

Relationship Between Product Development And Marketing Innovation On Performance On Herbal City Community

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ABSTRACT

Herbal city community has central importance in the society, as herbal community providing several benefits to the people. However, the product performance of herbal community product is low and require significant strategies to promote performance. In this direction, the relationship between product development and marketing innovation is key to achieve higher performance. Therefore, objective of this study is to examine the role of marketing innovation and product innovation in Thailand Herbal community product performance. Population of this study is based on the Thailand Herbal community. Data were collected from Thailand Herbal community and analyzed by using the statistical software. Cluster sampling was applied to collect the data and data were collected by using the questionnaire. Results of the study shows that product packaging has positive effect on herbal community product performance. However, product design has no effect on product community product performance. Moreover, product promotion also has positive effect on herbal community product performance. Along with this, product design has positive effect on product development. However, product packaging has no effect on product development. Additionally, product promotion has positive effect on product development and finally, product development has positive effect on herbal community product performance.

Keywords: Product performance, product development, marketing innovation, herbal community, product design, product packaging, product promotion.

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INTRODUCTION

Herbal has most significant role globally as it has major importance in various product development. Generally, wide use of Herbal can be seen in medicines because the nature provided various cures for different diseases which has important role in disease prevention. Various companies related to the Herbal medicine use herbal in medicine making on an extensive amount. The importance of Herbal is also given in various previous studies which shows that Herbal has major importance (Li, Li, et al., 2020; Li, Liu, et al., 2020). Therefore, in the Herbal community, it has major importance and has significant contribution to various fields. Herbal products have also important influence on the various sections of the society as well as economic development in the country. For instance, it has major importance for the local people to generate income through various income generating activities related to the Herbal products. It provides the several livelihood opportunities to the people. Therefore, Herbal products has major importance to enhance the community development or welfare of people. It has vital importance to enhance the revenue of the nation because it has contribution to the economic development. Various other authors acknowledged in the previous studies that Herbal products has major importance in any country which has important contribution in different fields (Kaewkhuntee & Kortana, 2020; Vasantha-Srinivasan et al., 2018).

In Thailand, the Herbal community is also active which has considerable contribution to the community. The importance of Herbal in Thailand is also playing active role in the community and various companies have activities in making Herbal products. In Thailand, Herbal city community is playing important role in development of Herbal products. Various companies in Thailand which are making different Herbal products fall in the Herbal

city community. Several studies in literature explained the Herbal city community playing positive role to serve the people through Herbal products. Thus, the considerable importance of Herbal community is highlighted among various previous studies (Chusri, Chaicoch, Thongza-ard, Limsuwan, & Voravuthikunchai, 2012; Panyaphu et al., 2012).

However, to promote Herbal products, marketing innovation is most important. There are different ways of marketing innovation and various companies apply various strategies while doing marketing. Therefore, the Herbal community also use various strategies to promote Herbal products to compete in the market. To promote Herbal products, the role of marketing innovation is most important. Marketing innovation is the process which has the ability to promote products through various strategies. Marketing innovation involve the product design, product packaging as well as product promotion. All the three ways; product design, product packaging as well as product promotion has major importance in marketing strategies which has positive role to promote any product related to the Herbal city community. Hence, the marketing innovation has key importance in any business activity (Lee & Falahat, 2019; Vukšić, Bach, Garrido-Moreno, Lockett, & Garcia-Morales, 2015).

Along with the marketing innovation, the role of product development also has major importance. As product development has central role in any business activity, therefore, it also has major importance on promotion of Herbal products. As it is given in the previous studies that product development is most important (Garina, Kuznetsov, Romanovskaya, Andryashina, & Efremova, 2018; Schöggel, Baumgartner, & Hofer, 2017). Therefore, objective of this study is to examine the role of marketing innovation and product innovation in Thailand Herbal community product performance. Several studies have

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been carried out in the field of marketing innovation by the previous studies, moreover, several studies are carried out in the field of products development, however, in rare cases any study documented the role of marketing innovation and product development in Herbal community development.

Literature Review

Product performance is explained as the reply of a product to external actions in its working environment in a business market. The performance of a product is realized with the help of the performance of its constituent components. Numerous of these given definitions imply that product performance is a measure of functional aspects of the product. Product performance is most important among the companies. As the success of companies is majorly based on the performance of products. Success of product has main contribution to promote the overall performance of the company. As various studies show that firm performance has major relationship with the product development (Hsu, Tan, Kannan, & Keong Leong, 2009; Steven McMillan, Mauri, & Halmilton III, 2003). However, to promote product performance, the role of various strategies is most important in which the marketing strategy is most well acknowledge by the previous studies. Therefore, the current study is examining the role of marketing strategy in product performance of Herbal community. In marketing strategy, marketing innovation is most

important which include product design. Product design is one of the most important elements which attract the people to purchase the product. Further to this, product packaging is also most important which has influence on the product performance. Success of Herbal product is also based on the product packaging. Furthermore, the role of product promotion also has key importance. Therefore, the current study is following three major marketing innovation elements which include product design, product packaging and product promotion. Along with this, the role of product development is most crucial in Herbal city community. According to the current study, marketing innovation has positive role to promote product development (Chen, Chang, Lin, Lai, & Wang, 2016; Ciric, Lalic, Gracanin, Palcic, & Zivlak, 2018; Lee & Falahat, 2019) which finally lead to the product performance in Herbal community. This study examining the role of product design, product packaging and product promotion to the Herbal community product performance. Furthermore, the role of product design, product packaging and product promotion is also examined on product development. The direct effect of product performance is also examined on the product performance. The relationship between product design, product packaging, product promotion, product development and Herbal community product performance is given in Figure 1.

Marketing Innovation

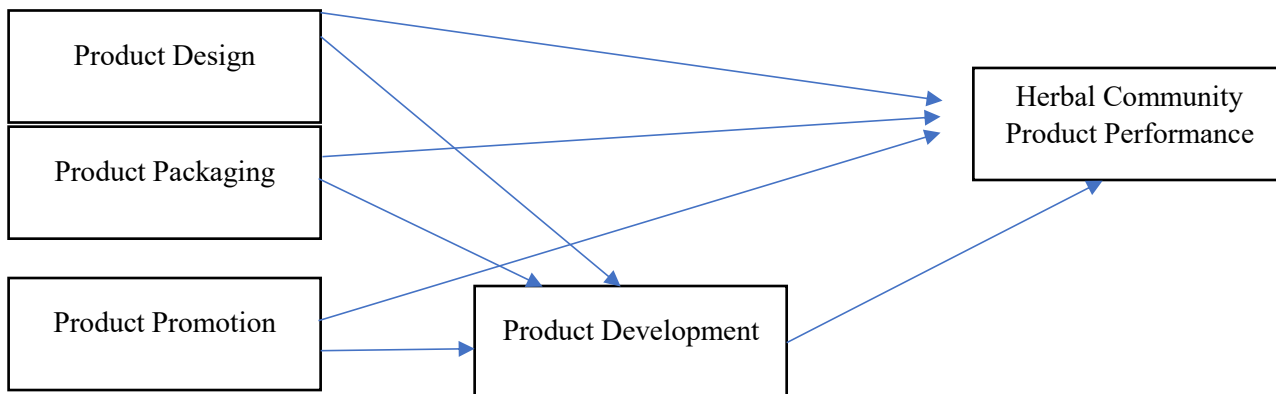


Figure 1. Theoretical framework of the study showing the relationship between marketing innovation, product development and Herbal community product performance

Product design is one of the important elements of every product. Marketing companies always focus on product design while promoting any product. In the recent years, the role of product design in the community is most important that is the reason most of the companies are trying to launch new products with unique designs. The unique designs represent the products in the market as one of the different products and it also represent the company of the products which has important contribution to the promotion of product. Design of the product is based on that how the product shaped as compared to the other similar products in the market. Therefore, it is most important for the herbal city community to launch products with unique design because different product design attract the customers to purchase the product. As previous studies are also

highlighting that product design has significant importance for the companies (Mashdurohatun & Mansyur, 2017; Souder & Song, 1997).

Product design is important because it has major influence on the product development and product performance. There are several elements of product development in which product design is also one of the important elements of product development. Product development is most crucial because it has major influence on the product performance. Several previous studies also show the important contribution of product development in the literature (Ciric et al., 2018; Redante, de Medeiros, Vidor, Cruz, & Ribeiro, 2019; Shi, Yang, Zhang, & Zhou, 2020; Souder & Song, 1997). Therefore, importance of product development cannot be neglected. Hence, this study shows that product design has positive role to promote product development which further lead to the product performance.

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Hypothesis 1. Product design has positive effect on product performance.

Hypothesis 2. Product design has positive effect on product development.

Hypothesis 3. Product development mediates the relationship between product design and product performance.

Another important element of product development is product packaging which also has crucial role for the product success. It also contributes to the higher performance of product in the market. In the recent competitive environment, most of the companies are always trying to promote various products with the help of unique packaging. A different packaging of the product as compared to the other products has major role to promote the product and has significant role in product development. This could be the major influence on the performance of any product. As given in previous studies that product packaging is most important in various products (Abidin, Effendi, Ibrahim, & Idris, 2014; Sastre, de Paula, & Echeveste, 2018). It is crucial because product packaging has positive influence on product performance. Along with the direct effect on product performance, it also has indirect effect on product development. Therefore, it shows the product packaging has positive role in product development and product development has positive role in product performance. As the product performance is important (Jabbour et al., 2016), therefore, it is important to promote product development. Here, product development is playing the role of mediating variables between product packaging and product performance which lead to the following hypotheses;

Hypothesis 4. Product packaging has positive effect on product performance.

Hypothesis 5. Product packaging has positive effect on product development.

Hypothesis 6. Product development mediates the relationship between product packaging and product performance.

Finally, the third and last important element of product development is product promotion. It is also the important part of product performance which is proved by the several studies in the literature (Nouri, Hosseini-Motlagh, Nematollahi, & Sarker, 2018; Raber-Johnson, Gallwitz, Sullivan, & Storer, 2020). There are several strategies adopted by the companies to promote products. For instance, most of the companies use various marketing strategies for the product promotion. As several previous investigations about product promotion use marketing strategies to promote products (Souder & Song, 1997; Theodosiou, Katsikea, Hardy, & Okazaki, 2018). These promotion strategies have major importance on the product performance. Product promotion has influence on product development as well as product success. Increase in the promotion strategies increases the product performance through product development. Because product promotion has direct and indirect effect on the product performance. Indirectly, it has positive role to promote product development which has positive effect on product performance.

Hypothesis 7. Product promotion has positive effect on product performance.

Hypothesis 8. Product promotion has positive effect on product development.

Hypothesis 9. Product development mediates the relationship between product promotion and product performance.

Hypothesis 10. Product development has positive effect on product performance

RESEARCH METHODOLOGY

The nature of the objective if this study is in line with the quantitative approach. Because the current study examined the relationship between different variables. To examine the relationship between variables with the help of hypotheses is well supported by the quantitative approach. As this study examine the relationship between product design, product packaging, product promotion, product development and Herbal community product performance. To examine this relationship, cross-sectional research design is suitable for this study. In cross-sectional research design (Lou et al., 2010), this study collect data on one point of time. While using a cross-sectional research design, the current study followed questionnaire survey method to collect the data. Number of previous studies used cross-sectional research design which is most suitable in the current study. A questionnaire was designed to examine the relationship between different variables. To develop a survey questionnaire, this study adapted scale items from different previous studies. Questionnaire was developed on five-point Likert scale which is suitable to check the opinion of people about the product design, product packaging, product promotion, product development and Herbal community product performance. Population of this study is based on the Thailand Herbal community. Data were collected from Thailand Herbal community by using questionnaire. Finally, cluster sampling was utilized to collect data which is recommended by previous authors (Iqbal & Hameed, 2020). Questionnaires were distributed in the herbal city community and 270 valid responses were used for data analysis to get final results. The questionnaire used in this study was based on various sections including the section of respondent's profile. It was found that people working in herbal city community are mostly based on the forty years of age. There are few people working in herbal city community having age below twenty year. A significant number of people having age fifty to sixty are also working in herbal city community.

Data Analysis

This study used Partial Least Square (PLS) for data analysis which is also applied by the several previous studies as shown in the previous literature this software is most recommended by the other scholars (F. Hair Jr, Sarstedt, Hopkins, & G. Kuppelwieser, 2014; J. F. Hair, Sarstedt, Pieper, & Ringle, 2012; Henseler & Chin, 2010). However, before to start the data analysis, the current study used missing value analysis to check the errors in the data. This is given in the Table 1 that data has no errors. As the data has no missing value and data has no outlier.

Table 1. Data Statistics

No.	Missing	Mean	Median	Min	Max	SD	Kurtosis	Skewness
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PD1	1	0	3.444	4	1	5	1.371	-1.067	-0.479
PD2	2	0	2.962	4	1	5	0.932	-1.052	-1.424
PD3	3	0	3.438	4	1	5	1.442	-1.26	-0.442
PD4	4	0	3.32	4	1	5	1.524	-1.41	-0.371
PD5	5	0	3.456	4	1	5	0.996	-0.555	-1.543
PP1	6	0	3.373	3	1	5	1.244	-0.847	-0.348
PP2	7	0	2.951	4	2	5	0.841	-0.387	-0.344
PP3	8	0	3.586	4	2	5	0.818	-0.517	-0.017
PP4	9	0	3.633	4	2	5	1.804	-0.336	-1.269
PP5	10	0	3.651	4	2	5	0.83	-0.557	-0.082
PP6	11	0	3.621	4	2	5	0.835	-0.501	-0.175
PP7	12	0	2.991	3	2	5	0.986	-1.015	0.081
PPR1	13	0	3.74	4	2	5	1.173	-1.382	-0.345
PPR2	14	0	3.621	3	2	5	1.076	-1.326	1.027
PPR3	15	0	3.704	4	2	5	1.17	-1.367	-0.345
PPR4	16	0	3.592	4	2	5	1.218	-1.556	-0.166
PPR5	17	0	3.663	4	2	5	0.971	-1.462	-1.186
PDE1	18	0	3.544	4	2	5	1.182	-1.495	-0.118
PDE2	19	0	3.74	4	2	5	1.148	-1.278	-0.4
PDE3	20	0	3.503	4	2	5	1.167	-1.475	-0.097
PDE4	21	0	3.556	4	2	5	1.125	-1.356	-0.167
HCPP1	22	0	3.538	4	2	5	1.003	-1.072	0
HCPP2	23	0	3.757	4	1	5	1.164	-0.919	-0.423
HCPP3	24	0	3.604	4	1	5	1.056	-1.105	-0.063
HCPP4	25	0	3.751	4	2	5	1.181	-1.357	-1.398
HCPP5	26	0	3.604	4	1	5	1.217	-1.384	-0.273
HCPP6	27	0	3.669	4	2	5	1.15	-1.398	-0.219
HCPP7	28	0	3.533	4	1	5	1.151	-1.343	-0.162
HCPP8	29	0	3.716	4	1	5	1.131	-1.12	-0.436
HCPP9	30	0	3.538	4	2	5	1.177	-1.483	-0.137

After missing value analysis and after fixing the errors in the data, the current study moved on to the PLS data analysis to examine the reliability as well as validity of the data. In this process, the current study examined the factor loadings which must be above 0.5 for all the variables. However, it could be retained below 0.5 but above 0.4 in case if the composite reliability (CR) and average variance extracted (AVE) has above the minimum level. Figure 3 shows the measurement model

of PLS showing the factor loadings which is also given in the appendix (Table 1). Product design is measured by using five scale items, product packaging is measured by using four scale items and product promotion is measured by using six scale items. Product development is measured by using six scale items and product performance is measured by using seven scale items. It is found that all the scale items have factor loadings above minimum threshold level.

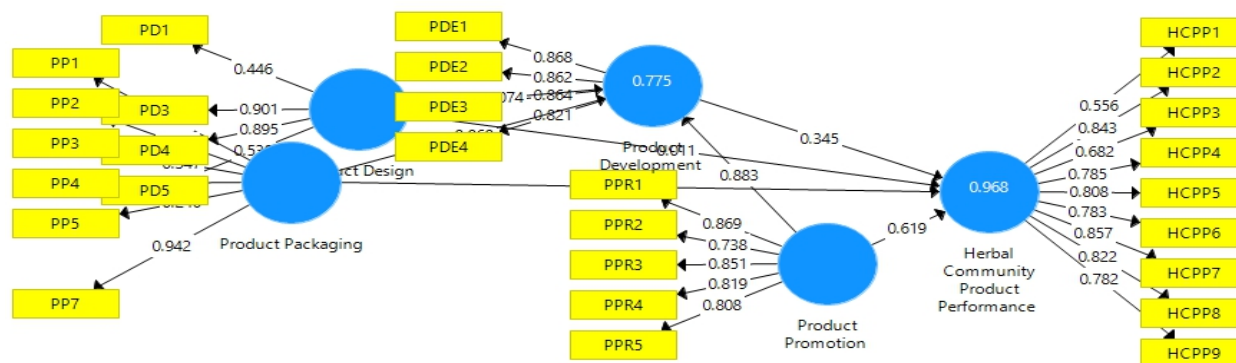


Figure 3. Measurement Model

Additionally, according to J. Hair, Hollingsworth, Randolph, and Chong (2017), CR must be above 0.7 and

AVE must be above 0.5. Table 2 shows that AVE is above 0.5 and CR is above 0.7. Hence, AVE and CR is above the

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minimum threshold level for product design, product packaging, product promotion, product development and product performance of Herbal community. In addition to this, the current study also examined the discriminant

validity (Henseler, Ringle, & Sarstedt, 2015) which is given in Table 3 with the help of cross-loadings.

Table 2. Reliability and Convergent Validity

	Alpha	rho_A	CR	(AVE)
Herbal Community Product Performance	0.914	0.921	0.93	0.599
Product Design	0.792	0.827	0.803	0.525
Product Development	0.876	0.879	0.915	0.729
Product Packaging	0.78	0.727	0.701	0.504
Product Promotion	0.876	0.882	0.91	0.669

Table 3. Cross-Loadings

	Herbal Community Product Performance	Product Design	Product Development	Product Packaging	Product Promotion
HCPP1	0.556	0.215	0.397	0.876	0.506
HCPP2	0.843	0.335	0.755	0.537	0.826
HCPP3	0.682	0.309	0.563	0.45	0.716
HCPP4	0.785	0.34	0.616	0.607	0.808
HCPP5	0.808	0.281	0.764	0.323	0.789
HCPP6	0.783	0.291	0.74	0.344	0.787
HCPP7	0.857	0.337	0.839	0.372	0.807
HCPP8	0.822	0.259	0.841	0.406	0.76
HCPP9	0.782	0.363	0.839	0.408	0.697
PD1	0.134	0.446	0.121	0.168	0.128
PD3	0.359	0.901	0.379	0.323	0.338
PD4	0.377	0.895	0.36	0.36	0.37
PD5	0.18	0.538	0.177	0.074	0.2
PDE1	0.842	0.312	0.868	0.341	0.812
PDE2	0.825	0.261	0.862	0.402	0.772
PDE3	0.774	0.366	0.864	0.429	0.701
PDE4	0.709	0.414	0.821	0.429	0.701
PP1	0.153	0.497	0.131	0.136	0.175
PP2	0.068	0.108	0.08	0.207	0.048
PP3	0.085	0.017	0.055	0.347	0.061
PP4	0.083	0.012	0.034	0.309	0.072
PP5	0.031	-0.019	0.003	0.246	-0.003
PP7	0.583	0.233	0.455	0.942	0.553
PPR1	0.857	0.328	0.788	0.554	0.869
PPR2	0.68	0.301	0.567	0.472	0.738
PPR3	0.807	0.373	0.658	0.612	0.851
PPR4	0.816	0.293	0.792	0.35	0.819
PPR5	0.785	0.282	0.753	0.347	0.808

Finally, this study examined the results with the help of PLS bootstrapping which recommended in previous studies (Henderson et al., 2016; Henseler & Chin, 2010; Henseler et al., 2014; Henseler et al., 2015). The direct effect of product design is examined on product development. The direct effect of product packaging is examined on product development. The direct effect of

product promotion is examined on product development. Furthermore, the direct effect of product design, product packaging, product promotion and product development was examined on product performance of Herbal community. Results of the study found that product design, product packaging and product promotion has significant effect on product performance of Herbal

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community. product design, product packaging and product promotion has significant effect on product

development. Figure 4 shows the results of the t-value which is known as inter model.

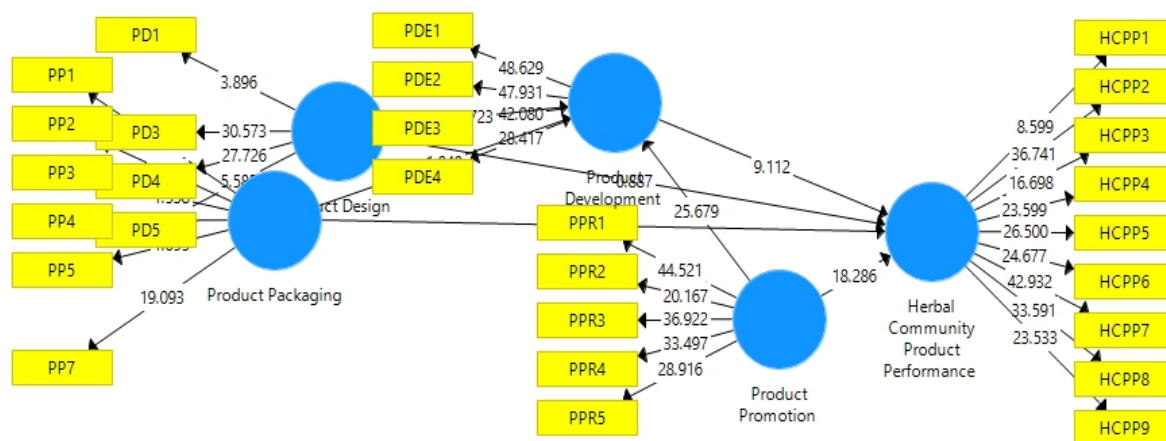


Figure 4. Structural Model

Table 4. Direct Effect Results

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Product Design -> Herbal Community Product Performance	-0.011	-0.009	0.012	0.887	0.188
Product Design -> Product Development	0.074	0.074	0.043	1.723	0.043
Product Development -> Herbal Community Product Performance	0.345	0.343	0.038	9.112	0
Product Packaging -> Herbal Community Product Performance	0.089	0.083	0.02	4.369	0
Product Packaging -> Product Development	-0.06	-0.05	0.058	1.04	0.149
Product Promotion -> Herbal Community Product Performance	0.619	0.624	0.034	18.286	0
Product Promotion -> Product Development	0.883	0.877	0.034	25.679	0

Table 5. Indirect Effect Results

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Product Design -> Product Development -> Herbal Community Product Performance	0.026	0.026	0.015	1.653	0.049
Product Packaging -> Product Development -> Herbal Community Product Performance	-0.021	-0.017	0.02	1.045	0.148
Product Promotion -> Product Development -> Herbal Community Product Performance	0.305	0.3	0.034	8.991	0

Along with the other results, this study also examined the mediation effect. The mediation effect of product development is examined between product design and herbal community product performance. Moreover, the mediation effect of product development is also examined between product packaging and herbal community product performance. Finally, the mediation effect of product development is also examined between product promotion and herbal community product performance. The mediation effect of product development between product design and herbal community product performance is significant with t-value 1.653. Moreover, the mediation effect of product development between product packaging and herbal community product performance is not significant. Finally, the mediation effect of product development is also examined between product promotion and herbal community product performance and results shows the significant relationship with t-value 8.891. Hence. Product

development reflect the positive effect of product design and product promotion to promote

CONCLUSION

The objective of this study is to examine the role of marketing innovation and product innovation in Thailand Herbal community product performance. The relationship between product design, product packaging, product promotion, product development and herbal city community product performance was examined. Population of this study is based on the Thailand Herbal community and data were collected by using the questionnaire. It is found that product packaging has positive effect on herbal community product performance. Increase in the quality of product packaging increases the herbal community product performance. However, product design has no effect on product community product performance. Any change in product design has no influence on product performance.

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Furthermore, product promotion also has positive effect on herbal community product performance. Various strategies by the company for product promotion has positive role to promote performance of herbal community product. Additionally, the role of product development is most crucial to highlight the performance of product through various strategies in herbal city community. Along with this, product design has positive effect on product development. It is observed that any change in product design has direct influence on product development. But product packaging has no effect on product development. Moreover, product promotion has positive effect on product development and finally, product development has positive effect on herbal community product performance. Hence, product design, product packaging and product promotion has the ability to promotion herbal community product performance. All these factors push the product development which lead to the higher product performance of herbal community.

Implications of the study

The current study has several implications to the literature. This is the pioneer study which examined the relationship between product design, product packaging, product promotion, product development and herbal city community product performance. Particularly, in Thailand, the relationship between product design, product packaging, product promotion, product development and herbal city community product performance was not examined, therefore, this study has valuable contribution to the literature. There are only few studies available in the field of herbal city community in the literature. Along with this, this study is rare in the context of Thailand. This uniqueness of the study has major importance to contribute to the literature. Furthermore, this study examined three indirect effect which has important contribution to the literature. First, the mediation effect of product development is examined between product design and herbal community product performance. Second, the mediation effect of product development is also examined between product packaging and herbal community product performance. Third, the mediation effect of product development is also examined between product promotion and herbal community product performance. Two indirect effect was significant which contributed significantly to the theory. Along with the theoretical contribution, this study has valuable contribution to the practice which has valuable importance for the practitioners. This study has valuable importance for the management of herbal city community. As the results of this study provides various key points to promote the product performance of herbal city community which has major role to promote herbal industry performance in Thailand. This study suggested that herbal city community should promote product development which can lead to the higher product performance. Furthermore, this study suggested to the management of herbal city community to promote product design to enhance product development which further lead to the higher performance in herbal products. In addition to this, it is suggested to the management to enhance product packaging and product promotion which has positive contribution to product development and finally to promote product performance.

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Appendix

Table 1. Factor Loadings

*Relationship Between Product Development And Marketing Innovation On Performance
On Herbal City Community*

	Herbal Community Product Performance	Product Design	Product Development	Product Packaging	Product Promotion
HCPP1	0.556				
HCPP2	0.843				
HCPP3	0.682				
HCPP4	0.785				
HCPP5	0.808				
HCPP6	0.783				
HCPP7	0.857				
HCPP8	0.822				
HCPP9	0.782				
PD1		0.446			
PD3		0.901			
PD4		0.895			
PD5		0.538			
PDE1			0.868		
PDE2			0.862		
PDE3			0.864		
PDE4			0.821		
PP1				0.536	
PP2				0.507	
PP3				0.547	
PP4				0.509	
PP5				0.546	
PP7				0.942	
PPR1					0.869
PPR2					0.738
PPR3					0.851
PPR4					0.819
PPR5					0.808