Ecopreneurship and Green Innovation for the Success of New Spa Products

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Abstract

Current business activity demonstrates the ability to support the economic development of the community. At the same time, it is also considered worrying, due to its perceived role as a cause of environmental damage. This situation requires much attention, namely through environmentally friendly business conduct. Environmentally friendly principles should emerge from within the individual entrepreneurs. The conduct of entrepreneurs that concerns environment in running business is called ecopreneurship. Nevertheless, the implementation needs to be supported by creative green innovations to achieve the success of the products launched. The purpose of this study was to describe the influence of ecopreneurship against green innovation that can affect the creative industry, including manufacturers of Balinese Spa products, to explain the influence of ecopreneurship against the success of new spa supplies describe the influence of green innovations against the success of new products, explain the role of green innovation to bridge the relation between ecopreneurship and the success of the new spa supplies.

Research was conducted on the entire Balinese Spa product manufacturers in Bali that have been already incorporated in the Association of Balinese Spa Product Manufacturers (Aprosspa). This research engaged 40 respondents as the unit of analysis. The analytical technique used was Partial Least Square (PLS). The results of the analysis are expected to become consideration by the Balinese Spa product manufacturers in facing the competition further and provide an alternative strategy for implementing green business.

1. Introduction

Loon Koe et al. (2001) in his study mention that entrepreneurship exists as long as it has both positive and negative contributions in the community. At the negative side, it triggers the emergence of environmental quality degradation so that it takes serious attention of all parties. People at this time appear to be more environmentally conscious, understand the importance of healthy living, and show increasing needs of natural-based products. The situation encourages consumers to concern the environment more (Kim and Chung, 2011). Companies that implement environmentally-friendly business activities would gain positive benefits (Walley and Taylor, 2003). New organizations around the world also start to focus on environmentally friendly issue. Those entrepeneurial organizations are so called ecopreneurship (Schaper, 2010). Ecopreneurship is implemented when entrepreneurs not only try to seek profits but also strive to maintain the natural environment. Ecopreneurship needs support of all parties, both the internal and the external aspects of the organization.

Compliance to ecopreneurship will encourage people to be creative in sustaining the environment to support business goals. Creativity is capable of producing a variety of innovations for facing business competition. Performing ecopreneurship continuously could produce a variety of organizational development that leads to green innovation (McEwen, 2013). Green innovation demands persistent improvement efforts to produce stuff according to the needs of the target market. Green innovation can take the forms of product innovation and process innovation. Product

innovation is related to the continuous development of manufactured products. Process innovation is associated with the development of the production process to produce finished products.
Entrepreneurs in Bali also have begun to implement environmentally friendly business, such as the Balinese spa product manufacturers who always strive to produce natural products. Balinese spa product called "boreh", is actually one of the products of local wisdom (Widyastuti, 2013). It is packed in such a way into a wide range of spa products. Balinese spa product marketing has reached out of the country.

Theoretical Framework and Literature Review

Ecopreneurship is distinctive from social entrepreneurship that focuses on increasing social wealth. Ecopreneurship is also different in terms of sustainability because it focuses on the triple bottom lines (economy, equity, environment) which protect the environment (Shepherd and Patzelt, 2011). According to Walley and Taylor (2003), it is important to investigate the motives of all types of green entrepreneurs to gain insight that help policy makers and educators to encourage entrepreneurs to hold ecopreneurship.

The most important reason why entrepreneurs start ecopreneurship is personal motivation, coupled with the effort to meet the needs of the market and the attention on the recent environmental damage (Cohen and Winn, 2007). They are human beings who think about sustainability and want to maintain their world at the same time. Their business is based on the principle of sustainability and they are committed to improving the quality of the environment. Ecopreneurship might also as a reaction toward failure in the market competition, so these failed entrepreneurs attempt to seek for new market that is green business (Pastakia, 1998).

The term of green innovation currently is becoming more widespread. Moreover, green innovation has been implemented by the public at large. Large companies also began to divert their products toward the green innovation. The term of green innovation was first proposed in 1962 by Rachel Carson, in her book entitled *Silent Spring*, stating that green innovation was growing because of the awareness of the impact of human activity on the environment. Green innovation is shared responsibility because it is the result of products from the Government, private sector and individuals of the community. Green innovation is different from the conventional innovation; green innovation puts more effort into tackling environmental challenges, starting with compliance to green requirements and targeting green customers (Porter, 1991). Conventional innovation is more general and applicable for all kinds of changes, while green innovation according to Wagner (2012:16) emphasizes continuous innovation; the term 'green' itself is only as part of innovation, so green innovation is quite complex and requires competence. Green innovation is an effort to widen the conventional concepts of innovation, to introduce innovations which are environmentally friendly, both the products and the process of making the products. Referring to the definition of green products expressed by Chen *et al*., (2006) and Chen (2011), green innovation is the development and implementation of a new product and process innovation that contributes to sustainable environment through achievement of the target to maintain the environment and reduce environmental damage as the result of company activities, and keep the life cycle of the product, that in turn effectively help increase productivity, the company's reputation and corporate image, develop new markets, and achieve profit as the first player. However the development of green innovation is quite slow since it is full of uncertainty.

Green product innovation refers to the application of innovative ideas to the design, manufacture and marketing of new products that significantly outperform conventional, competing products (Wagner, 2012:14). Green products are considered able to defeat conventional products because they can reduce the burden on the environment, energy and raw material, lessen air pollution and water pollution; furthermore, the competitiveness of green products is that it becomes part of the product life cycle (Greenpeace International, 2011). Green products and green innovative products are innovative products, characterized by the ability to recycle, the use of materials which

can be recycled and reducing pollution, non toxic materials, the use of energy, ecological impact and sustainability issues at each stage of the life cycle, and the incorporation of continual improvement in the mechanism and product development cycle (Chiou et al., 2011). Green process innovation is defined as the application of innovative ideas which lead to the adoption of production processes that reduce negative sides on the ecological environment, human health, social, cultural and economic impacts (Chen, 2011). The process of green innovation has criteria set out by the industry and the social context that is intended to serve, use and fully consider in the use of energy and resources, as well as the ecological impact and sustainability problems in the manufacturing process of the products (Chiou*et al*., 2011).

Measuring success of new products can be from the development of products capable of providing benefits, ability to have financial competitiveness and have responsibility for the environment. Wong and Tong (2012) mention that a new product can be judged successful by persistent innovative ideas that are poured into product features, resulting in varying, competitive features. In addition, the success is also demonstrated by the performance of the product at the post-production stage, namely the ability to deliver the benefits as well as profit for the company.

2. Methodology

This research chose quantitative research design (Creswell, 2010:5). Quantitative analysis based on multivariate analysis is using structural equation model or SEM-based Partial Least Square (PLS). The research was carried out in Bali's SMEs producing local stuff, namely companies which manufacture environmentally friendly spa equipment and supplies in Bali. The population of this research was spa entrepreneurs producing eco-friendly products, namely the Head of the organization, managers, pharmacists, Research and Development staff, operational staff, and suppliers of the raw material. The size of the sample in this study was 40, given that the minimum number of samples for PLS analysis is 30 (Latan and Ghozali, 2012). This was largely due to less business that already implemented ecopreneurship, especially in the SME sector.

3.1 Research Variables

The variables in this study were as follows.
Exogenous variable was ecopreneurship (X 1).

Ecopreneurship (X 1) consisted of four indicators of measurement i.e. having environmental awareness (X1.1), seeing the opportunity to market natural products (X1.2), meeting the needs of the community of green products (X1.3) and assurance on the profits of green business (X 1.4).
Endogenous variables were as follows

Green Innovation (Y1) consisted of product innovation (Y1.1) and process innovation (Y1.2). Product innovation (Y1.1) consisted of three measurement indicators, namely, the use of natural materials (Y1.1.1), the use of dyes (Y1.1.2), and the use of preservatives (Y1.1.3). Innovation process (Y1.2) consisted of electricity-saving production process (Y1.2.1), water-saving production process (Y1.2.2), and reduced-waste of production process (Y1.2.3).

Success of new products (Y2), consisted of three measurement indicators, namely in accordance with environment sustainability and in accordance with the rules for environmental rescue (Y1.3), meeting the requirements set out by stakeholders (consumers) (Y2.2), and capable of generating better income (Y2.3).

3.2 Research hypotheses

Ecopreneurship influences green innovation

Pastakia (1998) suggests that ecopreneurship is the result of a response to a market formed. Intervention of the Government, negotiation among business actors, institutions and organizations as manufacturers of eco-friendly products are able to overcome the internal problems including in the efforts to do innovations. Ecopreneurship conducted continuously could trigger organizational development that leads to green innovations (McEwen, 2013).

H1: Ecopreneurship provides a positive and significant effect on green innovations.

Ecopreneurship affects the success of new products

Bsieler and Gross (2003) reveal that innovation generates new products by exploring directly the internal and external conditions of organizations. Also, environmental awareness is potential to achieve the success of new green products. *Information Processing and New Product Success: a Meta-Analysis* is the title of research conducted by Pentina and Strutton (2007). It has the purpose of analyzing and comparing the previous findings quantitatively about the role of the organizations concerned towards the environment in achieving new product success.

H2: Ecopreneurship shows a positive and significant effect against the success of new products.

Green innovation influences the success of new products

The research of Lau (2011) aims to explore contextual factors that influence the supplier and customer relationship. In addition, it also explores how the relationship influences the performance of the company's new products. The study implemented SEM analysis of 251 factories in Hong Kong. The study found that the modules of design, product innovation, internal organization and coordination are positively related with the engagement between suppliers and customers. Such engagement together with product innovation brings better success to the new products. An empirical study by Wong (2012) highlights the influence of green product innovation and green process innovation on construction of two green approaches, i.e. the competitive advantage of green products and the success of new products.

H3: Green innovation brings a positive and significant effect on the success of new products.

Green innovation serves as the mediation between ecopreneurship and the success of new products.

Result

4.1 Analysis of the Research Model with Partial Least Square (PLS)

This research employed PLS analysis using SmartPLS Program. Based on the results of data processing, PLS analysis was done by evaluating structural equation models. This evaluation undertook two fundamental activities. First, the evaluation of the measurement model (outer model) aimedto find out the reliability and validity of the indicators used to measure the variables of the study. Validity and reliability tests refered to the convergent validity, discriminant validity, and composite reliability. Second, the evaluation of the inner model or the structural model was to see the relation among constructs, the significance value and value of R-square model of research. Testing against the inner model was done through bootstrap resampling.

4.2 Evaluation of the outer model

Evaluation of the outer model on this research was conducted to test the validity and reliability of the indicators which were used to measure the latent variable or constructs. This study utilized four latent variables or constructs namely ecopreneurship (X1), green innovation (Y1), and success of new products (Y2). These variables have reflective indicators. To conduct an assessment of outer model on the reflective indicators requires three criteria, namely convergent validity, discriminant validity, and composite reliability. Based on the results of bootstrapping using PLS method,each assessment criterion can be explained as follows.

a**. Convergent validity**

Convergent Validity is used to measure the validity of indicators to measure a construct, as seen from the outer loading value. An indicator is said to be valid if the outer loading is above 0.60 and the t-statistic value is above 1.96 (Lathan and Ghozali, 2012:78). Nonetheless, for exploratory studies or research at the initial stage of development of measurement scale, the value of the loading factor that is 0.5-0.6 is still considered appropriate (Chin, 1998; 295-336). This study chose outer loading value above 0.50. The results of the testing and measurement of each indicator and research variable are presented in Table 1 as follows.

Table 1. Outer loading of Research Indicators

Variable, Dimension, and Indicator	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	t-Statistics
Ecopreneurship Variabels:				
$X_{1.1}$ Having environmental awareness	0.901	0.904	0.022	40.650
$X_{1.2}$Seeing the opportunity to market natural products	0.841	0.837	0.054	15.591
$X_{1.3}$Meeting the needs of the community of green products	0.776	0.777	0.073	10.701
$X_{1.4}$Assurance on the profits of green business	0.817	0.811	0.069	11.845
Product Innovation Dimension:				
$Y_{1.1.1}$The use of natural materials	0.852	0.849	0.044	19.185
$Y_{1.1.2}$The use of natural dyes	0.838	0.841	0.045	18.801
$Y_{1.1.3}$The use of natural preservatives	0,903	0.901	0.028	31.956
Process Innovation Dimension				
$X_{2.2.1}$ (Electricity-saving production process)	0.816	0810	0.112	7.254
$X_{2.2.2}$ (Water-saving production process)	0.840	0.835	0.118	7.135
$X_{2.2.3}$ (Reduced-waste of production process)	0.834	0.821	0.123	6.751
Success of New Product Variables:				
$Y_{2.1}$ (Being in accordance with environment sustainability and with the rules for environmental rescue)	0.899	0.900	0.029	31.456
$Y_{2.2}$ (Meeting the requirements set out by stakeholders)	0.918	0.918	0.017	54.277
$Y_{2.3}$ (Capable of generating better income)	0.928	0.929	0.018	52.685

Table 1. shows the entire indicators have the value greater than 0.50. This means that the entire indicators constructing variables of this study on the research model are valid. Here is presented the results of the outer loading in PLS statistical analysis diagram in Figure 1.

Figure 1.Path Coefficient of Variables

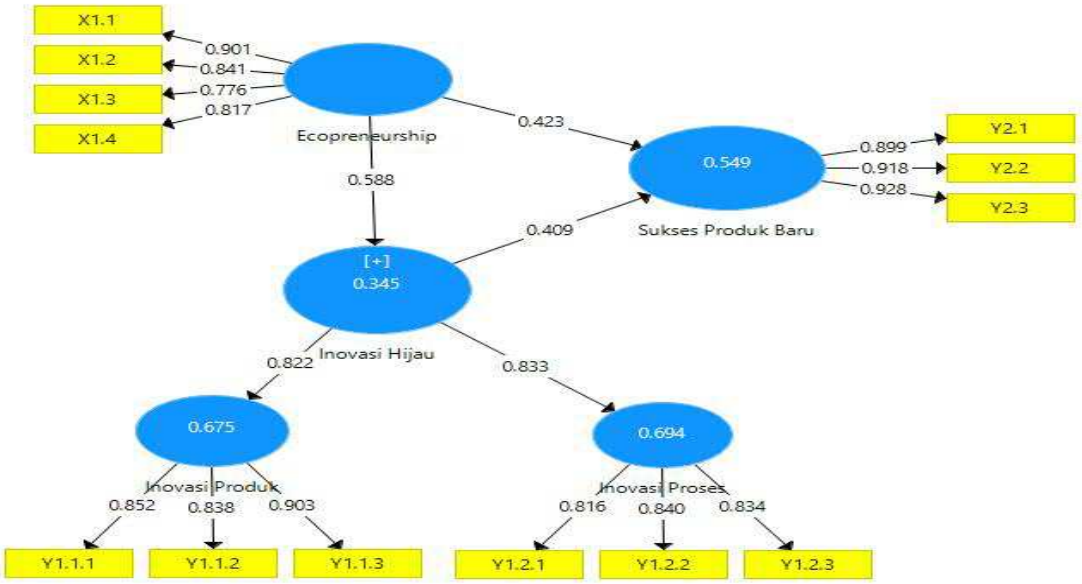

Figure 1 shows the results of path coefficient. The first order which consists of product innovation and process innovation affect significantly to the second order, namely green innovation constructs. It is characterized by the t-statistics value for all constructs in the first order is> 1.96. This means that all constructs in the first order that are product innovation and process innovation constitute green innovation dimension.

b. Discriminant validity

Discriminant validity testing was done by using cross loading value. If the cross loading value of each indicator of the related variable is greater than the cross loading value of other variables, the indicator is considered valid. The value of cross loading suggested is greater than 0.7 for each variable. Following is the results of cross loading analysis as presented in Table 2.

Table 2. The Results of Cross Loading Testing

Notation	Variables				
	Ecopreneurship	Green Innovation	Product Innovation	Process Innovation	Success of New Products
$X_{1.1}$	0.901	0.684	0.546	0.585	0.656
$X_{1.2}$	0.841	0.434	0.183	0.530	0.496
$X_{1.3}$	0.776	0.434	0.356	0.359	0.545
$X_{1.4}$	0.817	0.317	0.153	0.369	0.477
$Y_{1.1.1}$	0.264	0.656	0.852	0.251	0.318
$Y_{1.1.2}$	0.384	0.728	0.838	0.369	0.442
$Y_{1.1.3}$	0.389	0.743	0.903	0.332	0.466
$Y_{2.2.1}$	0.485	0.675	0.286	0.816	0.539
$Y_{2.2.2}$	0.523	0.706	0.323	0.840	0.451
$Y_{2.2.3}$	0.395	0.693	0.310	0.834	0.526
$Y_{2.1}$	0.629	0.536	0.443	0.442	0.899
$Y_{2.2}$	0.519	0.612	0.448	0.561	0.918
$Y_{2.3}$	0.601	0.653	0.418	0.658	0.928

Discriminant validity testing could also make use of square root of average variant extracted (√AVE). It is suggested that the AVE value must be greater than 0.50 (Lathan and Ghozali, 2012:79). Table 5.8 shows the AVE to all constructs are already greater than 0.50, namely 0.697 for ecopreneurship variables; 0.491 for green innovation; 0.748 for product innovation, 0.688 for process innovation and 0.837 for success of new products. This means that fifty percent (50%) or more of the indicator variance can be explained by the model. In addition, the square root of AVE of each variable AVE appears to be greater than the value of the correlation among latent variables. It seems the AVE square root of green innovation (0.700) is the smallest compared to the square root of other latent variables, but the number is still at the limit of tolerance. This means that the entire research instruments meet the criteria of discriminant validity.

Table 3. AVE and √AVE

Variable	AVE	√AVE
Ecopreneurship	0.697	0.834
Green Innovation	0.491	0.700
Product Innovation	0.748	0.864
Process Innovation	0.688	0.829
Success of New Products	0.837	0.914

c. Composite Reliability

Composite reliability is used to test the reliability between indicators of the constructs. The result is considered good if the value is above 0.70 (Lathan and Ghozali, 2012:80). For exploratory research, the value between 0.60-0.70 can still be accepted (Chin, 1998). This research used composite reliability above 0.7. The results of composite reliable testing can be figured out in Table 4.

Table 4. Results of Instrument Reliability Testing

Variables	*Construct Reliability*
Ecopreneurship (X)	0.902
Green Innovation (Y_1)	0.852
Product Innovation ($Y_{1.1}$)	0.899
Process Innovation ($Y_{1.2}$)	0.869
Success of New Products (Y_2)	0.939

Table 4.denotes the composite reliability forecopreneurship variable is 0.902; 0.852 for green innovation; 0.899 for product innovation; 0.869 for process innovation, and 0.939 for success of new products. That means the three variables used in this study i.e. ecopreneurship, green innovation and new product success are reliable with the values above 0.70.

Based on the evaluation of discriminant validity, convergent validity, and composite reliability of the variable indicators or constructs, it can be concluded that they are all valid and reliable as measurement indicators. After that, goodness of fit of the model can be identified by evaluating the inner model.

2) Evaluation of Structural Model/Inner Model

Evaluation of the structural model/inner model was to evaluate the level of accuracy of the model in the research as a whole, which was formed through some variables along with the indicators respectively. The evaluation was done through a number of approaches including: R-square (R^2), Q-square predictive relevance (Q^2), and goodness of fit (GoF).

a. Structural Model of Evaluation through the R-square (R2)

R-square (R^2) displays the significance of the influence of exogenous variables on endogenous variables. R-square (R^2) can show the quality of research model. According to Chin (Lathan and Ghozali, 2012:85), the value of R-square (R2) of 0.67 indicates the model is strong; R-Square (R^2) of 0.33 means the model is moderate, and; R-Square (R^2) of 0.19 implies a weak model. All analyses of the R-square (R^2) can be seen in Table 5 as follows.

Table 5. *R-Square (R^2) Value*

Structural Model	Endogenous Variables	*R-square*
1	Product Innovation ($Y_{1.1}$)	0.675
2	Process Innovation ($Y_{1.2}$)	0.694
3	Success of New Products (Y_2)	0.549
Average		0.639

Table 5.suggests the value of R-Square (R^2) of product innovation is 0.675. Based on the criteria proposed by Chin (Lathan and Ghozali, 2012:85), the model is categorized very strong. Process innovation by 0.694 also indicates that the model is very strong. The R-square value of success of new products is0.549, that makes the model become moderate. These numbers also mean green innovation and ecopreneurship are able to explain variations in the success of new products by 54.90 percent, while the remaining 45.10 percent are explained by variations outside the model.

b. Evaluation of Structural Model through Q-square predictive relevance (Q^2)

Q-square predictive relevance (Q^2) is a measure of how well the observation gives results on the research model. $Q^2$is based on coefficient of determinants of the whole dependent variables. Q^2 has a value with a range $0 < Q^2 < 1$; the value closer to means the better model. The Q-square formula is $Q^2 = 1 - (1- R_1^2)(1-R_2^2)(1 - R_3^2)$. In this research, the value of Q-square is:

$Q^2 = 1 - (1- R_1^2)(1-R_2^2)(1 – R_3^2)$

$= 1 – (1 – 0.675)(1 – 0.694)(1 – 0,549)$

$= 1 – (0,325)(0,306)(0,451)$

$= 1 – 0,04$

$= 0,96$

The evaluation of the structural model proves that Q^2 is 0.96, almost 1. The test gives evidence that the structural model is qualified as well. In other words, it can be interpreted that 96% information contained in the data can be explained by the model, while the remaining 4% is explained by error and other variables not yet included in the model.

The value of Q-square predictive relevance (Q^2) ranges from 0 (zero) to 1 (one). The closer the value to 0 indicates the less qualified the model is; on the other hand, the closer the value to 1 (one) means the better the research model is. The quality of the model is measured based on Q-square predictive relevance (Q^2). Lathan and Ghozali (2012:85) categorize the quality of the model based on Q^2 as follows: 0.35 (strong), 0.15 (moderate), and 0.02 (weak). This study found the Q-square predictive relevance (Q^2) amounts to 0.96. This means that the estimated model belongs to a very strong model, since 96 percent variations in endogenous constructs can be predicted by variations in exogenous constructs. These findings indicate the observations done have given a very strong influence on the model.

c. Evaluation of the Structural Model through Goodness of Fit (Gof) Model

Goodness of Fit (GoF) is measurement of the accuracy of the model as a whole, that is developed by Tenenhaus et al,. (2004). They point out that small GoF shows the value of 0.10; medium GoF shows the value of 0.25 and large Go indicates the value of 0.36.

The calculation of goodness of fit (GoF) is as follows:

$GoF = \sqrt{AVE} \times R^2$

$= \sqrt{0,69} \times 0,64$

$= \sqrt{0,44}$

$= 0,66$

The calculation of GoF shows the value of 0.63, meaning the overall model is predictive and fit. GoF score ranges between 0 (zero) and 1 (one). The value of GoF that is close to 0 (zero) means the model is less good, otherwise getting away from 0 (zero) and the closer to 1 (one) means the model is better. The quality of the models based on goodness of fit (GoF) testis proposed Lathan and Ghozali (2012:88). The criteria are as follows: 0.36 (large GoF); 0.25 (medium GoF); and 0.10 (small GoF). The test indicates the value of GoF is 0.66, meaning the overall models are highly predictive and fit. It also indicates that the accuracy of the models as a whole is very good.

4.3 Results of Statistical Tests on Path Coefficient Variables

The statistical test on path coefficient variables has been undertaken on variables of ecopreneurship, green innovation and success of new products. The path between endogenous and exogenous variables formed can be seen in Table 6 as follows.

Table 6. Statistical Test of Influence among Variables

	Original Sample	*Sample Mean*	*Standard Deviation*	*t-Statistics*	Ket
Ecopreneurship -> Green Innovation	0.588	0.596	0.111	5.304	*Sig*
Success of New Products	0.423	0.426	0.175	2.410	*Sig*
Green Innovation -> Product Innovation	0.822	0.830	0.059	14.006	*Sig*
Green Innovation -> Process Innovation	0.833	0.831	0.079	10.541	*Sig*
Green Innovation -> Success of New Products	0.409	0.411	0.163	2.503	*Sig*

The influence between variables appears to be entirely significant. The significant influence occurred between ecopreneurshipand green innovations with the t-statistic score of 5.304; ecopreneurship and new product success have t-statistic score of 2.410; green innovation shows the t-statistic score of 14.006 with Product Innovation, 10.541 with Process Innovation, and 2.503 with Success of New Products.

These results indicate that ecopreneurship causes a direct effect both positively and significantly to the success of new products by 0.423. Green innovation serves as a partially mediating variable between ecopreneurship and the success of new products. The mediation by green innovation is scored 58 percent or 0.588. The rest mediation is done by other variables not included in the model.

4.4 Hypothesis testing

The results of hypothesis testing on the influence can be explained as follows.

H1: Ecopreneurship provides a positive and significant effect on green innovations.

The hypothesis testing concerning the influence of ecopreneurship on green innovation is shown with t-statistic score of 5.304 that means the relationship is significant, with95% level of significance. The positive path coefficients can be interpreted as the relationship between ecopreneurship and green innovation is also positive. That is, the better the ecopreneurship principles performed by Balinese spa product manufacturers is, the greater their chances to produce green innovations will be.Entrepreneurs are expected to be innovative and to acknowledge the value of reducing the carbon footprint, make use of locally sourced ingredients. This research have some degree of similiarity with comparable destinations such as The Maldives, Mauritius and The Seychelles. It is essential that there is some form of acknowledgement of the fact that green innovation is not about a quick win, but demonstrates foresight as well as an appreciation of our trusteeship of the planet (Clifford& Dixon, 2005). The issue of job creation is also an issue that warrants inclusion in some form or another.

H2: Ecopreneurship shows a positive and significant effect against the success of new products.

Hypothesis testing on the influence of ecopreneurship on the success of new products is shown with the t-statistic score of 2,410, which means the relationship is significant at the 95 percent level of significance. The positive path coefficients might imply that the influence of ecopreneurship on the success of new products is also positive. That is, the better the ecopreneurship principles held by Balinese spa product manufacturers is, the greater the chances of achieving the success of new products will be.It is suggested that the Green-Works business model provides a practicalframework for social and green entrepreneurship.In the local context, local ecopreneurship began to emerge in the form of hotel companies, property, food processing and other industries in Bali.

H3: Green innovation brings a positive and significant effect on the success of new products.

The hypothesis testing result shows the influence of the green innovation variable onthe success of new products appears to have t-statistic value of 2.503 that implies a significant relation. The t-statistic score gives empirical evidence to accept H3 which states that if more organizations implement green innovation, they are becoming increasingly able to generate successful new products.

The research reported here sought to examine how this balance is attained inone small ecopreneurial firm. The insights suggest that rather than hinderingentrepreneurialism, idealistic values can be translated into valuable economicassets, largely by offering large corporations the opportunity to adopt a means ofethical purchasing that in its offering of social and environmental benefits goeswell beyond traditional green product.

4.5 Hypothesis testing onmediation variable

Hypothesis testing on the mediationvariable aims to identify the position of the variable in the research model. The test explains there is a direct and significant relationship between ecopreneurship and new product success by the value of 0.423. Meanwhile, ecopreneurship shows a direct and positive effect significantly to green innovation with a value of 0.558. Similarly, green innovation contains direct and significant relationship with the success of new products with a value of 0.409. Based on the criteria set out by Hair *et al.* (2010), the first one is that all have a significant and direct relationship, but the value of c (0.423) is smaller than the value of b (0.409). It means green innovation acts as the partial mediationthat links ecopreneurship variable and the success of new products.

Hence, there is enough evidence to empirically accept H4, stating that green innovation mediatesecopreneurship and success of new products in a positive and significant effect, although it is only partial mediation. This implies that when the implementation of ecopreneuship is much better, it carries a positive and significant effect on the success of new products that is mediated by green innovation; however, the green innovation can only be able to mediate partially. The finding suggests green innovation is not fully able to mediate the relationship between ecoprenurship and the success of new products.

5. Conclusions, Recommendations and Limitations

Ecopreneurship undertaken so far by the product manufacturer Spa Bali has positive and significant impact to green innovation and the success of new products. Green innovations also affect the success of new products, as well as green innovation is able to mediate the relationship between ecopreneurship to successful of new products.

Ecopreneurshipas an entrepreneurial nature of the change that is desirable in the present era with consideration of environmentally friendly production. ecopreneurship existence as well as to preserve nature while attempting to get the economic benefits. Government can provide incentives for funds to help entrepreneurs formed into ecopreneurship. Limitations of this study is in the form of cross section data is only valid for a limited period only. Suggested to researchers using longitudinal data, as well as other research on the SME sector.

References

Chen Y.S., Chang Hsun-Ching, Feng Shang-Wu,(2012). Origins of green innovations: the differences between proactive and reactive green innovations. Journal of Management Decision, 50 (3): 368-398

Chen, Y.S., Lai, S.B. and Wen, C.T. (2006).The influence of green innovation performance on corporate advantage in Taiwan. Journal of Business Ethics,67 (4): 331-9.

Chen, Y.S. (2011). Green organizational identity: sources and consequence. Management decision,49 (3): 384-404.

Chiou, T.Y., Chan, H.K., Lettice, F. and Chung, S.H. (2011).The influence of greening the suppliers and green innovation on environmental performance and competitive advantage in Taiwan.Transportation Research. Part E, 47 (6): 822-36.

Cohen, B. and Winn, M. (200). Market imperfections, opportunity and sustainable entrepreneurship. Journal of Business Venturing, 22 (1): 29-49.

Creswell, J W. (2010). Research Design: PendekatanKualitatif, Kuantitatifdan Mixed.Cetakan 1. Yogyakarta: PustakaPelajar.

Folmer, H andTietenberg, T. (2005).A survey of current issues.The international yearbook of environmental and resource economics 2005/2006:EdwardElga: Washington

Garcia, R. and Calantone, R. (2002). A critical look at technological innovation ypology and innovativeness terminology: a literature review. Journal of Product Innovation Management,19 (2): 110-32.

Greenpeace International.(2011). Towards Green Electronics: Getting Greener, but not There Yet, Greenpeace. Amsterdam.

Hair, J.F.; Ringle, C.M.; and Sarstedt, M. (2011). PLS-SEM: indeed a silver bullet. Journal of Marketing Theory and Practice, 19(2): 139–151.

Isaak, R. (1998). Green Logic: Ecopreneurship, Theory and Ethics. UK: Greenleaf Publishing; West Hartford, CT: Kumarian Press.

Issak, R. (2002). The making of the ecopreneur. Greener Management International, 38: 81-91.

Kirkwood, J. and Walton, S. (2010b). What motivates ecopreneurs to start businesses.International Journal of Entrepreneurial Behavior and Research, 16 (3): 204-228.

Koe, L. Wei, ROemar. And Izaidin, A M. (2014). Factors Associated with Propensity for Sustainable Entrepreneurship. Procedia - Social and Behavioral Sciences, 130: 65 – 74.

Lo¨fsten Han, (2014). Product innovation processes and the trade-off between product innovation performance and business performance, European Journal of Innovation Management,17 (1): 61-84.

Latan, H danGhozali, I. (2012). Partial Least Square, Konsep, TeknikdanAplikasi 2.0 M3. Semarang: BadanPenerbitUndip.

McEwen, T, (2012). What, why, and how of ecopreneurship: implications for entrepreneurship education. Proceedings of the Academy of Entrepreneurship, 18 (2): 122-132

McEwen, T, (2013). Ecopreneurship as a Solution to Environmental Problems: Implications for College Level Entrepreneurship Education" International Journal of Academic Research in Business and Social Sciences,3 (5): 234-245.

Mothe Caroline and Thi Thuc Uyen Nguyen.(2010). The link between non-technological innovations and technological innovation. European Journal of Innovation Management, 13 (3): 313-332

Organization for Economic Corporation and Development.(2009). OECD annual report. Public Affairs Division, Public Affairs Communication Directorate.

Pastakia, A. (1998). Assessing Ecopreneurship in the context of a developing country: The case of India.Greener Management International, 38: 93-108.

Porter, M. (1991).American green strategy. Scientific American, 264 (4): 168-176.

Schaltegger, S. (2002). A Framework and typology of ecopreneurship: Leading bioneers and environmental mangers to ecopreneurship. Making Ecopreneurs: Developing Sustainable Entrepreneurship.2nd Edition. USA: Ashgate publishing group. pp. 45-38.

Schaper, M. (2010).Making Ecopreneurs: Developing Sustainable Entrepreneurship.2nd Edition. USA: Ashgate publishing group.

Sekaran, Uma. (2011).Research Method for Business, Metode Penelitianuntuk Bisnis, Jakarta: SalembaEmpat.

Shepherd, D. A. and Patzelt, H. (2011). The new field of sustainable entrepreneurship: studying entrepreneurial action linking "what is to be sustained " with "what is to be developed. Entrepreneurship Theory and Practice, 35 (1): 137-163.

Sony Michael and NaikSubhash.(2012). Six Sigma, organizational learning and innovation An integration and empirical examination. International Journal of Quality & Reliability Management. 29 (8): 915-936

Walley, E. and Taylor, D. (2002). Opportunists, champions, mavericks..? A typology of green entrepreneurs.Greener Management International.38: 31-43.

Volery, Thierry. (2002). Ecopreneurship: Rationale, current issues and futures challenges. Publication of Swiss Research Institute of Small Business and Entrepreneurship. University of St.Gallen

Wagner, M. (2012).Entrepreneurship, Innovation and Sustainability, Greenleaf Publishing.

Widyastuti, Sri Harti, MulyaniHesti, EkowatiIndriya. (2013). KearifanLokaldalamFitotherapi yang TerdapatPadaNaskah-naskahJawa, LembagaPenelitianUniversitasNegeri Yogyakarta.

Wong, (2012).The influence of green product competitiveness on the success of green product innovation Empirical evidence from the Chinese electrical and electronics industry. European Journal of Innovation Management, 15 (4): 468-490.

Wong, S.K.S. and Tong, C. (2012).The influence of market orientation on new product success. European Journal of Innovation Management, 15 (1): 99-121.