Development of creative and innovation abilities and knowledge transfer on the purchase intention of local products consumers in Phatthalung Province: The mediating role of new product development process

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Abstract---The prime purpose of the current study entails the assessment of the purchase intention of consumers living the province of Phatthalung Thailand, influenced by new product development process. The study incorporated the development of creative and innovative abilities that predict the new product development process. The knowledge transfer was also assessed that it influences the new product development process, however the mediation role of new product development process between development of creative and innovation ability was evident. The data analysis was conducted through Smart-PLs and results stated that all direct and indirect hypotheses are statistically significant. The study suggests to the firms to ensure the innovative capabilities for development of new and emerging products, the effective utilization of knowledge sharing, knowledge management and specifically knowledge transfer must be measured.

Keywords---purchase intention, development creative, innovative abilities, knowledge transfer, new product, development process, Phatthalung Province.
Introduction

The willingness of consumers to purchase the specific product from particular shop or retailer comes under the concept of customers’ purchase intention. The research scholars have divided purchase intention and perceived value into two categories, first is related with perceived value and impact of perceived value on other variables such as perceived cost, or perceive return on developing the intention towards the purchase (Rana et al., 2015). The literature has expressed the relationship between perceived value, perceived risk, trust and willingness for purchase the specific product or may be to purchase the green products that has positive impact on the environment. The second category conceptualized the purchase intention as multi-dimensional construct and investigated the impact of perceived value on purchase intention. The research scholars have defined consumer’ perceived value into four dimensions including price, quality, emotional and social value, the study reported that perceived price and emotional value had positive impact on purchase intention, however no significant effect was reported with quality and social values. Another author described that perceptual risk, perceived value, and risk influence the willingness of consumer to purchase the specific product. The purchase intention has occurred as an outcome/consequence variable for number of predictors (Weng & de Run, 2013).

Surprisingly, it has been reported that Small and Micro community enterprises in Thailand, under free-trade in globalization perspective has worsen the quality of life of Thailand as policies have clear lack in supporting the people. It has been reported that social heritage has fall into crisis due to deterioration of valuable natural resources that damage the environment and create number of problems. The harmful chemicals and contamination of food negatively impact the life of community, the attitude of small and micro community enterprises found to be selfish that focus is on competition for gaining higher profit, this mindset found to be devastating towards unity of community and weaken the strength and negatively affect the sustainability of community, it needs to relay export factor to generate the higher income. The community enterprises surely face failure and inevitable financial circumstances if any sort of economic collapse occur globally due to insufficient funds (Srisopha, 2011). The study conducted the descriptive approach in explaining the community enterprises of dependency, and community enterprises for sufficiency, as the study overlooked to investigate the empirical relationship (Srisopha, 2011).

The research scholars have focused on fabric product of Thailand due to wide range local fabric products, having plenty of knowledge in the science of natural woven resources, Thai silk recognized internationally. The economy of Thailand, depends upon the fabric product and clothing that is has been observed that Thai textile contributes in GDP and ranked fourth in Thailand that contribute significantly. The significant contribution of fabric industry of Thailand in GDP has encouraged to initiate more community enterprises as majority of SMEs in Thailand are community enterprises. The research studies have stressed upon the utilization of research and development in order to innovate, new product development, knowledge to predict the consumers’ intension (Distanont et al., 2019). The number of issues has been faced in today’s business environment but development of potential level of community enterprises that increase the value
addition and enhance the working processes, through enrichment of the knowledge and skills for better innovative products that enable the firms to foster the benefits of competitive advantage. The innovative products are required to be introduced in any sector through quality enhancement, unique design, or in development of products in response to the demand of consumers. The lack of human resources considered as another challenge for organizations as appropriate skill set may not be widely available in labor market, so therefore there is dire need to create the production capabilities in order to cope with external changes (Distanont et al., 2019).

The Association of Southeast Asian Nations (ASEAN) has reported that HR in Thailand's textile industry possess the appropriate and advanced level skills, however the lack of workers, operational level and manager level issues or disputes causes the negative consequences. The negative consequences of these issues have become crucial and serious that Thai current generation may not be willing to work as operators in the factories. It has been also reported that number of people working in the industry has decreased continuously, the lack of knowledge, and in understanding of new practices followed in the textile sector specifically at the community enterprises level. These issues causes failure in development of innovative products and difficulty has been observed in satisfying the customer's demand, further it has been reported that failure in achievement of target customers (Distanont et al., 2019). It has been suggested to be more innovative to respond to external environment as changes in environment bring major change in the industry practices. The innovative capabilities enable the firms to create the new product that overcome the issues of previous products or become more efficient and effective in terms of production. The design and production methods are usually focus of innovation but firms has to focus on material for being innovative, the innovation is considered as crucial element for business advantage (Dereli, 2015). The government policies play important role in encouraging and implementation of competitive edge through innovative capability of production and to gain competitive advantage. The innovation is also defined as action of an individual or group in society that bring some sort of change in existing practices to conduct the business that reduce the cost or increase the performance. The research scholar has also depicted that innovation is procedure, technology, product that never existing before (Sage, 2000). The firms strive to gain the advantage through fulfilling the customers’ need and that plays crucial role in gaining competitive advantage, the competitive ability leads towards the innovation at higher level. Another, definition of innovation is expressed as the creation of new things, the definition of innovation can be assessed through number of ways such as development of newly or emerging thing, it could be product, service or may be the process. The development of completely new thing or change in existing new thing that never occurred before in the way an individual has done. The second is economic benefits in terms of economics or commercial success. It argues that innovation must lead towards the value addition through development of such things, the gained benefits compared with financial benefits. The creation of innovation depends upon the knowledge and creativity as innovation should be based on the application of knowledge and creativity should leads to the development of new thing (Yingbo et al., 2010).
The concept of co-creation has been coined to assess the creativity, innovation and involvement of individual; the co-creation found to be increasing the value for human in economic experience (Voyer & Kastanakis, 2017). It has been argued that determining the importance of degree of readiness, technological advancement adoption and implementation, further the connection among the customers and company expressed under the concept of co-creation. The research scholars have defined that quality of experience and company's experience must be engaged in creative activities that encourage for creating best output through motivation. Another study expressed that significance of opportunities can be valued by the creation of uniqueness that add the value in the existing processes considered as co-creation experience (Verleye, 2015). The product innovation and interacting with organization considered as an important value creator concept that focuses the ideas to fulfill the need of customers (Prebensen et al., 2013).

The countries devise the strategies for economic growth specifically in past decades, the development for increasing the complexity of the economies relates to the export portfolio. The natural resource driven economy and knowledge driven economy have been reflected in higher level of competitiveness for economies that causes the transition according to economic world forum. The earning from exports increases by addition of creative products, the countries strive to produce creative products and increase their portfolio diversify in their products and increase the exports that ultimately expand the export earning, that means the higher the level of creativity, the higher the number of creative goods that enable the firms to grab the international or national market share (Hansen et al., 2015). The innovative and creative products can flourish in creative economy that holds the promise of fostering creativity, the social innovation enable the firms to create inclusive, equitable economic development and encourage economic growth, the countries develop the strategies where organizations foster the creative goods, products and services in order to meet the demand of the customers and gain competitive advantage through their creativity and innovation. It has been observed that creative economy provides the grounds to reach the goals of sustainable development and long-lasting economic development. Moreover, the other sectors gained the importance that impact the industries such as videogames, pictures that contribute in economic development and growth at faster rate as observed in United States, that this sector contributes in annual growth and earing. The countries have focused on several initiatives to promote the creation of creative products that enable to generate the employment that further contribute in the economic growth and development (Gouvea & Vora, 2018).

The current study intends to determine the purchase intention of customers in the province of Phatthalung Thailand, the study incorporated the predictors of development of creative and innovative ability, knowledge transfer and mediating effect of new product development process.
Literature Review

New product development process and Purchase Intention

This section of the literature establishes the link between new product development that is based on the innovation that further influence the purchase intention of the customer. The innovative capabilities encourage the firms to innovate effectively to fulfill the demand of the customers. The innovative capability of the firms classifies its product as tangible or intangible, generally it is known as process innovation or product innovation. The previous literature argues that degree of innovation can also be classified on the base of the innovation introduced in the existing or new product. The innovation capability leads towards the procedure to develop or to introduce the change that occurs as enhanced quality for the customers that add values to product and brings large-scale benefits to the firm (Kok & Biemans, 2009; Kerdpitak, 2022). The development of innovative products affects the growth of the firm and enhance the competitive position and enrich the capability of the firm to introduce innovative initiatives. The process innovation also introduces the change in direction or method of producing the products for being different than before. It has been explained that market innovation relates to the newer market and the product that’s has never been launched before directly or indirectly by agency method. The innovative capability has the tendency to enhance the performance and purchase intention of the individual customer, the setting up of few prices, new promotions, new advertising, emerging marketing strategies for controlling the channel for ease of approach (Distanont et al., 2019).

The purchase intention receives the impact from various predictors including the perception for value given by consumer, it has been observed that perception of consumer is given valued gradually as the phenomenon emerged as an important factor in order to gain the success of organizations. The research scholars have focused on perceived value and expressed it as consumer’s overall assessment, that what product provides and what was the perception of consumers about the product. It has been defined that perceived value is considered as perceived preference for evaluation of product, the attributes of the product, the performance and facilities that achieve the customers’ goals and achieve the usage situation. The tangible and intangible dimensions are given for perceived product value, later the five value components have been given including functional, social, conditional, epistemic and emotional. These components have the tendency to influence the customer choice, and influence the behavior of consumers towards buying decision. Later, the dimensions of consumers’ perceived value of durable goods, functional price, social value, emotional value and functional quality. The specific yardstick was developed for assessing the perceived value by number of scholars, that covered the large number of goods, services and products for assessing the customer perceived value ranging from hospitality, luxury goods, tourism products and wetland parks and so on (Sanchez et al., 2006; Kerdpitak, 2020; Li et al., 2021).

The current study argues that firms stive to create new goods, products and services to gain the market strength and to gain the economic development by fulfilling the demand of consumers and become the preference of consumers by
influencing their behavior towards the purchase. That means the new product development has the tendency to influence the purchase intention of consumers in the province of Phatthalung Thailand.

**Development of creative and innovative ability and new product development process**

The competitive advantage for diverse industries has been changed due to rapidly emerging technology and its implementation speedily. The late adoption of technological advancement may cause delay in implementation of technology that further negatively influence the performance related outcomes. The basis for competitive advantage has been altered now due to rapid emergence of technology and speedy adoption of system causes number of issues such as system failure. The innovation is considered as one the important element in creation of new business activity, the generation and growth of the business, generating growth that ensure the viability of existing businesses to gain competitive advantage. It has been reported that product innovation found to be associated with creativity, the creativity of the design, the skills of the fashion designer, and essential to create the stronger link considering the international brands, competitive products and innovation business operations (Ünay & Zehir, 2012). The previous study established the link between development of creative and innovative ability and product innovation, the study reported significant results (Nurgraha & Mulyadi, 2018). The current study argues that development of creative and innovation ability to increase the product development process that further leads towards the purchase intention.

The willingness of the consumer to purchase the product is referred as customer’s purchase intention, a customer is willing to buy the specific product that best meet the demand and requirement. The number of scholars has focused on assessing the relationship between consumer perceived value and purchase intention including the influence of perceived value of the product on purchase intention, and reported that it is one of the most significant factors that influence the behavior of customer to buy the specific product (Rana et al., 2015). The research scholars have expressed the relationship between perceived value, perceived risk, willingness to purchase, trust and willingness to buy the green products that has positive impact on environment, these factors collectively influence the behavior of consumer and develop the intention of consumer in future to purchase the specific product. The consumer perceived value of has been expressed in four dimension including price, emotional, social value, and quality, these factors ultimately influence the purchase intention of the customers. It has been reported in the study that perceived price and emotional value found to be positively related with purchase intention and impact the behavior of customer, the perceived price, the perceive emotions and positive impact on purchase intention, while considering the quality and social values has no significant impact on intention. The scholars have expressed that perceptual risk and perceived value affect the consumer’ willingness to purchase the goods, services and products. The literature has explored and established the relationship between purchase intention by perceived value. Further the study has explored and verified that quality value, social value, price value, innovation
value, educational value, and experiential value influence the purchase intention of consumers towards creative products (Li et al., 2021).

**Knowledge Transfer and new product development process**

The importance of knowledge can be assessed through its crucial role of encouraging the innovation and implement the change in existing or emergence of newly established businesses operations. It has been occurred in the literature that there is need to develop the potential at the level of community enterprises that add the value to the enhance the processes, the development of skills, knowledge and abilities are required for effective outcome and better innovative products in order to main the competitive position. The study has incorporated the textile industry of Thailand and highlighted that labor issues, knowledge and understanding the marketing efforts for new products development as smaller entrepreneurs to predict the positive performance related outcomes. The lack of knowledge has occurred as one of the most crucial variable and problem at community enterprises level that causes negative impact on the performance, so therefore there is dire need to conduct the study on knowledge-based behavior to predict the new product development mindset that further impact the purchase intention (Distanont et al., 2019). The inability of the firm to produce goods according to the requirement of the customers leads towards the negative impact that may reduce the customer base. It has been reported that most of the community enterprises face the lack of knowledge, skills and abilities as compare to developed nations and organizations. The lack of knowledge and skills lead towards the devastating issues, the marketing plan, surveys and opening the businesses may get risky and may stagnate due to mis management of knowledge or reluctancy in delivering the knowledge to relevant persons (Nurgraha & Mulyadi, 2018). The research study suggested to focus the community enterprises for developing the competitive advantage-beside focus the quality of production, marketing and financial issues (Distanont et al., 2019).

The research scholars have focused on creating the value together and creating the value for the customers to gain their satisfaction, the functional value, the social value and emotional values are under consideration for the product development that has the tendency to grab the attention of customers and to gain the intention of customers that ultimately influence the behavior (Wikner, 2010). It has been experienced that customer experience has important meaning in creating the value of product or service. For the creation of product innovation it is based on the co-creation experience but must be balance with development of creativity and innovation authority that further meets the competitive advantage, that means tomorrow expected to be the different than today, the real focus for the company is to focus on the future that compete innovatively. The product innovation is important in gaining the attention of consumers, as the innovative products play important role in gaining the attention of consumers and develop their intention in future to buy the product that further enable the firms to gain the competitive advantage. However, the point is that innovation driven and creative individuals play significant role in economic development, in prior literature specifically in fashion business product innovation is related to creativity of fashion designers, the textile firms, and innovation in development of the fabric create the stronger and leading international brands, it enables to gain
the competitiveness and innovation in business operations. The creativity and innovation ability influence the product innovation and improvements in the products that obtained on the base on the creation of innovation products to grab the customers and to retain them for long time period, that shows the innovation and creativity attract the customers and develop the purchase intention. The research scholars have focused on the creativity and innovation as internal capabilities that introduced the innovation to meet the customer’s demand and further gain the competitive advantage by increasing the purchase intention. The entrepreneurs in micro industries are required to innovate products for increasing the buyers interest and for competitiveness because consumers requires something new in marketed products (Nurgraha & Mulyadi, 2018).

**Mediating role of new product development process**

The study examines the relationship between development of creative and innovation ability and new product development process, further the knowledge transfer and new product development process, moreover the influence of new product development process and purchase intention. It has been argued that new product development process has the tendency to mediate the relationship between exogenous and endogenous constructs.

**Research Framework**

![Diagram of the research framework](image)

The figure 1 presents the research framework, the hypothesized statements as under

H1: New product development process influence the purchase intention among Phatthalung Thailand consumers

H2: Development of creative and innovation ability influence the purchase intention among Phatthalung Thailand consumers
H3: Knowledge transfer influence the new product development process
H4: New PDP mediates the relationship between DoCIA and purchase intention among Thailand.
H5: New PDP mediates the relationship between KT and purchase intention among Phatthalung Thailand

**Research Methodology**

The current research article is quantitative as data was collected through questionnaire and each measurement scale was adopted from prior literature. The data was collected from the people of Phatthalung province of Thailand to investigate the relationship between variables of the framework. The simple random sampling technique as applied and 300 responses were collected based on (Krejcie & Morgan, 1970) table. The measurement scale of development of creative and innovative abilities with 3 items was taken from the study of (Nurgraha & Mulyadi, 2018). The 03 items measurement scale of knowledge transfer was taken from the study of (Distanont et al., 2019), and 02 items of new product development process measurement scale was taken from (Distanont et al., 2019). The 06 items measurement scale of purchase intention was adopted from the work of the (Li et al., 2021).

**Data analysis**

This section of the study presents the analysis of collected data, the Smart-PLs was utilized for data analysis, the analysis was conducted in two phases, the first phase entails the assessment of measurement model in which researcher determined the construct validity and reliability based on Cronbach alpha, on the base of composite reliability and average variance extracted.

**Measurement Model**

This section determines the validity and reliability of the construct, the Cronbach alpha, composite reliability and average variance extracted, the PLS-algorithm method was utilized for the purpose. The values for Cronbach alpha, composite reliability and average variance extracted (AVE) must be greater than 0.70 for acceptable reliability and greater than 0.50 respectively according to the given criteria for acceptable reliability and validity given by (Leguina, 2015). The table 1 below presents the Cronbach alpha, CR and AVE

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Cronbach’s Alpha</th>
<th>CR</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>DoCIA</td>
<td>0.701</td>
<td>0.611</td>
<td>0.549</td>
</tr>
<tr>
<td>KT</td>
<td>0.742</td>
<td>0.532</td>
<td>0.523</td>
</tr>
<tr>
<td>NPDP</td>
<td>0.751</td>
<td>0.123</td>
<td>0.521</td>
</tr>
<tr>
<td>PI</td>
<td>0.799</td>
<td>0.745</td>
<td>0.511</td>
</tr>
</tbody>
</table>

Note: DoCIA (development of creative and innovation ability), Knowledge Transfer, NPDP (New product development Process), PI (Purchase intention)
The above table presents the values for Cronbach alpha, CR and AVE, the values for each found to be greater than cutoff point. Hence, the constructs are reliable and valid for relationship testing.

**Discriminant Validity**

The research article examined the discriminant validity for constructs validity, the table 2 presents the discriminant validity, the square root of AVE or the intersection value of each row of same variable must remain higher than the correlational value of each column. The criteria for the discriminant validity was given by the (Fornell & Larcker, 1981).

<table>
<thead>
<tr>
<th>Constructs</th>
<th>DoCIA</th>
<th>KT</th>
<th>NPDP</th>
<th>PI</th>
</tr>
</thead>
<tbody>
<tr>
<td>DoCIA</td>
<td>0.521</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KT</td>
<td>0.422</td>
<td>0.532</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NPDP</td>
<td>0.411</td>
<td>0.111</td>
<td>0.521</td>
<td></td>
</tr>
<tr>
<td>PI</td>
<td>0.4121</td>
<td>0.342</td>
<td>0.511</td>
<td>0.651</td>
</tr>
</tbody>
</table>

Note: DoCIA (development of creative and innovation ability), Knowledge Transfer, NPDP (New product development Process), PI (Purchase intention)

The table 2 demonstrated discriminant validity and hence it is shown that is meets the criteria of discriminant validity that each measurement scale determines the different concept. The measurement model is achieved, and collected data is suitable for next phase to test the hypotheses.

**Structural Equation Model (SEM)**

This section investigates the hypothesized relationship, the current study has three direct and two mediating hypotheses. First, the direct hypotheses were investigated through utilization of bootstrapping method of Smart-PLS based on the t-statistics and p value, whereas the β demonstrates the direction of the relationship. The table 3 depicts the results of direct relationship.

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>β</th>
<th>t-test</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPDP→PI</td>
<td>0.213</td>
<td>1.981</td>
<td>0.001</td>
</tr>
<tr>
<td>DoCIA→NPDP</td>
<td>0.221</td>
<td>0.2.321</td>
<td>0.000</td>
</tr>
<tr>
<td>KT→NPDP</td>
<td>0.271</td>
<td>2.987</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Note: DoCIA (development of creative and innovation ability), Knowledge Transfer, NPDP (New product development Process), PI (Purchase intention)

The direct hypothesis H1 between new product development process and Purchase Intension and was investigated through bootstrapping method based on t-statistics and p value, the results depicted that t-value found to be lower than cutoff point 1.96 for statistically acceptable relationship as per given criterial of Hair et al., (2010). So therefore, the first hypothesis H1 is accepted based on
statistical grounds that t-value is lower than cutoff point, and p value also found to be higher than 0.05, and rejected. The hypothesis H2 investigated the relationship between development of creative and innovative ability and new product development process and results reported that t-statistics higher than cutoff point as it was observed as 2.321 with p value as 0.000, that means the hypothesis H2 is accepted on statistical grounds. The hypothesis H3 investigated the relationship between Knowledge transfer and new product development process, the results show statistically significant relationship as t-statistics was observed to be 2.987 with p value 0.000, so therefore the hypothesis H3 is accepted on statistical basis.

**Mediating effect**

The mediation hypotheses were investigated in this section, the study argued that new product development has the tendency to mediate the relationship between independent and dependent variables of the study.

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>β</th>
<th>t-test</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>DoCIA → NPDP → PI</td>
<td>0.121</td>
<td>0.199</td>
<td>0.532</td>
</tr>
<tr>
<td>KT → NPDP → PI</td>
<td>0.271</td>
<td>2.987</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Note: DoCIA (development of creative and innovation ability), Knowledge Transfer, NPDP (New product development Process), PI (Purchase intention)

The above table shows that there is significant mediating effect of new product development process between development of creative and innovative abilities. Similarly, the mediating effect of NPDP found to be significant between knowledge transfer and purchase intention.

**Conclusion**

The research article examined the purchase intention of consumers in the province of Phatthalung Thailand, the purchase intention was influenced by new product development process, development of creative and innovative abilities and knowledge transfer. The study utilized Smart-PLs for data analysis and it was reported that all direct and mediating hypothesis were accepted statistically. The result of the study depicted that purchase intention of consumers can be predicted by new product development process, similarly the development of creative and innovative ability influenced the new product development process, meanwhile the mediating role of new product development mediates the relationship between development of creative and innovation ability and purchase intention. The study suggested to the organizations to ensure the innovative capabilities that has direct control over governance.

**References**


