one party wanted peace. Therefore, land dispute resolution cannot be resolved completely, this is because many parties are authorized to carry out their respective duties and functions so that good faith from all parties is needed to resolve them peacefully. All parties involved in the PT Perkebunan Nusantara (PTPN)

VII Cinta Manis case should voluntarily agree to a mediation process that will be carried out so that all parties' wishes are fulfilled fairly.

2. Empowerment

The position of the parties in the mediation, is placed as an active participation in the decision-making process and allows them to participate directly in resolving their disputes for their interests in the future. In informal mediation, the parties are given the opportunity to express their emotions by trying to find the identity of their fundamental interests, to then simplify their emotional confusion. The principle of empowerment is based on the assumption that people who are willing to come to mediation actually have the ability to negotiate their own problems and can reach the agreements they want. The ability of the disputing parties must be recognized and respected, therefore the solution or solution should not be forced from outside. Dispute resolution must arise from empowerment of each party, because it will make it more possible for the parties to accept the solution.

Before a mediator is appointed and processes the mediation, the mediator needs to ensure that the parties have met the predetermined requirements. The parties to a dispute must be involved in mediation. Involvement of the disputing parties in the mediation process is being able to negotiate independently to bring up the roots of the dispute they are experiencing and submit ideas or options for a way out of solving their case. The parties must be able to make their own bids according to the expectations of each of the parties to the dispute.

In the land dispute case between PT Perkebunan Nusantara (PTPN) VII Cinta Manis, the disputing parties were empowered by the Regional Office of the National Land Agency of Sumatera Selatan Province. The disputing parties were given the opportunity to negotiate and offer offers to resolve the land dispute case between PT Perkebunan Nusantara (PTPN) VII Cinta Manis and residents of Rengas Village. The bid ideas were expressed by the residents of Rengas Village regarding the return of their land from PT Perkebunan Nusantara (PTPN) VII Cinta Manis. This option was also brought by the community to Jakarta. On July 16, 2012, at the Ministry of BUMN, a discussion was also held. The meeting was attended by the Secretary of the Ministry of BUMN and Deputy Minister for Primary Business. Empowerment to submit bids made by both sides did not find common ground. This is because there is no agreement between the two parties so that even though the offers have been submitted, the results of the mediation failed to reach an agreement and this dispute case continues until now.

3. Neutrality

Land dispute resolution through mediation is very dependent on the neutrality of the mediator. Mediation provides an opportunity for the parties to take the role of taking the initiative, in order to resolve disputes that arise assisted by third parties. The principle of mediation must share a win-win solution so that the disputing parties feel that there are no winners and losers. Based on this, the mediator must have neutrality so that the mediator does not take sides or does not interfere in any decisions made by the disputing parties. The mediator can develop and offer dispute resolution options. These dispute resolution options are considered by the disputing parties as an alternative dispute resolution that will be a solution taken by both parties. The alternative settlement options offered by the mediator are expected to be able to accommodate the interests of the disputing parties so that the disputing parties can reach an agreement without either party feeling victorious or party feeling lost.

In the case of PT Perkebunan Nusantara (PTPN) VII Cinta Manis with residents of Rengas Village, the neutrality of the officials who were requested to act as mediators needs to be questioned, this is due to the shooting of residents so that one victim died. The settlement of land

disputes in Rengas Village has experienced a lack of neutrality by the state apparatus, especially the Police, causing casualties. If the police are neutral in securing the condition of the village, the land dispute that occurs will not escalate into a new conflict so that the village conditions are increasingly not conducive to mediating between the disputing parties. The neutrality of government officials in resolving land disputes needs to be fostered because officials who do not take sides with any party will produce an agreement option that benefits all parties.

4. Confidentiality

Confidentiality is one of the principles applied in the implementation of mediation. Confidentiality is understood that everything that happens in the mediation process must not be broadcast to other publics who are not related to the dispute in other words that mediation is closed so that not everyone can participate in the negotiation process so that the bids recommended by the parties to the dispute can be kept strictly confidential.

The principle of confidentiality in mediation is often a dilemma when it comes to land disputes. The principle of confidentiality is a principle that must be maintained in the mediation process in the business world and in the divorce process. Confidentiality of these two mediation processes is needed because it maintains a good name and a relationship that is likely to become bad if the disgrace of the disputing parties is brought up in public. Mediation in business disputes and divorce cases upholds the principle of confidentiality but is different from land dispute cases. The principle of confidentiality in the land dispute mediation process needs to be considered what information needs to be kept confidential. Confidentiality of information that PT Perkebunan Nusantara (PTPN) VII Cinta Manis' s permits for business use rights (HGU) are only 4,881.24 hectares (ha) may not occur because the community has the right to know whether their land is included in the area of PT Perkebunan Nusantara (PTPN) VII Cinta Manis or not. This information is very important for the public to know in order to guarantee their rights so that new conflicts do not occur.

5. Unique Solutions

Land dispute resolution through mediation has recently been used as a way out to reconcile the disputing parties, this is because mediation offers a unique solution to the disputing parties. A unique solution is understood as a solution that does not have to be in accordance with legal standards, but can be generated from the creative process of the mediator who concocts alternative solutions that have been negotiated by the two disputing parties to benefit both parties.

Settlement of land disputes through mediation in the Sumatera Selatan Province can not only be carried out by the Regional Office of the National Land Agency of Sumatera Selatan Province, it can also be carried out by the Regional Government where the land dispute is submitted. Based on this, farmers in Rengas Village, Ogan Ilir Regency can propose a mediation process to the Regional Office of the National Land Agency of Sumatera Selatan Province, the Land Office of Ogan Ilir Regency, or the Regional Government of Ogan Ilir Regency can even propose a mediation process to the Regional Government of Sumatera Selatan Province because Ogan Regency Ilir belongs to the Sumatera Selatan Province.

Based on the research results, the conflict between PT Perkebunan Nusantra (PTPN) VII Cinta Manis caused a lot of losses, both physical and material losses. The loss was due to clashes between residents and members of the Mobile Brigade. This conflict started with the police officers who guarded the disputed location. The Sumatera Selatan Regional Police Mobile Brigade personnel conducted an operation to residents' houses, resulting in clashes between residents and the Police. This incident resulted in the shooting of a 12 years old boy named Angga Darmawan. This incident did not make residents trust the police, so the community asked the Sumatera Selatan

Government for help to mediate the case. After a request for mediation from the farmers in Rengas Village, Ogan Ilir District, made the Regional Government of Sumatera Selatan Province as the mediator.

The mediation carried out by the Governor of Sumatera Selatan has produced a unique solution, namely that there is no partiality for the two disputing parties. The solution taken in this case is re-measurement by the National Land Agency. This measure is within the authority of the National Land Agency. This authority will decide whether the land in dispute belongs to PT Perkebunan Nusantara (PTPN) VII Cinta Manis or to residents of Rengas Village. This re-measurement process will produce a decision that will resolve the dispute case or add a new conflict, this depends on the agreement between the two parties to the dispute. The demands generated by a conflict are not all fulfilled. Sometimes the resulting demands are very difficult to fulfill, therefore there must be an agreement that binds both parties so that the disputed case does not lead to new conflicts.

CONCLUSION

In principle, any mediation process must first be based on volunteerism and the good faith of the parties, both the plaintiff and the defendant, to resolve disputes between them. The role of the mediator captures the wishes of the disputing parties. Mediation will work best if the mediator can build trust and be neutral in resolving land disputes. Suggestion to the disputing parties is to be actively involved in the mediation process. It is recommended that judges and mediators be optimized to realize mediation efforts that result in a peace agreement.

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**ПОСЕРЕДНИЦТВО У ЗЕМЕЛЬНИХ СУПЕРЕЧКАХ
МІЖ PT PERKEBUNAN NUSANTARA (PTPN) VII CINTA MANIS
TA RENGAS VILLAGE FARMERS, OGAN ILIR REGENCY У ПІВДЕННІЙ СУМАТРИ**

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Вирішення суперечок між суб'єктами економічних відносин – актуальне питання, що потребує теоретичного вивчення та практичного досвіду. Основним капіталом врегулювання суперечок шляхом посередництва є добросовісність сторін та їх готовність припинити

суперечку. Метою цього дослідження є аналіз посередницьких дій щодо земельних суперечок між PT Perkebunan Nusantara (PTPN) VII Cinta Manis та Rengas Village Farmers, Ogan Ilir Regency, провінції Південна Суматра. Метод дослідження є описовим якісним методом. Використовувалися методи збору даних за допомогою співбесід, спостережень та документації. Висновки цього дослідження свідчать про те, що посередник не вирішує питання щодо земельних суперечок, а посередництво має незначні шанси примирити дві сторони в суперечці. Факторами, що визначають успіх процесу посередництва, є добровільність проведення посередництва, конфіденційність та нейтральність медіатора. Висновок з дослідження полягає в тому, що посередництво матиме успіх, якщо сторони добровільно погоджуються на посередництво, а медіатор може бути нейтральним у вирішенні суперечки.

Ключові слова: посередництво, суперечки, земля, плантаційні компанії.

**ПОСРЕДНИЧЕСТВО В ЗЕМЕЛЬНЫХ СПОРАХ
МЕЖДУ PT PERKEBUNAN NUSANTARA (PTPN) VII CINTA MANIS
И RENGAS VILLAGE FARMERS, OGAN ILIR REGENCY В ЮЖНОЙ СУМАТРЕ**

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Решение споров между субъектами экономических отношений – актуальный вопрос, требующий теоретического изучения и практического опыта. Основным капиталом урегулирования споров путем посредничества является добросовестность сторон и их готовность прекратить спор. Целью настоящего исследования является анализ посреднических действий по земельным спорам между PT Perkebunan Nusantara (PTPN) VII Cinta Manis и Rengas Village Farmers, Ogan Ilir Regency, провинции Южная Суматра. Метод исследования является описательным качественным методом. Использовались методы сбора данных с помощью собеседований, наблюдений и документации. Выводы этого исследования свидетельствуют о том, что посредник не решает вопрос о земельных спорах, а посредничество имеет незначительные шансы примирить две стороны в споре. Факторами, определяющими успех процесса посредничества, является добровольность проведения посредничества, конфиденциальность и нейтральность медиатора. Вывод из исследования заключается в том, что посредничество будет иметь успех, если стороны добровольно соглашаются на посредничество, а медиатор может быть нейтральным в процессе разрешения спора.

Ключевые слова: посредничество, споры, земля, плантационные компании.

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JUSTIFICATION OF THE USE OF CRITICAL TECHNOLOGIES IN THE AGRICULTURE ON THE BASIS OF FORESIGHT DESIGN METHODOLOGY

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Abstract. The article considers the results of using the method of critical foresight technologies in relation to the agricultural sector at the regional level, considering the region as a subject of competitive processes in the context of globalization. The purpose of the study is to determine the critical technology in the agro-industrial complex at the regional level, capable of implementing the final phase of Foresight to affect the industry, markets, environment and ultimately – the competitiveness of the region. Outlining the scope of foresight, the author considers the following key issues in this area, which are: agri-environmental condition of land, social issues – job creation in rural areas, ensuring food production for the population, necessary for medical standards and affordable prices. The research of foresight is focusing on the trends of innovation in the field of science and technology. The results of research have shown that the technology of grazing dairy herds can become a critical technology, a potential factor in the revival of animal husbandry in the region. This approach will solve the problem of maintaining soil fertility as a key competence in the development of the region's agricultural and industrial complex, necessary for high yields of crops, and will solve social problems with job creation, providing food in accordance with medical standards, dairy market development.

Key words: foresight, future forecasting, critical technologies, communication.

JEL Classification: C53, Q24, O13.

INTRODUCTION

In modern science, there are many methods and technologies of economic forecasting, which with varying degrees of possibility can represent real picture of the future. They are widely covered in the world scientific literature. In world practice, foresight technology, which means "prediction" in English, is designed to study the future or as a forecast of the future development of economic activities, is considered as an effective forecasting tool. Most authors consider the use of foresight at the national, global level, devoted to theoretical and methodological aspects. The lack of experience in practical application as an effective tool is one of the problems in increasing the competitiveness of regions in the current conditions.

LITERATURE REVIEW

The economic literature reveals various aspects of foresight technology, in particular, the European Association for Technology Transfer, Innovation and Industrial Information (CORDIS) describes in its program materials as follows: Foresight includes actions focused on thinking, discussing and outlining the future, The Australian Innovation Center defines foresight as a systematic reflection on the future and impact on the future (Akhmetzhanova et al.).

According to many scientists, B. Martin proposed classic definition of this technology: “the process associated with a systematic attempt to look into the distant future of science, technology, economics and society to identify areas of strategic research and technology that are likely to bring the greatest economic and social benefits” (Kuklina, 2007); L.M. Hochberg, Russian professor, believes that “Foresight is a system of methods for expert assessment of long-term prospects for innovative development” (Sizov, 2012); director of German Center for Future Research and Forsyth IS K. Kuls, points out that Forsyth - is not only “the choice of winners” in research and technology, such as strategically important areas of research, technology, but also the choice of “losers” – those areas that will not develop (Sizov, 2012).

The unsolved part of the general problem is insufficient study of the practice of “critical technologies” that can apply one of the defining differences of foresight from other methods - to influence the future, try to shape it, use it for active event management and develop practical measures to motivate civilians, institutions.

PAPER OBJECTIVE

The purpose of this work is to determine the critical technology in the agro-industrial complex at the regional level, which in the implementation of the post-foresight phase can affect the production of the industry, market, environment and ultimately – the competitiveness of the agricultural sector.

METHODOLOGY

To substantiate the theoretical positions and reasoning of the conclusions general scientific methods are used, including system, abstract-logical approach, as well as methods of formalization, analysis and synthesis of information, comparative analysis and expert assessments, graphical visualization of factual information.

RESULT AND DISCUSSION

The term critical technology is understood by Bimber and Popper with RAND as a factor / evaluation criterion in specific areas, thus linking technology to the production process of any particular product. In this case, the definition of “criticality” is understood not as a characteristic of the technology itself, but as a quality inherited in the product that was obtained at the output, as a result of using a particular technology (European Foundation for the Improvement of Living and Working Conditions, 2003). Research of critical technologies can be carried out not only in the field of technology, but also to apply these methods in the social and economic sphere. However, this requires the development of new, improved criteria for determining what is considered critical. For critical technologies, these criteria are as follows. Critical technologies must:

- correlates with the political course and decision-making;
- clearly divide what is considered critical (advanced) and non-critical in technology;
- get a reproducible result, which can later be used in other areas and not very competent people (European Foundation for the Improvement of Living and Working Conditions, 2003).

We chose the regional Foresight, because the competitiveness of the region means the ability to perceive global development trends, adapt to them and adapt them to themselves in such a way as to engage in global processes without destroying internal integrity and preserving their national and cultural identity (Kalyuzhnova, 2008).

The areas, where Foresight can be applied, can vary. Based on the list of fixed calls and threats, we can determine the scope of the foresight. As such an area, we choose the region's agro-industrial complex. Outlining the scope of foresight, it is impossible not to touch on such key issues in this area, where the agricultural and environmental condition of land is closely linked with the specifics and features of land resources as a means of production. Moreover, it is a key competence, the main wealth of the region; social issues – job creation in rural areas, ensuring the production of food for the population, necessary for medical standards and at affordable prices, changing the pricing policy for agricultural products and the market. All these aspects are directly related to the meaning of the term "competitiveness" for the region. Elimination of unemployment, a decent standard of living for the population as one of the key participants, profitability for business, budget deficit, investment attractiveness for regional authorities – these are the project participants whose consent must be obtained (Kalyuzhnova, 2008).

Ukraine is among the ten largest grain exporters in the world. It ranks the first place in sunflower seeds and oil export. In the context of globalization and food problem exacerbation in the world, Ukraine will increase markets. It can realize created opportunities in order to integrate onto the globalized market with dignity. According to the President of the Ukrainian Agrarian Confederation L. Kozachenko, the world community sees Ukraine as a source of food production in the long run for 500 million people, including 45 million people in Ukraine. However, there are risks in which these opportunities may not be realized. In 2013, Zaporizhzhia region was at the fifth place for the production of sunflower seeds and winter wheat in Ukraine. In 2018 Zaporizhzhia region was not in the top ten for wheat production in accordance with the results of agricultural production. However, it ranked the 9th among the regions of Ukraine for sunflower production (State Statistics Committee of Ukraine, 2019).

Internal analysis has shown that in the current state of affairs in the agricultural and industrial complex, the region risks to lose its main key competence in the coming years, land fertility, namely. According to the State Agency of Land Resources in the Zaporizhzhia region, 1545.5 thousand hectares of surveyed arable land in the region have different percentages of humus (Tsybrov, 2012):

- a) 1.3 thousand hectares have a humus content in the arable layer of more than 5.0%;
- b) 83.0 thousand hectares – from 4.1 to 5.0%;
- c) 520.0 – from 3.1 to 4.0%;
- d) 771.4 – from 2.1 to 3.0%;
- e) less than 2% of humus - 169.8 thousand hectares.

In such conditions, 85-90% of the crop yield is obtained due to the natural fertility of grants and only 10-15% is obtained due to fertilizers. There is an acute deficit of humus and mineral nutrients of plants. In 2010 – 2012, the negative balance of humus in the region reached 712 kg / ha on average. It can fluctuate in areas from 500 to 800 kg / ha (Markin et al., 2011). In 2018, the average negative balance of humus reached 780 kg / ha (Soils Protection Institute of Ukraine, 2019).

This situation has developed as a result of a catastrophic decline in mineral and organic fertilizers against the background of increased production of cereals and sunflower. In 2018, the application of organic fertilizers amounted to only 137.8 thousand tons, which is 78 times less than in 1990 (Fig. 1). In 1990, 151.6 thousand tons of mineral fertilizers were applied to crops of all kinds of plants. In 2000 only 10 thousand tons were applied. Mineral fertilizers were applied at the level of about 20 thousand tons from 2002 to 2005. Starting from 2016, the application of mineral fertilizers exceeded the level of more than 50 thousand tons. It amounted to 67.3 thousand tons in

2017. In 2018 it amounted to 91.4 and 109.8 thousand tons, respectively (State Statistics Committee of Ukraine, 2019).

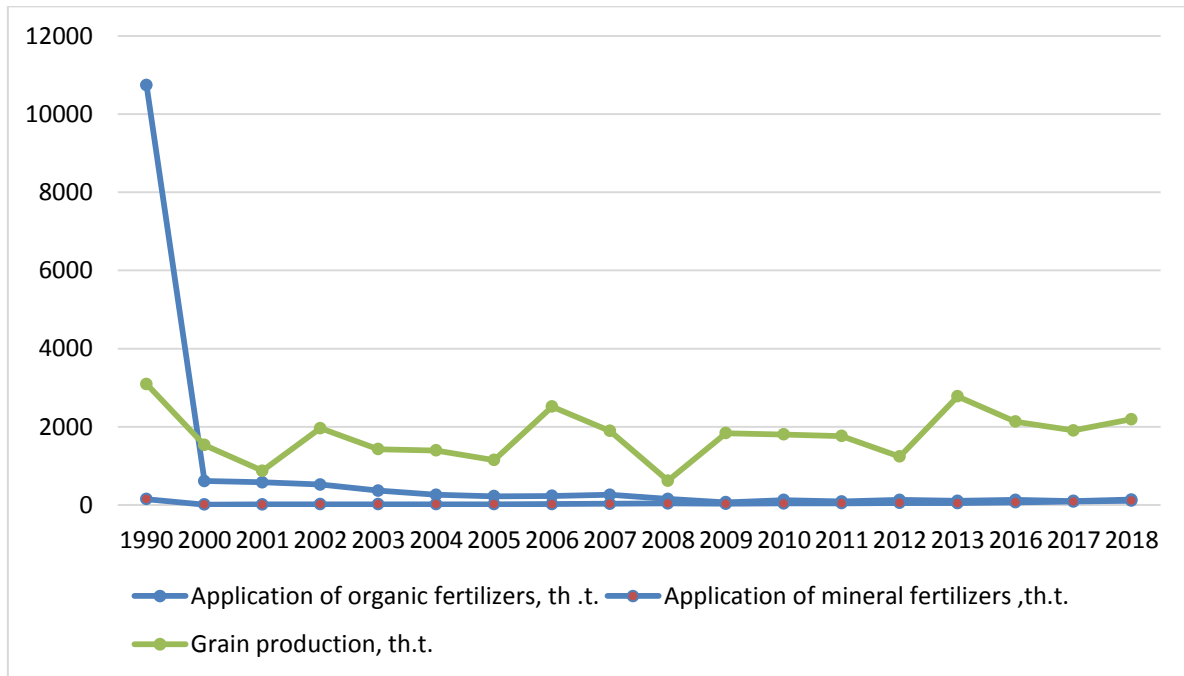


Figure 1. Application of mineral and organic fertilizers and grain production in the Zaporizhzhia region in 1990 – 2018

Source: State Statistics Committee of Ukraine, 2019.

Agricultural lands in the region are in crisis, there is a decrease in soil fertility due to the loss of humus and basic plant nutrients. The shortage of organic fertilizers has developed as a result of a sharp reduction in the number of cattle. On January 1, 2018, the number of cows in agricultural enterprises in the region is about 7.1 thousand heads. It is only 2.2% out of the 1991 amount (State Statistics Committee of Ukraine, 2018-2019). There is a reduction in livestock production. So it happened because it is unprofitable to produce it. Table.1 approves this.

Table 1

The results of the sale of milk in the Zaporizhzhia region

Indicator	Year			
	2010	2016	2017	2018
The cost of 1 quintal, UAH	249,81	440,90	553,85	691,29
The average selling price of 1 quintal, UAH	280,59	501,74	705,06	732,77
The level of profitability (loss),%	12,32	13,80	27,30	6,00

Source: State Statistics Committee of Ukraine, 2019.

In 2018, the profitability of milk production was about 6% (Table 1), the loss of cattle for meat was 45,16 % (Table 2).

Table 2

The results of the sale of beef in the Zaporizhzhia region

Indicator	Year			
	2010	2016	2017	2018
The cost of 1 quintal, UAH	528,50	691,23	045,86	917,00
The cost of 1 quintal, UAH	33,26	200,09	266,30	051,23
The level of profitability (loss),%	-38,94	-29,04	-38,10	-45,16

Source: State Statistics Committee of Ukraine, 2019.

As the production of milk and beef is unprofitable, region’s agricultural producers prefer the production of crop products: wheat and sunflower.

Table 3 shows that since 2008 the share of crop production exceeds 70%.

Table 3

The structure of agricultural products in the Zaporizhzhia region

Year	1995	2000	2005	2006	2007	2008	2009	2010	2016	2017	2018
Crop production, %	552,7	556,8	772,8	664,5	557,2	770,0	772,5	880,3	885,6	887,3	885,0
Livestock products, %	447,3	443,2	227,2	335,5	442,8	330,0	227,5	119,7	114,4	112,7	115,0

Source: State Statistics Committee of Ukraine, 2019.

In 2018 the share of livestock products decreased to 15.0%. In addition to the environmental problem the existing disproportion in the development between animal husbandry and crop production has created a number of social problems. The contraction of the livestock sector has led to rising rural unemployment.

Milk production has decreased by more than 24 times from 1990 to 2018 (State Statistics Committee of Ukraine, 2019). The recommended consumption of milk and dairy products is 392 kg per head per year. Milk production per capita is declining. In 1995, 280 kg of milk was produced per head. 200 kg of milk was produced in 2004. In 2018 142 kg of milk was produce. The fund of consumption of milk and dairy products in the region decreased from 436.5 thousand tons in 1995 to 320.9 thousand tons in 2000 (Prokopenko, 2017-2019). Since 2001, there has been an upward trend. Over the last twenty years the consumption fund has averaged about 300.0 thousand tons per

year. In 2018 consumption of milk and dairy products amounted to 175 kg per head per year. This is much lower than the recommended norm (Prokopenko, 2017-2019).

Compared to the indicators of developed European countries, this tendency is becoming dangerous to public health. For example, in France, one person consumes about 400 kg of dairy products per year; residents of the Scandinavian countries, Sweden, Denmark and Finland namely, consume more than 500 kg of milk per year (Krylova, 2011).

Analysis of beef consumption shows that the production of beef and veal per head decreases from 21 kg in 1990 to 6 kg in 2010 – 2018. Corresponding to the scientifically substantiated nutrition, the rational norm provides consumption of 82 kg of meat a year by one person. 32 kg (39%) of beef is the amount consumed by one person. Consumption of meat and meat products per head in the Zaporizhzhia region is much less than the norm (Prokopenko, 2017-2019). In 2018, the fund of meat consumption per head amounted to 54.9 kg per year. The volume of milk and beef production depends on the number of cattle, including cows. According to statistics (State Statistics Committee of Ukraine, 2018-2019), the number of cattle is declining every year in the Zaporizhzhia region. The logical solution to the problem of low profitability of milk production is to reduce its cost by reducing the most expensive items. Calculations show that in 2018 the largest share in the structure of the cost of milk production is the cost of feed, which covers 53.7% (State Statistics Committee of Ukraine, 2017-2019).

In our research, we focused on foresight focusing on trends in innovation in science and technology.

As the region is dominated by stall keeping cows, a significant share in the cost of feed is the cost of fuel and lubricants for tillage, crop care, mowing, transportation of feed to livestock complexes, their unloading and distribution to animals. A system of grazing cattle, which is successfully used in advanced countries, may be an alternative to producers of cow's milk.

The popularity and efficiency of pasture-based dairy production is due to the spread of the so-called “New Zealand System”, which is formed in New Zealand and is based exclusively on the pasture system of milk production. New Zealand's largest company, Fonterra Cooperative Group Limited, is also the world's largest exporter of milk and dairy products. Fonterra consists of farming cooperatives, which in total annually collect about 17 billion liters of milk, which is 89% of the country's dairy production (Fonterra Annual Results, 2014).

In 2014, Fonterra Co-operative Group Limited ranked second in the world in milk production with a market share of 2.9% according to the IFCN Dairy Research Center (Brockotter, 2014). Dairy Farmers of America, a world market share of which is 3.7%, is in the first place.

In the United States, the cost of feed in milk production is 35-50%. It is proved that rationally organized milk production based on grazing cows reduces production costs and increases the net income of small and medium enterprises by \$ 150 per cow compared to the usual system of keeping.

Research by Ukrainian scientists also confirms that the most effective way to solve the problem of effective management of the dairy industry should be the widespread introduction of grazing in the region of cows in the summer. Researchers of the Crimean Institute of Agro-Industrial Production conducted an experiment on economic evaluation of types of keeping and feeding rations of cows (Prihodko et al., 2011), the results of which are given in Table 4.

Table 4

Economic assessment of types of keeping cows in the summer with an average annual milk yield of 5000 kg / goal

Indicator	Types of saving		
	1	2	3
Average daily milk yield , kg / goal	16,7	16,7	16,7
Daily feed requirement, k.unit./goal.	13,2	13,2	13,2
Feed costs per 1 kg of milk, unit	0,79	0,79	0,79
Area of fodder crops per 1 head	0,62	0,43	0,49
Area of fodder crops for the production of 1 ton of milk, ha	0,12	0,09	0,1
The cost of the daily ration, UAH	5,03	3,16	4,1
The cost of feed. units, UAH	0,38	0,24	0,31
The cost of milk, UAH / kg	0,86	0,54	0,7

Source: after Prikhodko et al. (2011)

Notes: 1 – Stable with the use of green conveyor crops. 2 – Pasture. 3 – Pasture with top dressing of green conveyor crops (50%).

Due to the use of cheaper and complete feed in cattle grazing, the cost of a feed unit in feeding rations is lower by UAH 0.14. The area of fodder land per head is lower by 0.19 ha and by 0.03 ha for the production of a ton of milk compared to the stall, comparing the way of keeping animals and feeding them food on a green conveyor.

The results of the study define that by reducing the costs associated with mowing, transportation and distribution of feed to animals, the cost of feed units for grazing is reduced by 37%, which can significantly increase the profitability of milk production.

Summing up the above arguments, we can conclude that the technology of grazing dairy herds can become a critical technology, a potential factor in the revival of animal husbandry.

When using grazing cows in the Zaporizhzhia region, a real reduction in feed costs by 20 – 30% is possible. In accordance with the indicators of 2018 it has increased the profitability of milk production to 24 – 26%.

Thus, the key factor of success in the revival of dairy farming in the Zaporizhzhia region is the development and implementation of modern technology that will make it possible to increase productivity, production quality and reduce production costs. The development of milk production should be based on feed of own production. This approach will solve the problem of maintaining soil fertility as a key competence in the development of the region's agro-industrial complex, necessary for high yields of crops, and will solve social problems with job creation, providing food in accordance with medical standards, dairy market development.

The presence of an initiative group and an artefact of critical technology that can influence the future, try to shape it, use it for active event management and develop practical measures to achieve

the chosen benchmarks is an important result. The main problem of a foresight is how to integrate its results into the process of public policy. Public policy is understood as the government's response to a publicly recognized problem in specific political, legal and social and economic conditions through various ways of interfering in social reality (Chemerys, 2012).

Subjects of state power and local governments, large and medium-sized businesses, research institutions and universities, infrastructure companies, NGOs are involved to the participants of this stage (Figure 2). The task of this stage is to reconcile the “ideal” scientific vision with the real features and possibilities of practice, to identify limitations, to assess organizational features and conditions (Krymova, 2009). I. Kuklina notes: “Particular attention in foresight’s works is paid to the creation of communication platforms for people who prepare and make decisions” (Kuklina, p.50, 2007).

Any person or social group affected by a collective (social) issue addressed in the field of public policy is a potential public policy actor. Public policy actors are also called stakeholders or groups that have a common interest in solving or maintaining the status quo of a public problem. Public policy actors are divided into three types:

- social groups that are the cause of the social problem (target groups or target groups);
- social groups that experience the negative impact of this problem (final users);
- political and administrative authorities that develop and implement public policy.

In addition to these types of actors, there are so-called “third parties”, who are indirectly affected by public policy. They benefit from this or they are deprived of their capabilities (Chemerys, 2012).

The relationship of the actors is shown in Figure 2:

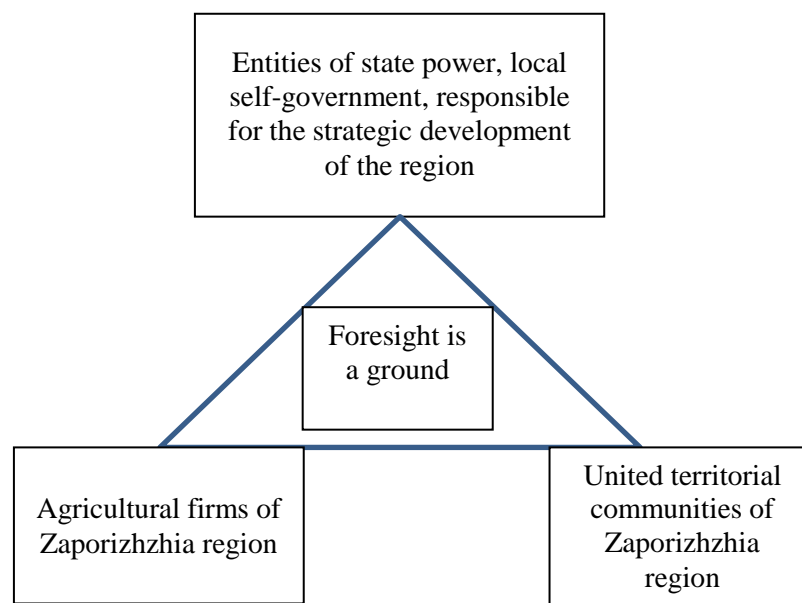


Figure 2. Foresight is a platform at the regional level

In this version, the social group that is the cause of the negative impact of the social problem, i.e. the target group, namely. The target groups are farmers in the Zaporizhzhia region, agricultural firms. Their number is more than 65. The sown area of each is more than 1000 hectares. In our opinion, large land tenants must be engaged in animal husbandry in accordance with the established legal norm. The position of this group will determine whether the foundation of future changes will be laid in the present.

The social group, that is negatively affected by this problem, is represented by the citizens of

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the united territorial communities of Zaporizhzhia region. These are 57 united territorial communities of rural, settlement and urban type. They are end users of all consequences of the negative decision of the considered problem: ecological one. That is the degradation of soil fertility. Social problem is unemployment in the countryside. Medical problem is the lack of necessary livestock products at affordable prices. Moreover, low quality of life and, finally, it reduces life expectancy.

The third actor is the political and administrative bodies. They are the following: Zaporizhzhia Regional State Administration, Zaporizhzhia Regional Council, which develop and implement public policy.

Public discussion within three participants of actors will reduce the time required to analyze the problem, detail the causal links, identify obstacles and possible impacts on the situation, and streamline the process of formulating the problem and the roadmap for its implementation.

Public policy tools provide identification of a public problem based on the interests of stakeholders, putting the problem on the government agenda, developing alternative solutions and choosing the best solution, implementing the policy, monitoring its implementation and assessing the consequences.

The purpose of this stage is to form unified idea of the situation in the region, the attitude to the decisions made and directions of development of all members of the interested public and thus create an opportunity to influence the development of the distant future.

CONCLUSION

The results of research revealed that the technology of grazing dairy herds can become a critical technology, a potential factor in the revival of animal husbandry in the region.

Studies have shown that the use of technology for grazing dairy animals justify the prospects for the use of critical technologies in the agro-industrial complex on the basis of foresight design methodology.

The technology of grazing animals, based on modern advances in science and practice, can be the subject of dialogue and further cooperation between all stakeholders in order to address issues related to environmental degradation and reducing soil fertility. A key challenge of the region is to reduce rising unemployment, to reduce elimination of disparities in the agricultural sector between livestock and crop production. One of the main targets is an increase in livestock production in accordance with medical standards. Secondly, the main targets are to lay the foundations for changing the future, to increase the competitiveness of the region.

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ОБҐРУНТУВАННЯ ВИКОРИСТАННЯ В АПК КРИТИЧНИХ ТЕХНОЛОГІЙ НА ОСНОВІ МЕТОДОЛОГІЇ ФОРСАЙТ-ПРОЕКТУВАННЯ

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У статті розглянуто результати використання методу критичних технологій форсайта стосовно аграрному сектору на регіональному рівні, розглядаючи регіон як суб'єкт конкурентних процесів в умовах глобалізації. Мета дослідження полягає у визначенні критичної технології в АПК на регіональному рівні, здатної при реалізації заключної фази форсайта вплинути на виробництво галузі, ринки, навколишнє середовище і в кінцевому результаті - на конкурентоспроможність галузі регіону. Окреслюючи область застосування форсайта, автор розглядають такі ключові питання даної галузі, якими є: агроекологічний стан земель, соціальні питання – створення робочих місць в сільській місцевості, забезпечення виробництва продуктів харчування для населення, необхідного за медичними нормами і за доступними цінами. Дослідник фокусування форсайта акцентував на тенденціях розвитку інновацій в області науки і технологій. Результати досліджень виявили, що технологія пасовищного утримання молочного стада може стати критичною технологією, потенційним фактором відродження тваринництва в регіоні. Викладений підхід вирішить проблему збереження ґрунтової родючості як ключової компетенції в розвитку АПК регіону, необхідного для отримання високих врожаїв сільськогосподарських культур, а також дозволить вирішити соціальні проблеми зі створенням робочих місць, забезпечення

населення продуктами харчування у відповідність з медичними нормами, розвиток ринку молочної продукції.

Ключові слова: форсайт, прогнозування майбутнього, критичні технології, комунікація

ОБОСНОВАНИЕ ИСПОЛЬЗОВАНИЯ В АПК КРИТИЧЕСКИХ ТЕХНОЛОГИЙ НА ОСНОВЕ МЕТОДОЛОГИИ ФОРСАЙТ-ПРОЕКТИРОВАНИЯ

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В статье рассмотрены результаты использования метода критических технологий форсайта применительно к аграрному сектору на региональном уровне, рассматривая регион как субъект конкурентных процессов в условиях глобализации. Цель исследования заключается в определении критической технологии в АПК на региональном уровне, способной при реализации заключительной фазы форсайта повлиять на производство отрасли, рынки, окружающую среду и в конечном результате – на конкурентоспособность отрасли региона. Очерчивая область применения форсайта, автор рассматривает такие ключевые вопросы данной области, какими являются: агроэкологическое состояние земель, социальные вопросы – создания рабочих мест в сельской местности, обеспечение производства продуктов питания для населения, необходимого по медицинским нормам и по доступным ценам. Исследователь фокусировку форсайта акцентировал на тенденциях развития инноваций в области науки и технологий. Результаты исследований выявили, что технология пастбищного содержания молочного стада может стать критической технологией, потенциальным фактором возрождения животноводства в регионе. Изложенный подход решит проблему сохранения почвенного плодородия как ключевой компетенции в развитии АПК региона, необходимого для получения высоких урожаев сельскохозяйственных культур, а также позволит решить социальные проблемы с созданием рабочих мест, обеспечения населения продуктами питания в соответствии с медицинскими нормами, развитие рынка молочной продукции.

Ключевые слова: форсайт, прогнозирование будущего, критические технологии, коммуникация.

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THE IMPLEMENTATION OF PUBLIC RELATION PROGRAM NASIONAL SENYUM INDONESIA AS MANAGEMENT STRATEGY IN UPHOLDING AUTOIMMUNE AWARENESS

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Abstract. Autoimmune categorized as a dangerous non-communicable disease that tends to be at bigger risk for women and children. Lack of understanding on general public and medical experts has an impact to the high mortality rate from autoimmune diseases. Having a response to the fact, Marisza Cardoba Foundation as a non-governmental organization concerned with health inaugurated the Senyum Indonesiaku National Program along with the Ministry of Women's Empowerment and Child Protection to support public awareness of autoimmune. The purpose of this research is to understand and analyze the implementation of one of the program strategies. This study uses Harold Laswell's communication theory and public relations campaign by Ronald D. Smith. The research method used is a descriptive-qualitative approach. The research finding found that Idolanesia Awards Indonesia 2017 as one of the strategies for Senyum Indonesiaku National Program, include as good effort to support public awareness regarding the autoimmune. However, weaknesses were still found in the planning strategies of the program.

Keywords: autoimmune socialization program, appreciation, autoimmune awareness, public relation campaign.

JEL Classification: H750, I10, I12.

INTRODUCTION

As a country with the fourth largest population in the world, Indonesia has potential for the development of industrial sectors, especially for health sector. By the development of time, the need for health services continues to change due to rapid economic and knowledge growth. The government which is an authorized institution of public health also needs to step in to make that service quality optimal. However, in reality it is not perfectly realized yet. According to the online news articles, it is stated that the number of health facilities is still uneven in several areas (Manafe, 2015).

Health problems have a broad scope, one of the important scopes is the emergence of various diseases which directly affect health and quality of life of Indonesian people, both categorized as infectious and non-communicable diseases. This statement is reinforced by the results of data

released by Health Research and Development Agency (Balitbangkes) regarding 10 diseases that most common causes of death in Indonesia (Widowati, 2015)

By the time, it will be possible that the emergence of non-communicable diseases will become a factor as the cause of death in Indonesia, as well as infectious diseases. This has become the main focus for the formation of the government's national health program. Government realizes that the disease issue is a challenge that is currently being faced by Indonesia. On the era of 1990, the biggest cause of dead in contagious disease. However, since 2010 non-contagious disease has the higher proportion (Kementrian Kesehatan Republik Indonesia, 2016).

U.S. Department of Health and Human Services (Parrott, 2004) explained the health communication as the art and technique of informing, influencing, and motivating individual, institutional, and public audiences about the important health issue. It is clear health communication is an effort to inform a disease, both contagious and non-contagious. Indonesian Ministry of Health as a government agency that takes a major role to deal with health issues always strives to improve their services to the society through the efforts of prevent, control and observe disease.

It should be noted that health problems are not only the responsibility of government, but also a responsibility of all citizens. The presence of non-governmental organizations (NGOs), foundations, and social organizations is very helpful for government to deal with health problems in Indonesia. The increase number of disease, both infectious and non-communicable, has encouraged the government and social organizations to work hard on reducing the death rate of citizen, especially for chronic or dangerous disease category. In this research, the authors would like to focus on non-communicable disease that really needs to pay more attention, especially in the area of Jakarta as Capital city of Indonesia.

An autoimmune disease is the disease that attacks the human body due to the antibodies that do not work normally. Due to the development of time, in the future autoimmune patient will increase and will emerge new types of disease (Waluyo and Marhaendra, 2014). In addition, autoimmune diseases categorized as diseases for women and children because most of the survivors are women and children.

As a disease that categorized as dangerous, not many people, general and medical experts, recognize this disease really well. As a disease that is categorized as dangerous, not many people, both general and medical experts, recognize this disease really well. Lupus disease or Systematic Lupus Erythematosus (SLE) is a chronic autoimmune inflammatory disease that has recently become the government's spotlight due to the increasing number of infected people in Indonesia. Citizen awareness of autoimmune disease is still low (Marisza Cardoba Foundation, 2017)

This disease is often said as special disease because it is different from other diseases that are easily recognized. Thus, public will easily recognize autoimmune diseases if various activities are formed to support the awareness autoimmune. Every individual human being is in social environment, from family, workplace, educational institute to community. Therefore, there are several ways of organizing health communication, through interpersonal communication, small groups or social communities, organizations, public, and masses (Liliweri, 2013).

As already explained, the contribution of social foundations is able to help reduce health problems in Indonesia and this is the basis for the formation of Marisza Cardoba Indonesia Foundation. As one of the foundations that protects people with autoimmune and other rare diseases, this foundation plays an active role in providing knowledge and information about autoimmune. The participation of Marisza Cardoba Indonesia Foundation can accelerate the realization of *Three Ends* program from the Ministry of Women's Empowerment and Child Protection of Indonesia (Marisza Cardoba Foundation, 2017).

Therefore, in responding the facts that are closely related to public health conditions, Marisza Cardoba Indonesia Foundation and the Ministry of Women's Empowerment and Child Protection of Indonesia inaugurated a national scale program on August 6, 2015, which called as *Program Nasional Senyum Indonesiaku* (Indonesian Smile National Program). The word smile is interpreted

as an expression of happiness. Happiness can be achieved when the three aspects of basic human needs (health, economy and education) are met. From those three aspects, health is the main focuses of this program. Besides, the use of smile describes a happy society which physically and mentally healthy.

There are other objectives of this system, to increase public awareness, especially women and children, about autoimmune. In other words, this program is expected to liberalize people from the lack of knowledge of autoimmune. To achieve these objectives, five strategies were implemented, including releasing the official website of Marisza Cardoba Indonesia Foundation, holding the Indonesian Awards, encouraging the realization of Indonesia Autoimmune Campaign, Autoimmunepreneur Indonesia, and the releasing AiFit application (Marisza Cardoba Foundation, 2017)

Apart from being an appreciation, this activity was accompanied by the selection of inspirational figures that could represent the National Smile Indonesia Program. Yohana Yembise advised that the award recipients should work together to campaign or disseminate information about autoimmune in Indonesia. The award recipients were selected based on the *Key Performance Indicator* (KPI) and considered to have played an active role in the success of *Senyum Indonesiaku National Program* (Marisza Cardoba Foundation, 2017). One of the lupus foundations in Indonesia is Syamsi Dhuha Foundation that often carries out similar activities. The event was called the Care for Lupus SDF Awards.

Based on the explanation above, it can be formulated that there are problems to be studied. This study aims to identify and understand the implementation, the obstacles faced and the efforts made in implementing *Senyum Indonesiaku National Program* to support people awareness of autoimmune.

LITERATURE REVIEW

Communication

Humans are social creatures who live as individuals and interact with their social environment. Thus, communication cannot be separated from human life. The word communication or in English is known as the word communication comes from Latin, *communis* which means "same". The first term (*communis*) is the root of other Latin words which resemble others, *communico*, *communicatio*, or *communicare* which means "to make the similar". It means that there is a thought, meaning, and message that shared in similar portion (Mulyana, 2012, p. 46).

Laswell (Mulyana, 2012, p. 147) describes the three functions of communication, such as: Environmental monitoring which reminds community members of the dangers and opportunities in environment correlation on various segments of society that respond to the environment, the transmission of social inheritance from a generation to another.

Transmission of social inheritance from one generation to another. The quality of human life can be improved by include the role of science; especially determine the right communication strategy to disseminate the information of health. If the delivery of health information can be properly conveyed to the public, it will have an impact on each individual and community; they can make the right decisions to maintain their personal health. (Liliweri, 2007, p. 29). Health communication emphasizes a health concept that discusses health information or health promotion Liliweri (2013, p. 32).

Public Relations

A *public relations* is not only a profession in the field of communication, but also it is a science. Ardianto (2014, p. 1) writes that "public relations is a science within the social science

cluster and is part of the science of communication science”.

The work activities carried out by public relations are very fundamental because of the relationship to the good name and development of an organization (Gassing and Suryanto, 2016, p.105)

Every public relations activity in the form of events, campaigns, and programs requires a communication strategy combined with a public relations strategy (Ardianto, 2014).

Awareness Program

The word awareness defined as a state of understanding (Departemen Pendidikan Nasional, 2013, p. 1199). In this study, the word awareness means a state of understanding towards non-communicable disease of autoimmune. An objectives of the *Senyum Indonesiaku National Program* is to build public awareness about autoimmune.

Besides, the word program is closely related to the realm of public relations. A public relations person communicates a message to the intended public through various public relations activities (Ronald D. Smith (2013, p. 15). moreover, the program has a close relation to the realm of public relations.

Moreover, awareness program is the program that has purposes to build people awareness regarding significant issue. In this case the awareness related to autoimmune.

PAPER OBJECTIVE

This Research has several objectives such as:

1. To understand the implementation of Senyum Indonesiaku National Program in order to support the autoimmune awareness.
2. To understand the obstacles that faced in the implementation of Senyum Indonesiaku National Program
3. To understand the efforts made to overcome the obstacles faced from the implementation of Senyum Indonesiaku National Program in supporting autoimmune awareness.

METHODOLOGY

There are two research methods in public relations, one of which is qualitative (Daymon and Holloway, 2010) Daymon and Holloway inside their book stated that research question influences research methodology. This research use qualitative research methods were based on the findings.

Data or information in qualitative research can be obtained from research informants, Thus researchers need to understand how to determine and get the informants (Burhan, 2015) This research uses purposive procedure to determine and obtain informants. Burhan (2015) explained that purposive procedure is one of the most common strategies used in qualitative research to determine the informants. In this procedure, researcher determines the participant group as informants by adjusting the criteria that relevant to research problem.

The focus of this research is centered on one of communication strategies of *Senyum Indonesiaku National Program*, which called as *2017 Idolanesia Awards Indonesia* to support people awareness of autoimmune. The analysis will be carried out based on Harold Laswell's communication theory. Harold Laswell(inside Suryanto, 2015) provide a description of communication through verbal expressions “who says what in which channel to whom with what effect”. The researcher used nine stages of the public relations strategy that was coined by Ronald D. Smith as a reference for analyzing the communication strategy at the *2017 Idolanesia Awards Indonesia*. The data collection technique was done through interview and documentation.

There are various consideration expressed by several experts in determining data analysis

techniques when conducting qualitative research. The data analysis technique used in this study was based on the thoughts of Miles and Huberman (2014). Those two experts explain the steps of how to analyze data in qualitative research. The data analysis was carried out in cycles, starting from stage one to stage three, then returning to the first stage (Afrizal, 2017).

The validity test of the research obtained based on the data collection techniques. This research uses a triangulation technique that refers to Denzin as one way to test validity of research results. This research was conducted from September 2017 to the end of August 2018. The research time is calculated from the process of proposal making until submitting the soft cover of the thesis. This research was conducted at a social foundation of autoimmune groups in Indonesia, called the Marisza Cardoba Indonesia Foundation.

RESULT AND DISCUSSION

This study examines the communication process and the strategy of public relations conducted by Marisza Cardoba Indonesia Foundation and the Ministry of Women's Empowerment and Child Protection in Indonesia in supporting awareness of autoimmune patient to the public through organizing an event which is a part of the program strategy.

Implementation of *Program Nasional Senyum Indonesiaku* (National Smile Indonesia Program)

Marisza Cardoba Indonesia Foundation and the Ministry of Women Empowerment and Child Protection of the Republic of Indonesia. The two parties were originators of Indonesian Senyum Program and the organizer of 2017 Indonesian Idolanesia Awards. The two sources are non-governmental organizations engaged in health sector.

To strengthen the researcher's conclusions, the organizers of *2017 Idolanesia Awards Indonesia* issued a press release in which the key message was conveyed by Marisza Cardoba as the founder of Marisza Cardoba Indonesia Foundation. It was written that community needs to understand, recognize, be grateful and encourage autoimmune survivors to be actively creating an innovation even in their conditions and inspire other autoimmune survivors.

The *Senyum Indonesiaku National Program* is a program that used to convey messages to public. *Idolanesia Awards Indonesia* (IAI) is one part of the program, thus it can also be said that IAI is one of communication channel. *Idolanesia Awards Indonesia* is an inspirational awarding ceremony for survivors and observers of autoimmune and rare diseases.

Based on those statements above, researcher interpreted that Marisza Cardoba Indonesia Foundation and Ministry of Women's Empowerment and Child Protection of Republic of Indonesia made the *2017 Idolanesia Awards Indonesia* as one of the media to educate the public regarding autoimmune diseases, raise awareness, and appreciate the autoimmune survivors and observers. Besides, the event was able to attract the attention of wider society regarding the existence of autoimmune diseases, people with autoimmune and observers.

Analyzing the situation

The government provides opportunities for Marisza Cardoba Indonesia Foundation to work together in realizing a better quality of life for society. Thus, the involvement of government's role will greatly help Marisza Cardoba Indonesia Foundation to overcome public health problems, especially autoimmune diseases. These problems include the lack of information, the dissemination of misinformation and low understanding of medical experts about autoimmune diseases.

Smith (2013, p. 21-22) added that the situation faced by organization can be either positive or negative. This depends on the assessment of situation followed by potential impact of organization.

In other words, the organization could observe the situation as an opportunity or obstacle for organization. In this case, the situation faced by Marisza Cardoba Indonesia Foundation is more likely to be categorized as an opportunity. This statement supported by Smith (Smith, 2017) who stated that “*an opportunity offers a potential advantage to the organization or its publics*”

Analyzing the organization

Marisza Cardoba Indonesia Foundation has a vision and mission that describes the identity of organization. Related to the concept of public relations strategy by Ronald D. Smith's, the mission of Marisza Cardoba Indonesia Foundation describes the goals of organization, its publics and reflects the actions which need to be taken in the future. Besides, the alignment of statements from the informants shows a good understanding on the vision and mission of organization.

Internal environment, public perception, external environment

The internal environment of Marisza Cardoba Foundation can be seen from the aspect of performance, structure and internal impediments. According to the informants, Marisza Cardoba Indonesia Foundation consistently carries out various health communication activities in order to achieve the organizational goals. Most of the management of Marisza Cardoba Indonesia Foundation comes from health experts, survivors and autoimmune observers who voluntarily play an active role in educating the public by realizing various health communication activities. The internal obstacles faced are the limitations of volunteers and most of the parties involved in the management of Marisza Cardoba Indonesia are actively working outside the organization.

Furthermore, it can be seen from the aspect of public perception, Marisza Cardoba Indonesia Foundation was seen as the first health organization that protect the people of autoimmune survivor and other rare diseases to actively disseminate information about autoimmune through sharing communication channels. Various activities that have been carried out by the foundation are covered by various media, both offline and online. Thus, it is able to build public perception and good reputation of organization. Last, from the aspect of external environment, Marisza Cardoba Indonesia Foundation is supported by ministries and health experts who are familiar with autoimmune diseases. However, there were also some outsiders who were not related or contradicted the vision and mission of Marisza Cardoba Indonesia Foundation, which prevented the organization from achieving its goals.

Analyzing publics

The harmony of statements from informants emphasized that the public of Marisza Cardoba Indonesia Foundation are people with autoimmune, people with rare conditions and non-survivors in Indonesia. The researcher relate the statements of two informants with the concept of stages from the public relations strategy. Smith (Smith, 2017) underlined the importance of identifying various publics in organization by categorizing public relations with organization which is referred as “*linkage*”.

The public target of 2017 Idolanesia Awards Indonesia is included from the public target of Marisza Cardoba Indonesia Foundation in general. In general, public target of 2017 Idolanesia Awards Indonesia is autoimmune sufferers who focus on women (mothers and children), sufferers of other rare diseases and non-survivors. However, Smith (2013, p. 76-78) explains an identification based on five characteristics of the target public, such as public relations situation, organization, public's communication behavior, demographic and personality. In this case, the researcher sees that the determination of 2017 public target of *Idolanesia Awards* Indonesia has not fulfilled the elements of overall public analysis in the public relations planning strategies by Ronald D. Smith.

The organizers did not describe the categories and characteristics of 2017 Idolanesia Awards Indonesia public target more specifically, therefore it could not see the indicators of event success.

Strategy

The main goal of holding 2017 Idolanesia Awards Indonesia is to give appreciation to autoimmune survivors and observers as a form of support and concern, therefore it is expected that it will continue to inspire and socialize autoimmune to wider community. The informant's statements written that the event was held as a form of concrete action and a gratitude for autoimmune survivors. The organizers hope that people with autoimmune and people with rare conditions can be recognized through their works and inspire the other.

Formulating action and response

This step of the planning will focus on your decisions about action strategies as you prepare to achieve the objectives. Strategic communication planners have many options for what their organization can do on any particular issue. This action can be either proactive or reactive.

In this case, Marisza Cardoba Indonesia Foundation and the Ministry of Women Empowerment and Child Protection of the Republic of Indonesia inaugurated a national health program called *Senyum Indonesiaku National Program*. There are several health communication activities to achieve the objectives of program, one of program by *2017 Idolanesia Awards Indonesia*. The event was used as one of the actions of health communication as an effort to introduce diseases and autoimmune survivor of wide audience.

Related to the concept of the stages of public relations strategy, 2017 Idolanesia Awards Indonesia award ceremony is part of proactive strategy, where one of communication program variants of proactive strategy could be under special event (Smith, 2013, p. 117).

Idolanesia Awards Indonesia 2017 is a formulation of action or communication program actions realized by the organizers in order to achieve goals, which supporting public awareness of autoimmune, encouraging the adoption of healthy lifestyle in order to achieve a better quality of life and providing moral support for every person and autoimmune observer. The action of communication program is categorized as special event to build public attention to autoimmune disease, establish interactions with public and attract media attention to be published for large audience.

Developing the message

As the one who convey the message, spokesperson must fulfill several important elements when communicating a message to an audience. Smith (2013, p. 183). In this case the chosen spokesperson is a representative of the organizers, such as internal Marisza Cardoba Indonesia Foundation and the Ministry of Women Empowerment and Child Protection of Indonesia. Besides, the Ministry of Health also took part as the spokesperson of event.

The chosen *spokes person* as the message conveyer in organizing 2017 Idolanesia Awards Indonesia in terms of credibility and expertise owned by the internal of Marisza Cardoba Indonesia Foundation and Ministry. Expertise is one of credibility aspect that has an important role of persuasion (Smith, 2013, p. 178-179).

Another important point is key message, which was conveyed by organizers through the 2017 Idolanesia Awards Indonesia. In this case, the key message of *Idolanesia Awards Indonesia 2017* aimed to the positive emotional side which is called as *positive emotional appeals*. In this case, the conveyed message is expected to be able to build people emotional in terms of moral support, social acceptance of people with autoimmune and other rare diseases.

Tactic

In this case, the organizers of 2017 Idolanesia Awards Indonesia used several choices of communication media categories in promoting the event. The communication media used is from social media, digital media, e-mail and mass media. Thus, related to the concept of stages from public relations strategy, there are two categories of communication media applied by the organizers, such as organizational media and news media. In organizational media section, the organizers use organizational communication media of e-mail to notify 2017 Idolanesia Awards Indonesia event, both to invited guests and media. Furthermore, is the official website of Marisza Cardoba Indonesia Foundation. The use of social media and social networking is an option for Marisza Cardoba Indonesia Foundation to promote the event, including Instagram, Facebook and YouTube.

In the news media section, the organizers use news releases in order to get news publications or media coverage related to support the *2017 Idolanesia Awards Indonesia*. News conference sessions as an attempt by the organizers to provide important statements related to *2017 Idolanesia Awards Indonesia* which the wider public needs to know through the role of spokesperson as the message conveyer.

Discussion of Research Finding

Based on the results of research analysis, there are several findings in this study that can be concluded as written below:

1. The involvement of Ministry of Women's Empowerment and Child Protection Indonesia as communicator of 2017 Idolanesia Awards Indonesia event only limited to provide a support at the event concept planning stage, however it was not directly involved in coordinating 2017 Idolanesia Awards Indonesia event. The event was fully coordinated by Marisza Cardoba Indonesia Foundation.
2. The organizer did not analyze the target public for 2017 Idolanesia Awards Indonesia. Therefore, there is no public categorization, either internal or external, followed by specific characteristics. Therefore, the indicators of success in delivering messages is not visible.
3. The organizers do not have specific and measurable targets to be achieved. In other words, there is no detailed objective of 2017 Idolanesia Awards Indonesia.
4. There are positive emotional appeal that built by delivering messages to target public. Positive emotional appeal is more directed towards virtue appeal which is expected to be able to build the emotional side of society in providing moral support and social acceptance for survivors and caregivers.
5. The organizers did not make a post-event report for 2017 Idolanesia Awards Indonesia, therefore they could not see the success of the event.

CONCLUSION

After carrying out the results of discussion and analysis regarding the Strategy Analysis of *Senyum Indonesiaku National Program* in Supporting the Autoimmune awareness, the conclusion of this research is that the occurrence of communication process is related to the elements of Harold Laswell's communication theory.

Marisza Cardoba Indonesia Foundation and Ministry of Women Empowerment and Child Protection have a role as communicators or sources. The key messages delivered by organizers is the socialization of importance on introducing the insights of autoimmune, building awareness of people with autoimmune and people with rare conditions through providing moral support and maintaining personal health. *2017 Idolanesia Awards Indonesiaku* is a media to convey messages to

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the intended audience and support public awareness of autoimmune.

2017 Idolanesia Awards Indonesia as a media used by communicator based on the stages of public relations strategy by Ronald D. Smith. There are several shortcomings, especially in research, strategies and tactics which are not fully implemented. This program is not well planned yet. 2017 Idolanesia Awards Indonesia event is a good effort to support public awareness of autoimmune, even though there is several numbers of weaknesses in planning strategy for the activity.

Moreover, to manage this public relation even, it need a good management on planning, and prevents the failure of communication activity. Every communication strategies and tactics need to be fully implemented.

SUGGESTION

Based on the results of research and discussion, researchers provide academic and practical suggestions, as explained below:

This research can be used as a reference for non-thesis research to find out indications of failure in a communication activity. The stages of public relations strategy can be used as reference in analyzing the strategy for implementing health communication activities.

It is better if the organizers analyze the public first through categorizing and identifying the characteristics of target public therefore the messages conveyed can be accepted by the intended public and know the target public.

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ВПРОВАДЖЕННЯ ПРОГРАМИ ЗВ'ЯЗКУ З ГРОМАДСЬКІСТЮ NASIONAL SENYUM INDONESIA ЯК СТРАТЕГІЯ УПРАВЛІННЯ У ЗАБЕЗПЕЧЕННІ ІНФОРМАЦІЇ ПРО АВТОІМУННІ ЗАХВОРЮВАННЯ

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Автоімунна хвороба класифікується як небезпечне незаразне захворювання, яке, як правило, має великий ризик для жінок та дітей. Відсутність взаєморозуміння серед широкої громадськості та медичних експертів впливає на високий рівень смертності від автоімунних захворювань. Визнаючи цей факт, Фонд Маріші Кардобі як неурядова організація, яка займається питаннями охорони здоров'я, відкрив Національну програму Nasional Senyum Indonesia разом із Міністерством прав жінок та захисту дітей для підтримки обізнаності громадськості про автоімунні захворювання. Мета цього дослідження – зрозуміти та проаналізувати реалізацію однієї із програмних стратегій. Це дослідження використовує теорію комунікації Гарольда Ласвелла та кампанію зі зв'язків з громадськістю Рональда Д. Сміта. Використаний метод дослідження є описово-якісним підходом. Результати дослідження виявили, що Idolanesia Awards Indonesia 2017 як одна із стратегій Національної програми Senyum Indonesiaku включає намагання підтримати обізнаність громадськості щодо автоімунних захворювань. Однак, в ході дослідження були виявлені також слабкі місця в стратегії планування програми.

Ключові слова: програма, автоімунна соціалізація, сприйняття, автоімунна обізнаність, кампанія зв'язків з громадськістю.

ВНЕДРЕНИЕ ПРОГРАММЫ СВЯЗИ С ОБЩЕСТВЕННОСТЬЮ NASIONAL SENYUM INDONESIA КАК СТРАТЕГИЯ УПРАВЛЕНИЯ В ОБЕСПЕЧЕНИИ ИНФОРМАЦИИ ОБ АУТОИММУННЫХ ЗАБОЛЕВАНИЯХ

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Аутоиммунная болезнь классифицируется как опасное незаразное заболевание, которое, как правило, имеет большой риск для женщин и детей. Отсутствие взаимопонимания среди широкой общественности и медицинских экспертов влияет на высокий уровень смертности от аутоиммунных заболеваний. Признавая этот факт, Фонд Мариши Кардобы как неправительственная организация, которая занимается вопросами здравоохранения, открыл Национальную программу Nasional Senyum Indonesia совместно с Министерством прав женщин и защиты детей для поддержки осведомленности общественности о аутоиммунных заболеваниях. Цель этого исследования – понять и проанализировать реализацию одной из программных стратегий. Данное исследование использует теорию коммуникации Гарольда Ласвелла и кампанию по связям с общественностью Рональда Д. Сміта. Исползованный метод исследования является

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описательно-качественным подходом. Результаты исследования показали, что Idolanesia Awards Indonesia 2017 как одна из стратегий Национальной программы Senyum Indonesiaku включает попытки поддержать осведомленность общественности о аутоиммунных заболеваниях. Однако, в ходе исследования были обнаружены также слабые места в стратегии планирования программы.

Ключевые слова: программа, аутоиммунная социализация, восприятие, аутоиммунная осведомленность, кампания по связям с общественностью.

MARKETING

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STRATEGIC POLICIES AND BUSINESS MODELS FOR ARTIFICIAL INTELLIGENCE-BASED DIGITAL PRINTING STARTUP IN INDONESIA

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Abstract. This study is aimed to examine based on industrial competition analysis, functional business analysis, Lean Canvas Model and Blue Ocean Strategy and the feasibility of investing in the formation of digital-based reality Start-upper printing at AIGOO.ID. The method used is descriptive qualitative and explanatory methods, namely the Mix method which is the observation and interviewing, coding, and triangulation. The results of STP's research that lead to positive and sustainable market trends can be seen from the Augmented Reality-based digital printing business plan has a good opportunity. It is derived from sharing with competitors who are already successful like their predecessors and so are the results of the marketing mix design made with reference to the 7P + 1 marketing mix. The basis for achieving consistency in public services is an effort to maximize the application of standard operating procedures in every aspect of the production process. In the financial sector, companies prepare financial technology software in the future and try to solve human errors.

Keywords: start-up companies, augmented reality, business, strategy, digital printing.

JEL Classification: M21, L84.

INTRODUCTION

In the current industrial era 4.0, it is hard to find the replacement on the role of printing industry with primary media format. The printing industry has been considered as one of the primary needs of every human being. Along with the times, printing has become one of the industries that have an increasing global demand trend. Year by year, more commercial printing business units are found in various parts of the world including Indonesia. Three categories of the printing industry itself can be distinguished, namely commercial printing, labeling and others. General commercial, Rapid Printing, Newspaper Printing, Book Printing, Finance, Legal Printing, Screen Printing, and Digital Printing, including commercial printing categories which are further divided into several sub-categories (Yuyun, 2014).

In this study, the authors raised the category of Digital printing because this sub-category has a type of commercial printing machine that has advantage on printing speed sheets of documents directly through a computerized system without the help of intermediaries such as film, or plate printing as in conventional offset printing. Several groups can be distinguished from POD (Print on

Demand), large format printers/wide format printers, DCP (Digital Color Proofing), and Digital Photography which is digital printing needs. Digital printing can be grouped again in product service groups which include, Digital printing of paper, fabric, PVC. The products that can be done through the media of Digital Printing Machine are types of screen printing (screen printing) which its media is very diverse, such as t-shirts, mugs, and ID cards, etc. In the process of making this type of digital printing product, customers can determine their own designs according to their needs and desires with a digital file format. For the price it can be cheaper because the consumer can order the product with the amount according to their needs so that it does not require much material to implemented (Porter and Leo, 1982).

Digital printing (Digital Press) of this type uses paper or sticker media that function as pamphlets, brochures, or catalogs and consists of various sizes such as A5, A4, or A3. In order for the pamphlet to look attractive, it must be designed in such a way as include font selection, image composition, tables and basic colors of the pamphlet. This makes pamphlets as one of the main products of the digital printing business. The brochures and catalogs are also products of sophisticated digital printing technology. The world of information technology has developed a technology called Augmented Reality. The Augmented Reality (AR) or extended augmented reality applications can make users see the objects in three dimensions (3D) and even interact with objects (Megginson, Byrd and Megginson, 2003).

Thus, using a mobile phone that has downloaded the Augmented Reality application in a short time prospective customer can interact with the 3D home model through the internet connection on their computers and mobile phones. Prospective buyers can see the appearance in the house in detail, and equipped with a view of the environment around the house that will also feel more alive by supporting animations such as passing cars, flying birds, and so on. Therefore this Augmented Reality technology will be an attraction for prospective buyers by viewing 3D views (Porter, 1990).

By using the Augmented Reality (AR) technology on Smartphone, consumers are expected to know the product in more detail. There have been many developments of Augmented Reality (AR) technology in various fields, one of which was developed to be used to promote products to make them look real. The merging of real and virtual objects in a real environment interacts interactively in real time and there is integration between objects in three dimensions (3D) as use of Augmented Reality (AR) technology. Suitable display technology it is possible to combine real and virtual objects. Application development uses AR Sound software while most designers use 3DSMax software for making 3D objects. Stages of the process of making 3D objects through Solar System Science book learning application carried out then designing the application, and designing markers. There is also the application of Augmented Reality technology. The application of Digital Marketing using AR on a mobile-based system will certainly be a very good product marketing media. Especially considering that the packaging of a product is generally mass-printed with the same design, so that the manufacturer can apply marker technology to the product design, the Augmented Reality technology will instantly be able to reach consumers with a very modern packaging (Pratomo, 2010).

Augmented Reality application was developed based on the Linear Sequential method and Unified Modeling Language (UML) object-oriented analysis. Augmented Reality technology means to deliver more specific and interactive information. Combining Augmented Reality technology with the marker code on mobile technology has its own benefits for consumers to check the price of the product or how to use the product. This technology will greatly assist consumers in getting information faster and easier by simply pointing the Smartphone to the logo or image that has been implanted with the marker code of the item, the detailed information of the item will instantly appear automatically. Prospective customers is no longer need to search for information by opening a browser first because it will take a little longer and sometimes the information is not necessarily appropriate and complete (Young, 2015).

Learning in the field of education has been good so far to help improve the application of Augmented Reality (AR) technology. The promotion of inclusive learning using AR is also growing rapidly. The main findings of this research on education provide the latest state of AR research. Innovations in Augmented Reality are still limited and need to be further developed, especially in the things above. The number of Internet users in Indonesia continues to increase quite rapidly each year, the Indonesian Internet Service Providers Association based on data from (Asosiasi Penyelenggara Jasa Internet Indonesia, 2017a). Especially the services that are accessed, such as; banking 7,39%, selling goods 8,12%, registration 16,97%, buying goods 32,19%, email 33,58%, uploading files 35,99%, articles 55,30%, downloading pictures 56,77%, video downloads 70,23%, see videos 69,64%, see pictures/photos 72,79%, search engines 74,84%, social media 87,13%, chat 89,35%. From this trend, it is very apparent that people's lifestyles in Indonesia, particularly in big cities have an attachment to the internet media, especially for the need to socialize among them.

By using the internet marketing costs, it is become more efficient by utilizing social media which is accessed easily and free. The internet world is also strengthened by the results of a survey by the Indonesian Internet Service Providers Association regarding the business market potential which shows that the number of internet users in the economic sector is very significant, which shows in (Asosiasi Penyelenggara Jasa Internet Indonesia, 2017b).

This study aimed to examine based on industrial competition analysis, functional business analysis, Lean Canvas Model and Blue Ocean Strategy and the feasibility of investing in the formation of digital-based reality Start-upper printing at AIGOO.ID. Electronic commerce or so-called e-commerce is a business using the ordinary internet. All forms of trade transactions or trade in goods and services using electronic media can be interpreted generally as e-commerce. It is clear that apart from those mentioned above, these commercial activities are part of business activities. Based on existing data and business opportunities that are wide open to be developed, the authors are interested to explain a digital printing business based on Augmented Reality technology with an electronic advertising marketing strategy.

METHODOLOGY

This study uses mix methodology using qualitative research with exploratory methods, and quantitative research in its financial projections. The sampling of data sources is done in a qualitative interactive manner with combined data collection techniques and the results are more emphasized on a meaning rather than generalization. The main purpose of exploratory research is the process of identifying the boundaries of an environmental phenomenon, the opportunity, or place of a situation and also to identify important factors that exist in the environment or important factors associated with a research. The object of this research is a business feasibility test based on analysis of industry competition and functional business planning and innovation planning.

Information collection techniques used by the author in this study are: 1. Observation, 2. Interview, and 3. Documents. According to (Sugiyono, 2014) Records of events that have passed or about future forecasts can be said with document information. A person's writing, drawing or monumental work forms within the document Information.Document study is a complement and a synchronization tool so that it becomes an objective work in this qualitative research.

Qualitative data analysis is implemented by coding. Can be measured or understood the qualitative data grouping process so that it is easily a coding. In qualitative research that has the characteristics of post positivism where the principle is that truth is not absolute (Bachri, 2010).

The degree of trust (credibility), transferability, dependability, and confirmability is the implementation of data checking techniques based on a number of certain criteria. The trustworthiness test is using the data validity test in the qualitative research of Lincoln and Guba, 1985 in (Indrawan and Yaniawati, 2014) which consists of several steps such as credibility (internal

validity), transferability (external validity), and dependability (reliability), confirmability (objectivity).

Triangulations are the data analysis approach synthesizes data from various sources. Triangulation according to Susan Stainbank in (Sugiyono, 2007) stated that "The same social phenomenon aims not to determine the truth, rather than increasing one's understanding of whatever is being investigated is a triangulation goal". While, according to William Wiersma in Sugiono, "Qualitative cross validation is triangulation, convergence of multiple data sources or multiple data collection procedures according to assessing the adequacy of the data". Source triangulation is the method of getting the data from different sources with the same technique (Sugiyono, 2007). In this research, triangulation of sources was carried out, where data were obtained from four expert informants who had different backgrounds, namely expert informants with a background in design thinking, rapid prototyping, digital printing, Augmented Reality, and Virtual Reality. The selection of informants aims to increase the understanding of the concept of AIGOO.ID business planning.

Data analysis was performed using the version of Miles and Huberman, in (Sugiyono, 2007) that the activities in the qualitative analysis were carried out interactively and took place continuously until they were finished so that the data was saturated (showing the same pattern). Activities include data reduction, data display, and verification.

RESULT AND DISCUSSION

1. Profile of Company

AIGOO.ID is a start-up provider of goods and services in the digital printing industry based on Augmented Reality application technology (Adhari, 2018).

Here are some categories of product fields provided:

a. Hardware: Billboard billboards (size 5x10 meter - 4x6 meters), Neon Box, Stickers, exhibition stands, embossed letters, banners, brochures, invitations, business cards, ID-cards, books, agendas, calendar, and etc.

b. Software: Website development and development, mobile applications, fintech applications, Augmented Reality applications and virtual reality, SEO services.

While, the company identification is as follows (Adhari, 2018):

Brand Name	: AIGOO
Line of Business	: Provider of printing-based printing goods and services.
Business Location	: Indonesia (Bandung City)
Capital Structure	: 100% Own Capital (Adhari, 2018).

2. Formulation of Strategy

The formulation of the AIGOO.ID strategy starts after formulating the context of the company's vision, mission, values, brand, catchword (slogan) and location concept. Then proceed with the SWOT analysis, external analysis (PESTEL Analysis) and analysis of Porter's five forces industry competition.

2.1 Analysis of External (PESTEL Analysis)

Analysis of PESTEL is very important for companies to determine the condition of a country's macro environment where a business place will be established. Many factors in the macro environment will influence the management decisions.

a. Conditions of Political

At present the conditions of political in Indonesia can be said to be quite stable with so many inflows of funds coming in from outside to be invested in Indonesia. Indirectly this condition will benefit AIGOO.ID because of the good political stability and of course this condition will have an impact on the growth of the business being run.

b. Conditions of Economic

The economy of Indonesian has shown quite positive developments marked by macroeconomic conditions and stable macroeconomic indicators. Based on data from Bank Indonesia and BPS:

- The economic growth in the first quarter of 2017 (year on year) of 5.01%. Economic growth in the first quarter of 2018 was 5.06%. (Source: bps-ri 2018).

- The exchange rate of the rupiah on May 8, 2018 per 1 USD was 14,150 from the previous exchange rate on May 2, it still touched 13,950 per USD.

This level is far above the assumption on 2018 state income and expenditure budget of 13,400 per US dollar. However, according to the fiscal policy body (BKF) Ministry of Finance of the Republic of Indonesia, explaining the weakening of the rupiah exchange rate increases state revenues and expenditures. From the results of the BKF calculation they get the result that revenues in the state budget are higher than the expenditure due to the exchange rate.

c. The Conditions of Social

Changes in Social trends in society will have an impact on the demand for products or services offered by the company. The social conditions that must be considered are as follows:

- The Changes of Lifestyle

Changes of Lifestyle that occur in big cities, such as Jakarta and Bandung, with routines especially workers need a speed and ease in every communication interaction in the delivery of advertisements or public notice.

- Cultural of Ethnic and Factors of Religious

The Republic of Indonesia is the only country in the world that has the most ethnic cultures with a total of 1,340 ethnicities. There are 6 different religions in Indonesia which are legalized and protected by law in Indonesia, namely Islam, Catholic Christianity, Protestant Christianity, Hinduism, Buddhism, Confucianism. If related, this news is an opportunity.

- Education and Demographics (Age, Sex)

Demographic growth is one of the determining factors for increasing the intended market share. AIGOO.ID itself focuses on urbanites with middle to upper strata aged 17 to 55 years who have a high enough education and understands the importance of visual interaction from conventional advertisements or notifications.

- Jobless

With the digital printing business plan based on Augmented Reality application technology in AIGOO.ID will create new jobs so that it will reduce jobless rates especially in Bandung and East Borneo Indonesia.

d. The Conditions of Technology

The impact is quite strong to the development of business activities, namely technology has, especially in printing services and mobile applications. Due to the rapid condition of technological development, AIGOO.ID must anticipate quickly by:

- Using the latest technology for equipment and printing equipment and computerized systems based on technology that is environmentally friendly and energy efficient, but still promotes quality and time efficiency. To conducts research using latest technology in the dissemination of information and as well as the use of communication facilities to its customers.

e. Conditions of Legal

- In carrying out its business, AIGOO.ID must comply with regulations or laws in force in Indonesia, such as trade regulations, taxes and labor laws.

- Protection of Consumer

The rights of consumer must always be considered by providing the best service because consumers are a source of income for the company or in other terms the consumer is king. Indeed, the company has provided full service damage guarantee, with applicable terms and conditions.

f. Conditions of Environmental

- Weather and Climate

The products and materials used will be adapted to weather and climate in Indonesia with a tropical climate so that the products produced will be more durable.

- Ecology

AIGOO.ID will use products and materials that are environmentally friendly so as not to damage the environment and dispose of waste separately in the form of liquids, paper or recyclable goods, and wet materials (green environment).

The following below will be visualized into the results table of the Pastel analysis business plan which is synthesized from the information of the informants and supporting data both verbal and non verbal. As it explained in the table 1 below:

Table 1

Analysis of PASTEL

P	E	S	T	E	L
<ul style="list-style-type: none"> • Indonesia's stable political conditions. • Government support for entrepreneurial nurseries. • Obstructing licensing bureaucracy 	<ul style="list-style-type: none"> • Positive economic growth • The rate of inflation is stable • The exchange rate of the rupiah continues to weaken 	<ul style="list-style-type: none"> • The number of internet and smartphone users in Indonesia continues to experience positive growth 	<ul style="list-style-type: none"> • There is a reality hologram technology that is a competitor to VR technology • Conventional printing technology cannot be abandoned 	<ul style="list-style-type: none"> • Indonesia only has 2 seasons that facilitate the process of channeling products from suppliers, as well as to consumers 	<ul style="list-style-type: none"> • The AR and VR industries have not been clearly protected through the ITE Law • Although the bureaucratic mechanism is complicated, it does not require difficult matters in licensing

Source: Own Data

3. Analysis of SWOT

Analysis of SWOT is very necessary when making a new business that is useful to find out the strengths and weaknesses of the business, so the company will be able to make the most appropriate strategy to seize all opportunities and eliminate existing weaknesses.

Based on the results of interviews, observations, and documentation studies conducted by researchers, several strengths were recorded in realizing the business design of the AIGOO.ID. According to Seterhen and Melvin, who are practitioners in the field of digital printing and manufacturing design thinking the application of AR and VR technology can increase value in the conventional printing industry. Meanwhile, Alvian who is a practitioner in the field of AR and VR stated that technology can provide solutions for more dynamic visual interactions. Based on the results of observations and literature studies it is noted that until now there has been no business sector that integrates business in one place of business engaged in digital printing with AR and VR technology. So that it can be understood that the strength of the business design of AIGOO.ID is the first printing and manufacturing application in one place (one stop printing application center) in Indonesia.

In terms of services provided, Seterhen and Melvin explained that it takes between 1-4 working days for digital printing service. With the integration of conventional printing business and AR and VR technology in one place, the speed of production operations can be cut, so that the strength in planning the AIGOO.ID is about the speed of production. Besides, one place production may cut the production charge which implies on price, thus the advantage of this business design is

the products offered will have lower prices than competitors on the market. In addition, based on the interviews results the practitioners from the field of digital printing and IT in terms of AR and VR focus on consumer comfort. Therefore, it can be concluded that in order to further improve service quality, the strength in the business of AIGOO.ID can be added regarding on the attention to consumers such as the welcome drink. Also customers can do communication outside operating hours, by making an appointment in advance. Based on the analysis of the results of interviews, observations, and literature studies that have been conducted, the strengths of the AIGOO.ID business plan are as explained in the table 2 below:

Table 2

Analysis of Strength

<i>Strength</i>	
1	The first printing and manufacturing application in one place (one stop printing applicationscentre) in Indonesia
2	AIGOO.ID provides Home and Office Services services in the consultation and design process
3	AIGOO.ID opening hours start at 07.30 - 20.00 WIB and can meet below 7am or below 8pm, but customers must make a prior agreement (H-2).
4	Easily accessible, and convenient location
5	There is free wifi and welcome drink
6	The selling price of the product is cheaper than competitors
7	The turnaround time is very fast and there are certain products that can be awaited for completion

Source: Own Data

In understanding the weaknesses of the AIGOO.ID business design, researchers compiled the results of interviews with several informants who are practitioners in similar business fields, and it found that the weaknesses of the AIGOO.ID business design are new players in the printing industry as well as the technology industry AR and VR. It is realized by researchers that AIGOO.ID certainly does not have bargaining power to consumers, and requires more efforts to introduce and promote company products to consumers. However, based on the results of interviews with practitioners in IT field for AR and VR, of course every company faces the same disadvantage that is the initial process requires high initial costs for making servers in the development of the coding marker process.

In understanding the opportunities of the AIGOO.ID business design, researchers understand that the Indonesian people are people with internet usage that experience positive growth every year.

This was also revealed by business practitioners IT midwives, Pram and Alvian in an interview that stated that currently the trend on AR and VR technology has 6-10 years prospect. In addition, the existence of MSME associations or associations such as KADIN, HIPMI, MarketInd, The Local Enabler, and TDA will make it easier for AIGOO.ID to determine the target market, so that the association can be understood as a niche market. AIGOO.ID owners also have a network of

relations with political party politicians, so that this group can also become a separate target market. Furthermore, the concept of AIGOO.ID can be used as a gathering place for start-up units to share knowledge, digital business consulting, promotion consulting, and places to learn entrepreneurship, as well as cooperation opportunities for conventional printing entrepreneurs. Based on the analysis of the results of interviews, observations, and literature studies that have been conducted, it can be concluded that the opportunities of the AIGOO.ID business plan are as it explained in the table 3 below:

Table 3

Analysis of Opportunity

<i>Opportunity</i>	
1	The number of internet users through smartphones is experiencing positive growth every year
2	There are SME communities/associations that can be used as a target market (KADIN, HIPMI, Marketind, The local enabler, TDA, etc.) and a network of politicians from political parties
3	AIGOO.ID can be used as a place to share knowledge, digital business consulting, promotion consulting, and entrepreneurship learning places for start-up units
4	Open opportunities for cooperation with conventional offset printing entrepreneurs

Source: Own Data

In industries that depend on the latest technology, researchers understand that technology that is currently trending nowadays will be replaced by newer technology. In the results of interviews conducted with business practitioners’ new technologies, called Hologram Reality technology emerge that can replace or have the advantage of previous technologies, which causes AR and VR technology to look no longer modern. Changing consumer tastes are also a threat in this business, where communication media through digital printing still has its own value for the community. The shift in consumer tastes thinks the physical communication media is still better than digital media. From the analysis above the results of interviews, observations, and literature studies that have been conducted, it can be concluded that the threats from the AIGOO.ID business plan are as it explained in the table 4 below:

Table 4

SWOT of Matrix

<p>IFAS</p> <p>EFAS</p>	<p>Strength</p> <ol style="list-style-type: none"> 1. Printing and manufacturing applications in one place (one stop printing applicationscentre) First in Indonesia. 2. providing Home and Office services in the consultation and design process. 3. Can serve outside of operating hours. 4. Easily accessible and convenient location. 5. Free wifi and welcome drink. 6. Cheaper price. 7. Faster completion time. 	<p>Weakness</p> <ol style="list-style-type: none"> 1. New players and have no bargaining power to consumers. 2. New players thus need high costs for promotion. 3. New players and high initial costs for server procurement and coding marker development. 4. HR is weak in understanding the vision, mission and culture of the organization.
<p>Opportunities</p> <ol style="list-style-type: none"> 1. Indonesian internet users experiencing positive growth. 2. The existence of the SME Association. 3. Political party networks for business development. 4. Cooperation opportunities with conventional offset printing. 	<p>SO Strategy</p> <p>The services offered by AIGOO.ID as the first integrated business in Indonesia can capture Indonesia's market opportunities with high internet users in Indonesia experiencing positive growth, and the presence of MSME associations and networks on political parties, with the support of strategic business locations and offering maximum services (outside operating hours) at a cheaper price.</p>	<p>WO Strategy</p> <p>To capture the opportunities available, AIGOO.ID must prepare resources to immediately make an introduction to consumers, prepare servers and coding markers, increase HR capacity, and evaluate the location of offices on the 5th floor.</p>
<p>Threats</p> <ol style="list-style-type: none"> 1. The emergence of more modern technology. 2. The emergence of new competitors with almost the same concept. 3. Community taste. 	<p>ST Strategy</p> <p>To overcome this threat, as the first integrated business in Indonesia, it must improve services such as home and office services, be able to serve outside of operating hours, at a lower price and faster time.</p>	<p>WT Strategy</p> <p>To avoid existing threats, AIGOO.ID needs to minimize the quality of existing human resources, so that when new competitors emerge to provide better services, and with the emergence of newer technology, HR can immediately make adjustments.</p>

Source: Own Data

Based on the explanation in the strengths, weaknesses, opportunities, and threats of the AIGOO.ID business design, there are four possible sets of alternative strategies that AIGOO.ID can implement based on the framework presented, it can be seen that (Rangkuti, 2016) below:

a. (SO Strategic) is the company's internal strength to take advantage of external opportunities from SO Strategies. All managers take advantage of external trends and events and want their organization to be in a position where internal strength can be used.

b. Great opportunities sometimes arise, but the company has internal weaknesses that prevent it from taking advantage of these opportunities. Taking advantage of external opportunities to correct internal weaknesses is the goal of the WO Strategy.

c. ST Strategy (ST strategic) to avoid or reduce the impact of external threats using company power.

d. WT Strategies (WT Strategies) to reduce internal weakness and avoid external threats is the aim of defensive tactics.

4. The Analysis of the Industry Model from Porter's Five Forces

The Analysis of Porters Five Forces is used to analyze industries and develop business strategies as a framework. This analysis was developed by Porter because Porter believes that the analysis of SWOT is an ad hoc and unrigorous analysis. Moreover, the detailed data on the download number of the Augmented Reality application is active and passive. However, AIGOO.ID will not make it as a threat, and will continue to compete with its uniqueness and carry out appropriate strategies such as:

- Promotion is done by word of mouth and viral marketing.
- Provide special services and discounts for membership
- Offering new products that are more innovative.

4.1 The Forecasting of Strategy Formulation Results

From the explanation above, the SWOT analysis and Porter's Five Forces Model can be taken an outline and explained in the table 5 below:

Table 5

The Forecasting of Strategy Formulation Result

No	Variabel	Hasil
1	Environment Analysis	WORTH business is run
2	SWOT Analysis	WORTH business is run
3	Analysis Of Industry Competition (<i>Porter's Five Forces Model</i>)	WORTH business is run

Source: Own Data

4.2 Business Planning of Functional

In formulating the focus targets, the author first identifies the four aspects of functional business together with the percentage of investment feasibility assessment focus from the discussion of the performance series that will be set out below:

4.3 Plan of Marketing

The company uses a lifestyle approach in identifying the values of similarity as segmentation and then combining with individuals, organizations and other activities that are considered to be able to realize these values of similarity. The company's decision to merge the company can gain the trust of consumers and can be seen that the company is doing differentiation on the selection of

segmentation, targets and positions. In determining the marketing mix the company optimizes the marketing mix in performing its performance processes.

4.4 Targeting, Segmentation, Positioning

Based on interviews with informants and from APJII secondary data, the determination of aspects of market segmentation is based on the user's age, which in this case can refer to the age of Smartphone and internet active users in Indonesia who have a high association with information technology, then the level of economic capability, psychological, and intellectual intelligence. It can be explained as below:

- Targeting

In accordance with the predetermined segmentation of the company and the tendency to increase the number of individual urbanites and on the basis of public awareness of the receipt of complete and accurate information, the company determined to use Market Specialization as the company's target strategy. The choice of this strategy is because the company sees and believes it can facilitate marketing sell the product to consumers who are interested in Augmented Reality application-based digital printing. With the existence of Augmented Reality technology, it can provide a new trend towards the mindset of people who are already modern in Indonesia.

- Segmenting

The segments that correspond to the digital printing business plan based on the Augmented Reality application on AIGOO.ID are as follows:

- a) Demographics

If we look at the composition of internet users by age, it would be very significant to see internet use at the age of 19 - 34 years for 49.52% this might be due to the demands of interaction in their work or education. The growth of Smartphone usage in Indonesia is based on a survey of Indonesian internet service provider associations (APJII) in 2017, the composition of the growth of internet users based on age which in line with the target users and connoisseurs of molds based on Augmented Reality between 13 - 54 years with a total coverage of 95.76%.

- Positioning

AIGOO.ID is a new player in the digital printing industry and mobile applications. Which decided to choose using abstraction - base positioning. The company hopes to build brand relations without comparing with market leaders in the market. Therefore, the positioning of the AIGOO.ID lies in the product differentiation and theme concepts offered, which are integrated. In the abstract, AIGOO.ID places itself as a product that supports the lifestyle of urbanites in all corners of Indonesia who cannot be separated from Smartphone and thirst for premium things. This matter is very good for the development of the digital printing business based on Augmented Reality, because the audience can be very evenly distributed throughout the entire region of Indonesia with 3G or 4G network signals. Internet service users in Indonesia use an internet network and roam in cyberspace on average by 65.98% in the period of activity on a daily basis, and have a roaming time of 26.48% of active users who are more than 7 (seven) hours per day.

5. MixMarketing

In producing a well marketing system, the company has formulated a mix marketing to become a milestone of this business marketing plan by using 7P mixmarketing, including products and prices, places, promotions, process, peoples, physical evidence, productivity and quality. As it explained below:

- 1) Price and Product

The price is not only a component for the company to return its capital, but also to get profits and become a benchmark for the sustainability of the company. By analyzing the cost of the product to the consumer's purchasing power and comparing with the level of customer satisfaction and the selling price of other competitors, a price deal can be obtained from the product offered. The

company makes a policy of giving 2 (two) different prices between business partners and ordinary consumers. The requirements to become a business partner include, among others, having a conventional printing business.

2) Places

There are several reasons for AIGOO.ID to choose to be located in that area, a) it is close to the center of government, b) it is close to educational access, and c) it is very close to several other large scale offices. In addition, it is very suitable for middle and upper market segmentation.

3) Promotions

To communicate the products offered by AIGOO.ID, promotion is needed, among others:

- The Grand Opening will be held at the AIGOO.ID office.
- Has an ambassador brand from celebrities who will become a reference for consumers to be able to invite the wider community to buy printing products.
- Endorsing celebrities and YouTubers.
- Join the Indonesian business community.
- Join the community of printing entrepreneurs and digital printing entrepreneurs.
- Create a member program for consumers and provide special price discounts for members who post photos with products and locations of AIGOO.ID on consumer's personal social media.
- Distribute brochures and bidding proposals to potential customers.
- Advertise on local print media and social media.

4) People

Human resources are part of the company assets that cannot be separated. For this people position in AIGOO.ID has represented a lead figure from a founder figure, where the founder has been and until now is still running the printing and advertisement business in East Kalimantan province since 2010. His experience will be a good capital in conducive the company.

5) Process

AIGOO.ID sets Standard Operating Procedure (SOPs) that must be carried out to guarantee quality standards of services and products produced. Also to provide an explanation of the risks and rewards that will be given to consumers who come to the store. The following describes the basic operational technical policies made in AIGOO.ID explained below:

- a. It will be emphasized further about the company's attention to loyal partners and consumers by inviting family gatherings or appreciating if partners are in joy.
- b. Customers who come directly or via telephone to the company will get the better service

6) Evidence of Physical

This element is very important for AIGOO.ID in supporting the company's continued success in capturing consumer interest. Such as providing after sales services, providing design services and delivery of products that ordered at home or office directly and free.

7) Quality and Productivity

Service delivery that is based on effectiveness and efficiency is highly prioritized in AIGOO.ID, this is clearly seen in providing rewards to loyal customers and business partners actively. One way to do this is by give gifts and partner assistance on products explanation in a friendly and full of togetherness.

5.1 Plan of Operational

Planning of Operational implemented by AIGOO.ID in realizing production activities that have good performance, without exception can be done by fulfilling several criteria. I must be carefully prepared and met the level of reasonableness because if there is an error in operational behavior, it will cause material and non-material losses which will result in bankruptcy of the company. The aspects that need to be concerned, such as Operation Volume, Equipment and Technology, raw materials and additives, layout, labor, and operational performance.

5.2 Plan of Human Resources

In the plan of human resource, resources with characters that support the entire production and marketing process, such having an honest character, discipline, able to work in teams, have skills in programming languages, coding, graphic design, and able to speak a foreign language, or at least English actively, are needed. Determining the human resources of the company can be seen from the production process, AIGOO.ID hopes that this can cause the amount of human resources not to overload. The company conducts briefings and guidance regarding work systems, such as Graphic Designers, Programmers, Administration, Customer Service, Cashiers, Machine Operators, Marketing, and Office Boy.

5.3 Plan of Financial

In relation to the generic strategy that will be implemented by AIGOO.ID, the financial strategy must be in line and consistent with other functional strategies such as marketing planning, human resources and operations. This plan of financial has a short-term goal which is to guarantee the availability of adequate funds to ensure the smooth operations of the AIGOO.ID, while the long-term goal is to manage and utilize assets, debts (if any) and optimal equity so as to create value for the company owner by The company's strong foundation of wanting a good rate of return on its investment.

6. Allocation and Capital Structure

Augmented Reality-based digital printing business is a business that requires a fairly large amount of capital, especially for the facilities and infrastructure of the main printing machine which is expensive. However, the required capital does not use financing from banks and uses private funds in its capital element.

The company's capital ownership arrangement is explained in the table 6 below:

Table 6

AIGOO.ID Ownership Structure

Shareholder	Percentage of Share Ownership (%)	Amount of Funds Deposit (Rp)
Iendy Zelviean Adhari	100	2.000.000.000

Source: Own Data

7. Revenue Projected

In calculating the revenue of projected sales, sensitivity analysis will be used to find out the picture of the extent financial analysis is able to deal with changes in factors that influence it. Sensitivity analysis is applied by changing the values of a meter to further seen on how they affect the investment feasibility. In this case the sensitivity analysis is done by making 2 income conditions, namely pessimistic (pessimistic) and optimistic (optimistic). Based on the market share that the company's target market such as conventional printing partners and private consumers, the sales assumption (included) and revenue based on the two conditions in a yearly basis are set in the table 7 and 8 below:

Table 7

Pessimistic Income Conditions Assumption

PARTNERS / CONSUMERS	2018 (Rp)	2019 (Rp)	2020 (Rp)	2021 (Rp)
PRODUCT	4,971,061,100.00	10,925,354,600.00	10,487,783,100.00	10,968,323,300.00
SERVICE	643,000,000.00	1,940,000,000.00	1,966,000,000.00	2,613,000,000.00
TOTAL	5,614,061,100.00	12,865,354,600.00	12,453,783,100.00	13,581,323,300.00

Source: Own Data

Table 8

Optimistic Conditions of Revenue Assumption

PARTNERS / CONSUMERS	2018 (Rp)	2019 (Rp)	2020 (Rp)	2021 (Rp)
PRODUCT	7,456,591,650	16,388,031,900	15,731,674,650	16,452,484,950
SERVICE	1,651,000,000	3,704,000,000	3,690,000,000	4,398,000,000
TOTAL	9,107,591,650.00	20,092,031,900.00	19,421,674,650.00	20,850,484,950.00

Source: Own Data

8. Financial Statements Projection

The analysis of AIGOO.ID financial statements projection is divided into 3 parts, namely:

- a. Sheet of Balance
- b. Statement of Income
- c. Statement of Cash flow
- Projection of Profit-Loss

The projection of net profit after tax for 4 consecutive years using two predetermined conditions can be seen in table 9 below:

Table 9

Net Profit after Tax (Rp.)

NET PROFIT	2018	2019	2020	2021
PESIMISTIC	1,739,474,618	4,370,203,275	4,224,467,670	4,895,582,940
OPTIMISTIC	3,254,821,770	7,395,474,600	7,137,121,193	7,946,919,098

Source: Own Data

From table 9 above, it can be seen that the two conditions used have resulted in the highest profit derived from optimistic conditions. The possibility of achieving optimistic conditions can

occur if the promotion carried out is right on target from the beginning and the services provided can satisfy the customer. Hence, the customer can indirectly participate in promoting it to his family or colleagues (word of mouth). The positioning strategy of AIGOO.ID must really be able to attract customers from the upper middle class to use company services.

• Dividends Projection and Retained Earnings

To create value for the owners of the company's capital the company, it is circumvented by conducting a dividend distribution strategy. For dividend distribution, the policy that will be carried out in the form of dividend distribution will be given at the end of 2019 or the current operating year at 80% of net income in the second year after tax. The rest will be retained earnings which will be used to fund expansion plans or upgrades in the next few years. In addition, the distribution of dividends of 80% is also intended to provide a little flexibility for capital owners in using money from the results of this business. The following table will explain the projected retained earnings and dividends from pessimistic and optimistic conditions as it explained in the table 10 and 11 below:

Table 10

Dividends in Pessimistic Conditions and Projected Retained Earnings

DESCRIPTION	2018	2019	2020	2021
EARNINGS ARRANGED EARLY	-	1,739,474,618	4,370,203,275	4,224,467,670
NET PROFIT	1,739,474,618	4,370,203,275	4,224,467,670	4,895,582,940
DEVIDEN	-	1,391,579,694	3,496,162,620	3,379,574,136
INCOME ENDED	-	-	347,894,924	1,221,935,579

Source: Predictions for 2018-2021 balance sheet projections

Table 11

Dividends in Optimistic Conditions and Projection of Retained Earnings

DESCRIPTION	2018	2019	2020	2021
EARNINGS ARRANGED EARLY	-	3,254,821,770	7,395,474,600	7,137,121,193
NET PROFIT	3,254,821,770	7,395,474,600	7,137,121,193	7,946,919,098
DEVIDEN	-	2,603,857,416	5,916,379,680	5,709,696,954
INCOME ENDED	-	-	650,964,354	2,130,059,274

Source: Predictions for 2018-2021 balance sheet projections

Analysis of Return on Investment (ROI)

ROI analysis is used to measure the rate of return on investments made. As explained in the previous capital structure point. The funds used to make this investment come from own capital, so it can also be written as return on investment (ROI), return on equity (ROE), return on assets (ROA). The formulas used to calculate ROI, ROE and ROA according to Ross (2009) are as follows:

$$\text{ROI} = (\text{Net Profit After Tax} / \text{total asset}) \times 100\%$$

$$\text{ROE} = (\text{Net profit after tax} / \text{total equity}) \times 100\%$$

$$\text{ROA} = (\text{Net Profit Before Tax} / \text{Average Asset}) \times 100\%$$

Based on the profit and loss projections set out in table 9 above, it can be calculated ROI for 4 years running from the two project conditions as in the table 12:

Table 12

Return on Investment (ROI) Projection for 2018-2020

DESCRIPTION	2018	2019	2020	2021
PESIMISTIC	86%	218%	211%	244%
OPTIMISTIC	162%	369%	356%	397%

Source: projection of 2018-2021 profit and loss

9. Lean Canvas Model and Blue Ocean Strategy Implementations

Lean Canvas is a further development of the canvas business model method, there are 9 blocks that must be filled based on the data take in the field, the following will be implements in the first step up to the ninth step in preparing lean canvas on AIGOO.ID:

- Segments of Customer (step 1)

AIGOO.ID determines their target market based on demographic, psychographic, lifestyle and behavior, such as the place where he lives, sex, type of work, age, level of education, number of income every month and others, early adopters are urban aged people ranged from 18-35 years old and conventional printing entrepreneurs in Indonesia because they are more aware of Indonesian technology, besides that cooperation can be developed with agencies such as schools, manufacturing companies, political parties, event organizers, restaurants and cafes.

- Problems (Step 2)

The problems column will be validated from the existing customer segment and then adjusted to the business niche that the AIGOO.ID wants to build. The business niche is Augmented Reality mobile application development and integrated printing. Some correspondence from urbanites and conventional printing entrepreneurs were given direct questions about the main problems in the printing world.

- Proposition of Unique Value (Step 3)

Determining the Proposition of Unique Value can be validated through the uniqueness of AIGOO.ID business when compared to similar business competitors. It can be measured in terms of selling prices, product safety, and production process control systems and after sales. In this case because the company is engaged in digital printing based on the integrated Augmented Reality

application, the statement "4D Printing Augmented Reality" was made. With the hope of making No. 1 digital printing in Indonesia which is the only integrated concept in one place between printing and video coding Augmented Reality.

- Solutions (Step 4)

The Solutions column can be validated from foresight when analyzing customer segments and asking the top 3 answers in their problem column. In this case, AIGOO.ID provides a step-by-step action list to present Augmented Reality technology-based printing in the same company and provide standardized customer service.

- Channels (Step 5)

Channel is a medium or method used by the companies to deliver business product marketing solutions aimed at their segments customer. In this case the company focuses on the generation (X and Y) that have transformed into urbanites by utilizing, blogs, social media, YouTube videos with storytelling, email marketing and chat applications such as Whatsapp, Line, Instagram, SMS to reaching customers and utilize Search Engine Optimization.

- Streams of Revenue (Step 6)

AIGOO.ID takes a policy in determining the source of income for the company, with hope that it can focus on development and optimal results. The company makes a policy by market 2 product packages in the hope to minimize the number of consumer choices for its products. These options include basic digital prints (profit margins 2x the price of capital) and AR digital prints (10x the price of capital).

- Structure of Cost (Step 7)

For companies, it is important to determining the check list of costs to be incurred for the future viability of their business. In this case the company has divided into 2 types of costs to be incurred, namely fixed costs and variable costs. However, according to the information from the interviews, it is stated that consumers have consciously understood that the price value of AR technology is high, so that it will still be welcomed in positively even though it has a high value.

- Key Metrics (Step 8)

AIGOO.ID is very intensive in the key metrics because it is very helpful for stakeholder to know the progress from the business performance both in time, every week, every month or maybe every year. Based on the interview result with the informant, AR technology can give the overview of visitor traffic, sharing product for company in the field of conventional promotion. While, for children it will be easy to understand the message and the knowledge that delivered because it has the concept of message delivery learning and playing. In this case of key metrics that company used is the amount of customer (in terms of website traffic and also the number of AR application downloads), Retention (the number of sales of basic printed products and AR), Retention (how many people order again and again the printed products).

- Advantage of Unfair (step 9)

The company has the preliminary guidelines to determine advantage of unfair. Since, it is only with making a strong foundation in the product offered then it will make the competitor is difficult to follow the business that have been run. Company is trying to improve barrier to entry (the difficulty to copy) in each changes like always update and upgrade the quality and quantity product that offered to be more superior. Besides it, based on the interview result with the informant, who AR is still potentially, will last for the next 5-10 years.

aigoo.id		Find a new Better way to say...		LEAN CANVAS MODEL
PROBLEM	SOLUTION	UNIQUE VALUE PROPOSITION	UNFAIR ADVANTAGE	CUSTOMER SEGMENT
<p>1. Society by level lower middle economy very burdened with total business consultant rates.</p> <p>2. Other business consulting services, usually too macro inside issue research results.</p> <p>3. Other business consulting services, usually comes first clients from the economic level middle and upper.</p>	<p>1. Offer service rates business consulting with adjusts ability Public.</p> <p>2. Give a time limit settlement of services with mandate according to the contract..</p> <p>3. Providing service results detail and micro the source of the problem and "Down To Earth" on all consumers.</p>	<p>1. Grant PATENT RIGHTS to consumers for services resulting from.</p> <p>2. Provide warranty after sales.</p> <p>3. 24 hour customer care (partner only)</p> <p>4. Provide solutions non-usury capital. (partner only).</p>	<p>1. Prioritizing Islamic science Islam in giving solutions to consumers</p> <p>2. Presents the atmosphere of the location discussion / office with a concept Islamic and contemporary</p> <p>3. Provide guarantees refund of fees, to partners if they do not trust or give results that are not valid.</p>	<p>1. Small and Medium Enterprise (SME)</p> <p>2. Digital start-up</p> <p>3. CV / PT need a business Consultant and advertising</p> <p>4. NGOs (socialpreneur and business community)</p> <p>5. Central and local government</p>
EXISTING ALTERNATIVES	KEY METRIX	HIGH-LEVEL CONCEPT	CHANNELS	EARLY ADOPTERS
<p>Community of Social Entrepreneurs</p>	<p>1. Doing traffic check on the Website.</p> <p>2. Doing traffic check on the Website.</p> <p>3. Monitoring Customer Loyalty and receive service criticism and advice via call and website.</p>	<p>Business Consultant Services prioritizes sharia science Islam and humanity</p>	<p>1.Human to Human</p> <p>2.Machine to Machine</p> <p>3.Search Engine Marketing</p> <p>4.Social Media and Positive Word of Mouth</p>	<p>Millennials</p>
COST STRUCTURE			REVENUE STREAMS	
<p>Variable Costs:</p> <p>1. Auxiliary Raw Materials</p> <p>2. Server / Framework / API</p> <p>3. Budget Over time</p> <p>4. Advertising costs, partner support, accommodation</p> <p>Fix Costs:</p> <p>1. Rent a building</p> <p>2. Electricity / PAM costs</p> <p>3. Taxes</p> <p>4. Employee Salary</p>			<p>1. Advertising Consulting Services</p> <p>2. Establishment Business Consultant Services (Grand Opening)</p> <p>3. Business Recovery Consulting Services</p> <p>4. Advertising Consultant Service Package + Products</p> <p>5. Business Seminar and Workshop Packages</p>	

Source: Own Data

Strategy of Blue Ocean

In the implementations strategy of Blue Ocean, the canvas strategy and 4 steps working scheme will be applied. The data that stated on the canvas are the interview result and deepening of the writer on the competitor and customer of conventional printing.

The explanation about the canvas Blue Ocean Strategy and 4 steps work scheme AIGOO.ID as in the table 13:

Table 13

Four-Step Work Scheme of AIGOO.ID

<p style="text-align: center;">CLEAR</p> <ul style="list-style-type: none"> • Booking fees • Down payment • Regulations that limit the creativity of AR production 	<p style="text-align: center;">CREATE</p> <ul style="list-style-type: none"> • Cash on delivery • Hologram Reality products Research
<p style="text-align: center;">REDUCE</p> <ul style="list-style-type: none"> • Conventional Promotion • Dependence on advances in the production process 	<p style="text-align: center;">LEVEL</p> <ul style="list-style-type: none"> • Increased HR capacity • Quality Control System • After sales services • Foreign networks Expansion

Source: Own Data

From the table above, the changes that must be done on the element value that has been applied by another company, it can be arranged and focused on the canvas strategy that trying to get out of the competition with away movement.

AIGOO.ID is trying to get out and become the leader of the existing competition. The explanation is based on factors that influence, such as:

1. AIGOO.ID is trying to gives the AR product and basic printing production lower price than the particular Augmented Reality Program and conventional printing company.
2. The quality of the waiting room is usually simple for rest and does not provide comfort literally. AIGOO.ID is trying to make the waiting room with the service and facility equivalent with café.
3. The service to customer became the benchmark level of consumer loyalty on company. If the service is friendly and giving the appreciation with enthusiast to the customer so that consumers are more likely to come back and entrust all the interests of advertising and printing to the company. This is what the company is aiming for in differentiating and prioritizing maximum service compared to other companies.
4. Product quality becomes the important things preferred in the company in fulfilling the customer assessment criteria as the trusted company. Thus, the company takes on policy to improve the product quality than the other competitor.
5. AIGOO.ID makes the printing concept and Augmented Reality integrated in one place without the need for other sub-contractors to fulfill the customer needs. Therefore, in this case

the company has been made the clear differences with the other competitor in the field of the completeness of the product that offered.

6. The company production speed automatically can be faster because it is using the printing concept of integrated one-door printing with manufacturing programs Augmented Reality.

7. Delivery product given by AIGOO.ID include 2 elements, that is; before and after. So, the company serves the service of design graphics in customer location and after the order is complete the product can be delivered to the customer.

8. After sales or guarantee, there is some policy which the company applied: about regarding basic printing products, a). there is a guarantee if we have previously made an agreement, b). if our Augmented Reality products provide warranty and maintenance, it will free of charge and without conditions to customer complaints during the current work contract. In this case the company will become a company that provides comfort and peace to consumers who will partner with AIGOO.ID.

10. The Bruce Barringer criteria of Business Evaluation result

The result of business planning evaluation using the Bruce Barringer criteria is the AIGOO.ID company assess good to be run because all of the numeric of each potential. The company has enough sufficient funding ability to do the improvement printing product basis of Augmented Reality with highest potential projection in the power of business ideas. Related to the business idea, it can be the basic improvement of effort and ability in compete with other competitors.

11. Risk and Innovation

The improvement planning and innovation of AIGOO.ID sourced on the combination from the possibility of a previous event experience the consequences of the event. It also does not rule out on the possibility that there is more than one effect that may occur for a particular event in working the project later. In this case company has the principles that every forms of uncertainty that cannot be understood must be managed effectively so that it will create added value for the company. The company divides 2 elements into the main concern, namely the development of innovation and risk forecast.

12. Improvement of Innovation

The aim is used as references in measured and structured action. These programs will facilitate business planning after it is carried out, including:

a. Program of Marketing

The activity that will occur in the program of marketing improvement is open the new branch of AIGOO.ID with the purpose to expand offline marketing networks in Indonesia, active in participating in a series of exhibitions on a local and national scale, and also doing record traffic offline and online visitor with hope can focusing on the market potential.

b. Program of Operational

The activity that will be done in the program of operational improvement is creating the system of "one gate time control" in the monitor display for the customer in the waiting list.

c. Program of Human Resource

Improvement Program of the Human Resource is the collaboration in the field work with several Vocational High Schools (SMK) with multimedia majors, design graphics, business administrative and corporate marketing. Based on the interview results, the human resource program is created to make special division to do the printing process, improve the QV system, and gives the training and employee gathering.

d. Program of Financial

The activity that will be done in this improvement program is making the special financial software printing which has been adapted with the criteria of digital printing company of AIGOO.ID. The other aims from making the software is if in the future the company develop the business through the franchise route, it will facilitate cooperation and coaching.

e. Program of Innovation Product

The activity that will be implemented within the improvement program is perfecting holographic reality prototyping with Chinese technology company Shisuan Group.

CONCLUSION

The business establishment project of AIGOO.ID is feasible and support on its implementation based on:

1. The adjustment analysis of porter's five forces and SWOT analysis conclude that digital printing industry has big potential and worth to run. SWOT analysis also gives the positive illustration to the four basic elements such as strengths, weakness, shortcomings and threats.

2. Based on the analysis of functional business, there are 4 basic aspects of the assessment with the final results of the business recommendation which are feasible to run;

a. Aspect of Marketing: from the market prospect, business planning of digital printing of Augmented realitybased have the good chance to run, it is seen from the STP research results that lead to positive and continuous market trend Also from the results of the design of the marketing mix 7P + 1 and the sharing on the competitor who has been successful as predecessors.

b. Aspect of Operational: from the aspect of operational design the company makes reference to be one step ahead of other competitors. The company center is locate in the central city of Bandung and all the procedural on work process, from input to output, mustbe standardized and packed interesting or simple as it can due to optimize the job description.

c. Aspect of Human resources: the company makes the compete policy in instrumental standardization recruitment for human resources in job acceptance selection and carry out basic training in accordance with their respective duties and functions. The improvement that will be given also direct to the government regulation in the things of working times, salary and social assurance.

d. Aspect of Financial: the 6 eligibility assessment criteria provide a positive picture of the acceleration of the implementation of this business. Payback period and discounted payback period from the pessimist condition shows the return on investment in a period of 8 months and in an optimistic condition within a period of 5 months. From the assessment profitability index also gives the gives a number that is far greater than the standardization of eligibility; the pessimists are at point 11 and the optimists are at point 17. The assessment NPV the positive value can be seen from the pessimist condition which already reaches13,481,185,495 and the optimist position in value 21,768,825,113.

3. Based on the implementation Lean Canvas Model and blue ocean strategy:

a. Lean Canvas model: from the instrumental application, company gets the specific illustration from the problem column on the conventional printing product. In the solution column, it is seen the role and the Augmented Reality product as one of the important component which give the innovation to the conventional printing product. Likewise in other columns such as unique value proportions, unfair advantages, and customer segments are closely related to the results of the acceleration of the business. In the revenue streams and cost structure columns it is also very clear where the sources of costs and profits come from.

b. Blue Ocean Strategy (BOS): in the Blue Ocean Strategy that has been projected from the canvas strategy and 4 steps performance may sharpen the uniqueness of Augmented Reality-based digital printing companies and network companies in Indonesia, in achieving their profit goals.

4. In the Bruce Barringer and Ireland of criteria evaluation, it gives the assessment overview about the results of the power of ideas from company in establishing digital printing of Augmented Reality based is worth to run. From the entire element of evaluation criteria, Bruce Barringer and Ireland gives the positive stigma image from a series of evaluations that exist on the assessment of business policies.

5. Based on the improvement of Innovation and risk forecast:

a. Improvement of Innovation: Maximizing the application of standard operating procedures in every aspect of the production process is a foundation to get to the consistency of prestige public services. In the financial aspect, company is trying to overcome human mistake with the software financial technology in the future.

b. Forecast Risk: company is anticipate the risk all possible risks that can occur by making 4 risk criteria, that is; financial risk, operational risk, disaster risk and finally strategic risk.

SUGGESTION

The researcher suggestions as explained it below:

1. As a start-up company, AIGOO.ID must be active promote consistently effectively through the community-printing business community and advertising agencies in Indonesia through the Website, social media and SEO.

2. Based on the analysis of financial planning reports, conditions are pessimistic and optimistic indeed provide a positive trend, but not automatically the stakeholders feel in a safe zone, always alert all the possibilities and opportunities that occur.

3. To increase business revenue, AIGOO.ID can expand the network of supporting services for example holding training in advertising, training for non-institutional work practices, and others. And it is possible to expand the business into business-related elements of other printing and advertising flows.

For owners of capital / investors:

Owners of capital are required to monitor the performance of AIGOO.ID directly and if possible in a vulnerable time every day. Immediately expand the business into supporting aspects printing, such as: becoming a distributor of raw materials for paper or ink printer. After the capital returns, it must be consistent and upgrade company.

For academics:

In order to get perfection in this research, it is necessary conducted further research on digital-based printing business. This Augmented Reality application by conducting periodic surveys in the form questionnaire to partners and consumers so that it can be concluded new data that is more valid and comprehensive in the future will happen in the future.

For readers:

This business plan is an aspiration of the researcher in innovating in conventional printing by inventing solution using the implementation of Augmented Reality application technology.

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СТРАТЕГІЧНА ПОЛІТИКА ТА БІЗНЕС-МОДЕЛІ ДЛЯ СТАРТАПУ ЦИФРОВОГО ДРУКУ НА ОСНОВІ ШТУЧНОГО ІНТЕЛЕКТУ В ІНДОНЕЗІЇ

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Дослідження має на меті вивчити, базуючись на аналізі промислової конкуренції, функціональному аналізі бізнесу, моделі Lean Canvas та Стратегії Blue Ocean, а також доцільності інвестування, формування цифрової реальності запуску цифрового друку на AIGOO.ID. Використовуваний метод – це описові якісні та пояснювальні методи, а саме метод поєднання спостереження та опитування, кодування та тріангуляції. Результати досліджень STP, що призводять до позитивних та стійких ринкових тенденцій, можна побачити з бізнес-плану цифрового друку на основі доповненої реальності. Дане твердження є наслідком обміну досвідом з конкурентами, які вже досягли успіху, як і їх попередники, а також результати дизайну маркетингового міксу, зробленого з посиланням на маркетинговий мікс 7P + 1. Основою досягнення послідовності державних послуг є намагання максимально застосувати стандартні операційні процедури у всіх аспектах виробничого процесу. У фінансовому секторі компанії готують програмне забезпечення для фінансових технологій у майбутньому і намагаються вирішити людські помилки.

Ключові слова: стартап-компанії, доповнена реальність, бізнес, стратегія, цифровий друк.

СТРАТЕГИЧЕСКАЯ ПОЛИТИКА И БИЗНЕС-МОДЕЛИ ДЛЯ СТАРТАПА ЦИФРОВОЙ ПЕЧАТИ НА ОСНОВЕ ИСКУССТВЕННОГО ИНТЕЛЛЕКТА В ИНДОНЕЗИИ

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Исследование имеет целью изучить, основываясь на анализе промышленной конкуренции, функциональном анализе бизнеса, модели Lean Canvas и Стратегии Blue Ocean, а также целесообразности инвестирования, формирование цифровой реальности запуска цифровой печати на AIGOO.ID. Используемый метод – это описательные качественные и объяснительные методы, а именно метод сочетания наблюдения и опроса, кодирования и триангуляции. Результаты исследований STP, приводящие к положительным и устойчивым рыночным тенденциям, можно увидеть из бизнес-плана цифровой печати на основе дополненной реальности. Данное утверждение является следствием обмена опытом с конкурентами, которые уже достигли успеха, как и их предшественники, а также результаты дизайна маркетингового микса, сделанного со ссылкой на маркетинговый микс 7P + 1. Основой достижения последовательности государственных услуг является попытка максимально применить стандартные операционные процедуры во всех аспектах производственного процесса. В финансовом секторе компании готовят программное обеспечение для финансовых технологий в будущем и пытаются решить человеческие ошибки.

Ключевые слова: стартап-компания, дополненная реальность, бизнес, стратегия, цифровая печать.

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**THE ROLE OF TRUST MEDIATES IN THE INFLUENCE OF SOCIAL MEDIA
MARKETING AND ELECTRONIC WORD-OF-MOUTH ON PURCHASE INTENTION**

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Abstract. Purchase intention is an important factor for PT Reska Multi Usaha in realizing sustainable business continuity. This study aims at analyzing the increase in purchasing intention through social media marketing and electronic word of mouth with trust as a mediating variable. The type of this research is an explanatory study with a quantitative approach. The respondents of this study is all customers of PT Reska Multi Usaha countless, the sample used 100 respondents with the sampling technique using incidental sampling. The method of gathering data is a questionnaire. The data analysis method used is path analysis. The partial results of hypothesis testing found that social media marketing and electronic word of mouth had a positive and significant trust effect. Electronic word of mouth and trust have a positive and significant effect on purchasing intention. Social media marketing has no effect on purchasing intention. The results of the indirect effect prove that social media marketing and electronic word of mouth have a positive and significant effect on purchasing intention through trust.

Keywords: social media marketing, electronic word of mouth, trust, purchase intention.

JEL Classification: M 310, M370, M 390.

INTRODUCTION

Challenges in a business of macro dimension are external challenges that come from changes in the business environment. Some of the existing changes include the changes in consumers, competition, technology, politics, regulations, socio-culture, economy and finance (Kartono, 2017). Revolution is the basis in the dimension of the macro challenge where this challenge must be read and anticipated because revolution can be both a threat and an opportunity. An business that cannot turn a revolution change into an opportunity will lose the competition and collapse.

The revolution in changing technology becomes a trigger for changes that occur in business (Kartono, 2017). The technological revolution by itself will spur changes in consumers, consumer products and services. Furthermore, Kartono (2017) states that with this change, business competition will lead to competition in meeting consumer needs. Industries that cannot read a change in technology will lose in business competition, so they can experience a decrease in income, sales due to the decreased purchasing power (Kasali, 2017). Changes in technology can

lead to the disruption that causes destruction and shifting. Kasali (2017) also explains that disruption creates a new world in the digital marketplace. In this era of disruption, the existence of the market has changed and consumers have also experienced the change that follows these market changes. Changes in consumers can take place so quickly with mass communication (Kartono, 2017). Changes in this shift in consumers have resulted in a value migration that must be captured with discretion in running a business. A business that is unable to capture a value migration will be abandoned by consumers, and the business will automatically become a loser.

Consumers who leave a business that has been fulfilling their consumption needs will not make purchase intentions (Tjiptono and Diana, 2019). Kotler and Keller (2016) define purchase intention as a process that exists between evaluating alternatives and purchasing decisions. Consumers are the main source of a business to know unmet needs, so companies must be able to motivate consumers to convey unmet needs so that companies are able to motivate consumers to make purchase intentions of products provided by the company (Aaker, 2013). One of the factors that influence purchase intention is social media marketing (Liu, Xiao, Lim, and Tan, 2017).

Social media marketing is an interactive marketing system that uses internet social communication media to increase specific and measurable consumer responses (Tjiptono and Diana, 2019). Social media marketing can increase purchase intention (Gautama and Setiawan, 2017). Increasing purchase intention can be done through social media marketing (Liu et al., 2017).

Another way that can be done to increase purchase intention is through electronic word of mouth. Electronic Word of Mouth (eWOM) is defined by Pedersen (Pedersen, Razmerita, and Colleoni, 2014) as a development of communication that utilizes digital power persuasion of consumers about a product. Hamdani and Maulani (2018) state that increasing purchase intention can be through electronic word of mouth. Electronic word of mouth can have an impact on increasing purchase intention.

Previous research on the influence of social media marketing on purchase intention carried out by Dong, Chang, Liang, Fan (2004); Lin (2018); Pucci, casprini, Nosi, Zanni (2019) found that social media marketing has a significant positive impact on purchase intention. The results of different research findings were found by Zhu, Li, Wang, He, Tan (2020) where social media marketing has no effect on purchase intention. The difference in the research findings is overcome by including trust as the mediating variable. Trust is defined by (Moorman, Deshpande, and Zaltman, 1993) as the willingness of consumers to rely on the company based on consumer confidence. This is based on research conducted by different researchers (Jakic, Wagner, and Meyer, 2017; Prasad, Gupta, and Totala, 2017; Zhang and Li, 2019) who found that social media marketing can have an impact on trust, then customer trust can have an impact towards increasing purchase intention (Matute and Redondo, Yolanda Polo Utrillas, 2016).

The present research was conducted at PT Reska Multi Usaha. This company is a subsidiary of PT Kereta Api Indonesia (Persero). The company was established to implement and support the policies and programs of PT KAI (Persero). It carries out business activities in the field of managing restaurants on trains and at railway stations, catering services, and advertisements related to trains. PT Reska Multi Usaha has several problems in carrying out business activities to provide support services for PT KAI (Persero) where consumer behavior has changed and the fulfillment of consumer needs has also changed. This change in consumer behavior causes a decrease in purchases or is called a purchase decision. Decreasing purchase decisions are preceded by a lesser intention of the product being offered. This problem has been reflected in the value of consumer purchases for the last 6 months where the purchase value has continued to decline.

PAPER OBJECTIVE

This study aims at analyzing the problem of reducing the purchase intention of customers of PT Reska Multi Usaha. Based on the above phenomena, further research is carried out on purchase

intention through social media marketing and electronic word of mouth and trust.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Social Media Marketing

Social media is a social network (social networks, namely networks and relationships online on the Internet). Social media is an online media where users can easily participate in sharing and creating content including blogs, social networks and so on (Dong, Chang, Liang, and Fan, 2018). Social media is a tool or method used by consumers to share information in the form of text, images, audio and video with other people and companies (Kotler and Keller, 2016).

Social media marketing is an interactive marketing system that uses the Internet social communication media to increase specific and measurable consumer responses (Tjiptono and Cjandara, 2017). Social media is an effective business promotion tool because it can and is easily accessed by anyone, so that the promotion network can be wider. Types of online promotion that can be used in online marketing to achieve goals and sales effectively are (Kotler and Keller, 2016): websites, micro sites, search ads, display ads, intermediate ads, Internet specific video ads, sponsorship, alliances, communities online, email, car marketing.

Social media have a number of features that enable effective applications in terms of interactive dissemination of information, creating awareness of companies and products, gathering market research and creating the desired image (Tjiptono and Cjandara, 2017). The use of social media as marketing media includes: Target marketing, Message tailoring, Interactive capabilities, Information access, Sales potential, Creativity, Market potential. Social media marketing indicators (Kotler and Keller, 2016) are context, content, community and customization.

Electronic word of mouth

Pedersen et al., (2014) argue that the Electronic Word of Mouth (eWOM) is communication development that utilizes the power of digital consumer persuasion about a product. Another opinion states that the Electronic Word of Mouth is a form of non-formal communication that is partly directed at customers through the internet-based technology related to the use or characteristics of a good or service (Abd-Elaziz, Aziz, Khalifa, and Abdel-Aleem, 2015).

Social networks are an important force in business-to-consumer marketing and business-to-business marketing (Kotler and Keller, 2016). Word of mouth, the number and nature of conversations and communication between various parties are key aspects of social media networking. Social media offers a more targeted market and possibly spreads the brand message. Companies are increasingly recognizing the power of word of mouth. Word of mouth is especially effective for small businesses where customers can experience a more personal connection. Social networks in the form of online communities can be an important resource for companies.

The formation of electronic word of mouth goes through several stages (Kotler and Keller, 2016) including buzz marketing, viral marketing and blogs. Electronic word of mouth is a form of marketing communication that contains positive or negative statements made by potential customers, customers and consumers about a product or company that is available to many people or institutions via the Internet (Hennig-Thurau, Gwinner, Walsh, and Gremler, 2004). The dimension of Electronic word of mouth according to Hennig-Thurau (Hennig-Thurau et al., 2004) is a platform assistance, concern for other, expressing positive emotions.

Trust

Trust is the willingness of consumers to trust the company in providing services for products and services (Moorman et al., 1993). Trust is one of the most important factors in a seller-consumer relationship, and is an important element of the strength of business relationship and trust is essential for maintaining long-term relationship. Morgan and Hunt (1994) define trust as one party's

trust in another because of the other's honesty and reliability. Patrick (2002) views customer beliefs as thoughts, feelings, emotions, or behavior manifested when customers feel that the provider can be relied on to act in providing the best service

Trust is a basis for consumers to make purchases of an item offered by the seller (Green, 2006). Consumer trust can be built through consumer confidence in the statements and services provided. Furthermore, Green (2006) states that the product provided has the required character, the seller is able to provide solutions to problems that consumers have, the seller is able to become a partner in doing business and the company has people who can be trusted by consumers. The indicators of trust are credibility, reliability, intimacy, and self orientation (Green, 2006).

Purchase intention

Interest is an internal impulse or stimulation. Purchase interest is consumer behavior that appears as an action towards a particular product that forms attitudes about consumer desire to buy a product (Kotler and Keller, 2016). External effects, awareness of the need for product introduction and evaluation of alternatives are things that can lead to consumer buying interest (Schiffman and Kanuk, 2018). External influences consist of marketing efforts and socio-cultural factors. Motivation is a power within the individual that forces him to take action. Someone who has high motivation for something will be encouraged to behave in control of the product.

Consumer purchase interest is someone's desire to fulfill the needs and wants hidden in the minds of consumers. Purchase interest is always embedded in each individual where no one knows what the consumer wants and expects (Malik et al., 2013). The stages of purchase intention are awareness, interest, desire, action (Rehman et al., 2014).

Kotler and Keller (2016) state that there are two external factors that influence a person's buying interest. The first is the attitude of other people, in this case the attitude of other people who influence buying interest depends on two things, namely the magnitude of the influence of one's negative attitude towards alternatives that are of interest to consumers, as well as consumer motivation to be influenced by other people related to the buyer's interest. The second is an uninspired situation, the situation that suddenly arises and indirectly can change consumers' buying interest. The indicators of buying interest (Kotler and Keller, 2016) are tractional interest, referential interest, and referential interest.

Social media marketing and trust

Social media as a medium for marketing. According to Helianthusonfri (2019) social media is used as a marketing medium because it is practical, cheap and also has a large number of users. Companies that do marketing using social media will increase customer trust. The research conducted by Jakic et al., (2017), Prasad et al., (2017), Zhang and Li (2019), Mahmoud et al., (2020), Irshad et al., (2020) have found that social media marketing are able to increase trust.

H1.Social media marketing has a positive effect on trust.

Electronic word of mouth and trust

Electronic word of mouth is a form of marketing communication that contains positive or negative statements made by potential customers about a product or a company that is available to many people or institutions via the Internet (Hennig-Thurau et al., 2004). Electronic word of mouth will have an impact on consumer trust. The research of several authors have found that electronic word of mouth has a positive effect on trust.

H2.Electronics word of mouth has a positive effect on trust.

Trust and purchase intention

Trust is the willingness of consumers to trust the company in providing products and services (Moorman et al., 1993). Companies that get the trust of customers will maintain this trust in

providing the best service, customer trust that is formed will arise in customer intentions to use their products and services. Thereseearch conducted by Prasad et al., (2017), Irshad et al., (2020) has found that trust is able to increase purchase intention.

H3.Trust has a positive effect on purchase intention.

Social media marketing and purchase intention

Social media marketing is an interactive marketing system that uses internet social communication media to increase specific and measurable consumer responses (Tjiptono and Cjandara, 2017). Gautam and Sharma (2017) found that social media marketing has an impact on increasing purchase intention. Liu et al., (2017) in a study conducted found that social media marketing has a significant positive effect on purchase intention. It is stated that purchase intention is influenced by social media marketing.

H4.Social media marketing has a positive effect on purchase intention.

Electronic word of mouth and purchase intention

Pedersen et al., (2014) argue that Electronic Word of Mouth (eWOM) is a development of communication that utilizes the power of digital consumer persuasion about a product. Electronic word of mouth has an impact on purchases intention. Electronic word of mouth has a significant positive effect on purchase intention. Electronic word of mouth has an impact on purchase intention.

H5. Electronic word of mouth has a positive effect on purchase intention.

METHODOLOGY

Research design

This research is an explanatory one aimed at explaining the relationship between variables that cause changes in other variables (Cooper and Schindler, 2014). The population in this study are the customers of PT. Reska Multi Usaha which is unlimited. The sampling technique used is incsdental sampling with a number of respondents amounted to 100 customers. The data collection method used is a questionnaire.

Measurement

The variables used in this study were assessed using several items from different studies in the extant literature. All items were measured using a five-point Likert-type scale, in which respondents had to indicate their level of suitability with different statements (1: strongly disagree to 5: strongly agree). Measurement of social media marketing through 4 items (Kotler and Keller, 2016). Measurement of electronic word of mouth uses 3 items (Tjiptono and Diana, 2019). The measurement of trust uses 4 items (Green, 2006). Measurement of purchase intention uses 5 items (Kotler and Keller, 2016).

Data analysis method

The data analysis used was confirmatory analysis to determine the validity of each indicator used and the reliability of the variables used in the study (Hair, Hult, Ringle, and Sarsteadt, 2017). The hypothesis testing is carried out as the next step to determine the results of the hypotheses used in the study. The path analysis is used to determine the magnitude of the influence of each variable by using the Smart PLS tool.

RESULT AND DISCUSSION

Reliability and validity the scales

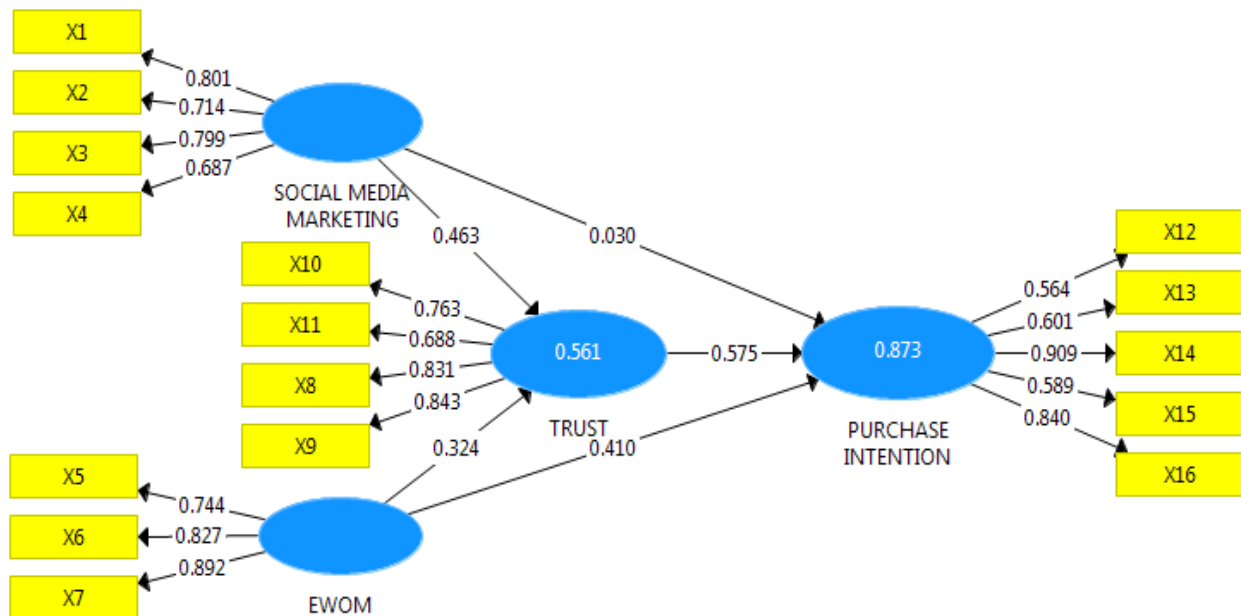


Figure 1. Reliability And Validity The Scales

Source: PLS output results

The construct validity can be seen from the loading factor (LF) value with a rule of thumb greater than 0.5 which is said to be valid. Based on the test results, the loading factor (LF) results of all indicators in the model are said to fit. Evaluation of the construct reliability value is measured by the Cronbach alpha and Composite Reliability values. The Cronbach alpha value of all constructs must be above 0.70. The test results show that the Cronbach alpha value is above 0.70 so it can be said that the indicators are consistent in measuring the construct.

Table 1

Reliability Construct

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extrated (AVE)
Social Media Marketing	0,742	0,748	0,838	0,566
Electronic Word Of Mouth	0,764	0,812	0,862	0,677
Trust	0,794	0,836	0,863	0,614
Purchase Intention	0,751	0,819	0,834	0,512

Source: PLS output results

The table above shows the Cronbach Alpha value for all constructs above 0.70, so it can be concluded that the indicators are consistent in measuring the constructs. The results of the Cronbach

Alpha value of social media marketing is (0.742), of electronic word of mouth is (0.764), of trust is (0.794) and of purchase intention is (0.751). The results of examining construct reliability based on composite reliability can be obtained by looking at the Composite reliability value to show the size of the indicator variance contained in the construct where the limit value of Composite reliability ≥ 0.5 . The results of the Composite Reliability value of social media marketing is (0.838), of electronic word of mouth is (0.862), of trust is (0.863) and of purchase intention is (0.834). The results of checking construct reliability based on convergent validity can be done by looking at the AVE value to show the number of indicator variants contained in the construct where the AVE limit value is ≥ 0.5 . The results of checking construct reliability based on convergent validity can be done by looking at the AVE value to show the number of indicator variants contained in the construct where the AVE limit value is ≥ 0.5 . The test results above show the value of social media marketing is (0.566), electronic word of mouth is (0.677), trust is (0.614) and purchase intention is (0.512).

R Squares

Table 2

R Squares

Variable	R Square
The influence of social media marketing and electronic word of mouth on trust	0,561
The influence of trust, social media marketing and electronic word of mouth on purchase intention	0,873

Source: PLS output results

Based on the table above, the R Square value for the influence model of social media marketing and electronic word of mouth on trust is 0.561, it can be interpreted as the ability of social media marketing and electronic word of mouth to influence trust by 56.1%, while the rest 43.9% is explained by other variables not examined in this study. The value of R Square for the model of the influence of trust, social media marketing and electronic word of mouth on purchase intention is 0.873, which means that trust, social media marketing and electronic word of mouth are able to influence purchase intention by 87.3%, while the remaining 12.7% is explained by other variables not examined in this study.

Test hypothesis

The proposed hypothesis is tested using structural equation modeling. The results of the hypotheses H1, H2, H3, H5 are accepted with a t count of more than 1.96 and a significance of below 0.05, except for hypothesis 4 (not accepted) with a t count of 0.435 < 1.96 and a significance of 0.332 > 0.005. The structural model test depicted in the figure shows a good match with the data.

Kristina, T. and Sugiarto, C. (2020), "The role of trust mediates in the influence of social media marketing and Electronic Word-of-Mouth on purchase intention", *Management and entrepreneurship: trends of development*, Volume 4, Issue 14, pp. 102-113. Available at: <https://doi.org/10.26661/2522-1566/2020-4/14-08>

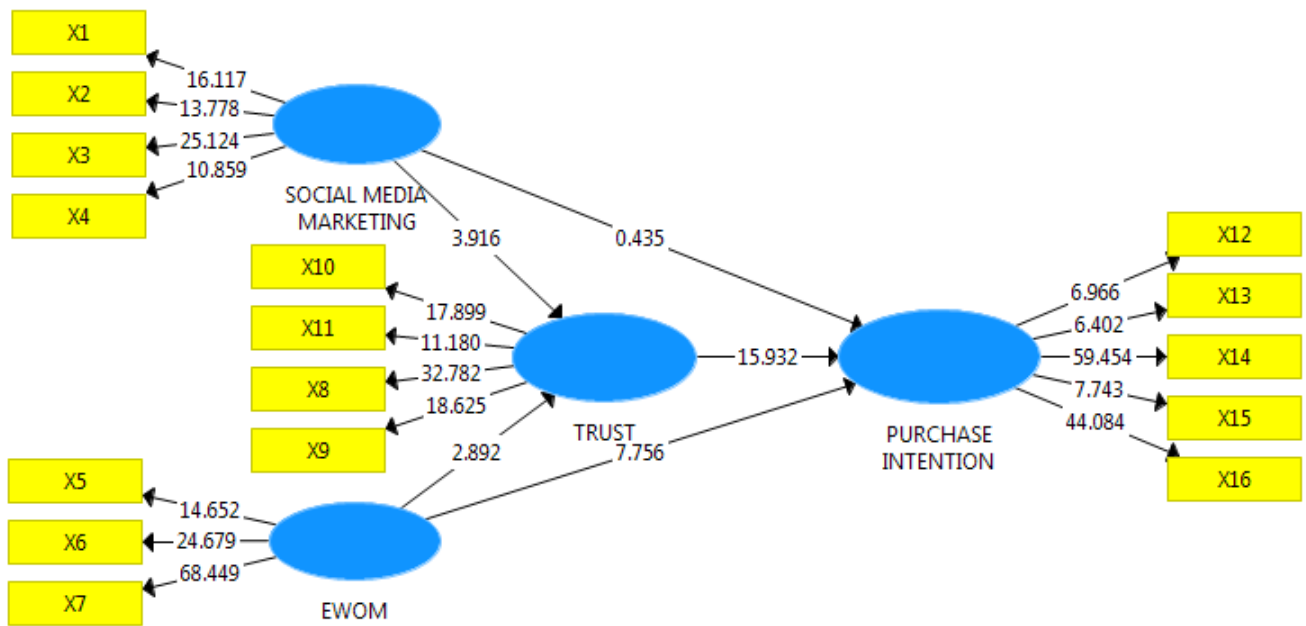


Figure 2. Test hypothesis

Source: PLS output results

Table 2

Test hypothesis

	Original Sample (O)	Sample Mean (M)	Standar Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Social Media Marketing -> Trust	0,463	0,459	0,118	3,916	0,000
Electronic Word Of Mouth -> Trust	0,324	0,331	0,112	2,892	0,002
Trust -> Purchase Intention	0,575	0,581	0,036	15,932	0,000
Social Media Marketing -> Purchase Intention	0,030	0,030	0,068	0,435	0,332
Electronic Word Of Mouth -> Purchase Intention	0,410	0,405	0,053	7,756	0,000
Social Media Marketing -> Trust -> Purchase Intention	0,266	0,266	0,068	3,933	0,000
Electronic Word Of Mouth -> Trust -> Purchase Intention	0,187	0,193	0,068	2,746	0,004

Source: PLS output results

Based on social media marketing testing, trust has a significant positive effect and it can be interpreted as following: the higher the social media marketing is, the higher the customer trust is. Social media marketing through context, content, community and customization can increase this trust in accordance with the research of Jakic et al., (2017), Prasad et al., (2017), Zhang and Li (2019), Mahmoud et al., (2020), Irshad et al., (2020) who proved this statement. Electronic word of mouth has a significant positive effect on trust and it can be interpreted as following: the better the electronic word of mouth is, the higher the trust is, electronic word of mouth in the form of platform assistance, concern for other, expressing positive emotions can increase trust. This is in accordance with the results of Matute et al., (2016), Prasad et al., (2017), Jakic et al., (2017), Seifert and Kwon (2019), Suwandee et al., (2019) who found that the better electronic word of mouth will increase customer trust. The results of the influence of trust on purchase intention show that trust has a significant positive effect on purchase intention, meaning that the higher the trust is, the higher the purchase intention is. Trust in the form of credibility, reliability, intimacy, and self orientation can increase purchase intention. This is in line with the research results of Prasad et al., (2017), Irshad et al., (2020) who found that trust is able to increase purchase intention. The results of social media marketing research on purchase intention show that social media marketing has no influence on purchase intention. Social media marketing, which should be able to increase purchase intention, is not able to have an impact on increasing purchase intention because the social media marketing that is being carried out is not enough to make customers have trust in the products and services provided. This is in line with the research of Zhu, Li, Wang, He, Tan (2020) where social media marketing has no influence on purchase intention. Electronic word of mouth has a significant positive effect on purchase intention, the better electronic word of mouth, the higher the purchase intention is. This is in line with the research results which has found that electronic word of mouth can increase purchase intention.

CONCLUSION

The conclusion of this study is that social media marketing, electronic word of mouth has a significant positive effect on trust. Trust and electronic word of mouth have a significant positive effect on purchase intention. Social media marketing has no effect on purchase intention. Trust is able to mediate the influence of social media marketing and electronic word of mouth on purchase intention. The variables that affect purchase intention in this study are limited to free social media marketing and electronic word of mouth as well as intervening (trust) variables so that future research needs to add several other relevant independent variables. Social media marketing variables have no effect on purchase intention, the format of social media marketing information owned by PT Reska Multi Usaha is felt by consumers to have less interest in the format of information from the social media marketing. The information format really determines purchase intention as a decision starts with an interest and is followed by a purchase. Recommendations for future research on the insignificant influence of social media marketing variables on purchase intention are to be created for different objects.

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РОЛЬ ДОВІРЧОГО ПОСЕРЕДНИЦТВА У ВПЛИВІ МАРКЕТИНГУ В СОЦІАЛЬНИХ МЕРЕЖАХ ТА «ЕЛЕКТРОННОГО САРАФАННОГО МАРКЕТИНГУ» НА КУПІВЕЛЬНИЙ НАМІР

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Намір придбання є важливим фактором для PT Reska Multi Usaha для реалізації стійкої безперервності бізнесу. Це дослідження має на меті проаналізувати збільшення купівельних намірів за допомогою маркетингу в соціальних мережах та електронного усного переказу з довірою як посередницькою змінною. Тип цього дослідження - пояснювальне дослідження з кількісним підходом. Респондентами цього дослідження є всі клієнти PT Reska Multi Usaha, вибірка використовувала 100 респондентів із технікою відбору з використанням випадкової вибірки. Методом збору даних є анкетування. Використаним методом аналізу даних є аналіз шляхів. Часткові результати перевірки гіпотез показали, що маркетинг у соціальних мережах та електронна пошта надають позитивний та значний ефект довіри. Електронне усне спілкування та довіра позитивно і суттєво впливають на купівельні наміри. Натомість, маркетинг у соціальних мережах не впливає на купівельні наміри. Результати непрямого ефекту доводять, що маркетинг у соціальних мережах та електронна пошта надають позитивний та значний вплив на купівельний намір через довіру.

Kristina, T. and Sugiarto, C. (2020), "The role of trust mediates in the influence of social media marketing and Electronic Word-of-Mouth on purchase intention", *Management and entrepreneurship: trends of development*, Volume 4, Issue 14, pp. 102-113. Available at: <https://doi.org/10.26661/2522-1566/2020-4/14-08>

Ключові слова: маркетинг у соціальних мережах, «електронний сарафанний маркетинг», довіра, купівельний намір.

РОЛЬ ДОВЕРИТЕЛЬНОГО ПОСРЕДНИЧЕСТВА ВО ВЛИЯНИИ МАРКЕТИНГА В СОЦИАЛЬНЫХ СЕТЯХ И «ЭЛЕКТРОННОГО САРАФАННОГО МАРКЕТИНГА» НА ПОКУПАТЕЛЬСКИЕ НАМЕРЕНИЯ

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Намерение приобретение является важным фактором для PT Reska Multi Usaha для реализации устойчивой непрерывности бизнеса. Это исследование имеет целью проанализировать увеличение покупательских намерений с помощью маркетинга в социальных сетях и электронного устного общения с доверием как посреднической переменной. Тип этого исследования – объяснительное исследования с количественным подходом. Респондентами этого исследования являются все клиенты PT Reska Multi Usaha, выборка использовала 100 респондентов с техникой отбора с использованием случайной выборки. Методом сбора данных является анкетирование. Использованным методом анализа данных является анализ путей. Частичные результаты проверки гипотез показали, что маркетинг в социальных сетях и электронная почта оказывают положительный и значительный эффект доверия. Электронное устное общение и доверие положительно и существенно влияют на покупательские намерения. Зато, маркетинг в социальных сетях не влияет на покупательские намерения. Результаты косвенного эффекта доказывают, что маркетинг в социальных сетях и электронная почта оказывают положительное и значительное влияние на покупательские намерения через доверие.

Ключевые слова: маркетинг в социальных сетях, «электронный сарафанный маркетинг», доверие, покупательские намерения.

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FEATURES OF MARKETING RESEARCH IN THE MASS MEDIA BUSINESS

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Abstract. The purpose of this study is to examine the tools and methods that mass media organizations use at the present stage to conduct marketing research of the target audience - to find out their needs, interests, expectations, assessments regarding the media products they consume; and also studying of a question of necessity and importance of carrying out qualitative marketing researches in the mass media organizations. Analysis, synthesis, observation and comparison methods were used in the study. We have considered the tools and methods used to organize marketing research in the media business, demonstrate their specificity. After all, media products differ from other product categories in marketing in terms of audience perception. It is shown that the need and importance of studying the media needs of the audience by a mass media organization is provided by the functioning of the media not only as a business but also as a social institution that aims to ensure the joint activities of people. It is substantiated that clarifying the needs, interests, expectations, assessments of the audience regarding media products for mass media organizations are extremely important as for no other organization, as for no other business.

Keywords: marketing research of media audience, media needs, mediometry.

JEL Classification: A12, A13, A14, M31.

INTRODUCTION

At the first glance, commercial media comply with the rules of marketing as any other business. However, mass media organizations have their own specifics in formation of marketing. Our attention was drawn to the question of how marketing research takes place in the mass media, particularly in consumer research. After all, finding out the needs, thoughts, attitudes, behaviors, motivations of the target audience is one of the first steps in marketing, which then becomes systematic.

It is obvious that the audience parameters of the media are an important factor that affects other functional characteristics of the media – content, organizational, creative ones and so on. However, in the field of mass media practice in Ukraine, a system of professional information about the subjects of media product consumption has not yet been customized. Decisions on the organization of television, radio, and printed products are made either intuitively or taking into account the experience of competitors. However, it is obvious that the mass media audience needs

are to be studied in order to understand the nature of its media consumption. Audience expectations, according to some researchers, should take the form of clear requirements for the functioning of media organizations, and the communication needs of audiences should be studied while using the methods of communication, sociology, psycholinguistics, etc. (Whitney, 2009; Phalen, 2009; Ivanov, 2009; Rizun, 2008; Vartanova, 2003; Fomicheva, 2007).

LITERATURE REVIEW

The study of literature sources allows us to understand that the clarification of the issue of marketing research in the audience aspect for mass media organizations took place in different aspects. Some scientific papers are devoted to the study of the concept of mass media audience separately (Whitney, 2009) and the features of its research (Phalen, 2009). Also, our attention was drawn studies, in which the authors raised the issue of the need to clarify the media needs of the audience and the appropriate tools (Fomicheva, 2007; Vartanova, 2003; Lukina, 2010). It is also important to study the specifics of marketing research in the Ukrainian media business (Ivanov, 2010; Rizun, 2008).

PAPER OBJECTIVE

We can say that the study of the peculiarities of the organization of marketing research in the media business is fragmentary. Therefore, the task is to accumulate important facts on this topic, systematize this information, clarify the features of media marketing - certain tools and methods, and also the arguments about the importance and necessity of studying the media needs of the audience.

METHODOLOGY

The study was conducted using systemic and interdisciplinary approaches. The identified scientific problem was studied at the intersection of such areas as media economics, media marketing, media management, media sociology, media psychology. The connection between research tasks and such theoretical and empirical methods as: analysis, synthesis, observation, comparison is revealed. Using a combination of these methods has made it possible to build causal relationships within the object.

RESULT AND DISCUSSION

The relevancy to study the media needs of the audience by the mass media organization is laid down in one of the main functions of the media – informational one, which I.D. Fomicheva explains as follows: "Production and distribution of information to the mass audience, *taking into account its (the audience) various characteristics (composition, demands, needs, interests) in order to ensure the joint activities of people*" (Fomicheva, 2007, p. 53).

It should be noted that the concept of "media needs" has recently found its expression in the Ukrainian discourse of journalistic research. In particular, in the context of studying media consumption, it is widely used by researcher T.S. Krainikova. The vast majority of definitions of mass media, means of mass communication do not contain a focus on consuming characteristics of the audience. The media appear as translators of socially significant information, a factor in ensuring of social interaction. However, as already mentioned above, the market realities of mass media functioning require strict compliance with the expectations and requirements of the audience.

Understanding the characteristics of the media audience, knowledge of its needs should be the basis for the functioning of the media organization. A good example is the practice of studying the audience by the world-famous British TV channel "BBC". This is done by a special department, where the audience's reaction to the content is studied using the "Audience Rating Bulletin" for

each program of the channel. In the absence of sufficient information to study the media needs of the audience additionally involve a special section of researchers who conduct a more advanced study (Ivanov, 2009). V.F. Ivanov notes that “this is an example of the most consistent, systematic and comprehensive study of the audience by the largest radio and television corporation in Great Britain” (Ivanov, 2009).

Interesting examples of a serious, thorough approach to studying the media preferences of its audience can also be found among some Ukrainian media. So, experience of the regional newspaper "Industrialnoe Zaporozhye" has already got to textbooks. The editorial office of a not so large newspaper has organized a laboratory of specific sociological research, which has been operating for decades. Journalists decided to wander from understanding the audience as an “average” reader and with the help of specially designed questionnaires to learn the composition of the audience to understand its interests, opinions on various sections and topics of the newspaper. This work gave some results, which showed that the reality was significantly different from the hypothetical ideas about the audience that the newspaper had. Due to the satisfaction of the identified media needs of the audience, the edition was managed to significantly increase its circulation (Ivanov, 2009).

It is important to note that in discussions on the media audience there are two antagonistic approaches to defining its features, one of which is the attempt to study and understand the audience, its media needs, the other lays in the attitude to the audience as such that a priori cannot be known. Thus, especially among media practitioners, abstractness, remotability of the media audience is usually part of its main characteristics. The media theorist Martin Allor noted that “audience” really exists only as an analytical concept and does not occupy any real niche. Charles Whitney in his research on the media audience pointed out that its main characteristics are uncertainty, unpredictability and “unknowability”, moreover, the concept of “audience” itself is relative one (Whitney, 2009).

However, a large group consists of researchers who insist on the need for the media to find out various data about their audience. For this purpose, a separate type of activity has been introduced in the media industry – it is media research.

The concept of media research (MR) has a broad meaning, it is so-called obtaining of some kind of information about the media. Traditionally, MR are conducted in the following areas: journalist, content, channel, audience, social effects, which are determined by the structure of the communication process. The issues of such media research can be varied according to the role of the media in society (Fomicheva, 2004, p.326). Research of the mass media audience is the broadest area, they are divided into quantitative and qualitative.

Quantitative MR audiences are the detection of audience coverage and are the amount of people who consume the content of a particular media. For print media it is circulation, for audiovisual media it is a rating, a share indicator. This media audience data, also called media measurement or mediametry, is typically used by advertisers in media planning to select the most effective media channels to promote their products. It is believed that regular research began just when it became clear that “the media is the best channel for contact with a potential mass consumer of goods and services” (Fomicheva, 2004, p.5). Therefore, the so-called rating system used for television has developed significantly. It allows detecting the size of the media audience relative to the channel as a whole, part of its content or a certain period of time (month, week, part of the day, etc.). The mechanism of their implementation is that on the TVs of households that were included in the sample, special devices are installed – people-meters or TV meters. These electronic counters record the amount and time of viewing certain TV channels or programs. It should be noted that in the process of obtaining information about the number of TVs that were turned on at a particular time on a particular channel, the question remains unanswered - why did each of the viewers choose to watch this program. After all, the reason may be not only interest in the topic. Many subsidiary motives can influence the choice of the viewer, and therefore, the rating approach can no longer be considered exhaustive for the audience's media research.

The disadvantages of quantitative MR are appearing in the fact that they do not inform about the interests, tastes, media needs of the audience, do not answer questions about the attitude of the audience to the suggested media content. Such data can be obtained through high-quality media research, usually a survey (questionnaire, interview, conversation). This one and other possible methods allow to identify the media needs of the audience in the context of partnership ideas, public service, audience participation in the communication (participatory model of communication), etc. for the functioning of the media as a social institution (Fomicheva, 2007, p.291).

Instead, economic relationships with advertisers require the media to conduct qualitative MRs in accordance with the terms of the Index Affinity. By choosing an advertising distribution channel, advertisers look for their target audience among the general media audience of a particular media. Therefore, to prove to the advertiser the presence of his\her target audience, media organizations conducts research to identify demographic, psychographic and the other necessary characteristics of the audience. According to these data, the advertiser can make sure that he\she has found the necessary target audience.

Qualitative MR audiences are aimed at "studying the social characteristics and construction of typological models of the audience, making recommendations to the media to improve their activities taking into account the specifics of the consumer of information" (Fomicheva, 2007).

Researcher V.F. Ivanov points out that finding out the reasons for the audience of a media product should be very important for media executives (Ivanov, 2009). The researcher considers it necessary to "analyze the subjective characteristics (factors of consciousness) of consumers of media materials, including thematic interests, assessments, preferences, motivation of choice, satisfaction, etc." (Ivanov, 2009). After all, for the releasing of media products, data on how viewers themselves formulate motives for watching various programs should be very useful (Ivanov, 2009).

Media working for a large heterogeneous media audience should take its qualitative research seriously in order to be able to do "cross or multi-factor segmentation" and "find combinations of a number of features" of a diverse audience (Fomicheva, 2007). To do this, high-quality MR offers, for example, a modern method of life-style studies (lifestyle), which allows to identify numerous links between education and upbringing, values, tastes, hobbies, on the one hand, and behavior in the media – with another (Fomicheva, 2007).

The history of quality media research began in the USA, according to one version, with television, when there was a need to identify its impact on children. This initiated the organization of research of the media audience in other areas and on other types of mass media. According to another version, the precondition for the implementation of high-quality MR was the threat of declining demand for print media due to the advent of television (there was a need to fight for the attention of the audience, and therefore to study its information interests).

In the form of "interactive dialogue", the sender of information will be able to see the "implementation of the ideas and goals aimed in it", which is archival important for a truly professional approach to the organization of institutional communication (Zemlyanova, 2004, p.126). Well-known researcher H. Lasswell noted the importance of such an aspect as "the quality of having feedback in communication (reciprocity)" (Fomicheva, 2007). In order to bring the process of mass media communication closer to a two-way model, there must be not only the possibility but also the desire of communication participants to establish "a reverse regime - a temporary change of roles in the transfer of information" (Fomicheva, 2007).

Feedback from the media audience helps to learn about the responses to the content published in the media, which give "opportunities for non-professionals to participate in the management of information processes, to influence them" (Fomicheva, 2007). Therefore, audience marketing research for media organizations is extremely important, as for no other organization, as for any other business.

The "culture of participation" or participatory approach provides endless opportunities to learn what really worries the audience, what are its information needs, because the audience can

easily “take the initiative in asking questions for discussion” (Fomicheva, 2007, p.91, p.101). And it is the practice of giving the audience the opportunity to participate in the media activity provides the exchange of various types of capital (social, cultural), the accumulation of not only “information but also other types of symbolic resources” (Fomicheva, 2007, p.140). And this is the peculiarity of marketing research of the mass media audience. With the involvement of the media audience in the production of information, there is an opportunity for its large-scale impact on public life.

Each type of media has its own specifics regarding the organization of media research of the audience. The print media, which have a longer history than other types of media, actually introduced the first methods of studying the information needs of media consumers. The best way to find out what readers think is to use a variety of survey methods implemented by the editors themselves through feedback. It is the most convenient to use your own website or account in the social network of a newspaper or magazine - they are now available in the most publications. It is possible to get in touch with your reader through e-mail, online interviews, forums, blogs for both journalists and readers. It is an effective tool for expressing approval or criticism, determining the level of information requests, clarifying the interests and moods of readers. For a journalist there is an opportunity to communicate with particular people, not with the average reader, they can say “about what did not get for one reason or another on the newspaper columns, ask readers for information, confess to readers by themselves” (Lukina, 2010, p.188).

The Internet provides much more opportunities for high-quality media research of the audience. In Ukraine, the online segment of the media sphere still does not have a clear definition either at the legislative level or among scientists. The media community argues that only professional online media and Web versions of traditional media (online prototypes) can be included in the online media. Other resources of the Web are not entirely correctly included to the media. These are various information resources and means of communication that can carry out institutional mass communication, but do not perform the full list of media functions, do not reflect the media nature (Lukina, 2010).

A wide range of research methods for the media audience of the Internet can be grouped as follows: online counters, online surveys and registration; use of social networks; special programs for tracking user behavior on the Web. Therefore, in general, we can state the significant media measurement potential of the media structures of the Web in comparison with traditional channels, which is appearing in the reduction of time-consuming procedures for conducting both quantitative and qualitative MR audiences (Lukina, 2010).

New technologies, special software allow carrying out quite effectively in cyberspace and quantitative media research of the audience. Usually in this way data are obtained on: “the size of the audience of a particular sector of the Web; dynamics of attendance for any period (“hosts”, “cookies”, “hits”); selection of the audience by frequency of visits, amount of downloads and total time; depth of viewing and average duration of sessions on the sector's sites; selection of visits per days of the week and hours, as well as by weekdays and weekends; geographical composition of the audience; activity of visitors from different countries and cities of the world; selection of users' browsers by established languages; statistics on operating systems, browsers, monitor characteristics; general structure of traffic and main sources; search queries by which users find sites in the sector” (Lukina, 2010).

CONCLUSION

Thus, the considered tools and methods used for the organization of marketing research in the media business demonstrate their specificity. After all, media products differ from other product categories in marketing in terms of audience perception. We have shown that the need and importance of studying the media needs of the audience by a mass media organization is provided by the functioning of the media not only as a business but also as a social institution that aims to

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ensure the joint activities of people. We argued that clarifying the needs, interests, expectations, and assessments of the audience about media products for media organizations is extremely important, as for no other organization, as for no other business.

We analyzed that the Internet provides much more opportunities for high-quality media research of the audience. We noted the significant media measurement potential of the media structures of the Web in comparison with traditional channels. New technologies, special software allow carrying out quite effectively in cyberspace and quantitative media research of the audience.

Despite the existence of a wide range of specific tools for conducting marketing research in the media business, the question of their imperfection remains interesting for further research, which can manifest itself in various aspects.

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ОСОБЛИВОСТІ ОРГАНІЗАЦІЇ МАРКЕТИНГОВИХ ДОСЛІДЖЕНЬ У МАСМЕДІЙНОМУ БІЗНЕСІ

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Метою дослідження є вивчення інструментів і методів, які використовують організації масмедіа на сучасному етапі для проведення маркетингових досліджень цільової аудиторії - з'ясування потреб, інтересів, очікувань, оцінок щодо медіапродуктів, які вони споживають. А також вивчення питання необхідності й важливості проведення саме якісних маркетингових

досліджень в організаціях масмедіа. Дослідження проводилось із використанням системного та міждисциплінарного підходів. У роботі використано сукупність загальнонаукових методів: аналіз, синтез, спостереження, порівняння. Розглянуті нами інструменти та методи, які використовуються для організації маркетингових досліджень у медіабізнесі, демонструють свою специфіку. Адже медіапродукти відрізняються від інших товарних категорій в маркетингу в аспекті сприйняття аудиторією. Показано, що необхідність і важливість вивчення медіапотреб аудиторії масмедійною організацією передбачено функціонуванням ЗМІ не лише, як бізнесу, але й як соціального інституту, який має за мету забезпечення спільної діяльності людей. Обґрунтовано, що з'ясування потреб, інтересів, очікувань, оцінок аудиторії щодо медіапродуктів для організацій масмедіа є вкрай важливими, як для жодної іншої організації, як для жодного іншого бізнесу.

Ключові слова: маркетингові дослідження медіааудиторії, медіапотреб, медіаметрія.

ОСОБЕННОСТИ ОРГАНИЗАЦИИ МАРКЕТИНГОВЫХ ИССЛЕДОВАНИЙ В МАССМЕДИЙНОМ БИЗНЕСЕ

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Целью исследования является изучение инструментов и методов, используемых организациями масс-медиа на современном этапе для проведения маркетинговых исследований целевой аудитории – выяснение потребностей, интересов, ожиданий, оценок относительно медиапродуктов, которые они потребляют. А также изучение вопроса о необходимости и важности проведения именно качественных маркетинговых исследований в организациях массмедиа. Исследование проводилось с использованием системного и междисциплинарного подходов. В работе использованы совокупность общенаучных методов: анализ, синтез, наблюдение, сравнение. Рассмотренные нами инструменты и методы, которые используются для организации маркетинговых исследований в медіабізнесі, демонструють свою специфіку. Ведь медіапродукты отличаются от других товарных категорий в маркетинге в аспекте восприятия аудиторией. Показано, что необходимость и важность изучения медіапотребностей аудитории массмедійной организацией предусмотрено функционированием СМИ не только как бизнеса, но и как социального института, который имеет цель обеспечивать совместную деятельность людей. Обосновано, что выяснение потребностей, интересов, ожиданий, оценок аудитории относительно медиапродуктов для организаций массмедиа крайне важны, как ни для одной другой организации, как ни для одного другого бизнеса.

Ключевые слова: маркетинговые исследования медіааудиторії, медіапотребности, медіаметрія.

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