

The Implimentation of Ecopreneurship and Green Innovation in Building Competitive Advantage to Generate Success of New Spa Products in Bali

Ni Wayan Ekawati, I. Ketut Rahyuda, Ni Nyoman Kerti Yasa and I. Putu Gde Sukaatmadja
Department of Management, Faculty of Economics and Business,
Udayana University, Denpasar, Bali, Indonesia

Abstract: The purpose of this research is to examine the correlation between ecopreneurship and green innovation towards competitive advantage to achieve new product success among Spa product manufacturers in Bali. Quantitative approach is applied in this study with individual as the unit of analysis which consist of owner and managers making a total of 44 samples. The data analysis employed Parsial Least Square (PLS-3) method. This study shows the relationship between ecopreneurship and competitive advantage as well as new product success, while green innovation does not significantly affect competitive advantage but new product success instead, the competitive advantage affect new product success as well as mediate most of the ecopreneurship's effect new product success but competitive advantage does not mediate the green innovation's effect new product success. The implication of this study is, theoretically, lead to further research to streng then the implementation of ecopreneurship and green innovation in the Small-Medium Entreprises (SMEs) sector.

Key words: Ecopreneurship, green innovation, competitive advantage, new product success, Small-Medium Entreprises (SMEs), Bali Spa product manufacturers

INTRODUCTION

Apart from being recognized for its positive impact on economic development, entrepreneurial activity is also considered to have a negative impact that become a concern of many parties (Koe *et al.*, 2014). The negative impact in question is that entrepreneurial activity contributes to the occurrence of environmental degradation around the organization and if left uncontrolled will result in a broader impact. Such condition indicates the economic activities currently undertaken by entrepreneurs are considered to have raised concern on environmental change such as unpredictable weather or season, impact on natural resources availability on earth, cause of pollution, habitat destruction, or anything related to environmental degradation (Cohen and Winn, 2007). Attention to anticipate long-term consequences is required to avoid environmental degradation, thus it is important to perform entrepreneurial activities with full consciousness, awareness and use of innovative ability to produce goods and services that takes the environmental elements into account (Schaper, 2010). Therefore, entrepreneur with environmental sensitivity is a necessary requirement to environmental protection. Companies that implement environmentally friendly activities get a lot of advantages.

And then eco-efficiency in business is the major influencing factor in environmental performance. This statement is scientifically proved in a study conducted by Walley and Taylor (2002) on the benefits of environmentally friendly business. The result of the study revealed the benefits that may be obtained are social benefits in the form of benefits enjoyed by the entire community, the economic benefits namely economic prosperity and sustainability benefits including maintaining the biological safety of the earth.

In respect of the environmental awareness, Bali Province was declared as Green Province in February 2010. In addition, Bali was named 'Island Destination of the Year' in China Travel and Meetings Industry Awards 2013. Bali was also named 'The Best Destination Spa in The World' by an international wellness guide ("Senses") in Berlin at the annual International Tourism Bourse (ITB) in March 2009 (kompas.com, Wednesday 18 Feb 2009 and The Jakarta Post, 2009). Bali won the award because it can preserve the original ancestral cultures including ancient kings' legacy called "boreh". In fact, the Balinese Spa terminology e.g., "boreh" and "lulur" have been recognized internationally. Boreh is one of the local wisdom (local genius) products which became the ancestral heritage. "Boreh" is packaged in such a way by the Spa product manufacturer in the form of various Bali

Spa products. Bali Spa products are relatively wide-ranging from essential oils, cream, soaps, scrubs, lotion and many others, all of which are made of natural ingredients. The products strongly support the development of Spa service providers in Bali. Bali Spa products manufacturer is a creative economy which has combined cultural heritage and business all together.

The results of interviews with Spa service users in both star hotels and beauty salons showed that the users were interested in using Bali Spa service due to its unique Spa method and most importantly the ingredients used in producing the Spa products are herbal, natural, fresh, without any artificial coloring agents and no artificial preservatives. This phenomenon indicates the Spa business success in Bali is strongly supported by the Spa products offered. This condition has triggered further research on the efforts to maintain the pretty well-known Balinese culture by maintaining and developing the local wisdom packed in Bali Spa products.

Company measures new product success implementing green approaches from three perspectives. First, the new product is in line with the environmental preservation efforts and environmental protection regulations. Successful new product is a new product made pursuant to the environmental protection guidelines and always strives to follow the rules of environmental rescue. Second, the new product is able to generate better revenues than before (Matsuno *et al.*, 2002; Calantone *et al.*, 2006; Song *et al.*, 2006; Paladino, 2007). New product success manages to increase the level of previous sales, resulting in better revenue. Third, public opinion says new product success can be observed from the increase of revenue and profit earned by organization. New product success which is organization's performance degree, is very much determined by its capacity to utilize the available resources. If organization effectively use the available resources with maximum utilization and good ability to manage, then competitive advantage can be achieved (Makadok, 2001).

Competitive advantage of a company requires continuous approach to innovation. Innovation does not only generate competitive advantage but also able to directly or indirectly affect the success of new products. The purpose of new product innovation is to commercialize new products so as to contribute to the company. Innovation strategy play an important role on business performance. New product success is not only seen from the development of innovative strategy and ideas into product features but also demonstrated by product performance in post-production. Approach to green innovation carried out by organization to obtain new product success shows insignificant correlation between

green innovation and new product success (Huang and Jim Wu, 2010). It means the green innovation occurred does not affect new product success. Green innovation includes efforts to prevent pollution or any activities of the companies that are always done with green approach.

Literature review: Entrepreneurial activity is actually broad and can be found in various disciplines relating to human and their behavior. Human has different behavior and abilities from one to another in taking opportunities. Entrepreneur's managerial skill and capacity will differ from one entrepreneur to another. Entrepreneurship includes activities to develop the entrepreneur's behaviour through a variety of creative process requiring the courage to take advantage of opportunities. Chances and opportunities are able to change the entrepreneur's behavior, for example, to make the entrepreneur pays more attention to the environmental issues and raise environmental awareness, given the tendency of consumer demand for more natural products has increased. In relation to entrepreneur's concern to environmental sustainability, the term of ecopreneurship was introduced in 1970 in Harvard Business Review which is the pioneer initiating ecopreneurship. The research explained that entrepreneur who combines business and ecology activity is doing an effort to take advantage of new market opportunity. Adoption of ecopreneurship by entrepreneur means indirect business expansion for company's development. Business expansion that combines the elements of environment is very crucial for human life today and in the future.

Pastakia stated that the occurrence ecopreneurship concept was underlied by a new development existing among entrepreneurs who pay attention to eco-friendly products. Ecopreneurship was response to the emerging market. Starting from the situation where the market faced with increasing consumer demand for natural products. Such situation became opportunity for entrepreneurs to innovate. This opportunity can be taken by trying to provide the market needs. To be able to provide the market needs, entrepreneurs has to pay attention to environmental issues, it takes entrepreneur who has strong environmental concern, supported by other resources within the organization. The study says there are several important reasons to consider to motivate ecopreneurs implementing green approaches, namely the need for government intervention through regulation, taxation and certain compensation provided. Therefore, it is necessary to have negotiation among the existing business actors and ability of eco-friendly products manufacturer to handle the problem internally, including efforts to take advantage of opportunities to implement

green approach. Schaltegger in his research introduced an ecopreneurship framework and observed the position of ecopreneurship applied by companies compared to other environmental activities. Another dimension of ecopreneurship was also observed, namely the market influence of environmentally friendly products as measured by market share, sales growth and competitors' reactions.

The term of green innovation approach has now become familiar, in fact green innovation approach has been widely implemented by the public. Even big companies have already started diverting their products towards green innovation. The term green innovation was first introduced in 1962 by Rachel Carson in her book entitled *Silent Spring*. It is mentioned in the book that approach to green innovation grows from human awareness regarding the impact of business activities on the environment. Green innovation is a shared responsibility since it is the common product of government, private sector and individual within the communities. Some authors have concluded that traditional innovation theory applied to the organizational management should be useful and applicable for green innovation. Some concepts explain about innovation and factors relating to the success of innovation in responding green approach issues. However, only a few organizations are trying to apply these concepts empirically.

A quite popular theory by Porter stated the competitive advantage can be obtained by means of differentiation, focus and cost leadership strategy. On the other hand competitive advantage with green approach here is different, meaning that the implementation of competitive advantage tend to be more attentive to environmental elements, including waste management and pollution, as well as efficient use of resources. Thus, it will be able to prevent or reduce waste and pollution that requires better resource utilization, reduction of the environmental burden and better benefits to customers. The process of green innovation approach provides a cost advantage compared to competitors. In addition, the products being put into market under the concept of a green approach can improve profitability, bring in new customers and increase profits (Chiou *et al.*, 2011).

New product success can be assessed from three perspectives. First, the new product is categorized as successful if in line with the environmental preservation efforts and environmental protection regulations. Second, once launched to market the new product can be accepted by consumers and manage to make better revenue than before. Third, public opinion which states new product success can be assessed from the level of income and

profit earned by organization (Matsuno *et al.*, 2002; Calantone *et al.*, 2006; Song *et al.*, 2006). Paladino (2007) explained that there are many indicators to measure new product performance or new product success such as achievement of sales target, ability to fulfill consumers' needs, good competitiveness, consumers satisfaction, fulfilment of stakeholders' needs and compliance to government regulations but financial indicator i.e. profit and revenue takes the lead over other indicators as the most common thing to assess product performance. New products success can be seen from the product development that can provide benefits, financial competitiveness, and is environmentally responsible. Wong and Tong stated that a new product can be categorized as successful if it develops innovative ideas expressed in the form of product features, creating a variety of competitive features. In addition, new product success is also demonstrated by post-production that can provide benefits and advantages for organization.

MATERIAS AND METHODS

Research conceptual framework: This research is the development of research done by Wong by developing a new variable that is ecopreneurship. The ecopreneurship concept and approach to green innovation are key concepts in explaining its relationship with competitive advantage and new product success. The core concept of ecopreneurship explains that in order to sustain the environment and organization as well as the safety and comfort of the living beings, it requires ecopreneurs who have strong environmental awareness. Ecopreneur is termed as ecopreneurship, namely ecopreneur who have environmentally friendly properties in carrying out its activities. The concept of Schaltegger revealed that ecopreneurship is a market incorporating environmental protection in its core business activities.

Green innovation approach is one way to create a competitive advantage in the on going competition. Competitive advantage possessed certainly a green competitive advantage that is still a rare product and now highly demanded by consumers. A well implemented and sustained green innovation is able to produce environmentally friendly products with competitive advantage (Chang, 2011). It is ultimately reflected through the performance and success of the new green products generated. Improved reputation, revenues, profits from the green approach implementation activities will lead to environmental rescue efforts, environmental sustainability and company sustainability (Elkington, 1998).

This study uses the following latent variables and indicators. First, ecopreneurship latent variables are shaped by concern for the environment, consistency in producing environmentally friendly products, confidence in green business provides benefits, great desire to maintain the environment (Linnanen, 2002), ability to capture opportunity in marketing natural products (Kirkwood and Walton, 2010), people's needs of green products (Walley and Taylor, 2002) and the growing of green products market (Walley and Taylor, 2002). Second, green innovation latent variables has two dimensions: product innovation and process innovation. Product innovation has five indicators namely the ingredients safety, the use of natural materials, the eco-friendly packaging (Wong, 2012; Chang, 2011; Saji and Shekhar 2013), the absent of artificial coloring agents and the absent of preservatives (Peschel *et al.* 2006). Process innovation uses four indicators, namely the use of power-saving technologies, the use of water-saving technologies, production processes with less waste, the use of recycled materials in production process (Chen *et al.*, 2006; Chang, 2011). Third, competitive advantage latent variable has four indicators, namely offering herbal ingredients, offering fresh ingredients, providing benefits that are not found in other products and higher quality (Chang, 2011). Fourth, new product success has three indicators, namely the new green product corresponds to the regulations on environmental protection and environmental rescue, compliance to stakeholders' requirements (consumers), the product ability to generate better revenues (Berry and Rondinelli, 1998; Calantone *et al.*, 2006; Paladino, 2007; Chemat *et al.*, 2012). The research concept developed is presented in Fig. 1.

Research hypotheses

The impact of ecopreneurship on new product success:

Ecopreneurship could improve and create both new products, services and new techniques in the organization (Schaper, 2010) as well as improving the quality of life (Schaltegger, 2002). Dixon and Clifford in

their research found that ecopreneur can create social and ecological values. The social value in question is associated with the capacity to assist the development of the organization, improving CSR efforts, improving relationship with the environmental communities and social relations that occur, providing the opportunity for employees to grow, with the support and encouragement of the government. Contradictory findings, however, introduced by Palmas and Linberg in their research conducted with the organic farmers in Sri Lanka which found that ecopreneurship activities cannot be used as a source of livelihood.

- H₁: Ecopreneurship has a positive and significant impact on new product success

The impact of ecopreneurship on competitive advantage:

Organizations implementing green approaches is established from ecopreneurship soul, striving to obtain competitive advantage. Research by Stone and Wakefield concluded that the organization concerned with green environment for a long term will achieve competitive advantage. Walley and Taylor (2002) in their research stated that organization applying green approaches is more likely to have competitive advantage.

Studies conducted by Wong stated that organization implementing green approach brings a positive and significant impact on the organization's competitive advantage and it derives from the products generated through green approach.

- H₂: Ecopreneurship has a positive and significant impact on competitive advantage

The impact of green innovation on competitive advantage:

Chen *et al.* (2006) mentioned that green innovation can be done through product innovation and process innovation. Product innovation and process innovation significantly affect competitive advantage. Organization should be encouraged to invest in green innovation because it helps to achieve success through competitive advantage. Productivity of resources in organization that

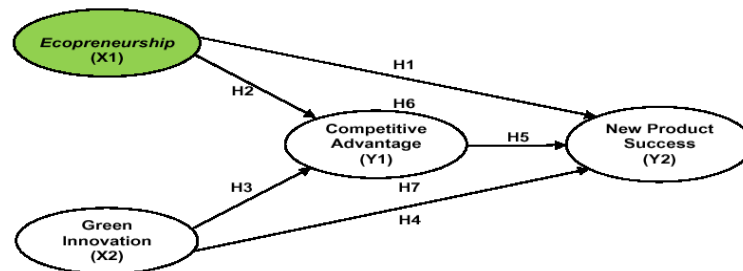


Fig. 1: Research conceptual framework

are aware of environmental protection lead to an increase followed by better profits as well as positive impact on the company's image. Study found that green innovation contributes to the competitive advantage of organization (Chiou *et al.*, 2011). Green product innovation and green process innovation have a positive and significant impact on competitive advantage.

- H₃: Green innovation has positive impact on competitive advantage

The impact of green innovation on new product success:

Empirical findings state that green innovation has no significant impact on new product success. Indicators of green innovation include the importance of protecting the environment, preventing pollution and performing management with green approach (Huang and Jim Wu, 2010). Meanwhile, new product success in question uses some indicators namely the success in financial performance, the ability to control pollution and minimize waste, the ability to comply with the government regulations and obtain ISO 14001. Research by Wong stated that green innovation brings a positive and significant impact on new product success.

- H₄: Green innovation has a positive and significant impact on new product success

The impact of competitive advantage on new product success:

Huang and Jim Wu (2010) found that competitive advantage positively and significantly affect new product success. Competitive advantage indicators applied in their research include the organization's commitment to environmental protection, benchmarking on environment, research capacity and organization development and the ability to integrate cross-functional areas within the organization. New product success in question uses some indicators such as the successful financial performance, the ability to control pollution and minimize waste, the ability to comply with the government regulations and obtain ISO 14001. Wong stated that competitive advantage positively and significantly affect new product success. Competitive advantage is assessed by using some indicators including the product's unique feature, the superiority compared to competitor's product, the benefits that are not found in competitor's product, the product has higher quality and technical performance superiority compared to competitor's product. Meanwhile, new product success is measured through the conformity of new product with environmental regulations, the fulfillment of stakeholder's requirements, the ability to generate better revenue and higher profit.

- H₅: Competitive advantage has a positive and significant impact on new product success

The role of competitive advantage in significantly mediating ecopreneurship impact on new product success:

Kamukama *et al.* (2011) highlighted the competitive advantage mediating intellectual capital to financial performance of the company. Competitive advantage is measured by indicators such as cost leadership, product differentiation and achievement levels of the organization. An ecopreneur embarking its business activities by taking environmental elements into account will be able to produce a unique product that contributes to competitive advantages. Likewise, the competitive advantage further lead to the new product being successfully accepted by society.

- H₆: Competitive advantage significantly mediate ecopreneurship to new product success

The role of competitive advantage in mediating green innovation impact on new product success:

Research by Wong (2012) specifically highlighted the green innovation activities carried out by organization that operationally apply green approach. His findings stated that competitive advantage is able to significantly mediate the impact of correlation between green product innovation and green process innovation on new product success. Green innovation consists of two dimensions: product innovation and process innovation. Gamero and coauthors stated that competitive advantage at the cost advantage can mediate the impact of new business resources on the company's financial performance.

- H₇: Competitive advantage significantly mediate the impact of green innovation on new product success

The research was conducted on the entire Bali Spa product manufacturers that are members of Indonesian Cosmetics Association (Perkosmi), all of which are categorized as Bali-based Small and Medium Enterprises (SMEs). The population of this study was a total of 11 companies, with the individual as the unit of analysis. The respondents comprise of the company's owner and a number of managers, including pharmacists.

Data were collected by means of questionnaires and in-depth interviews carried out since the beginning of the study until clarification of research outcomes, primarily associated with the manufacturers' perception on ecopreneurship and green innovations which consists of product innovation and process innovation, competitive advantage of the company and the achieved new product

success. In addition to the perception associated with the research variables, the research also deals with the existing correlation and the impact caused by the research variables. Data measurement for each indicator in the quantitative analysis was done by using differential semantic scale from 1-5. The method applied in this research are quantitative analysis and inferential statistical analysis which is a multivariate analysis using Structural Equation Modeling or SEM, variance based approach with PLS-3 (Partial Least Square) with the purpose to predict.

RESULTS

Respondent characteristics: This research involved 44 respondents with their characteristics analyzed based on gender, age and experience in eco-friendly business. The respondents were dominated by female entrepreneurs at 75% of the respondents, the vast majority were between 30-50 years of age making 69% of the respondents while those with eco-friendly business experience between 5-10 years reached 45% of the total respondents but it was also found that 30% of the respondents have been doing eco-friendly business for more than a decade. This condition indicates that Bali Spa product manufacturers implementing ecopreneurship are dominated by women, they are mostly in the productive age and quite many of them have been running eco-frendly business since long ago.

The results of PLS analysis: R² can indicate the degree of the impact of exogenous variables on endogenous variables. R² may also show whether are each model is strong or weak. According to Chin, R² value of 0.67 is categorized as strong model, R² value of 0.33 is considered as moderate and R² value of 0.19 is categorized as weak model. The analysis of R² in this research can be seen in Table 1.

The finding of R² value presented in Table 1 shows that R² value in product innovation is 0.851. Based on criteria proposed by Chin, the model is categorized as very strong model. Process innovation got 0.480 which is nealy strong. Meanwhile, competitive advantage has R² value of 0.116 or included as weak model, meaning the variant of ecopreneurship and green innovation are able to describe the variant of competitive advantage at 11.60%, the remaining 88.40% is explained by the variant outside the model while R² value in new product success is 0.416 or categorized as moderate model, meaning the variant of ecopreneurship, green innovation and competitive advantage can explain the variant of new product success at 41.60% and the rest 58.40% is expounded by the variant outside the models.

Table 1: R-Square (R²) value

| Structural | Model endogenous | Variables R ² |
|------------|----------------------------|--------------------------|
| 1 | Product Innovation (X2.1) | 0.851 |
| 2 | Process Innovation (X2.2) | 0.480 |
| 3 | Competitive Advantage (Y1) | 0.116 |
| 4 | New Product Success (Y2) | 0.416 |
| | Average | 0.470 |

The Q² Predictive Relevance (Q²) is a measurer to know how well can the observation bring result to research model. Q² is based on determination coefficient of all dependent variables. The value of Q² is ranging between 0 < Q² < 1, the closer to 1 the better the model. The Q² formula is Q² = 1 - (1 - R₁²)(1 - R₂²)(1 - R₃²). The value of Q² found in this research is:

$$\begin{aligned}
 Q^2 &= 1 - (1 - R_1^2)(1 - R_2^2)(1 - R_4^2) \\
 &= 1 - (1 - 0.851)(1 - 0.480)(1 - 0.116)(1 - 0.416) \\
 &= 1 - (0.149)(0.520)(0.884)(0.584) \\
 &= 1 - 0.4 \\
 &= 0.60
 \end{aligned}$$

The evaluation of structural model proved that Q² is 0.60, a value approaching to 1. Thus, the results of this test provide good evidence that the structural model is good. In other words, it can be interpreted that 60% of the information contained in the data can be explained by the model while the remaining 40% is explained by error and other variables that have not been included in the model.

Goodness of Fit (GoF) describes how well the model fits the overall observation (global), developed by Tenenhaus. GoF small is 0.10, GoF medium is 0.25 and GoF large is 0.36. The calculation of Goodness of Fit (GoF) is as follows:

$$\begin{aligned}
 \text{GoF} &= \sqrt{\text{AVE} \times R^2} \\
 &= \sqrt{0.73 \times 0.47} \\
 &= \sqrt{0.402} \\
 &= \sqrt{0.63}
 \end{aligned}$$

Calculation by using GoF showed a value of 0.63 which categorizes the overall model as a fit predictive model. The results of PLS analysis is presented in Fig. 2.

This research employs PLS-3 analysis with second order model for green innovation construct, thus analysis is required on such second order model. The Results of direct impact statistical test was obtained by examining the research variables namely ecopreneurship, green innovation, competitive advantage and new product success. Inter-variable relationship (path) formed between exogenous and endogenous variables in this study are shown in Table 2.

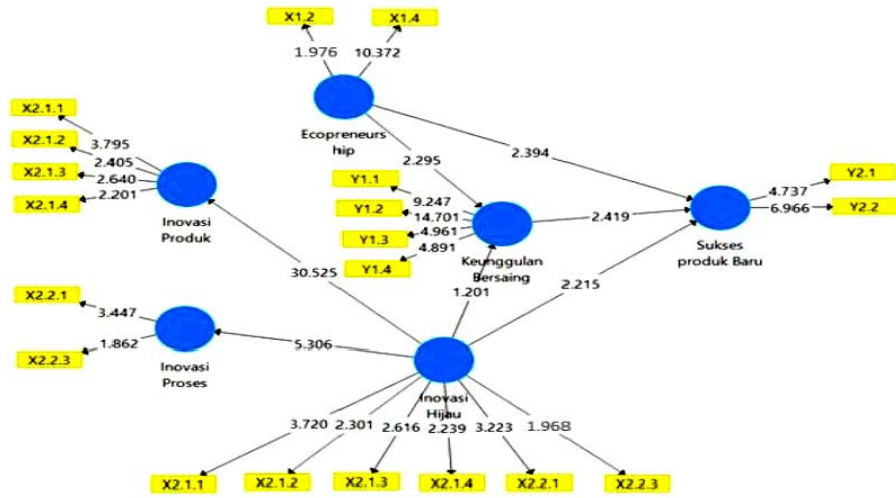


Fig. 2: PLS model

Table 2: Direct relationship between variables

| | Original sample | Sample mean | Standard deviation | t-statistics | p-values | Remark |
|--|-----------------|-------------|--------------------|--------------|----------|---------|
| Ecopreneurship->new product success | 0.320 | 0.353 | 0.133 | 2,394 | 0.000 | Sig |
| Ecopreneurship->competitive advantage | 0.312 | 0.333 | 0.136 | 2,295 | 0.017 | Sig |
| Green innovation->product innovation | 0.925 | 0.927 | 0.030 | 30,525 | 0.000 | Sig |
| Green innovation->process innovation | 0.702 | 0.705 | 0.132 | 5,306 | 0.000 | Sig |
| Green innovation->competitive advantage | 0.209 | 0.229 | 0.174 | 1,201 | 0.030 | Non-Sig |
| Green innovation->new product success | 0.314 | 0.287 | 0.142 | 2,215 | 0.027 | Sig |
| Competitive advantage->new product success | 0.331 | 0.325 | 0.137 | 2,419 | 0.016 | Sig |

Table 3: Effect Size (f²) statistical test

| | Original sample (O) | Sample Mean (M) | Standard deviation (SD) | t-statistics (O/STDEV) | p-values |
|--|---------------------|-----------------|-------------------------|------------------------|----------|
| Ecopreneurship->competitive advantage | 0.114 | 0.173 | 0.169 | 0.677 | 0.499 |
| Ecopreneurship->new product success | 0.166 | 0.258 | 0.205 | 0.813 | 0.417 |
| Green innovation->product innovation | 5.884 | 8.245 | 12.355 | 0.476 | 0.634 |
| Green innovation->process innovation | 0.970 | 1.256 | 0.690 | 1.405 | 0.161 |
| Green innovation->competitive advantage | 0.051 | 0.110 | 0.122 | 0.418 | 0.676 |
| Green innovation->new product success | 0.170 | 0.201 | 0.188 | 0.906 | 0.366 |
| Competitive advantage->new product success | 0.170 | 0.215 | 0.164 | 1.036 | 0.301 |

Effect size (f²) test aims at identifying the role of competitive advantage as mediator of the relationship between ecopreneurship and green innovation to new product success. According to Cohen, the criteria of effect size (f²) are 0.02-0.15 (weak effect), 0.15-0.35 (medium effect) and >0.35 (strong effect). The result of effect size (f²) test showed that competitive advantage as mediator of ecopreneurship impact on new product success was at 0.114. This value means the competitive advantage as mediating variable of the relationship between ecopreneurship and new product success is categorized as weak effect. While, effect size (f²) test revealed that competitive advantage as mediating variable of the impact of green innovation on new product success reached 0.051. This value confirms the competitive advantage as mediating variable of the relationship between green innovation and new product success is included as weak effect and likely to be very weak. The value of effect size (f²) statistical test is shown in Table 3.

DISCUSSION

The impact of ecopreneurship on new product success:

The impact of ecopreneurship on new product success is indicated by the value of t-statistic of 2.394 with probability (p-value) at 0.000 = 0.05 meaning that this relationship is significant at 95% confidence level. Positive coefficient path can be interpreted as unidirectional relationship between ecopreneurship and new product success. These findings indicate that Bali Spa product manufacturers have properly implemented ecopreneurship in carrying out their business activities, ecopreneurship activities undertaken by the product manufacturers bring impact on new product success. The better the implementation of ecopreneurship in organizational operation, the greater the new product success.

The impact of ecopreneurship on competitive advantage:

The effect of ecopreneurship on competitive advantage is

indicated by the value of t-statistic of 2.295 with probability (p-value) of $0.022 < 0.05$ which means this relationship is significant at 95% confidence level. Positive coefficient path denotes that the relationship between ecopreneurship and competitive advantage is unidirectional. The results of this study point out that the better the implementation of ecopreneurship performed by Bali Spa product manufacturer, the greater the chances of achieving competitive advantage.

The impact of green innovation on competitive advantage:

The test results showed that the impact of green innovation on competitive advantage appears to have a value of t-statistic of 1.201 with probability (p-value) amounted to $0.030 < 0.05$ which indicates that this relationship is significant at 95% confidence level yet insignificant in terms of t statistic value. The insignificant t-statistic value shows no sufficient empirical evidence to confirm the hypothesis (H_3). By looking at the positive coefficient path, however, the relationship between green innovation and competitive advantage is unidirectional. These results means the better the implementation of green innovation done by the Bali Spa product manufacturer, the better the chance of obtaining competitive advantage but the unidirectional relationship is insignificant or not real. It confirms that green innovation adopted by Bali Spa product manufacturers has no effect on their competitive advantage. Competitive advantage of the companies so far was not resulted from green innovation but each manufacturer has already had unique characteristic in their own products.

The impact of green innovation on new product success:

Based on the results of data analysis, the influence of green innovation on new product success appears to have a value of t-statistic of 2.215 with probability (p-value) amounted to $0.027 < 0.05$ which means this relationship is significant at 95% confidence level and also significant in terms of t-statistic. The significant t-statistics value indicates sufficient empirical evidence to accept the hypothesis (H_4) which states the better the organization implement green innovation, the more likely the product is accepted by the market. These results suggest the better the implementation of green innovation by Bali Spa product manufacturers, the closer they are to new product success.

The impact of competitive advantage on new product success: Statistical tests showed the influence of competitive advantage on new product success is indicated by t-statistic value of 2.419 with probability (p-value) of $0.016 < 0.05$ which means that this relationship

is significant at 95% confidence level. The positive coefficient path can be interpreted as unidirectional relationship between competitive advantage and new product success. These all indicates the greater the competitive advantage of Bali Spa product manufacturer, the bigger the new product success.

The role of competitive advantage in significantly mediating ecopreneurship to new product success:

The results of evaluation on the impact of ecopreneurship on new product success mediated by competitive advantage, described that there is a direct and significant relationship between ecopreneurship and competitive advantage with a value of 2.295. Competitive advantage directly and significantly affect new product success at a value of 2.419. Likewise, direct and significant relationship with a value of 5.651 also occurred between ecopreneurship and new product success. Based on the criteria by Hair *et al.* (2011), it seems that the first criteria is pertinent in which all variables have a significant and direct relationship but the value of c (2.394) is smaller than the value of b (2.419). It denotes the competitive advantage in this respect acts as a mediating variable (partial mediation) that connects ecopreneurship to new product success. Competitive advantage provides weak mediating effect, only amounted to 0.114.

Competitive advantage significantly mediates green innovation to new product success:

There is a direct and insignificant relationship between green innovation and competitive advantage with a value of 1.201. The direct and significant relationship between competitive advantage and new product success has a value of 2.419 and the direct and significant relationship between green innovation and new product success reached a value of 2.215. This situation indicates that the competitive advantage does not act as a mediating variable between green innovation and new product success. It denotes the test results reject the hypothesis (H_7) which states the competitive advantage significantly mediate the relationship between green innovation and new product success. Competitive advantage provides a weak mediating effect, even tend to be very weak at only 0.051.

CONCLUSION

Based on the research outcomes and discussion, it can be concluded that ecopreneurship implemented by Bali Spa product manufacturers directly and significantly affect new product success. There are two dominant indicators that strongly reflect ecopreneurship among Bali Spa product manufacturers namely the consistency in

producing environmentally friendly products and the desire to protect the environment. Ecoprenurship in Bali Spa product manufacturers is scientifically proven to have significant impact on competitive advantage. It turns out the ecopreneurship concept that has been implemented by Bali Spa product manufacturers can results in competitive advantage. Moreover, green innovation adopted by Bali Spa product manufacturers brings a direct yet insignificant impact on competitive advantage. Green Innovation consists of two dimensions called product innovation and process innovation. The dominant indicators strongly reflecting product innovation among Bali Spa product manufacturers are the safety of ingrediants and the absent of artificial coloring agents, while the indicators reflecting process innovation are power-saving technology and less waste production processes.

Green Innovation in Bali Spa product manufacturers has a direct and significant impact on new product success. There are two dominant indicators that reflect new product success namely the new product is generated in accordance with environmental preservation and protection rules and the new product fulfills the requirements of stakeholder (consumer). Competitive Advantage of Bali Spa product manufacturers directly and significantly affect new product success. The stronger the competitive advantage of Bali Spa product manufacturers, the greater the chance of the company to achieve new product success. Competitive advantage partially mediates (partial mediation) ecopreneurship to new product success. It was found that competitive advantage of Bali Spa product manufacturers plays the role as mediator with weak effect on the relationship between ecopreneurship and new product success. However, competitive advantage of Bali Spa product manufacturers does not mediate the impact of green innovation on new product success since green innovation of Bali Spa product manufacturers has been able to directly create new product success.

LIMITATIONS

This research is a study on the implementation of ecopreneurship and green innovation with minimum empirical sources, thus this research is relatively rare and considered as the effort to strengthen ecopreneurship and green innovation concept. This research was conducted by involving Bali Spa product manufacturers, limiting generalization capacity on the findings of this research in other segment.

IMPLICATIONS

This research can provide practical implications for Bali Spa product manufacturers representing the SMEs sector in implementing green innovation and its needs to adjust to the type of product generated. For the government, practical implications from this study is to pay more attention as well as give more appreciation to the organizations implementing green business. In respect of theoretical implication, further research is required to strengthen the concept of ecopreneurship and green innovation in the SMEs sector.

REFERENCES

- Berry, M.A. and D.A. Rondinelli, 1998. Proactive corporate environmental management: A new industrial revolution. *Acad. Manage. Execut.*, 12: 38-50.
- Calantone, R.J., K.Chan and A.S. Cui, 2006. Decomposing product innovativeness and its effects on new product success. *J. Prod. Innovation Manage.*, 23: 408-421.
- Chang, C.H., 2011. The influence of corporate environmental ethics on competitive advantage: The mediation role of green innovation. *J. Bus. Ethics*, 104: 361-370.
- Chemat, F., M.A.Vian and G. Cravotto, 2012. Green extraction of natural products: Concept and principles. *Int. J. Mol. Sci.*, 13: 8615-8627.
- Chen, Y.S., S.B. Lai and C.T. Wen, 2006. The influence of green innovation performance on corporate advantage in Taiwan. *J. Bus. Ethics*, 67: 331-339.
- Chiou, T.Y., H.K. Chan, F. Lettice and S.H. Chung, 2011. The influence of greening the suppliers and green innovation on environmental performance and competitive advantage in Taiwan. *Transp. Res. E: Logist. Transp. Rev.*, 47: 822-836.
- Cohen, B. and I.M. Winn, 2007. Market imperfections, opportunity and sustainable entrepreneurship. *J. Bus. Venturing*, 22: 29-49.
- Elkington, J., 1998. *Cannibals with Forks: The Triple Bottom Line of 21st Century Business*. New Society Publishers, Gabriola Island, BC., Canada, ISBN-13: 9780865713925, Pages: 407.
- Hair, J.F., C.M. Ringle and M. Sarstedt, 2011. PLS-SEM: Indeed a silver bullet. *J. Market. Theor. Pract.*, 19: 139-152.
- Huang, Y.C and Y.C. Jim Wu, 2010. The effects of organizational factors on green new product success: Evidence from high-tech industries in Taiwan. *Manage. Decis.*, 48: 1539-1567.

- Kamukama, N., A. Ahiauzu and J.M. Ntayi, 2011. Competitive advantage: Mediator of intellectual capital and performance. *J. Int. Capital*, 12: 152-164.
- Kirkwood, J. and S. Walton, 2010. What motivates ecopreneurs to start businesses?. *Int. J. Entrepreneurial Behav. Res.*, 16: 204-228.
- Koe, W.L., R. Omar, and I.A. Majid, 2014. Factors associated with propensity for sustainable entrepreneurship. *Proc. Social Behav. Sci.*, 130: 65-74.
- Linnanen, L., 2002. An insiders experiences with environmental entrepreneurship. *Greener Manage. Int.*, 38: 71-80.
- Makadok, R., 2001. Toward a synthesis of the resource based and dynamic capability views of rent creation. *Strategic Manag. J.*, 22: 387-401.
- Matsuno, K., J.T. Mentzer and A. Ozsomer, 2002. The effects of entrepreneurial proclivity and market orientation on business performance. *J. Market.*, 66: 18-32.
- Paladino, A., 2007. Investigating the drivers of innovation and new product success: A comparison of strategic orientations. *J. Product Innovation Manage.*, 24: 534-553.
- Saji, K.B. and S.M. Shekhar, 2013. Investigating the role of firm resources and environmental variables in new product commercialization. *J. Prod. Brand Manage.*, 22: 18-29.
- Schaper, M., 2010. *Making Ecopreneurs: Developing Sustainable Entrepreneurship*. 2nd Edn., Gover Publishing Limited, Farnham, UK, ISBN: 978-1-4094-0123-0(ebk), Pages: 317.
- Song, M., B. Dyer and R.J. Thieme, 2006. Conflict management and innovation performance: An integrated contingency perspective. *J. Acad Market. Sci.*, 34: 341-356.
- Walley, E.L. and D.D. Taylor, 2002. A typology of green entrepreneurs. *Greener Manage. Int.*, 38: 31-43.