

# Jurnal Sosial Ekonomi dan Kebijakan Pertanian

http://journal.trunojoyo.ac.id/agriekonomika Agriekonomika Volume 8, Nomor 2, 2019

# A Study on Affecting Factors of White-Nest Swiftlet (*Collocalia fuciphaga*) Farming Performance in Haurgeulis District, Indramayu Regency

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> Received: September 2019; Accepted: October 2019; Published: October 2019 DOI: https://doi.org/10.21107/agriekonomika.v8i2.6013

## ABSTRACT

Indonesia is a major supplier of the white-nest products. The white-nest products can be originated from Java Island, including Haurgeulis District, Indramayu Regency. White-nest businesses in that area had been developed since 1950s although the productivity subsequently decline in the rate of deforestation of the concession area nowadays. These problems were henceforth set as the focus of the study, based on the inference Malcom Baldrige Criteria for Performance Excellence (MBCfPE). This study was to recognize the association white-nest business performance. Some internal factors, observed as the predictor factors of business performance, included achievement-motivation factor, strategic planning, technical aspects and technologies, guanxi (personal relationship), and leadership. Surveillance activities were undertaken by using simple random sampling with questionnaire method for collecting the primary data, processed by path analysis method. The test results shown that all of internal factor have significant effect on the performance of the white-nest business by the leadership intervening.

Keywords: Edible-nest Swiftlet, MBCfPE, Business Performance.

#### INTRODUCTION

Indonesia has a rich in biodiversity. All of the natural resources potentials have essential value for livelihood (bioprospecting), so that whole potentials required to be conserved in ecosystem level up to genetic level. Meanwhile, Indonesia has been recognized by the UNESCO (United Nations Educational, Scientific and Cultural Organization) as a predecessor in preserving biodiversity. Among the existing species of birds, whitenest swiftlet (Collocalia fuciphaga) is an ecotype of saliva-producing that artificially stabled by farmer on the island of Java. White-nest product contains very high glycoproteins as complex compounds that have a role in cell regeneration (Hamzah et

al., 2013). These fact cause the increasing of demand white-nest products, enacting the price as expensive as general which about 5-13.5 million rupiah/kg for the domestic market (Hakim, 2011; Rachman, 2016). While being at the regional level, the value of white-nest exports from Indonesia to China in 2017 reached 102 million USD 2018). Koesmawardhani (Marpaung, (2017), reported that the existence of Indonesia in China market competed with Malaysia (10%), and also Thailand and Vietnam (5%). The export enhancement efforts of these product are continuously developed as the fulfillment of bilateral agreements between both regions (see Table 1). Eventually, the white-nest swiftlet should be an agribusiness product that

Cite this as:

Wahyudi, D., Suwarto., Irianto, H. (2019). A Study on Affecting Factors of White-Nest Swiftlet (*Collocalia fuciphaga*) Farming Performance in Haurgeulis District, Indramayu Regency. *Agriekonomika*, 8(2). 128-142. https://doi.org/10.21107/agriekonomika.v8i2.6013

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Surakarta, JATENG 57126 Email : wahyudi.dodo@yahoo.com Phone : +62 878-0873-4894	Agriekonomika has been accredited as a scientific journal by the Ministry of Research-Technology and Higher Education Republic of Indonesia: <b>No. 23/E/KPT/2019</b>

becomes main export commodity from Indonesia to China.

Haurgeulis District, in Indramayu Regency, is one of white-nest producing areas in West Java Province. The authorization of these business has been carried out with their third generation, which has capability to survive more than two decades. In the heyday, the whitenest business was able to produce 10 - 30kg/quarter of products. The productivity decreases to 1.5 kg per harvest period that equal to the rate of deforestation that occurred in the nearest production forest concession. Some Gedong Walets (the swiftlet house) can eventually produce white-nest swiflet products once a year. Ecophysiological factor, the Chinese philosophy of business rooted in Chinese culture is able to be a determinant factor of the white-nest business productivity. Actually, the arrival of Tionghoa (the overseas Chinese) in the archipelago was building a trade as marked by the voyage of Admiral Cheng Ho (Zheng He; 1371 -1433 AD). Tionghoa mentality has affirmed the existence of Chinese entrepreneurs in many business, included in West Java Province (Mulyani, 2016).

The leadership of white-nest business has been involved to the workers. The *Tri Brata* as Javanese philosophy which originates from the Islamic value and affects the behavior of any workers. It has also influenced the white-nest business performance in Haurgeulis District, Indramayu Regency. The *Rasa Jawa* (Javanese mentality) will foster an individual character that respects each other and invites people to behave in

noble manner, at least avoiding the *Grusa-Grusu* (haste) and selfishness attitude (Endraswara, 2013). The assimilation that consisted of Tionghoa mentality of entrepreneurs and the *Rasa Jawa* of the workers, has became a driving force for arranging white-nest business in the region, in order that the business can be survived more than 20 years. That fact encouraged this study to retain problems which has been undermining the white-nest business, called decreasing of *Gedong Walets* productivity.

The purpose of this study is to recognize the association white-nest business performance which influenced by some internal factors that observed as the predictor factors of business performance, including achievement-motivation factor, strategic planning, technical aspects and technologies, *guanxi* (personal relationship), and also leadership.

There are several considerations for using the internal factors as predictors of white-nest businesses performance. Considering the relevance of community empowerment for the first point, Karsidi (2001), said that community empowerment was defined to be an effort to motivate people to authorize themselves to explore the potencies and dare themselves to act to improve the quality of life. Pranarka & Vidhandika (1996), explained that the empowerment process contained bv learning process and transfer of power. In the course of time, the achievementmotivation hints to learning process. while the power transfer expressed by leadership. Achievement-motivation, aiming the behavior towards the standard

The value of Edible-nest Swittlet Exports to China Market									
No.	Suppliers		Import Value (USD 000)						
		2010	2011	2012	2013	2014			
1.	Indonesia	432.9	307.9	190.3	211.3	207.2			
2.	Malaysia	17.8	15.2	7.2	11.3	7.3			
3.	Thailand	10.3	11.3	0.4	1.5	2.2			
4.	Vietnam	6.6	7.2	2.1	2.0	3.0			

Table 1
The Value of Edible-nest Swiftlet Exports to China Market

Source: Trade Ministry of Indonesia, 2016

of excellent, consists of (1) the need for achievement (n-ach); (2) the need for affiliation (n-aff); and (3) the need for power (n-pow) (McClelland et al., 1953). As for leadership, there were three types of leadership skills, namely: (1) technical skills as related to mastery of technical work; (2) human skills as related to ability to cooperate with other parties; and (3) conceptual skills as related to ability to formulate a framework or concept of work for alleviating problems (Alma, 2009).

Guanxi as The Chinese Work Culture is another consideration. The Chinese word "guanxi" refers to interpersonal linkages with the implication of continued exchange of favors, including reciprocal obligations. Unlike inter-firm networking in the West, however, this reciprocity is implicit, without time specifications not only necessarily equivalent but also socially binding (Luo, 2007). The major differential between quanxi and Western business approaches are perception and context of trust. Guanxi can be characterized in terms of long-term relationship which operated through trust, mutual obligation, and reciprocity. Xinyong (trustiness) is the foundation and the guideline of guanxi (Zhang & Pimpa, 2010). Guanxi remains being very important meaning of business activities, especially while starting up the new venture (Lee & Anderson, 2007). As soon as the business is growing up and running, other factors will take over the importance of guanxi while the relationship being established (Fan, 2002). Broadly, guanxi, based on shipping concept, is introduced by Admiral Cheng Ho. There were four dimensions of the guanxi, called (1) capacity building; (2) coordination; (3) communication; and (4) continuity (Hoon, 2012).

According to Jin (2006), Chinese entrepreneurs had gained allegiance to their mother-tongue, ethnicity, kinship, and work culture for arranging their businesses in mainland China. *Guanxi* related to interpersonal relationships (Huang & Wang, 2011) either in groups (Chen et al., 2011) or institution (Cai & Yang, 2014) for constraining the rationalization of nourish

economic activities (Luo, 2007), such as job changes (Bian & Ang, 1997), included attracting overseas Chinese investors for a business (Guan, 2011b). The best way to establish *guanxi* is identifying and satisfying the group's greatest necessity (Guan, 2011b). There is no Chinese business that grows up without involving *guanxi* to their business activities as their work value (Ikhsan et al., 2017). Lin & Ho (2010), stated that *guanxi* had significant effect on Chinese business.

The third consideration relates to business processes that applied into the performance of management system. Sparx (2004), explained that business processes were a series of activities designed to produce certain outputs for customers, included a set of coordinated activities in the technical environment and business. A business process, integratedly embodied business strategy, can interact with other business processes, even in different institutions (Weske, 2007). Business processes are not in linear association with performance management systems (Fletcher, 1993). Practically, the performance management system can be paired to measure firms performance, e.g.: Malcolm Baldrige Criteria for Performance Excellence (MBCfPE). There are seven categories of MBCfPE for valuing the manufacturing companies (Figure 1). either for small business or services performance, including leadership, strategic planning, costumer and market focus, analysis-measurement-knowledge management, human resources focus, process management, and also business results (Gaspersz, 2014).

Based on the provisions formed above, several internal factors that relate to the white-nest business processes are fastened as observed variables, which called as motivation-achievement, strategic planning, technical aspects and technologies, and *guanxi*. All of those factors can be predictors for leadership factor, and also white-nest business performance. Therefore, the importance of this study is to identify the influence



Source: Gaspersz, 2014

#### Figure 1 The Relation of Seven Categories of MBCfPE for Valuing Manufacturing Company or Small Business

of those predictors to the leadership and the business performance which can be a reference to sustainable agriculture study and white-nest swiftlet farming to increase their business productivity.

#### METHODOLOGY

Indramayu Regency has highest productivity areas for white-nest swiftlet business, consists of Haurgeulis District, Terisi District. and Cikedung District. The distance are respectively 63, 38, and 34 kilometers in far from Indramayu District (the district center). Haurgeulis District was purposively determined as the area of this study. Collecting the data, this study was also held on December 2018 until January 2019. The study used 162 individuals white-nest entrepreneurs who settled in Haurgeulis District, Indramayu Regency as the population. The determining of population will influence other actions, especially for the quantitative research (Sugiyono, 2010). At 5% of error, sampling size determined by the Yamane (1967) are lied in equation of (1).

$$n_{y} = \frac{N}{(Nd^{2}+1)}$$
(1)

Where as  $n_y$  for sample units, N for the population, and d for sampling error. From 116 white-nest swiftlet business entrepreneurs, there were 102 respondent who had willing to return the questioner

some considerations. sheets which included (a) changing their own quarters; (b) the activities on Haurgeulis District during the surveillance; and (c) the availability of time. The respondent was dominated by high educated person (24.51%), the labour/employee/the other service workers (29.41%), owner of Gedong Walets with less than 100 meter producing areas (41.18%), and the other resident. In particular, 10.78% women respondent had the white-nest swiftlet business. Accordingly, this surveillance had authority approval from Board of the Indramayu Regency Authority as 070/620/ Rekomlit/KNKM of legalized number. Their all responses to the surveillance could be classified as oridinal data.

The ordinal data was obtained by using simple random sampling with valid and reliable questionnaire to measure observed variables (Sarwono, 2007). Accordance with the usable response rate of 87.93%, so that number of processed questionnaires was fixed as 102 copies. Pujihastuti (2010), stated that sampling was classified as credible if the usable response rate should be 30% at least. Fulfilling the practical requirement of path analysis technique, the ordinal data that is formed by questionnaire converted directly to be the interval data (Heryanto & Triwibowo, 2018).

Being a quantitative research with path

analysis technique for testing the influences of each data, several assumptions will prevail in this path model. According to Utama (2016), those are (a) absence of adivity (impact of interaction); (b) causal flow is one-way (recursive); and (c) classic assumption of the hypothesis. Based on those basic point, the path analysis in this study was carried out according to the following stages:

- 1. Determine hypotheses, path models, and structural equations.
- 2. Regulate exogenous variables on endogenous variables for each structural equation.
- 3. Intercorrelate exogenous variables.
- Calculate the path coefficient, so that it is known the magnitude of the effect of exogenous variables on endogenous variables either directly or indirectly, and the simultaneously effects or partially.
- 5. Determine the path model that is available for generalizing particular observed symptoms (trimming process).

Riduwan & Kuncoro (2008), explained that the path diagram determined by theoretical prepositions and originating from a particular design of study should have been arranged before path analysis was carried out. Four determinant variable of exogenous-predictors consists of achievement-motivation factor (X1), strategic planning (X2), technical aspects and technologies (X3), and guanxi (X4). the exogenous-predictors Predictively. (X variables) can affect the endogenouspredictors, leadership as Y1 variable, and also business performance (Y2 variable) or endogenous - criteria. Leadership (Y1-variable) hypothesized to be the most influential predictor variable of the association, accordance with (Suyamti, 2009).

Achievement - motivation (X1), the cognition of human intelligence, related to impulse the entrepreneurs for increasing or defending their performance as high as possible in every economical operation of their own business, using the business primary standard that visualize all high necessity for having the achievement (Djaali, 2007; Alma, 2009).

Strategic planning (X2) refers to some criteria of the process, including planning and implementing strategic, scattering the programme, and the availability of human resource to execute the programme or rearrange it in certain condition. Strategic planning (X2) can be identified by the existence of strategic development and deployment (Utami & Setyorini, 2014).

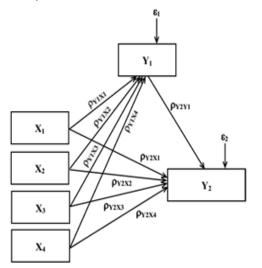
Technical aspects and technologies (X3) explains how the business processes technically run to produce the product more effective and efficient. The indicators of technical aspects and technologies are business location and building layout, utilization of appropriate technologies are too (Suliyanto, 2010).

*Guanxi* (X4) describes the interaction and relationship that has assisting and appreciating each other, forming mutual agreement to solve the problem, and bringing the societal value to the fore. Therefore, exchanging the information, conforming the decision, and doing synchronization intensively are needed to create the collaboration of capacity, coordination, communication, and continuity development (Hoon, 2012).

As the endogenous-predictor, leadership (Y1) explain how entrepreneurs direct and sustain their own businesses to have vision, values, performance expectation, and public responsibilities. The entrepreneurs need to communicate with their employees, develop their future leadership, and arrange their business performance. Indicators of leadership can be detected by the behavior of senior leader, business-governance, and social accounting which can be supported by technical skills, human skills, and conceptual skills (Alma, 2009; Utami & Setyorini, 2014).

Therefore, white-nest swiftlet business (Y2) give the real-time information of evaluation and improvement processes. Besides that, the business outcomes that fit in with their company strategies are given. Business outcomes are based on leadership and operating system ways which could be differentiated by customer focus and market, and also business performance (Rivai & Sagala, 2009; Utami & Setyorini, 2014).

Based on these course, the path diagram which formed for this research is presented in Figure 2. For the interests of trimming, the observed model is divided into two sub-structures. After trimming, the both of sub-structures are compared so that a path model is obtained.



Source: Data Process, 2019

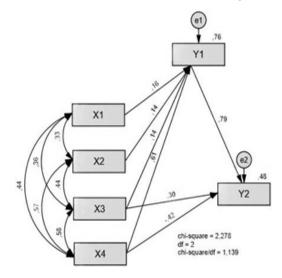
#### Figure 2 Observed Model

Whereas,  $X_1$  for achievement motivation,  $X_2$  for strategic planning,  $X_3$  for technical aspects and technologies,  $X_4$  for *guanxi*,  $Y_1$  for leadership, and  $Y_2$  for the white-nest business performance.

#### **RESULTS AND DISCUSSION**

The verification analysis results indicate that as asymptot significance value (2-tailed) for the unstandardized residual at 0.200 (asymp. Sig. > 0.05) means that the data is in normal distribution. Similarly, the F statistic value (at 105.333), was more than 2.196, in which shows that the observed model is classified as linear association. The correlation between exogenous-predictors is expressed by p-value that less than 0.05 which is not classified as very weak correlation.

The results of other verification analyzes Table 2, show that at significance level of 5% (2-tailed),  $X_1$  to  $Y_2$  vector ( $\rho_{Y2X1}X_1$ ) and  $X_2$  to  $Y_2$  vector ( $\rho_{Y2X2}X_2$ ) do not meet the rule of thumb, whereas each p-value more than 0.05, while p-value for the other vectors are less than 0.05 (significant). It is also indicated by critical value (C.R.). So that, both of the vectors have to be trimmed. Improving to the observed model are presented in Figure 3.



Source: Data Process, 2019

#### Figure 3 Estimated Model

Whereas  $\chi^2$  for chi-square and *df* for degree of freedom. According to the estimated model, it can be recognized that all of path coefficients are positive except for X<sub>4</sub> to Y<sub>2</sub> vector ( $\rho_{Y2X4}X_4$ ). Statistics for the estimated model listed in Table 3.

At significance level of 5% (2-tailed), the effect of all partial regression on the perfomance of white-nest business are significant, whereas each p-value less than 0.05. Those are also proven by the C.R. value or t-statistic as more than 1.984. Likewise,  $\rho_{Y2X4}X_4$  as its t-statistic (at -3.166) is less than -1.998 and the p-value (at 0.002) is less than 0.05. The first squared multiple correlations or  $R_a^2$  value (at 0.761) which is more than the second squared multiple correlations or  $R_b^2$  value (at 0.477) indicates the intervening of

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Statistics for the Observed Model									
Statistics				Estimate	S.E.	C.R.	Р	Label	
Regression Weights:	Y1	<	X2	0,147	0,065	2,284	0,022		
(Group number 1-Default model)	Y1	<	X3	0,148	0,067	2,217	0,027		
	Y1	<	X4	0,589	0,066	8,868	***		
	Y1	<	X1	0,145	0,048	2,995	0,003		
	Y2	<	X1	0,024	0,071	0,335	0,738		
	Y2	<	X2	-0,138	0,093	-1,484	0,138		
	Y2	<	Х3	0,327	0,097	3,386	***		
	Y2	<	X4	-0,369	0,125	-2,953	0,003		
	Y2	<	Y1	0,798	0,140	5,692	***		

Table 2 Statistics for the Observed Model

Source: Data Process, 2019

Table 3								
Statistics	for the	Estimated	Model					

No	Statistics				Estimate	S.E.	C.R.	Р	Label
1.	Regression Weights:	Y1	<	X2	0.147	0.065	2.284	0.022	
	(Group number 1 –	Y1	<	Х3	0.148	0.067	2.217	0.027	
	Default model)	Y1	<	X4	0.589	0.066	8.868	***	
		Y1	<	X1	0.145	0.048	2.995	0.003	
		Y2	<	Х3	0.315	0.097	3.242	0.001	
		Y2	<	X4	-0.395	0.125	-3.166	0.002	
		Y2	<	Y1	0.765	0.132	5.790	***	
2.	Regression Weights: (Group number 1 – Default model)	Y1	<	X2	0.138				
		Y1	<	Х3	0.136				
		Y1	<	X4	0.607				
		Y1	<	X1	0.165				
		Y2	<	Х3	0.298				
		Y2	<	X4	-0.423				
		Y2	<	Y1	0.793				
3.	Correlational	Y1			0.761				
		Y2			0.477				

Source: Data Process, 2019

estimated model. Eventually,  $\epsilon 1$  and  $\epsilon 2$  are to be unobserved variables of each substructure. The statistics of both determined by equations of (2) and (3), while the linear equation for sub-structures formulated by: (a) Y<sub>1</sub> = 0.165X<sub>1</sub> + 0.138X<sub>2</sub> + 0.136X<sub>3</sub> + 0.607X<sub>4</sub> +  $\epsilon 1$ ; and (b) Y<sub>2</sub> = 0.298X<sub>3</sub> -0.423X<sub>4</sub> + 0.793Y<sub>1</sub> +  $\epsilon 2$ .

$$\varepsilon 1 = \sqrt{1 - R_a^2} \tag{2}$$

$$\varepsilon 2 = \sqrt{1 - R_b^2} \tag{3}$$

Whereas  $\varepsilon$  for unobserved variables and  $R^2$  for squared multiple correlations.

The first equation, Y1 = 0.165X1 + 0.138X2 + 0.136X3 + 0.607X4 +  $\epsilon 1$ , explained that leadership (Y1) was straight affected by motivation-achievement (X<sub>1</sub>), strategic planning (X<sub>2</sub>), technical aspects and technologies (X<sub>3</sub>), and *guanxi* (X<sub>4</sub>)

which given by motivation-achievement (X1) of 0.165 in point, strategic planning (X2) of 0.138 in point, technical aspects and technologies (X3) of 0.136 in point, and guanxi (X4) of 0,607 in point. Meanwhile, the Y2 =  $0.298X3 - 0.423X4 + 0.793Y1 + \epsilon^2$ equation described as the improvement of business performance (Y2) was influenced by technical aspects and technologies (X3) and leadership (Y1) with 0.298 point of technical aspects and technologies (X3) and 0.793 point of leadership (Y1). Nonetheless, the fact that guanxi (X4) can impede the business performance (Y2) expressed with -0.432 point of guanxi (X4) influence. In other words, guanxi (X4) are giving the negative impact to the business performance (Y2) but giving the biggest impact positively to the leadership (Y1). The leadership (Y1) influence to business performance (Y2) is the biggest impression from all predictor variables.

Based on the statistics formed above, it can be seen the magnitude of the combined determination coefficient (R<sup>2</sup><sub>total</sub>) which means that there are influences of predictor variables of the estimated model on the white-nest business performance (Y<sub>2</sub>) of 87.5%, while the rest (at 12.5%) is explained by another variables (unobserved variables). In a fit model, the correlation matrix that estimated and servobied should be significantly different so that obtained a lower probability of the significance level (p-value < $\alpha$ ). Those course that requisioned can also be fulfilled by comparing between  $\chi^2$  and df value as its worth might be less than 2 in allowance  $(\chi^2/df < 2)$ , while the determination of  $\chi^2/df < 5$ applied to a rational model (Ghozali, 2013). According to the statement, the estimated model is categorized as the fit model with 1.139 in point of  $\chi^2$ /df (Figure 3).

As a comparising to the provisions formed above (for discussing purpose), there were many studies related to the influence of leadership on performance, included (Suyamti (2009), Khitam (2014), and Suprapta et al. (2015)). The other study proved that the effect of leadership on performance was direct (Sutikno &

Wurjaningrum, 2014). Additionally, there were studies that also indicated the leadership intervening on performance (Jannah et al., 2013; Utami & Setyorini, 2014). Whereas in the term of quality management that works according to 'obstinately developing' philosopy, leadership studding was aimed to improve the utilisation of tools and humans as to increase their productivity or output and to create gratitude of workers (workmanship). For those reason, Gaspersz (2014), suggested transformational leadership for achieving business goals.

Transformational leadership is in equal to Chinese work value that promoted the spirit of collectivism (Mulyani, 2016). The white-nest business in Kecamatan Haurgeulis, Indramayu Regency has been facing to problem of its productivity as called as the reduction of product volume (output), although market share of the product in China was still confidentially large (Rachman, 2016). Accordance with the estimated model, there are internal factors that have a significant effect on the white-nest business performance. All of those factors which require leadership intervening in order to be able to associate with the white-nest business performance.

After the leadership, the other sequent predictor of the white-nest business performance is achievement-motivation. The influence given by achievementmotivation on the performance that can be indirect. In line with this research, Suyamti (2009), explained that motivation had a simultaneous effect on performance being in conformity with leadership. Motivation can also be correlated to internal culture in order to be influenced on performance (Utomo et al., 2017). An internal culture might be related to external adaptation or internal integration. Likewise with the estimated model, achievement-motivation has a direct effect and positive on leadership although its influence on the white-nest business performance is not significant. These facts prove that leadership intervening is needed for associating achievement-motivation of internal factors

with the white-nest business performance.

Business planning is the legitimacy of a business. There are several uncertainties that occur in a business as caused by profit losses, so that a strategy are needed to overcome them. Strategy defined to be an effort to replace human resources, physical, information or capital at risk (Rangkuti, 1999). Utami & Setvorini (2014), proved the direct influence of strategic planning on leadership. Additionally, strategic planning affected performance simultaneously as similar to leadership (Suyamti, 2009). Likewise with the estimated model, there is a recursive vector that correlates strategic planning to leadership. It means that the direct effect and positive that given by strategic planning to leadership is significant, while its direct effect on the white-nest business performance is not allowed. Those evidence shows that leadership intervening is needed by strategic planning in order to be associated with the white-nest business performance.

The white-nest businesses in Haurgeulis District, Indramayu Regency, have been able to more than 2 decades as equal to a business cycle. Generally, those businesses has experienced in breaking even once moment. There is competitiveness of the white-nest business which marked by using market penetration. The usage of market penetration as a white-nest business strategy, it is realized throughin market positioning as comply with the product classification. The classification of the white-nest products can be divided into: (1) bowl shape as about IDR 12 – 13.5 million/kg in prices; (2) oval shape as about IDR 11 – 11.5 million/ kg in prices; (3) angular shape as about IDR 9 – 10 million/kg in prices; (4) faults as about IDR 7 - 7.5 million/kg in prices; and (5) crumbs as about IDR 4 – 5 million/ kg in prices.

There are three key processes regard to white-nest business as called as product maintenance, supply chains, and customer-supplier chains that supported by business management, an endorsing process. Actually, white-nest business is the public relation marketing based or PR-marketing as different as the corporate-based business. Appearance of PR-marketing, the process of customersupplier chains consists of public relations (customer relations), customer services, and marketing as the all functions have a role at once. Along with those processes, employers can get feedback on the importance of product maintenance. Therefore, the marketing function is carried out along with the supply chains process like the based-corporate. The supply chains process work in the kinship system that recognized as guanxi. There are 4 groups involved in the supply chains process, namely (1) costumers; (2) suppliers; (3) workers group; and (4) owners. All of these groups are directed by entrepreneurs.

The other business process, the key attribute of white-nest business, is product maintenance. According to the estimated model, it can be recognize that the technical aspects and technologies have dual functions. Both of the influences on the white-nest business performance are significant. At the first function, these internal factor have an indirect effect on the white-nest business performance, so that it needs leadership intervening. Millaty (2017), proved that technical cultivation activities could have a simultaneous effect on performance which characterized by increased productivity throughin effective business processes. At the second function, the influence of the technical aspects and technologies to the white-nest business performance is direct. The productivity rising of Gedong Walets characterized by usage of various productive factors as executed by utilisation of work methods or appropriate technologies, such as tweeters, air-conditioning installations, eradication of disturbing animals, white-nest bleaching, and egg-controlling techniques. The recursive vector that applied to the second function shows that the increasing in Gedong Walets utility is proportional to the white-nest performance.

The existence of market segmentation of white-nest products causes suppliers to

use a psychological approach for fostering customer-supplier chains process. The customer-supplier chains are realized by PR-marketing. PR-marketing is intended to encourage the customers satisfaction or their loyalty for white-nest consumption. The customers loyalty will be an inhibitor to competitors for improving their business. Even so, ethical behavior that symbiotic is a work value and noble for guanxi. So that, it also animates the behavior of Indonesia white-nest suppliers. Those fact which about the influence of collaboration on performance is revealed by Rani et al. (2017), who proved that supplychains collaboration has a direct effect on performance although there are other factors that have greater effect. Kurniawan & Kusumawardhani (2017), stated the simultaneous influence of supply-chains management on performance.

According to the estimated model, there are two recursive vectors that correlate *quanxi* to the performance. The first function proves that guanxi has an indirect effect on performance whereas affection is given by guanxi throughin leadership intervening. At the second function, the direct influence of guanxi on performance that is significant and negative. It shows that entrepreneurs concern for potential failure of guanxi. Cheng & Tang (2012), argued that guanxi was a necessary but not sufficient factor for the survival of small and mediumsized firms. Managers should seek formal and institutional tool to protect their own interest. Conclusively, the most important principle underlaying guanxi is transferable (Luo, 2007). The success of transferability depends on (1) capital necessity as in finance (Crawford, 2011), interpersonal relationships (Wiegel & Bamford, 2015), or cultural (Dunning & Kim, 2007); (2) ability to calculate competitive advantages which embedded into a business strategy (Guan, 2011a); (3) knowledge transfer as about the business practices (Luo, 2007); (4) effective managerial skill as rare resource in Chinese firms, for examples, intermediaries utilisation and risk-reduction

capability (Luo, 2007); and (5) experienced workforce (Gellerstam & Wiesner, 2010).

Guanxi failure has been experienced by Uber as the largest former ridesharing company in China. This multinational company was able just to survive for 2 years as suffered financial crisis and thus deliberately acquired by Didi Chuxing (Susilo, 2017). Guanxi failure was also experienced by Vietnamese businessmen in the late 18th century, due to the China's protective policies. This situation has drastically declined prices for several important commodities from Vietnam. included gold and silverware (Dar, 2015). Guanxi failure also triggered the decline in productivity of Gedong Walets in Haurgeulis Subdistrict, Indramayu Regency which held in 2007. The demand of the whitenests descent and collapse in prices whereas Chinese authorities affected by rumors related to the avian influenza (H5N1) pandemic and thus temporarily suspended importation of its product. This counter-productive policy was terminated by a mutual recognition agreement of both. So that, the protocol of hygiene requirements, guarantine, and inspection has been prevailed upon importation to China of edible bird nest products (Trade Ministry of Indonesia, 2013).

## CONCLUSIONS

There are 5 internal factors which contrive to the white-nest business process and stabled as predictors of its business performance, consist of achievementmotivation, strategic planning, technical aspects and technologies, guanxi, and leadership intervening. Inference from the results of path analysis has several clauses, there are: The effect given by all factors either in direct form or indirect on white-nest business performance are significant. Meanwhile, the guanxi has a negative-direct impact. Guanxi is possible to give the biggest impact to the leadership. On the other hand, the leadership influence to business performance is the biggest impression of all factors, showing that the leadership is a mediator of all factors

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to give their impression on business performance. The estimated model can generalize the association of the whitenest business performance which affected by all factors. Based on the modelling, there are leadership intervening on the influence given by predictors of white-nest business performance. The intervention applies to all predictors, includes technical aspects and technologies. These fact shows that in addition to human skills and conceptual, technical skills should be other important dimension of the entrepreneur competency.

# REFERENCES

- Alma, B. (2009). *Kewirausahaan*. Bandung: Alfabeta.
- Bian, Y., & Ang, S. (1997). Guanxi Networks and Job Mobility in China and Singapore. *Social Forces*, 75(3), 981-1005. Retrieved from https://www.re searchgate.net/ publication/275326275\_Guanxi\_ Networks\_and\_Job\_Mobili ty\_in\_ China\_and\_Singapore.
- Cai, S., & Yang, Z. (2014). The Role of the Guanxi Institution in Skill Acquisition between Firms: a Study of Chinese Firms. *Journal of Supply Chain Manage ment, 50*(4), 3-23. Retrieved from https://www.onlinelibrary.wiley. com/ doi/abs/10.1111/jscm.12035.
- Chen, Y., Friedman, R., Enhai, Y., & Sun, F. (2011). Examining the Positive and Negative Effects of Guanxi Practices: a Multi-Level Analysis of Guanxi Practices and Procedural Justice Perceptions. *Asia Pacific Journal of Mana gement, 28*,715-735. Retrieved from https://www.researchgate.net/ publi cation/226715335\_Examining\_ the\_positive\_and\_negative\_effects\_ of\_guanxi\_practices\_A\_multi-level\_ analysis\_of\_guanxi\_practices\_and\_ procedural\_justice\_perceptions.

- Cheng, Q., & Tang, W. (2012). How Business Guanxi Affects a Firm's Performance: a Study on Chinese Small and Medium-Sized Construction Companies. Undergraduate dissertation, Uppsala University, Uppsala.
- Crawford, D. (2001). Globalisation and Guanxi: the Ethos of Hong Kong Finance. *New Political Economy*, 6(1), 45-65. Retrieved from http:// unpan1.un.org/ intradoc/groups/ public/documents/APCI TY/ UNPAN011393.pdf.
- Dar, K.B. (2015). The Prohibition of China (Guangxi), Vietnam Border Trade During The Tay Son Rebellion: Rhetoric in Political Gain. *Malaysian Journal of History, Politics and Strategic Studies, 42*(2), 23-52. Retrieved from http://journalarticle. ukm.my/10042/1/13781-37750-1-SM.pdf
- Djaali, H. (2007). *Psikologi Pendidikan*. Jakarta: Bumi Aksara.
- Dunning, J.H., & Kim, C. (2007). The Cultural Roots of Guanxi: an Exploratory Study. *The World Economy*, 329-341. Retrieved from https://www.research gate.net/ publication/4921261\_The\_Cultural\_ Roots\_of\_Guanxi\_An\_Explora tory\_ study/amp.
- Endraswara, S. (2013). *Falsafah Kepemimpinan Jawa*. Yogyakarta: Narasi.
- Fan, Y. (2002). Guanxi's Consequence: Personal Gains at Social Cost. Journal of Business Ethics, 38(4), 371-380. Retrieved from https://www.researchgate. net/ publication/225324186\_ganxi%27s\_ Consequences\_Personal\_Gains\_ at\_Social\_Cost.

- Fletcher, C. (1993). *Appraisal: Routes to Improved Performance*. London: Institute of Personnel and Development.
- Gaspersz, V. (2014). *Total Quality Management (TQM)*. Jakarta: Gramedia Pustaka Utama.
- Gellerstam, M., & Wiesner, J. (2010). *The Impact of Guanxi in Chinese Business, a Study of Swedish SMEs in Beijing*. Undergraduate dissertation, University of Gothenburg, Gothenburg.
- Ghozali, I. (2013). *Model Persamaan Struktural, Konsep dan Aplikasi dengan Program AMOS*. Semarang: UNDIP Press.
- Guan, B. (2011a). *Guanxi-based Strategy and Competitive Advantage: an Exploratory Study*. Undergraduate dissertation, University of Manchester, Manchester.
- Guan, J. (2011b). Guanxi: the Key to Achieving Success in China. *Sino-Platonic Papers*, 217, 3-14. Retrieved From Http://Sino-Platonic. Org/Complete/Spp 217\_Guanxi.Pdf.
- Hakim, A. (2011). Karakteristik Lingkungan Rumah dan Produksi Sarang Burung Walet (C, fuciphaga) di Kecamatan Haurgeulis, Kabupaten Indramayu, Jawa Barat. Bachelor thesis, Institut Pertanian Bogor, Bogor.
- Hamzah, Z., Ibrahim, N.H., Sarijini, Hussin,
  K., Hashim, O., & Lee, B.B. (2013).
  Nutritional Properties of Edible Birdnest. *Journal of Asian Scientific Research*, *3*(6), 600-607. Retrieved from http://www.aessweb.com/pdf-files/jasr-3(6)-600-607.pdf.
- Heryanto I., & Triwibowo, T. (2018). *Path Analysis Menggunakan SPSS dan Excel*. Bandung: Informatika.
- Hoon, S.H. (2012). *Memenangkan Persaingan Cara Cheng Ho*. Jakarta: Kompas Media Nusantara.

- Huang, K.-P., & Wang, K.Y. (2011). How Guanxi Relates to Social Capital? A Psychological Perspective. *Journal* of Social Sciences, 7(2), 120-126. Retrieved from https://thescipub. com/pdf/10.3844/jssp.2011. 120.126.
- Ikhsan, M.F., Ghani, A.B.A, & Subhan, M. (2017). The Relevancy of the Guanxi and Xinyong Concepts in Chinese Business Capitalization In Indonesia. Journal of International Studies, 13, 97-116. Retrieved from https://www. researchgate. net/publication/332328822\_The\_ Relevancy\_of\_the\_'Guanxi'\_ and\_'Xinyong'\_Concepts\_in\_ Chinese\_Business\_Capitalization\_ in\_Indo nesia\_1.
- Jannah, E.M., Rahman, A., & Yuniarti, R. (2013). Penentuan Strategi Bersaing Perusahaan Berdasarkan Pengukuran Kinerja dengan Metode Malcolm Baldrige National Quality Award (MBNQA): Studi Kasus PT. Cakra Guna Cipta Malang. Jurnal Rekayasa dan Manajemen Sistem Industri, 1(1), 11-21. Retrieved from https://www.jrmsi.studentjournal. ub.ac.id/index.php/ jmrsi/article/ view/ 8/18.
- Jin, A. (2006). Guanxi Networks in China: Importance and Future Trends. *China and World Economy, 14*(5), 105-118. Retrieved from https://www.research gate.net/publication/4753663\_ Guanxi\_Networks\_in\_China\_Its\_ Importance\_and\_Future\_Trends.
- Karsidi, R. (2001). Paradigma Baru Penyuluhan Pembangunan dalam Pemberdayaan Masyarakat. *Jurnal Mediator, 2*(1), 115-125. Retrieved from https://ejournal.unisba. ac.id/index.php/mediator/article/ download/711/391.

140 | Dodo Wahyudi et al., Affecting Factors of White-Nest Swiftlet (Collocalia fuciphaga)

- Khitam, C. (2014). Pengaruh CSR terhadap Kinerja Keuangan Perusahaan: Studi Kasus BEI Tahun 2011 – 2013. *Jurnal EKBIS, 4*(10), 507-511. Retrieved from https://www.journal.unisla.ac.id/ pdf/121012014/4%20 Chusnul.pdf.
- Koesmawardhani, N.W. (2017). Sarang Walet dan Kacang RI di Supermarket Ekspor Impor Hunan. Retrieved from https://finance.detik.com/beritaekonomi-bisnis/d-3480193/sarangburung-waletdan-kacang-ri-disupermar ket-ekspor-impor-hunan.
- Kurniawan, A., & Kusumawardhani, A. (2017). Pengaruh Manajemen Rantai Pasokan terhadap Kinerja UMKM Batik di Pekalongan. *Diponegoro Journal of Management, 6*(4), 1-11. Retrieved from https://www.ejournal. undip.ac. id/index.php/djom/article/ view/17952.
- Lee, E.Y.-C., & Anderson, A.R. (2007). The Role of Guanxi in Chinese Entrepreneurship. *Journal of Asia Entrepreneurship and Sustainability, 3*(3), 3-17. Retrieved from https:// openair.rgu.ac.uk/handle/10059/301.
- Lin, L.-H., & Ho, Y.-L. (2010). Guanxi and OCB: the Chinese Cases. *Journal of Business Ethics,* 9(6), 285-298. Retrieved from https://link.springer. com/ar ticle/10.1007/s10551-010-0465-6.
- Luo, Y.D. (2007). *Guanxi and Business*. New Jersey: World Scientific Publishing.
- Marpaung, D. (2018). KJRI Shanghai Gelar Forum Bisnis Sarang Burung Walet. *Jurnal Trade Expo Indonesia*, 2, 3. Retrieved from https://www. tradeexpo indonesia.com/jurnal/ indone sia/2/jurnal\_hari\_2\_mei2018. pdf.
- McClelland, D.C., Athkinson, J.W., Clark, R.A., & Lowel, E.L. (1953). *The Achievement Motive*. New York: Appeton Century Cofts.

- Millaty, R. (2017). Faktor Teknis Budidaya yang Mempengaruhi Produktivitas Tanaman Kakao (Theobroma Cacao L.) di Kecamatan Kumpeh, Kabupaten Muaro Jambi. Jurnal Penelitian Universitas Jambi Seri Sains, 1-16. Retrieved from http:// repository.unja.ac.id/1182/1/ D1A013056-ARTIKEL.pdf
- Mulyani. (2016). Model Kepemimpinan Etnis Tionghoa di Jawa Barat: Survei pada Perhimpunan Fuqing di Jawa Barat. Jurnal Manajemen, 20(3), 453-473. Retrieved from https://www.researchgate. net/publication/322003746\_ MODEL\_KEPEMIMPINAN\_ ETNIS\_TIONGHOA\_DI\_JAWA\_ BARAT\_SUR VEI\_PADA\_ PERHIMPUNAN\_FUQING\_DI\_ JAWA\_BARAT.
- Pranarka, A.M.W., & Vidhandika, M. (1996). Pemberdayaan: Konsep, Kebijakan, dan Implementasi. Jakarta: CSIS.
- Pujihastuti, I. (2010). Prinsip Penulisan Kuesioner Penelitian. Jurnal Agribisnis dan Pengembangan Wilayah, 2(1), 43-56. Retrieved from https://www.jurnal. unismabekasi. ac.id/index.php/cefars/article/ view/63.
- Rachman, D. (2016). Meraup Untung dari Sarang Walet. *Maybank Premier Wealth*, 1, 16-17. Retrieved from https://www.maybank.co.id/ consumers/ wealth-management/ premier-wealth/documents/pdf/ Premier-Wealth-Edisi-I-2016.
- Rangkuti. (1999). *Analisis SWOT: Teknik Membedah Kasus Bisnis*. Jakarta: Gramedia Pustaka.
- Rani, A.E., Baihaqi, I., & Bramanti, G.W. (2017). Analisis Pengaruh Atribut Kemitraan terhadap Kolaborasi dan Kinerja pada Indusri Foodservice di Surabaya. *Jurnal Sains dan Seni ITS*, 6(2), 265-268.

- Riduwan, A., & Kuncoro, E.A. (2008). Cara Menggunakan dan Memaknai Analisa Jalur. Bandung: Alfabeta.
- Rivai, V., & Sagala, E.J. (2009). Manajemen Sumberdaya Manusia untuk Perusahaan, dari Teori ke Praktek. Jakarta: Rajagrafindo Persada.
- Sarwono, J. (2007). Analisa Jalur untuk Riset Bisnis dengan SPSS. Yogyakarta: Andi.
- Sparx. (2004). *The Business Process Model in UML Tutorials*. Australia: Sparx Systems.
- Sugiyono. (2010). *Metode Penelitian Kuantitatif Kualitatif dan R&D*. Bandung: Alfabeta.
- Suliyanto. (2010). *Studi Kelayakan Bisnis: Pendekatan Praktis*. Yogyakarta: Andi.
- Suprapta, M., Sintasih, D.K., & Riana, I.G. (2015). Pengaruh kepemimpinan terhadap kepuasan kerja dan kinerja karyawan: studi pada Wake-Bali Art Market, Kuta Bali. *E-Jurnal Ekonomi dan Bisnis Universitas Udayana*, *4*(6), 430-442. Retrieved from https:// ojs.unud.ac.id/index.php/EEB/ article/view/ 9860.
- Susilo. K.K. (2017). Kegagalan Internasionalisasi MNC di suatu Negara: Studi Kasus Kegagalan Internasionalisasi Uber di Tiongkok. Jurnal Analisis Hubungan Internasional. 120-130. 7(1), Retrieved http://journal. from ac.id/download-fullpapersunair. jahi7bdc984f19full.pdf.
- Sutikno, A.S.P.M., & Wurjaningrum, F. (2014). Analisa Pengaruh Penerapan Manajemen Kualitas dengan MBNQA Kriteria terhadap Kinerja Bisnis pada Rumah Sakit Islam Jemursari Surabaya. *Jurnal Manajemen Teori dan Terapan, 8*(1), 34-48. Retrieved from https://e-journal.unair.ac.id/ JMTT/ article/view/ 2716.

- Suyamti. (2009). Hubungan antara Kualitas Kepemimpinan Kepala Sekolah Dan Motivasi Kerja Guru dengan Kinerja Guru di SMA Negeri Surakarta. Undergraduate dissertation, Universitas Sebelas Maret, Surakarta.
- Trade Ministry of Indonesia. (2013). Laporan Kinerja Menteri Perdagangan RI Tahun 2012. Retrieved From Http://www.kemendag.go.id/files/ pdf/2013/05/ 07/lapkin-2012id0-1367919327. pdf.
  - \_\_\_\_\_\_. (2016). Laporan Market Brief: Sarang Burung Walet (HS-0410) di pasar Hongkong, RRT. Retrieved from http://djpen. kemendag.go.id/mem bership/data/ files/7664a-sarang-burung-walet\_ opt.pdf.
- Utama, M.S. (2016). *Aplikasi Analisis Kuantitatif untuk Ekonomi dan Bisnis*. Denpasar: Universitas Udayana.
- Utami, P., & Setyorini, R. (2014). Analisa Pengaruh Enam Kriteria Lainnya dalam Malcolm Baldrige Criteria for Performance Excellence (MBCFPE) terhadap Kepemimpinan pada PT. Krakatau Steel (Persero), Tbk. *E-Proceeding of Management, 1*(3), 515-523. Retrieved from https:// www.onereasearch.id/ Record/ IOS2750.14.04.993.
- Utomo, J., Nanere, M., & Sutono. (2017). The Effect Achievement Motivation, Leadership Character and Internal Culture Towards Employee's Performance a Case Corporate from Indonesia. *Journal of Applied Management, 15*(1), 1-9. Retrieved from https://jurnaljam.ub.ac.id/index. php/jam/article/view/1034.
- Weske, M. (2007). Business Process Management Concepts Languages. New York: Springer.

142 | Dodo Wahyudi et al., Affecting Factors of White-Nest Swiftlet (Collocalia fuciphaga)

- Role of Guanxi in Buyer-Supplier Relationships in Chinese Small and Medium Sized Enterprises -Resource-based Perspective. а Production Planning & Control, 26(4), 308–327. Retrieved from http://core. ac.uk/download/pdf/19780415.pdf.
- Τ. Yamane, (1967). Statistics: an Intruductory Analysis. New York: Harper and Row.
- Wiegel, W., & Bamford, D. (2015). The Zhang, J., & Pimpa, N. (2010). Embracing Guanxi. International Journal of Asian Business and Information Management, 1(1), 23-31. Retrieved from https://www.researchgate.net/ publication/276000406\_Embracing\_ Guanxi.