International Journal of Technology 14(5) 993-1008 (2023)
Received August 2022 / Revised August 2022 / Accepted April 2023

International Journal of Technology

http://ijtech.eng.ui.ac.id

Role of Brand Trust in Private Label Adoption Model- an Affective and Trust-based Innovation Characteristic

Stany Wee Lian Fong[1*], Hishamuddin Ismail[1], Tan Pei Kian[1]

[1]*Faculty of Business, Multimedia University, Jalan Ayer Keroh Lama, 75450 Bukit Beruang, Melaka, Malaysia*

Abstract. Consumers' lack of trust in the private label brand is thought to be the root cause of private label's failure in developing markets, particularly in Asia. To improve their market share in developing markets, retailers must address private-label brand trust issues and utilize private-label characteristics to convince non-users to adopt their products. However, brand trust, which is understood to play a significant impact in innovation adoption, is not taken into account in the Diffusion-of-Innovation literature. To fill this gap, this study aims to apply a trust-based commendation to supplement 'brand trust' as the innovation characteristic and validate an adoption model for the private label that consists of all its important innovation characteristics. Brand trust is also expected to play a determinant role in the innovation characteristic model as an affective-based innovation characteristic. As a result, this study has empirically proven brand trust (β = 0.364) to be the most influential characteristic of adoption intention compared to relative advantage (β = 0.214), compatibility (β = 0.214), and perceived risk (β = -0.167). The empirical support of brand trust as the affective mediator contributes to justifying the significance of affective-based characteristics to the adoption of innovation.

Keywords: Adoption; Brand trust; Diffusion of innovation; Hierarchy of effects; Private label

1. Introduction

Anticipated economic consequences and the rising cost of living resulting from the coronavirus pandemic are expected to lead to a significant increase in the number of value-minded consumers. These consumers will frequently shop at Everyday Low Price (EDLP) stores and have an unusual propensity for being frugal. They become more price cautious, put more emphasis on finding ways to pay less while still receiving the goods they desire, and consequently are more inclined to switch to less expensive options like private label goods (PLMA, 2021). Private Labels (hereafter, PLs) are brand names created, fully owned, and controlled by retailers to market products that are sold exclusively at their retail stores (PLMA, 2022). PLs, are frequently priced lower than National Brands (hereafter, NBs) in a retailer's chain of stores to compete with them under the same roof directly (Sharma *et al.,* 2020). Today, the quality of Private label (PL) products is thought to have greatly improved, with the PL constituents reportedly being on par with or even better than NBs (Olsen *et al.,* 2011).

The PL is thought to have some advantages over National Brand (NB) items when the value of money is declining as consumers desire better value and are prone to cheaper

*Corresponding author's email: lfwee@mmu.edu.my, Tel.: +606-2524031; Fax: +606-2520079
doi: 10.14716/ijtech.v14i5.5935

alternatives on the market. Consumers in developing markets, however, are thought to be unable to recognize the benefits of PL over NB (PLMA, 2021). Asian consumers are more likely to trust NBs since successful NB manufacturers are perceived as being better at developing new, cutting-edge items. This has led Asians to believe that PL manufacturers will not provide them with cutting-edge products (Chou and Wang, 2017; AAM, 2011). The lack of trust in PL is clearly noticeable where PLs are viewed as high-risk purchases, and customers do not want to take the financial or physical dangers associated with using PL (Mostafa and Elseidi, 2018). Although the affordability of PL products may attract Asian consumers, it can also raise concerns about potentially hidden inferior quality. This apprehension could discourage consumers from purchasing these products (Fan, 2014). Consumers' lack of trust in the PL brand is thought to be the root cause of PL's failure in developing markets, particularly in Asia (Aw and Chong, 2019). To improve PL's market share in developing markets, retailers must: (1) address PL brand trust issues and (2) utilize PL's characteristics to convince non-users to adopt their PL products. This apprehension over PL's poor market share in developing markets raises the following research questions: (1) Does brand trust play a role in PL product adoption among non-users? (2) Besides brand trust, what are the PL characteristics that can encourage non-PL users to adopt PL products ?.

Despite the present innovation characteristic models of Diffusion-of-Innovation (hereafter, DOI) being considered a comprehensive, brand trust, which is understood to play a significant impact in innovation adoption, is not taken into account in the literature (Wu, Yang, and Wu, 2021). In retailing, consumers commonly use the brand name as an extrinsic cue to predict the quality of the PL, and this formation of quality expectations based on brand name is frequently referred to as a form of trust (Komiak and Benbasat, 2006). The absence of brand trust in DOI is calling this study to (1) apply a trust-based commendation to supplement 'brand trust' as the new innovation characteristic and (2) validate an adoption model for PL that consist of all its important innovation characteristics.

Brand trust is also anticipated to assume a determinant role in the affective-based innovation characteristic model within the Diffusion of Innovation (DOI) framework. When PL products are perceived as unfamiliar by non-adopters, adoption decisions are more likely to be influenced by affective factors rather than cognitive assessments (Komiak and Benbasat, 2006). Brand trust is expected to play an affection role in PL adoption as "a feeling of security" for consumers to rely on (Delgado-Ballester, Munuera-Aleman, and Yague-Guillen, 2003). Brand trust is deemed practically essential to retailing and serves as an affection of satisfaction that reduces risk in the consumer purchasing process (Afzal *et al.,* 2010), forms consumer loyalty (Li *et al.,* 2008), and commitment to forging strong buyer-seller relationships (Afzal *et al.,* 2010). Therefore, the addition of brand trust to DOI's adoption model is expected to improve the predictive power of adoption decisions and draw scholars' attention to the lack of trust and affection-based innovation characteristics in the DOI literature.

2. Theoretical Foundations and Research Model

2.1. Private Label

PLs are the names or symbols of retailers that can be seen on the packaging of products that are frequently sold at a certain chain of retail stores (PLMA, 2022). PLs are universally named under store-brand and separate-brand strategies (Chou and Wang, 2017; Sarkar, Sharma, and Kalro, 2016). Store-brand strategies typically name the PL after the real name of the retailer, and these names include store brand, umbrella brand, own brand, and house

brand on the other hand, a separate-brand strategy, commonly known as vice-branding or sub-branding, involves the use of a new brand name, distinct from that of the retailer, to establish an independent and stand-alone brand identity. Generally, PL products are made by third parties, either by exclusive PL manufacturers who exclusively produce for retailers or by brand manufacturers who make NBs but also use their additional production capacity to produce PL for retailers. Only a small number of PL products are manufactured by retailers themselves, using their own production facilities (PLMA, 2022; AAM, 2011). Retailers who fully own and control their PLs have full control over the PLs' marketing operations, including choosing the product's manufacturer, deciding on the brand name, setting the product's features, pricing, and packaging design, as well as conducting promotions and advertising (Jaafar and Lalp, 2012).

The PL emerged as a strategic response from retailers to counter the high prices of National Brands (NBs) (Fitzell, 1982). PLs typically offer lower prices compared to NBs, allowing them to directly compete within the same retail space (Sharma *et al.,* 2020). However, in the early 1920s, national brands' severe competition caused many retailers to start prioritizing price over the quality of PL products (Fitzell, 1982). This price-driven marketing strategy had reduced PL's perceived value into a low-cost image that was associated with a low-quality image (Chou and Wang, 2017; Sarkar, Sharma, and Kalro, 2016) and did not pose a serious threat to NBs at retail outlets (Sutton-Brady, Taylor, and Kamvounias, 2017).

Today, PL products are thought to be of substantially higher quality, with PL constituents allegedly being on par with or even superior to NBs (Olsen *et al.,* 2011). This explains that PL and NBs are physically equivalent, and their quality is acceptable from a physical viewpoint. Consumers in developing countries, however, do not appear to be able to recognize the benefits of PL over NB. The poorer PL market share in the developing market indicates a lack of trust towards the brand name of PL, which leads to a poorer perception of the quality of PL products and results in higher rejection among consumers. It is thought that PL product rejection occurs even before PL testing or use. In other words, buyers might not have even tried PLs before simply rejecting them based on perception. This emphasizes how novel PLs are to the majority of customers in developing markets, where PLs are perceived as a novel, unfamiliar concept with little understanding and information to them. As a result, this study highlights the need to investigate PL from the perspective of DOI to comprehend how consumers view PL as an innovation.

Conceptually, PL aligns with Rogers (2003) notion of innovation within the context of DOI. According to Rogers (2003), the determining factor for an innovation is not its duration but rather the perceived originality of the innovation by the potential user. PL is viewed as unique or unusual in retailing, particularly in developing markets. This low market share illustrates how PL is not widely used in developing markets, as it is seen as a novel concept with limited acceptance and knowledge among the local community. where its average volume share is still below the cut-off point of 5%. (Oracle, 2020). Conceptually, this supports the idea that PL is an innovation in a developing market.

2.2. Diffusion of Innovation: Innovation Characteristics

The Diffusion of Innovation (DOI) is a well-known social science theory that seeks to explain how and why new ideas are embraced by people and how rapidly they spread among them within a community (Rogers, 2003). The foundational DOI literature is credited to Everett Rogers (1958), which listed five essential characteristics of an innovation that can accelerate or slow the innovation's market acceptance, namely: relative advantage, compatibility, complexity, trialability, and observability. These innovation characteristics or attributes are said to be crucial to a new product and the social system as

these characteristics contribute 49 to 87 percent to the rate of innovation adoption (Rogers, 1995). The "innovation characteristic studies" are crucial for anticipating how people will react to a novel innovation. With the aid of these predictions, marketers can alter the names and positions of innovations as well as how they relate to potential adopters' pre-existing beliefs and experiences (Rogers, 2003).

Over the past 50 years, Rogers' original characteristic framework has been expanded to become one of the most comprehensive in the marketing literature (Flight, D'Souza, and Allaway, 2011). Successive DOI research subsequently concentrated on analyzing the roles played by these characteristics and exploring brand-new variables that influence the rate of innovation adoption, such as perceived risk (Ostlund, 1974; Bauer, 1960), status conferral (Holloway, 1977), cost, communicability, divisibility, perceived cost, social approval, and profitability (Tornatzky and Klein, 1982); the image or social approval and voluntariness (Moore and Benbasat, 1991); perceived usefulness and perceived ease of use (Davis, 1986) and purchase context, supplier characteristics, and product usage (Shaw, Giglierano, and Kallis, 1989; Dickson 1982; Leigh and Martin, 1981).

The adaptation of the existing innovation characteristic model to the PL context pinpointed the absence of 'affective-based' and 'trust-based' innovation characteristics in DOI literature. Based on the summary of Flight, D'Souza, and Allaway (2011), there is an indication of cognitive orientation in the innovation characteristic studies where common characteristics such as compatibility, relative advantage, and risk/complexity are commonly conceptualized as cognitive constructs in the marketing literature (Komiak and Benbasat, 2006; Parthasarathy *et al.,* 1995). Decisions made by consumers, especially in deciding PL adoption, seem to be certainly influenced by "affective" characteristics: (1) The human experience includes both cognitive and emotional aspects (Komiak and Bensabat, 2006); (2) The Rational Choice Theory states that customers' conscious decisions frequently involve both reasoning and feeling; (3) Consumer decision-making is less likely to be cognitively dominant since consumers are unfamiliar with the innovation (Jiang and Benbasat, 2004); and (4) Consumers' affective response to the innovation has an impact on their choices, therefore adopting the innovation may not be a completely cognitive decision (Derbaix, 1995).

On the other hand, the lack of trust-based innovation characteristics can be explained by consumers' formation of quality expectations towards the innovation. In DOI, potential adopters are thought to experience difficulties due to the novelty of innovations, including their inability to evaluate the innovations' intrinsic qualities (such as features, quality, and performance) and their difficulty determining whether the innovations can meet their needs (Rogers, 2003). Thus, potential adopters are driven to form quality expectations based on the external characteristics of the innovation, including their trust in the seller's reputation and brand name (Chocarro, Cortiñas, and Elorz, 2009; Speed, 1998). In marketing literature, this formation of quality expectations based on extrinsic features is frequently referred to as a form of trust, which is characterized as a state of dependence between two parties when risk is present (Komiak and Benbasat, 2006). When a potential adopter (the trustor) can predict the behavior of the trustee (the innovation seller) in the future through the knowledge of the trustee (the innovation seller), trust has been established (Gefen, Karahanna, and Straub, 2003). As a result, the innovation adoption decision will be heavily influenced by the degree of trust a potential adopter has in the brand or seller of the innovation.

2.3. Brand Trust as the New Trust and Affective Innovation Characteristic

Brand trust is described as a "consumer's feeling of security" during engagement with the company, essentially perceiving the brand as trustworthy and accountable for

consumers' interests and welfare (Delgado-Ballester, Munuera-Aleman, and Yague-Guillen, 2003). Brand trust is also linked to "confidence expectations" regarding the brand's dependability and intentions, where it is seen as a form of confidence in taking a risk by relying on the brand of another party (Afzal *et al.,* 2010). When forming expectations and evaluating the quality of a product, consumers look to the brand as a quality signal (Lassoued and Hobbs, 2015). Credibility is expected to contribute to consumers' trust in a brand and serve as a determinant of their confidence in the quality attributes, particularly when they face a lack of sufficient information during the purchasing decision-making process. Consumer commitment to a brand can result from their initial trust in the brand evolving into confidence in its brand performance as they use its products (Lassoued and Hobbs, 2015).

Innovation adoption depends heavily on brand trust. Adoption, which is linked to the adopter's repetitive usage behavior (Schiffman and Wisenblit, 2015), is frequently conceptually equated with loyalty. Given that brand loyalty is frequently suggested as a brand trust's indirect effect, it makes sense to infer that brand trust has an impact on adoption behavior (Lassoued and Hobbs, 2015). Consumers' intentions for future adoption are anticipated to be determined by brand trust, which will also influence their decision-making. As a result, confidence arises from the great experience and ongoing satisfaction that support customer loyalty and recurrent brand usage (Lassoued and Hobbs, 2015). When PL appears to be the innovation under study, it is believed that its brand will have a certain influence on consumers' anticipation of what they can expect from a specific brand of PL product. The brand of PL becomes even more crucial for customers to infer its product quality because most PL products are offered in the experiential goods category, where their features can only be judged after consumers begin to consume (Smith and Johnson, 2022; Nelson, 1974).

On the other hand, since most PL products are named after the retailer's existing brand name, the PL brand symbolizes the overall consumer view of the retailer and frequently serves as a cue of expectation for a particular PL product. In this study, brand trust is seen as an affective construct for three reasons. First, brand trust is defined as a form of "consumer feeling of security" when interacting with the brand (Delgado-Ballester, Munuera-Aleman, and Yague-Guillen, 2003). Second, brand trust is also regarded as a manifestation of "consumer affective assessment," which elucidates consumers' willingness to depend on a brand in order to receive the promised benefits (Komiak and Benbasat, 2006). Third, brand trust is described as an "emotional condition" that includes a consumer's willingness to be conscious of vulnerability in response to the intentions or actions of other parties (Afzal *et al.,* 2010). Due to PL's unfamiliarity with most consumers in developing markets, the PL adoption decisions are thought to be more likely to be based on affective than on cognitive assessment and this further supports the affective conceptualization of brand trust in the context of PL adoption (Chocarro, Cortiñas, and Elorz, 2009). Consumers will become committed to the brand and feel secure enough to take the risk of depending (Lewis and Weigert, 1985) on the PL brand if they have a positive perception of its reliability and integrity (Afzal *et al.,* 2010). Therefore, it is assumed in this study that "the more trustworthy of the brand, the more likely it is that consumers will adopt PL."

3. Research Model and Hypotheses Development

The model of this study (Figure 1) is concluded with five innovation characteristics-information, compatibility, relative advantage, perceived risk, and brand trust. Drawing the theoretical foundation from the Hierarchy of Effects model (hereafter, HOE) and the

functional-level recommendation of Flight, D'Souza, and Allaway, (2011), this study applied three functional levels of innovation interpretation to conceptualize the innovation characteristics into cognitive, affective, and conative stages based on the HOE model's "think-feel-do" chain: (1) information construct as a primary-level characteristic which works as the trait that universally recognized across all potential users; (2) compatibility, relative advantage, and perceived risk as the secondary-level cognitive-based constructs that explain the mental or rational state of innovation assessment that uniquely perceived across all potential adopters; (3) brand trust as tertiary-level affective-based construct that explains the emotional or feeling state of innovation assessment; and (4) adoption intention conceptualized as a conative construct that works as the target behavior of this study.

The information construct originated from the trialability, communicability, and observability characteristics and is posited on the idea that potential adopters learn about the innovation from their internal and external communication channels rather than the usual sources of information covered in marketing literature. To ease the diffusion of information, the innovation itself is expected to contain characteristics that aid the flow of its information to potential innovation adopters (Flight, D'Souza, and Allaway, 2011; Parthasarathy *et al.,* 1995). In the PL context, the dissemination of PL information is essential for consumer adoption as it influences customer awareness and decision-making about whether it is worthwhile to try unfamiliar PL products. PL products with higher transmit-ability enable consumers to (1) be assured that the PL product fits their lifestyles (Holak and Lehmann, 1990); (2) perceive higher advantages in the PL compared to the current brand used (Flight, D'Souza, and Allaway, 2011); and (3) disregard any concerns about the PL products (Beneke *et al.,* 2012; Hirunyawipada and Paswan, 2006). Thus, this study proposes the following three hypotheses:

H1: Information is positively related to the compatibility of PL products.
H2: Information is positively related to the relative advantage of PL products.
H3: Information is negatively related to the perceived risk of PL products.

The compatibility construct refers to the degree to which an innovation fits into the social and personal structures of potential adopters (Flight, D'Souza, and Allaway, 2011). When compatible, the innovation is deemed to reduce adopters' level of uncertainty and typically fits well with the situations of potential adopters (Rogers, 2003). This situational fit is also linked to (1) an innovation's conformity to the cultural norms of the social system to which the potential adopter belongs (Sitorus *et al.,* 2019); and (2) the consistency of the innovation with the needs and adopted ideas of the potential adopter (Jaakkola and Renko, 2007; Rogers, 2003). The adoption of PL can be associated with consumers' natural resistance to change, where new products or brands that do not match the present habit are likely to be rejected. It is believed that greater compatibility makes the PL product less ambiguous for consumers and typically fits the circumstances of potential adopters, which directly encourages the adoption of the PL brand or product (Rogers, 2003). Thus, this study proposes the following 4th hypothesis:

H4: Compatibility is positively related to the adoption intention of PL products.

Relative advantage is the perceived benefit that the innovation can provide over the alternatives now available to the adopter or how the innovation is viewed as being superior to the idea it replaces (Hansen, 2005; Rogers, 2003; Jo-Black *et al.,* 2001). It is evaluated based on the perceived benefits that an adopter will derive from the innovation in comparison to the product they are currently using. Typically, the innovation's nature dictates the exact type of relative advantage that potential adopters would focus on, such as the benefits of economic, social, and so on (Rogers, 2003). In the PL context, the relative

advantage is commonly assessed based on the value comparison between the PL product and the current adopted brand. Prior PL studies suggested two key relative advantages: economic advantage (Beneke *et al.,* 2012) and products' performance and consistency (Richardson, Jain, and Dick, 1996). When the advantage of the PL is perceived to be greater than the current brand alternatives, the adoption is said to be more likely to happen. Thus, the 5th hypothesis of this study is proposed as follows:

H5: Relative advantage is positively related to the adoption intention of PL products.

This study denotes perceived risk to Rogers (2003) complexity characteristic, which is focused on 'the uncertainty induced from the physical product,' such as the performance risk, physical risk, and risk from the product category. In the context of DOI, innovation seems unusual and novel to potential customers and reflects low familiarity with the innovation. Thus, it is common to see consumers assessing the possibility of innovation failure when they are not familiar with the new idea (Ong *et al.,* 2022; Mieres, Martín, and Gutiérrez, 2005). PL product is often associated with perceived risk, as PL products were previously associated with low pricing, inferior quality, and poor performance (Beneke *et al.,* 2012). PLs are often perceived as high-risk purchases, and customers are hesitant to take on the financial or physical risks associated with using PL products (Mostafa and Elseidi, 2018; Nielsen, 2014). Thus, the 6th hypothesis of this study is proposed as:

H6: Perceived risk is negatively related to the adoption intention of PL products.

The absence of trust-based characteristics in DOI literature called for the brand trust to be supplemented as the innovation characteristic of the new PL adoption model. Brand trust is said to be long recognized in marketing and psychology literature, where it is seen as a type of bonding where one believes in another (LaFollette, 1996) and essential for consumers in setting expectations and assessing the quality of a product (Candra, Nuruttarwiyah, and Hapsari, 2020; Lassoued and Hobbs, 2015). Today, practically all products are advertised using a brand, and the impact of brand trust in most contexts of customer behavior is somehow indisputable. Since PL is unfamiliar to the majority of consumers in developing markets, its brand has typically developed into a crucial quality indicator to help consumers in making purchase decisions (Chocarro, Cortiñas, and Elorz, 2009; Mitra, 1995), and it indicates what consumers can expect from a particular product (Chocarro, Cortiñas, and Elorz, 2009). Therefore, this study presumes that:

H7: Brand trust is positively related to the adoption intention of PL products.

In most adoption contexts, the dependence of consumer choice on "affective" characteristics appears to be unavoidable. This is doubly important for a "brand-based" innovation like PL, which denotes the dependence of consumer evaluation on the trustworthiness of the retailer's brand before adopting PL products. The proposed mediation effect of brand trust in the PL adoption model is justified as when consumers believe PL to be superior to the brand being replaced (in terms of compatibility, relative advantage, and risk), this cognitive assessment is said to be capable of delivering them a "feeling of security" to rely on PL brand, and eventually, adopt the PL products. By proposing 'brand trust' as an affective-based characteristic to mediate the cognitive-based constructs and dependent variable, this study proposes:

H8: Brand trust mediates compatibility to the adoption intention of PL products.
H9: Brand trust mediates relative advantage to the adoption intention of PL products.
H10: Brand trust mediates perceived risk to the adoption intention of PL products.

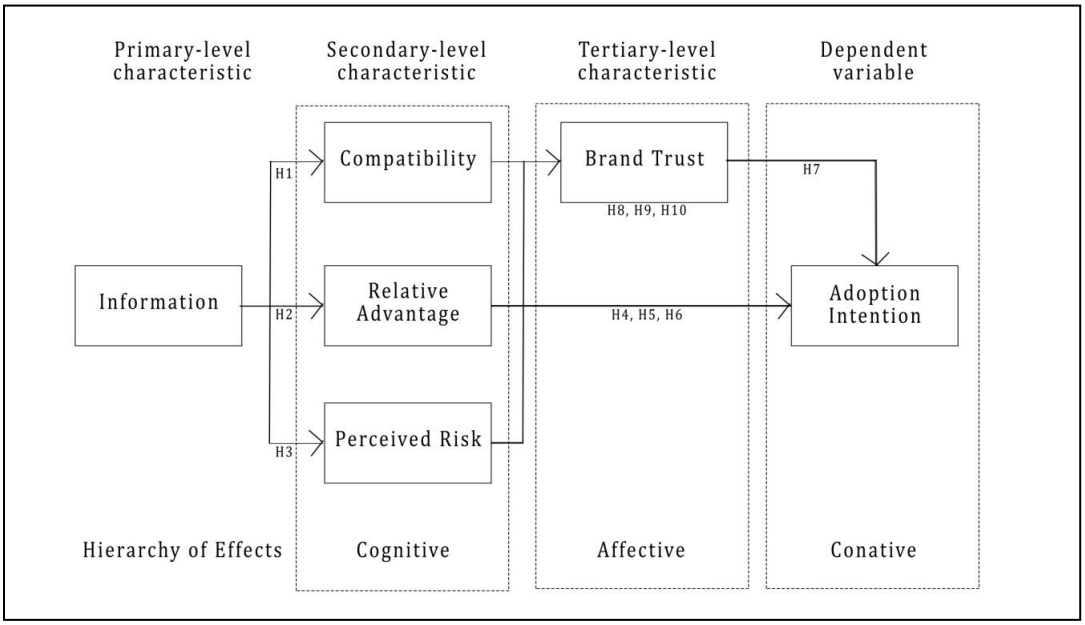

Figure 1 The research model

4. Research Methodology

With the support of relevant literature, multiple innovation characteristics were identified to examine the adoption intention of retailer shoppers towards PL products. The applicability of these characteristics and their items in the context of the PL products was then further validated by five marketing academicians and one industry expert in the retail and branding industry. As a result, five innovation characteristics of PL products-information, compatibility, relative advantage, perceived risk, and brand trust were chosen as the final constructs formatively measured by twelve closed-ended indicators (listed in Table 1). These indicators are measured using metric interval scales, with a summated rating or a five-point Likert scale employed to gauge respondents' beliefs and intentions regarding PL products.

The data required for analysis were gathered using a quantitative approach. The survey technique was applied with a questionnaire as the instrument to collect data from 270 retail shoppers who had yet to adopt PL products, as the data on the innovation characteristics are said to be valuable only when it is collected before or concurrently with the adoption decision of the respondents (Rogers, 2003). These respondents were intercepted in nine retail outlets in Malaysia with the hybrid sampling method (cluster and convenience sampling). To ensure the representativeness and eligibility of the respondents, four filtering questions were included in the questionnaire to determine the user status of the respondents towards PL products.

5. Data Analysis

PLS-SEM (also termed PLS path modeling) has been chosen as the data analysis method, and the SmartPLS 3.3.3 analytical software is used to analyze and answer the hypotheses of this study.

5.1. Demographic Profiling

270 qualified respondents participated in this study. Prior to data submission, each questionnaire was carefully reviewed to ensure that all questions had been addressed and all respondents fulfilled the "novelty" criteria towards PL products in retail stores they visit.

Among the 270 respondents, 157 (58.15 %) are reported as males, and 113 (41.85 %) are females. The majority of the respondents fall in the age group of 31 to 40 years old (27.04 %), followed by 41 to 50 (24.44 %), 61 and above (16.67 %), 51 to 60 (15.56 %), 21 to 30 (12.22%), and below 21 years old (4.07%). In the context of academic qualification, 16 (5.93 %) with qualification of PMR or lower, 90 (33.33 %) with SPM / O-level qualification, 24 (8.89 %) with STPM/A-Level qualification, 75 (27.78 %) with Diploma qualification, 56 (20.74 %) with Bachelor Degree qualification, and 9 (3.33 %) with qualification of Master Degree and above. As for monthly personal income, the majority of the respondents (37.04 %) are recorded with income lower than RM3000, 39.26% with income ranging from RM3000 to RM4999, 12.96 % with income ranging from RM5000 to RM6999, and 10.74% with income RM7000 and above.

5.2. Measurement Model

As illustrated in Table 1, all constructs of the model have been reported to meet the formative measurement model's evaluation requirements: convergent validity, collinearity assessment, and significance and relevance of outer weights. As for the convergent validity, all five constructs have achieved the 0.7 thresholds for the path coefficient values (Hair *et al.,* 2017) with information at 0.720, compatibility at 0.781, relative advantage at 0.707, perceived risk at 0.918, and brand trust at 0.906. All 12 indicators have obtained the desired level of VIF values lower than 5.0, as stated by Hair *et al.* (2017). Hence there is no collinearity problem in the model. Lastly, all 12 indicators are recorded with outer weights or outer loadings significant at $p < 0.05$ threshold and deemed to be important to the formation of five constructs of the model: communicability (outer weight = 0.618, $p < 0.01$), observability (outer weight = 0.520, $p < 0.01$), trialability (outer loading = 0.4858, $p < 0.01$), personal compatibility (outer weight = 0.519, $p < 0.01$), social compatibility (outer weight = 0.625, $p < 0.01$), relative product performance (outer weight = 0.833, $p < 0.01$), relative economic advantage (outer weight = 0.306, $p < 0.01$), performance risk (outer weight = 0.679, $p < 0.01$), physical risk (outer weight = 0.849, $p < 0.05$), category risk (outer weight = 0.673, $p < 0.05$), brand competence (outer weight = 0.305, $p < 0.05$), and brand intention (outer weight = 0.738, $p < 0.01$). Thus, all twelve indicators are detained in the model for further analysis and implementation.

Table 1 Result summary for the formative measurement model

Latent variable	Indicator	Convergent validity	Outer weight	t-value	p-value	Outer loadings	VIF
Information	Communicability	0.720	0.6180	6.7750	0.0000	0.8389	1.1857
	Observability		0.5198	5.5443	0.0000	0.7624	1.1468
	Trialability		0.1756	1.8290	0.0675	0.4858 (p=0.000)	1.1269
Compatibility	Personal compatibility	0.781	0.5190	5.5011	0.0000	0.8462	1.3770
	Social compatibility		0.6253	7.4141	0.0000	0.8969	1.3770
Relative advantage	Relative product performance	0.707	0.8331	15.0037	0.0000	0.9606	1.2104
	Relative economic advantage		0.3058	4.0434	0.0001	0.6531	1.2104
Perceived risk	Performance risk	0.918	0.6788	2.9327	0.0034	0.8729	2.0087
	Physical risk		0.8487	2.5278	0.0115	0.7981	3.3593
	Category risk		0.6732	2.0171	0.0437	0.4009	2.6426
Brand trust	Brand competence	0.906	0.3052	2.3057	0.0212	0.8985	2.8267
	Brand intention		0.7381	6.0704	0.0000	0.9834	2.8267

5.3. Structural Model

In the structural model, the criteria for collinearity assessment is fulfilled with all constructs' VIF values below the 5.0 threshold- compatibility VIF value at 1.621, relative

advantage VIF value at 1.894, perceived risk VIF value at 1.091, and brand trust VIF value at 1.700 indicating no lateral multicollinearity concern. T-statistics for the seven direct paths of the model have been generated using the SmartPLS 3.3.3 bootstrapping method to evaluate the significance level of relationships. As illustrated in Table 2, six direct relationships have t-values that are equal or large to 1.96, making them significant at the 0.05 level of significance: information to compatibility with the recorded t-value of 11.66 ($p < 0.01$), information to relative advantage with t-value = 9.20 ($p < 0.01$), compatibility to adoption intention with t-value = 3.46 ($p < 0.01$), the relative advantage to adoption intention with t-value = 3.16 ($p < 0.01$), perceived risk to adoption intention with t-value = 3.32 ($p < 0.01$), and brand trust to adoption intention with t-value = 5.67 ($p < 0.01$). However, the direct relationship path from information to perceived risk is reported to be insignificant at 0.05 level, with the t-value recorded at 0.886 ($p > 0.05$). Thus, the hypotheses testing of this study is concluded with hypotheses H1, H2, H4, H5, H6, and H7 supported, whereas hypothesis H3 is not supported.

Tabel 2 Hypotheses testing

Hypothesis	Relationship	Std Beta	Std Error	t-value	p-value	Decision	f^2	R^2	Q^2	VIF
H1	Information -> Compatibility	0.5572	0.0478	11.6630	0.0000	Supported	0.4502	0.4106	0.2224	
H2	Information -> Relative advantage	0.4883	0.0531	9.1949	0.0000	Supported	0.3131	0.2384	0.1543	
H3	Information -> Perceived risk	-0.0736	0.0831	0.8855	0.3759	Not supported	0.0054	0.0054	0.0050	
H4	Compatibility -> Adoption intention	0.2142	0.0619	3.4609	0.0005	Supported	0.0606			1.6210
H5	Relative advantage -> Adoption intention	0.2144	0.0677	3.1642	0.0016	Supported	0.0520	0.5331	0.5138	1.8936
H6	Perceived risk -> Adoption intention	-0.1669	0.0503	3.3195	0.0009	Supported	0.0547			1.0910
H7	Brand trust -> Adoption intention	0.3638	0.0641	5.6743	0.0000	Supported	0.1671			1.6968

On the other hand, the three mediation hypotheses for brand trust (as illustrated in Table 3) are answered with (1) Hypothesis H8 supported with standardized beta recorded as 0.070, t-value of indirect effect as 2.264 ($p < 0.05$) and direct effect reported as 3.461 ($p < 0.05$) indicating a complementary mediation of brand trust in compatibility to adoption intention, (2) Hypothesis H9 supported with standardized beta recorded as 0.164, t-value of indirect effect as 3.514 ($p < 0.05$) and direct effect reported as 3.164 ($p < 0.05$) indicating a complementary mediation of brand trust in relative advantage to adoption intention, and (3) Hypothesis H10 supported with standardized beta recorded as -0.066, t-value of indirect effect as 2.406 ($p > 0.05$) and direct effect reported as 3.320 ($p < 0.05$) indicating a competitive mediation of brand trust in perceived risk to adoption intention. The R2 value of the dependent variable in the model indicates a moderate level of predictive accuracy (Hair *et al.,* 2014), with brand trust, compatibility, relative advantage, and perceived risk carrying 53.31% of overall influences on adoption intention. Brand trust ($f2 = 0.167$) is reported to have medium and larger effect sizes towards the adoption intention compared to compatibility ($f2 = 0.061$), relative advantage ($f2 = 0.052$), perceived risk ($f2 = 0.054$)

and indicating brand trust plays a stronger influence on adoption intention compared to the conventional innovation characteristics in PL context.

Tabel 3 Significance analysis of direct and indirect effects of brand trust

Hypothesis	Relationship	Direct Effect	97.5% Confidence	t-value	Significance	Indirect Effect	97.5% Confidence	t-value	Significance	Decision	Mediation Type
H8	Compatibility -> Adoption intention	0.2142	[0.0955, 0.3385]	34.609	Yes	0.0696	[0.0155, 0.1389]	22.638	Yes	Supported	Complementary mediation
H9	Relative advantage -> Adoption intention	0.2144	[0.0811, 0.3446]	31.642	Yes	0.1635	[0.0848, 0.2660]	35.135	Yes	Supported	Complementary mediation
H10	Perceived risk -> Adoption intention	-0.1669	[-0.2652, -0.0630]	33.195	Yes	-0.0658	[-0.1229, -0.0168]	24.060	Yes	Supported	Competitive mediation

5.4. Result Discussion

Empirically, this study has filled the gap in traditional DOI studies by highlighting the need for 'trust-based' and 'affective-based' characteristics in the characteristic adoption model and distinguishing the model of this study from the conventional adoption models. 'Brand trust' (β = 0.364), which is often neglected in DOI literature, is empirically proven to have a stronger influence on the adoption intention than the conventional innovation characteristics: relative advantage (β = 0.214), compatibility (βC = 0.214), and perceived risk (β = -0.167). This result has somewhat proven that non-adopters are giving the "affective-based" characteristic more attention than the traditional "cognitive-based" attributes. Additionally, brand trust's empirical support for mediating compatibility (β = 0.070), relative advantage (β = 0.164), and perceived risk (β = -0.066) to adoption intention has emphasized the importance of affective-based characteristics to the adoption intention and supported the conceptualization of brand trust as the "affective" characteristic.

However, the insignificance influence of information on perceived risk (t = 0.886; p > 0.05) is rather unforeseen as past literature, such as Conchar *et al.* (2004) and Holak and Lehmann (1990), support a negative relationship. This insignificant relationship can possibly be justified by the target respondents' unfamiliarity with the PL products. In the DOI context, adoption decisions are often associated with novel products or ideas, and this novelty is thought to create anxiety in consumers. Despite the availability of information and knowledge, consumers are believed to experience psychological stress due to the uncertainties surrounding innovation (Kwon, Lee, and Kwon, 2008). This psychological stress is believed to cause consumers to forget the information they own to review the innovation (Kwon, Lee, and Kwon, 2008). As a result, consumers are found to ignore search-based information such as advertisements, word-of-mouth, or short-term trial results (Vengrauskas, 2012) until they receive experience-based information, which is post-adoption information gained from actual product usage (Vengrauskas, 2012).

6. Recommendation and Future Research

6.1. Marketing Implications for Private Label Products Adoption

The misperception about PL products and their low market share rate in developing markets suggest retailers learn how consumers perceive the characteristics of PL products as an innovation and determine which characteristics inspire them to commit. Based on the empirical findings, this study ought to recommend several implications that retailers can

use to strategically plan their PL offerings. Firstly, it is essential for retail managers to be aware that consumers' decision to adopt PL products can be influenced by their perception of the retailer's trustworthiness, which is often reflected in the retailer's brand. This highlights the importance of PL pre-launch campaigns to retailers, where investments in brand name capital via branding policies and ethical protocol are deemed to be critical to the success of PL acceptance. To develop a strong brand reputation and image, retailers must execute marketing activities and decisions based on brand rather than a product line. These pre-launch initiatives are thus expected to enhance consumer confidence in PL products, leading to long-term commitment from the consumers .

Second, retail managers are recommended to begin their PL product offerings with minimal complexity products. With brand trust mediating compatibility and relative advantage to PL adoption, these uncomplicated PL features will make it easier for customers to evaluate PL's compatibility and relative advantage, which will ultimately lead to higher trust in the PL brand. Additionally, these PLs with simple characteristics not only mitigate the perceived risks for customers but also facilitate the broader dissemination of PL's advantages to others. Eventually, after PL gained the majority acceptance in the market, retailers may then venture into higher complexity product offerings. Finally, this study urges retailers to carefully manage the information flow on their PL products. The promotion campaign of PL ought to place more emphasis on demonstrating how these products fit into local lifestyles and how superior they are to other product brands in their store. Furthermore, as perceived risk is empirically shown to be unaffected by information, retail managers can use "risk-reduction practices" rather than "risk-reduction marketing", such as satisfaction assurances, product warranties, and after-sale services to lower consumers' perceptions of risk.

Although the affective-based innovation characteristics have struggled to keep up with the overall adoption diffusion literature, the reliance of consumer choice on brands as an emotional attachment is in some ways inevitable. Retailers must understand how to address the PL trust issue, comprehend how to persuade non-PL adopters to switch brands, and construct their PL marketing strategies around the innovative characteristics to increase PL market share. This adoption model will serve as a starting point for academic researchers, particularly diffusion researchers, to pay attention to both cognitive and affective-based constructs in determining consumers' long-term commitment to a brand. With brand trust literately supported in influencing consumers' purchase behavior, the inclusion of brand trust into DOI's characteristic adoption model is deemed to be an enhancement to the predictive power of adoption decision.

6.2. Limitation of Study and Direction for Future Research

Due to the imbalance in PL offering across Malaysian retailers, this study generalized PLs as frequently bought FMCG and grocery items commonly found on the shelf of standard hypermarkets. This low-involvement classification of PL may have restricted the straight application of this adoption model to other technical and non-grocery product categories. Furthermore, the emphasis of this study is on the 'characteristics of innovation' and has excluded factors that are not related to the innovation (the product) itself, where factors such as adopter and social system characteristics are considered critical to the diffusion of new ideas remain unexplored in this study. This PL product characteristic-adoption model may only apply to non-PL adopters, who are primarily covered in developing markets where data is gathered. This model is thought to be ineffective at forecasting the behaviors of ex and existing adopters with prior PL consumption experience.

Continued study of innovation characteristics is necessary. Researchers can further specify innovation characteristics using the scales established here, giving practitioners the

advantage of knowing which characteristics most significantly influence the diffusion curve of innovation. Once perceived innovative aspects are considered, the actual dissemination of various products and services can be more clearly understood. With this knowledge, practitioners could more correctly forecast how innovation would spread and, as a result, potentially make better marketing decisions. Considering the future expansion of PL products to other higher-involvement product categories, future research can investigate consumer trust in the name of the manufacturer. High-involvement categories such as pharmaceutical products are often perceived as high-risk purchases, and consumer confidence in these products can be enhanced by the reputation and brand name of the manufacturer. Future research can also look at the influence of a subject's adoption experience in assessing perceived risk. The root causes of uncertainty, which are frequently cited as one of the hurdles to the adoption of innovations, can be better understood by diffusion experts with the aid of this knowledge. Lastly, the introduction of affective-based innovation characteristics to the DOI research framework is expected to draw scholars' attention as extrinsic and affective innovation characteristics have struggled to keep up with the overall adoption diffusion literature due to its lack of extensive scale of measurements.

Acknowledgments

This study was supported by the Ministry of Higher Education (MOHE) under the Fundamental Research Grant Scheme (FRGS) with project code: FRGS/1/2020/SS01/MMU/03/11.

References

Afzal, H., Khan, M.A., Rehman, K., Ali, I., Wajahat, S., 2010. Consumer's Trust in the Brand: Can It be Built through Brand Reputation, Brand Competence, and Brand Predictability. *International Business Research*, Volume. 3(1), pp. 43–51

Asset Allocation and Management (AAM), 2011. Private Label (Generic) vs Branded Products: Differences Aren't Black and White Anymore. Available online at: https://www.aamcompany.com/insight/private-label-generic-vs-branded-products-differences-arent-black-and-white-anymore, Accessed on January 18, 2022

Aw, E.C.-X., Chong, H.X., 2019. Understanding Non-private Label Consumers' Switching Intention in Emerging Market. *Marketing Intelligence and Planning*, Volume 37(6), 689–705

Bauer, R.A., 1960. Consumer Behavior as Risk Taking. *In:* Hancock, R.S., (ed.), Dynamic Marketing for a Changing World, Proceedings of the 43rd. Conference of the American Marketing Association, p. 389

Beneke, J., Greene, A., Lok, I., Mallet, K., 2012. The Influence of Perceived Risk on Purchase Intent-the Case of Premium Grocery Private Label Brands in South Africa. *Journal of Product and Brand Management*, Volume 21(1), pp. 4–14

Candra, S., Nuruttarwiyah, F., Hapsari, I.H., 2020. Revisited the Technology Acceptance Model with E-trust for Peer-to-peer Lending in Indonesia (Perspective from Fintech Users). *International Journal of Technology*, Volume 11(4), pp. 710–721

Chocarro, R., Cortiñas, M., Elorz, M., 2009. The Impact of Product Category Knowledge on Consumer Use of Extrinsic Cues–a Study Involving Agrifood Products. *Food Quality and Preference*, Volume 20(3), pp. 176–186

Chou, H.Y., Wang, T.Y., 2017. Hypermarket Private-label Products, Brand Strategies and Spokesperson Persuasion. *European Journal of Marketing*, Volume 51(4), 795–820

Conchar, M.P., Zinkhan, G.M., Peters, C., Olavarrieta, S., 2004. An Integrated Framework for the Conceptualization of Consumers' Perceived-risk Processing. *Journal of the Academy of Marketing Science*, Volume 32(4), pp. 418–436

Davis, F.D., 1986. A Technology Acceptance Model for Empirically Testing New End User Information Systems: Theory and Results. *Ph.D. dissertation, Sloan School of Management, Massachusetts Institute of Technology*

Delgado-Ballester, E., Munuera-Aleman, J.L., Yague-Guillen, M.J., 2003. Development and Validation of a Brand Trust Scale. *International Journal of Market Research*, Volume 45 (1), pp 35–54

Derbaix, C.M., 1995. The Impact of Affective Reactions on Attitudes towards the Advertisement and the Brand: A Step towards Ecological Validity. *Journal of Marketing Research*, Volume 32(4), pp. 470–479

Dickson, P.R., 1982. Person-situation: Segmentation's Missing Link. *Journal of Marketing*, 46(4), 56–64

Fan, S.M., 2014. Big Channel Brands Fight Using Private Labels: 72 Per Cent of Respondents Care Most About Price. Available online at: www.cardu.com.tw/news/detail.php?nt_pk?6&ns_pk?24833, Accessed on November 06, 2022

Fitzell, P.B., 1982. History of Private Labels. In: *Private Labels: Store Brands and Generics Products*, Avi Publishing Company, pp. 27–60

Flight, R.L., D'Souza, G., Allaway, A.W., 2011. Characteristics-Based Innovation Adoption: Scale and Model Validation. *Journal of Product and Brand Management*, 20(5), pp. 343–355

Gefen, D., Karahanna, E., Straub, D.W., 2003. Trust and TAM in Online Shopping: An Integrated Model. *Management Information Systems Quarterly*, Volume 27(1), pp. 51–90

Hair, J.F., Hult, G.T.M., Ringle, C.M. and Sarstedt, M., 2014. A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM), SAGE Publication

Hair, J.F., Hult, G.T.M., Ringle, C.M., Sarstedt, M., 2017. A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM), Sage Publication

Hansen, T., 2005. Consumer Adoption of Online Grocery Buying: A Discriminant Analysis. *International Journal of Retail and Distribution Management*, Volume 33(2), pp. 101–121

Hirunyawipada, T, Paswan, A.K., 2006. Consumer Innovativeness and Perceived Risk: Implications for High Technology Product Adoption. *Journal of Consumer Marketing*, Volume 23(4), pp. 182–198

Holak, S.L., Lehmann, D.R., 1990. Purchase intentions and the dimensions of innovation: an exploratory model. *Journal of Product Innovation and Management*, Volume 7(1), pp. 59–73

Holloway, R.E., 1977. Perceptions of an Innovation: Syracuse University's Project Advance. *Ph.D. dissertation, Syracuse University*

Jaafar, S.N. and Lalp, P.E., 2012. Consumers' Perception towards Extrinsic and Intrinsic Factors of Private Label Product in Johor Bahru, Malaysia. *In*: UMT 11th International Annual Symposium on Sustainability Science and Management, 09th – 11th July 2012, Terengganu, Malaysia

Jaakkola, E., Renko, M., 2007. Critical Innovation Characteristics Influencing the Acceptability of a New Pharmaceutical Product Format. *Journal of Marketing Management*, Volume 23(3-4), pp. 327–346

Jiang, Z., Benbasat, I., 2004. Virtual Product Experience: Effects of Visual and Functional Control on Perceived Diagnosticity in Electronic Shopping. *Journal of Management Information Systems*, Volume 21(3), pp. 111–147

Jo-Black, N., Lockett, A., Winklhofer, H., Ennew, C., 2001. The Adoption of Internet Financial Services: A Qualitative Study. *International Journal of Retail and Distribution Management*, Volume 29(8), pp. 390–398

Komiak, S., Benbasat, I., 2006. The Effect of Personalization and Familiarity on Trust and Adoption of Recommendation Agents. *Management Information Systems Quarterly*, Volume 30(4), pp. 941–960

Kwon, K.-N., Lee, M.-H., Kwon, Y.J., 2008. The Effect of Perceived Product Characteristics on Private Brand Purchases. *Journal of Consumer Marketing*, Volume 25(2), pp. 105–14

LaFollette, H., 1996. Personal Relationship: Love, Identity, and Morality. In: *Cambridge, MA: Blackwell Publisher*

Lassoued, R., Hobbs, J.E., 2015. Consumer Confidence in Credence Attributes: The Role of Brand Trust. *Food Policy*, Volume 52, pp. 99–107

Leigh, J.H., Martin, C.R., 1981. A Review of Situational Influence Paradigms and Research. In: *Review of Marketing,* pp. 57–74

Lewis, J.D., Weigert, A., 1985. Trust as a Social Reality. *Social Forces*, Volume 63(4), pp. 967–985

Li, F., Kashyap, R., Zhou, N., Yang, Z., 2008. Brand Trust as a Second Order Factor: An Alternative Measurement Model. *International Journal of Marketing Research*., Volume 50(6), pp. 817–830

Mieres, C.G., Martín, A.M.D., Gutiérrez, J.A.T., 2005. Antecedents of the Difference in Perceived Risk Between Store Brands and National Brands. *European Journal of Marketing*, Volume 40(1/2), pp. 61–82

Mitra, A., 1995. Price Cue Utilization in Product Evaluations: The Moderating Role of Motivation and Attribute Information. *Journal of Business Research*, Volume 33, pp. 187–195

Moore, G.C., Benbasat, I., 1991. Development of an Instrument to Measure the Perceptions of Adopting an Information Technology Innovation. *Information Systems Research*, Volume 2(3), pp. 192–222

Mostafa, R.H.A., Elseidi, R. I., 2018. Factors Affecting Consumers' Willingness to Buy Private Label Brands (PLBs) Applied Study on Hypermarkets. *Spanish Journal of Marketing*, Volume 22(3), 338–358

Nelson, P., 1974. Advertising as Information. *Journal of Political Economy*, Volume 82(4), 729–754

Nielsen, 2014. The State of Private Label Around the World, Where it's Growing, Where it's Not, and What the Future Holds. Available online at: https://develop.nielsen.com/wp-content/uploads/sites/2/2019/04/Nielsen20Global20Private20Label20Report20November202014-2.pdf, Accessed on January 22, 2022

Olsen, N.V., Menichelli, E., Meyer, C., Næs, T., 2011. Consumers Liking of Private Labels, An Evaluation of Intrinsic and Extrinsic Orange Juice Cues. *Appetite*, Volume 56(3), pp. 770–777

Ong, J.W., Rahim, M.F.A., Lim, W., Nizat M.N.M., 2022. Agricultural Technology Adoption as a Journey: Proposing the Technology Adoption Journey Map. *International Journal of Technology*, Volume 13(5), pp. 1090–1096

Oracle, 2020. Private Label in APAC: Capturing Opportunity and Protecting Your Brand, Oracle, pp. 1–14

Ostlund, L.E., 1974. Perceived Innovation Attributes as Predictors of Innovativeness. *Journal of Consumer Research*, Volume 1(2), pp. 23–29

Parthasarathy, M., Rittenburg, T.L., Ball, A.D., 1995. A Re-evaluation of the Product Innovation-decision Process: The Implications for Product Management. *Journal of Product & Brand Management*, Volume 4(4), pp. 35–47

Private Label Manufacturers Association (PLMA), 2021. Private Label Manufacturers Association's (PLMA's) 2021 Private Label Yearbook, a statistical guide to today's store brands. Available online at: https://plma.com/sites/default/files/files/2021-05/plma2021yearbook2.pdf, Accessed on January 23, 2022

Private Label Manufacturers Association (PLMA), 2022. Industry News, Private Label Today. Available online at: https://www.plmainternational.com/industry-news/private-label-today, Accessed on January 22, 2022

Richardson, P.S., Jain, A.K., Dick, A., 1996. Household Store Brand Proneness: A Framework. *Journal of Retailing*, Volume 72(2), pp. 159–185

Rogers, E.M., 1958. A Conceptual Variable Analysis of Technical Change. *Rural Sociology*, Volume 23, pp. 136–145

Rogers, E.M., 1995. Diffusion of Innovations, In: *4th (ed.), The Free Press*, New York

Rogers, E.M., 2003. Diffusion of Innovations, In: *5th (ed.), The Free Press*, New York

Sarkar, S., Sharma, D., Kalro, A.D., 2016. Private Label Brands in an Emerging Economy: an Exploratory Study in India. *International Journal of Retail and Distribution Management*, Volume 44(2), pp. 203–222

Schiffman, L.G., Wisenblit, J.L., 2015. Consumer Behavior, In: *11th (ed.), Pearson Education Limited*, England.

Sharma, V., Kedia, B., Yadav, V., Mishra, S.. 2020. Tapping the Potential Space-positioning of Private Labels. *Journal of Indian Business Research*, Volume 12(1), pp. 43–61

Shaw, J., Giglierano, J., Kallis, J., 1989. Marketing Complex Technical Products: The Importance of Intangible Attributes. *Industrial Marketing Management*, Volume 18 (1), pp. 45–53

Sitorus H.M., Govindaraju, R., Wiratmadja, I.I., Sudirman, I., 2019. Examining the Role of Usability, Compatibility and Social Influence in Mobile Banking Adoption in Indonesia. *International Journal of Technology*, Volume 10(2), pp. 351–362

Smith, J., Johnson, A., 2022. Private label quality assessment: The role of consumer consumption experience. *Journal of Consumer Research*, 45(2), 123-145

Speed, R., 1998. Choosing Between Line Extensions and Second Brands: The Case of the Australian and New Zealand Wine Industries. *Journal of Product and Brand Management*, Volume 7(6), pp. 519–536

Sutton-Brady, C., Taylor, T., Kamvounias, P., 2017. Private Label Brands: A Relationship Perspective. *Journal of Business and Industrial Marketing*, Volume 32(8), pp. 1051–1061

Tornatzky, L.G., Klein, K.J., 1982. Innovation Characteristics and Innovation-adoption Implementation: A Meta-analysis of Findings. *Institute of Electrical and Electronics Engineers (IEEE) Transactions on Engineering Management*, Volume EM-29(1), pp. 28–45

Vengrauskas, P.V., 2012. The Investigation of the Characteristics, Determining the Choice of Private Labels: Academic and Practical Aspects. *Economics and Management,* Volume 17(3), pp. 1049–1059

Wu, L., Yang, W., Wu, J., 2021. Private Label Management: A Literature Review. *Journal of Business Research,* Volume 125, pp. 368–384