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Proposing a Model for Measuring Consumer Knowledge and Its Impact on Purchase Intention in the Electrical Industries

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Abstract

This study presents a model for measuring consumer knowledge and its impact on purchase intention in the electrical industries. In terms of purpose, this research falls into the category of applied studies, and in terms of approach, it has an exploratory and explanatory nature. Given that this study is of a mixed, exploratory, and explanatory type, it was conducted in two qualitative and quantitative phases. In the first phase, using an inductive approach and qualitative methodology, content analysis and grounded theory based on the Strauss and Corbin approach were employed. Through this process, 28 components and 10 dimensions were identified within the framework of causal conditions, central conditions, contextual conditions, intervening conditions, strategies, and outcomes. Subsequently, the second phase was conducted using a quantitative approach, in which the identified dimensions and components were validated, ultimately confirming the conceptual model developed in the qualitative phase. The required data in the qualitative phase were collected through interviews with 12 experts and specialists in the fields of marketing and consumer behavior, selected using a purposive snowball sampling method. Additionally, in the quantitative phase, data were gathered through the distribution of a researcher-designed questionnaire among 114 managers and experts from home electrical appliance manufacturing companies, with the sample size determined using Cochran's formula. To test and explain the designed model, the structural equation modeling technique was applied using PLS software. The research findings indicated that customer knowledge, along with individual characteristics, acts as a causal factor influencing customers' behavioral tendencies. Behavioral tendencies, in turn, affect purchase decision-making. Moreover, marketing factors serve as contextual conditions impacting the examined phenomenon (purchase intention). Additionally, environmental factors and the internal capabilities of the company function as intervening conditions that significantly influence consumers' purchase intentions in the electrical industries, ultimately creating added value for both companies and customers. Overall, the findings of this study demonstrated that customers' behavioral tendencies are strongly influenced by their knowledge of the electrical industries and products.

Keywords: *Consumer knowledge, behavioral tendencies, marketing mix, company capabilities, purchase intention, electrical industries.*

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1. Introduction

In the era of knowledge or the post-industrial age, organizations and companies are compelled to continuously identify and analyze consumer behavior to gain a competitive advantage. Since consumers are at the center of all marketing activities, success in this domain requires understanding why and how they behave [1]. Therefore, one

of the fundamental challenges faced by marketing professionals is how they can influence consumer purchasing behavior based on the products or services offered to them. This is particularly important because purchasing is only one part of the consumption process. In reality, consumer behavior reflects how and why individuals are inclined to purchase, and understanding it enables the design of strategies that encourage customers to buy more and remain loyal to a brand [2].

In a saturated market, particularly in the electrical industry, economic recession and declining consumer purchasing power have led to a decrease in demand for household electrical appliances. Simultaneously, companies operating in this sector are striving to create a distinctive position in the minds of customers. Consequently, researchers, managers, and marketing professionals are seeking to identify and modify the factors influencing consumer behavior to impact their purchase intention [3].

In recent years, the use of marketing techniques to persuade customers has faced various challenges. Among these challenges, customer knowledge management has gained increasing importance, as organizations and companies today cannot survive without understanding and managing customer knowledge [4]. Researchers believe that customers acquire significant experience and knowledge during the process of using services or consuming a product [5]. This knowledge has become one of the most valuable organizational resources, and gaining access to it has turned into a new competitive advantage for companies [6].

On the other hand, customers require information that companies must provide to help them make the best purchasing decisions [3]. Accordingly, experts define customer knowledge management as a process that involves utilizing knowledge "for the customer, from the customer, and about the customer" to enhance an organization's capabilities in delivering services to customers [1]. In another definition, customer knowledge is described as a dynamic combination of experience, values, information, and specialized insights that emerge, are observed, and are utilized in the course of interactions and exchanges between customers and companies. This knowledge is generated in a bidirectional process that creates value for both the customer and the company, significantly enhancing the value delivered to customers [7].

Consumer knowledge management has emerged as a critical component in marketing and strategic decision-making, serving as a valuable asset for enhancing customer relationship management (CRM) and facilitating market-driven innovation. Consumer knowledge is categorized into three key dimensions: knowledge for customers, knowledge from customers, and knowledge about customers [1]. Knowledge for customers encompasses the information that companies provide to assist consumers in their purchasing decisions, including details on products, markets, and suppliers, all of which influence perceived service quality [8]. Knowledge from customers refers to insights derived from consumer experiences, feedback, and innovation participation, which play a crucial role in refining products and services [9]. Knowledge about customers involves the collection and analysis of data regarding customer motivations, purchasing histories, preferences, and behavioral patterns, enabling organizations to implement personalized marketing strategies [5]. Additionally, the role of consumer-to-consumer knowledge exchange, often facilitated through social media and digital platforms, has gained prominence as a mechanism for fostering brand engagement and trust [3]. This evolving framework highlights the necessity for companies to integrate consumer knowledge into their business models, leveraging data-driven insights to optimize customer experience and strengthen market positioning [4].

Consumer purchasing behavior is a complex, multidimensional phenomenon influenced by both internal and external factors. Internal factors, such as motivation, perception, and personality traits, shape individual decision-making processes, while external factors, including cultural norms, economic conditions, and regulatory policies, define the broader consumption environment [10]. The theory of planned behavior suggests that attitude, subjective norms, and perceived behavioral control collectively influence purchase intention, which, in turn, predicts actual purchasing behavior [11]. The relationship between purchase intention and buying behavior is well-documented, demonstrating that higher purchase intention correlates with an increased likelihood of transaction completion [12]. Furthermore, the post-purchase phase, which involves customer satisfaction, brand loyalty, and repeat purchasing behavior, plays a critical role in long-term consumer engagement [13]. Given the increasing competition in consumer markets, businesses must adopt customer-centric strategies that address diverse consumer needs, enhance brand differentiation, and optimize marketing communications [14]. As research suggests, firms that effectively leverage consumer knowledge management are better positioned to anticipate market trends, improve customer satisfaction, and achieve sustained competitive advantage [15].

Customer knowledge management has led to the emergence of a novel concept by integrating two approaches—knowledge management and customer relationship management—both of which focus on customer knowledge [16]. Companies typically acquire customer-related knowledge through direct interaction and dialogue with customers, analyzing how they use products or services, and examining the data and information obtained from these interactions [17].

Melgaard et al. (2024) stated that a company can identify new customer needs for products or services through direct communication with them. This process directly impacts customer satisfaction, purchase intention, and loyalty [18]. Additionally, Cela et al. (2025) argue that product-related knowledge influences customers' mental perception and their decision to purchase [19]. Despite the importance of customer knowledge and its role in shaping consumer purchase intentions, Kunttu (2022) believes that while customer service is considered a key success factor for businesses, the position of customer knowledge management remains unclear, with no well-defined policies for its implementation [20].

Furthermore, one of the most critical success factors in manufacturing industries, particularly in the electrical sector, is providing fast and accurate services while instilling a sense of security in customers. Given the characteristics of this industry, customer knowledge management can serve as an effective tool for achieving these objectives. However, most consumer-related approaches have traditionally focused only on customer satisfaction, lacking a specific model or framework that directly explains consumer knowledge, its impact on purchase intention, and the process of converting a customer into a long-term buyer of a company.

Therefore, assessing the role of customer knowledge management in shaping consumer purchase intention undoubtedly requires extensive theoretical and empirical investigations, an area that has received limited attention in previous studies. Accordingly, this research seeks to address the fundamental question: How should a model be designed to explain the impact of consumer knowledge on purchase intention?

2. Methodology

This study aims to propose a model for measuring consumer knowledge and examining its impact on purchase intention in the electrical industries. Since developing such a model can contribute to the advancement of the research literature, this study is classified as applied research in terms of purpose and as exploratory and explanatory in terms of approach. The research method follows a mixed-methods design (qualitative-quantitative) and was conducted in two phases. In the qualitative phase, the study was based on grounded theory following the Strauss and Corbin approach. Given the existing ambiguities surrounding consumer knowledge and its impact on purchase intention in the electrical industries, investigating this subject required, first, the identification of experts' and professionals' cognitive frameworks and, subsequently, an explanation of these frameworks and the influencing factors to develop the final model.

To collect qualitative data, semi-structured interviews were conducted, and a purposive snowball sampling method was employed. Initially, interviews were conducted with experts possessing sufficient knowledge and experience in the research domain. These experts were then asked to introduce other specialists who could contribute to the study. Accordingly, semi-structured interviews were conducted with a group of marketing and consumer behavior experts. Data collection continued until theoretical saturation was achieved, meaning no significant new information emerged from additional interviews. These interviews were conducted by the researcher in an unbiased manner. Ultimately, 12 individuals were selected as the research sample in the qualitative phase.

It should be noted that the interviews were conducted in person, primarily at the participants' workplaces, individually, and with audio recording (with prior consent). For analyzing the qualitative data obtained from the interviews, the Strauss and Corbin method, based on open coding, axial coding, and selective coding within the grounded theory framework, was utilized. In this process, appropriate codes were assigned to various sections of the data, with these codes considered as conceptual elements known as open coding. Subsequently, the researcher conducted axial coding by examining different aspects of these categories and identifying relationships among them. During this stage, theoretical sampling was used to collect additional information regarding individuals, events, and situations to develop a comprehensive understanding of the identified concepts and categories. Finally, selective coding refined the categories, and upon completing these processes, the study's theoretical framework was established.

The identified variables and components for developing a model to measure consumer knowledge and its impact on

purchase intention in the electrical industries were derived from the analysis of interview responses and a review of theoretical foundations based on the Strauss and Corbin approach in grounded theory. This model consists of 10 dimensions and 28 components.

In the quantitative phase, following the determination of the model's components, dimensions, and indicators, a questionnaire was used to collect data. After developing the research model at the end of the qualitative phase, hypotheses (research questions) were formulated, followed by designing a questionnaire to test these hypotheses. A researcher-designed questionnaire with 62 items was developed, covering 10 dimensions and 28 components of the study within the framework of causal conditions, central conditions, contextual conditions, intervening conditions, strategies, and outcomes. This questionnaire was distributed among 95 individuals from the statistical population, comprising managers and experts from home electrical appliance manufacturing companies. The required sample size was determined using the simple random sampling method. Considering that the total statistical population consisted of approximately 163 individuals, the sample size was set at 114 participants, which was used in the statistical analyses. Throughout the interview process, the researcher ensured precision and sensitivity by consulting with academic advisors and supervisors.

Subsequently, to test and explain the designed model, the structural equation modeling technique was employed using SMART PLS software.

3. Findings and Results

In this study, the grounded theory process, based on the Strauss and Corbin approach, was structured into four stages for data collection and initial organization. These stages included conducting semi-structured interviews with experts in marketing and consumer behavior, coding the data to extract concepts, components, and dimensions, identifying new elements, and establishing relationships among them. Accordingly, three types of coding—open coding, axial coding, and selective coding—were performed.

Following open coding, 182 concepts were identified from a total of 640 words extracted from the interviews. Additionally, theoretical foundations and previous research literature were gathered. In the axial coding phase, the study's components were categorized, ultimately resulting in 28 components across 10 dimensions. After extracting the components, in the selective coding phase, these components were grouped into main themes or dimensions. The details of the identified elements and dimensions are presented in Table 1.

Table 1. Axial Coding for Extracting Categories from Concepts

No.	Component (Category)	Concepts
1	Company Product and Service Information	Company information on electrical products, scientific information on products, practical information on products
2	Company Environment Information	Information on company communication methods, company news updates, product comparison with similar products, information on company facilities, company environment details
3	General and Supplementary Information	Product image gallery, company location, financial information, job opportunities, company process knowledge, company introduction, company market insights, supplier information, consumer data
4	Company-Related Information	Customer knowledge contribution to innovation, integrating customer ideas for product improvement, accepting customer feedback and suggestions, customer knowledge of marketing, sales, and support, complaint registration, discussion forums, messaging customers
5	Competitor Information	Gaining customer insights on competitors, comparing company products with competitor products, reasons for competitors' presence or absence in the market
6	Current Customer Information	Collecting knowledge on customers, assessing customer needs, understanding customer preferences, ensuring customer access to products, recognizing cultural and linguistic sensitivities
7	Future Customer Information	Identifying future customers, evaluating and tracking changes in customer preferences, understanding future customer tendencies
8	Personality Traits	Purchase experience, personal motivations, individual personality, preferences and personal traits, introversion, extraversion, flexibility, dynamism, sociability, emotional responsiveness

9	Demographic Factors	Age, occupation, income, social and economic status, economic condition, job type, educational background
10	Cultural Influence	Personal beliefs, influence of reference groups and companions, family cultural influence, lifestyle
11	Product	Product features, appearance, aesthetics, functionality, relative advantages, multifunctionality, product reliability, energy efficiency, product standards, product safety, quality, warranty, product design, diversity in functionality and aesthetics
12	Price	Final product price, price differences with similar products, price-to-quality ratio, price-to-functionality ratio, price suitability for different income groups, payment timing, payment conditions, installment sales
13	Place	Accessibility to electrical appliance stores, authorized dealers, responsive dealerships, customer communication channels, product delivery from factory to consumer, transportation and packaging, product assortment, point-of-sale terminals
14	Promotion	Advertising, public media advertisements, outdoor advertising, online services, sales incentives, personal selling, free sample distribution, internet advertising, social media marketing, trade promotions, exhibition participation, direct marketing
15	Process Management	Customer complaint handling, responsiveness to suggestions and criticisms, matching sales skills with profession, training employees and electrical product sellers, public relations, seller behavior, appropriate seller responses, seller honesty and guidance
16	Political Factors	Sanctions, difficulties in sourcing electrical equipment from abroad, strategies for bypassing sanctions in the electrical industry
17	Economic Factors	Economic recession, price fluctuations, currency and market instability, rapid price increases, poverty
18	Legal Factors	Lack of brand protection, import and export restrictions in the electrical industry, domestic and international administrative and regulatory policies, legal challenges affecting the electrical industry
19	Socio-Cultural Factors	Culture, religious and racial beliefs, cultural sensitivities toward color, language, numbers, etc.
20	Managerial Factors	Efficient management, managerial attitudes, globalization mindset of managers, teamwork culture, human resources practices, HR training and motivation, manager education, customer relationship management, employee participation, strategic thinking, managerial competitiveness
21	Corporate Social Responsibility	Green responsibility, environmentally friendly products, company environmental concerns, customer health focus, corporate emphasis on green products, environmental values, environmental knowledge, environmental impact of electrical products, environmental standards
22	Attitude	Product evaluation, assessment of alternatives, perceived value, product differentiation
23	Subjective Norms	Social pressure to buy, family influence, purchase awareness and confidence, emotional motivation to purchase
24	Behavioral Control	Purchase facilitators, access to purchase resources, obstacles and difficulties in the purchase process
25	Purchasing Behavior	Customer intention and willingness to purchase, strong purchase desire, final purchase decision, transaction completion, customer involvement in purchasing
26	Post-Purchase Behavior	Purchase satisfaction, warranty confidence, after-sales service assurance, customer identity formation, customer loyalty
27	Value Creation for the Company	Market share growth, brand success, facilitating product sales, eliminating perceptions of high pricing, competitive advantage, customer attraction, expansion of international customers, company profitability, financial performance improvement
28	Value Creation for the Customer	Cost savings, purchase assurance, reduced maintenance and replacement costs, customer profitability

After determining the dimensions, components, and concepts, the grounded theory framework was used to establish relationships between identified components and dimensions for research modeling. Furthermore, the proposed conceptual model of the present study, based on the provided framework comprising 28 components and 10 dimensions, is illustrated in Figure 1.

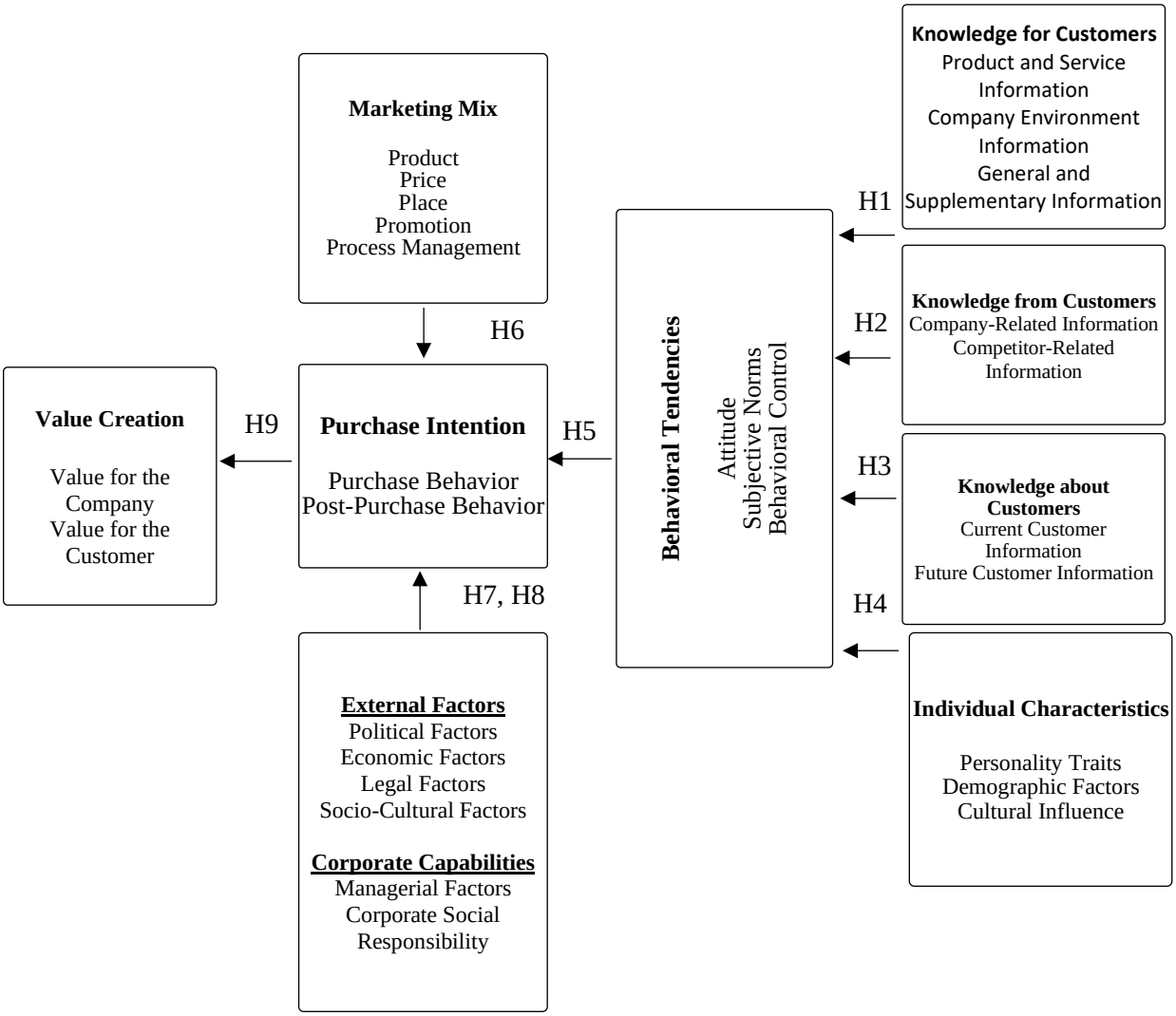

Figure 1. Proposed Conceptual Model of the Study at the Dimension Level

Based on the proposed model, the research hypotheses are as follows:

Hypothesis 1 (H1): Knowledge from customers has a significant effect on behavioral tendencies.

Hypothesis 2 (H2): Knowledge about customers has a significant effect on behavioral tendencies.

Hypothesis 3 (H3): Knowledge for customers has a significant effect on behavioral tendencies.

Hypothesis 4 (H4): Individual characteristics have a significant effect on behavioral tendencies.

Hypothesis 5 (H5): Behavioral tendencies have a significant effect on purchase decision-making.

Hypothesis 6 (H6): The marketing mix has a significant effect on purchase intention.

Hypothesis 7 (H7): Purchase decision-making has a significant effect on purchase intention.

Hypothesis 8 (H8): Corporate capabilities have a significant effect on purchase intention.

Hypothesis 9 (H9): Purchase intention has a significant effect on value creation.

To test the conceptual model, a questionnaire consisting of 10 dimensions, 28 components, and 62 items was designed and distributed among the statistical population, which included managers and experts from home electrical appliance manufacturing companies. Based on the analyses conducted, the mean, standard deviation, skewness, and kurtosis values for the research variables, obtained from the questionnaire responses, are presented in Table 2. Given that the skewness and kurtosis values for the research variables fall within the range of (-2, 2), it can be concluded that the distribution of the data related to the research variables is normal.

Table 2. Examination of Mean, Standard Deviation, Minimum, and Maximum Values of Research Variables

Variable	Mean	Standard Deviation	Skewness	Kurtosis
Knowledge for customers	18.02	4.46	0.16	-0.72
Knowledge from customers	5.54	2.41	0.10	-1.21
Knowledge about customers	13.67	4.51	-0.39	-0.74
Individual characteristics	25.45	5.99	-0.35	-0.15
Marketing	65.72	12.49	-0.35	-1.18
External factors	14.72	3.04	0.18	-0.68
Corporate capabilities	17.92	4.39	-0.31	-0.93
Behavioral tendencies	18.51	3.16	-0.04	-0.59
Purchase intention	14.19	3.01	0.13	-1.05
Value creation	24.95	6.04	-0.31	-0.31

In this study, structural equation modeling was employed using SMART PLS software to evaluate the model and test the hypotheses. To assess the measurement model, confirmatory factor analysis was performed, and its results were determined using indices such as the T-value and composite reliability (CR). Additionally, the factor loadings for each component across different constructs are presented in Table 3.

Based on the findings, the Cronbach's alpha reliability coefficient for all research variables was above 0.7, indicating that the measurement tool has satisfactory reliability and internal consistency. The CR values for all variables also exceeded 0.7, confirming an acceptable level of composite reliability. Moreover, the results of the structural model fit analysis showed that T-values for all variables, components, and items exceeded 1.96. Therefore, it can be concluded that the factor loadings of all variables, components, and items are statistically significant at the 95% confidence level.

Table 3. Results of Factor Loadings, T-Statistics, and Significance of Research Variables Based on Structural Equation Modeling

Variable	Components	Factor Loading	T-Statistic	CR	AVE	Cronbach's Alpha	R Square
Knowledge for Customers				0.84	0.52	0.77	
	Product Information	0.63	7.82	1	1	1	0.40
	Company Environment Information	0.90	46.47	0.83	0.63	0.70	0.81
	General Information	0.81	23.73	0.84	0.73	0.64	0.65
Knowledge from Customers							
	Company Information	0.92	68.80	1	1	1	0.89
	Competitor Information	0.92	73.95	1	1	1	0.85
Knowledge about Customers							
	Current Customer Information	0.97	234.15	0.92	0.81	0.88	0.95
	Future Customers	0.91	70.59	1	1	1	0.83
Individual Characteristics				0.88	0.50	0.85	
	Personality Traits	0.77	15.85	0.90	0.83	0.80	0.60
	Demographic Factors	0.88	30.86	0.87	0.64	0.80	0.78
	Cultural Influence	0.78	18.56	0.90	0.80	0.75	0.61
Marketing Mix				0.93	0.47	0.91	
	Product	0.82	7.49	0.86	0.60	0.81	0.68
	Price	0.82	18.90	0.87	0.63	0.84	0.68
	Place	0.89	65.13	0.95	0.91	0.91	0.80
	Promotion	0.80	22.58	0.85	0.66	0.74	0.64
	Process Management	0.90	68.44	0.95	0.87	0.79	0.81
External Factors				0.80	0.50	0.65	
	Political	0.66	7.34	1	1	1	0.44
	Economic	0.84	30.48	1	1	1	0.72
	Legal	0.77	12.98	1	1	1	0.60
	Socio-Cultural	0.50	4.13	1	1	1	0.25
Corporate Capabilities				0.87	0.60	0.81	
	Managerial Factors	0.91	59.22	0.88	0.72	0.80	0.84
	Corporate Social Responsibility	0.84	21.26	0.90	0.81	0.76	0.71
Behavioral Tendencies				0.80	0.46	0.70	

	Attitude	0.87	30.56	1	1	1	0.77
	Subjective Norms	0.86	41.59	0.74	0.61	0.41	0.75
	Behavioral Control	0.72	13.28	0.78	0.64	0.45	0.52
Purchase Intention				0.85	0.60	0.81	
	Purchase Behavior	0.82	30.22	1	1	1	0.67
	Post-Purchase Behavior	0.95	128.31	0.83	0.63	0.70	0.92
Value Creation				0.90	0.60	0.87	
	Value for the Company	0.95	133.77	0.89	0.62	0.84	0.91
	Value for the Customer	0.82	21.97	0.96	0.93	0.92	0.68

The evaluation of the measurement model requires an assessment of two types of validity: convergent validity and discriminant validity. In general, these two types of validity provide evidence regarding the goodness-of-fit of the measurement model. Convergent validity (AVE) implies that the indicators of each construct should have moderate to high correlations with each other. According to Fornell and Larcker (1981), an AVE value greater than 0.5 for each construct and its associated components is considered acceptable. Based on the AVE values presented in Table 3, it can be concluded that the measurement tools for all variables exhibit adequate convergent validity.

Discriminant validity refers to the extent to which indicators of a construct are distinct from the indicators of other constructs. In this context, the square root of the AVE values for each construct should be greater than the correlations between that construct and other constructs in the model. The correlation matrix of the research variables' constructs is provided in Table 4. Given that the square root of the AVE for all constructs is greater than their correlation with other constructs, it can be concluded that the measurement tools demonstrate appropriate discriminant validity.

Table 4. Correlation Matrix of Constructs and AVE Values

Constructs	1	2	3	4	5	6	7	8	9	10	√AVE
1. Knowledge for Customers	1										.72
2. Knowledge from Customers	.62**	1									.65
3. Knowledge about Customers	.72**	.58**	1								.75
4. Individual Characteristics	.68**	.68**	.65**	1							.70
5. Marketing Mix	.40**	.35**	.55**	.30*	1						.68
6. External Factors	.19	.29*	.10	.34**	.38**	1					.70
7. Corporate Capabilities	.37**	.37**	.38**	.35**	.75**	.05	1				.77
8. Behavioral Tendencies	.37**	.37**	.23	.26*	.01	.27*	-.21	1			.67
9. Purchase Intention	.30*	.30*	.34**	.44**	.28*	.62**	.004	.60**	1		.77
10. Value Creation	.22	.22	.38**	.28*	.63**	.32**	.33**	.28*	.45**	1	.77

It should be noted that the R^2 values for behavioral tendencies (0.22), purchase intention (0.55), and value creation (0.22) indicate that these indices are at an appropriate level based on established criteria. Additionally, the Q^2 values for the endogenous constructs of behavioral tendencies (0.20), purchase intention (0.15), and value creation (0.25) suggest that the model has moderate predictive power for these constructs. Overall, the results of the structural model fit, including path coefficients and T-statistics from the structural equation model, are presented in Table 5 and Figure 2.

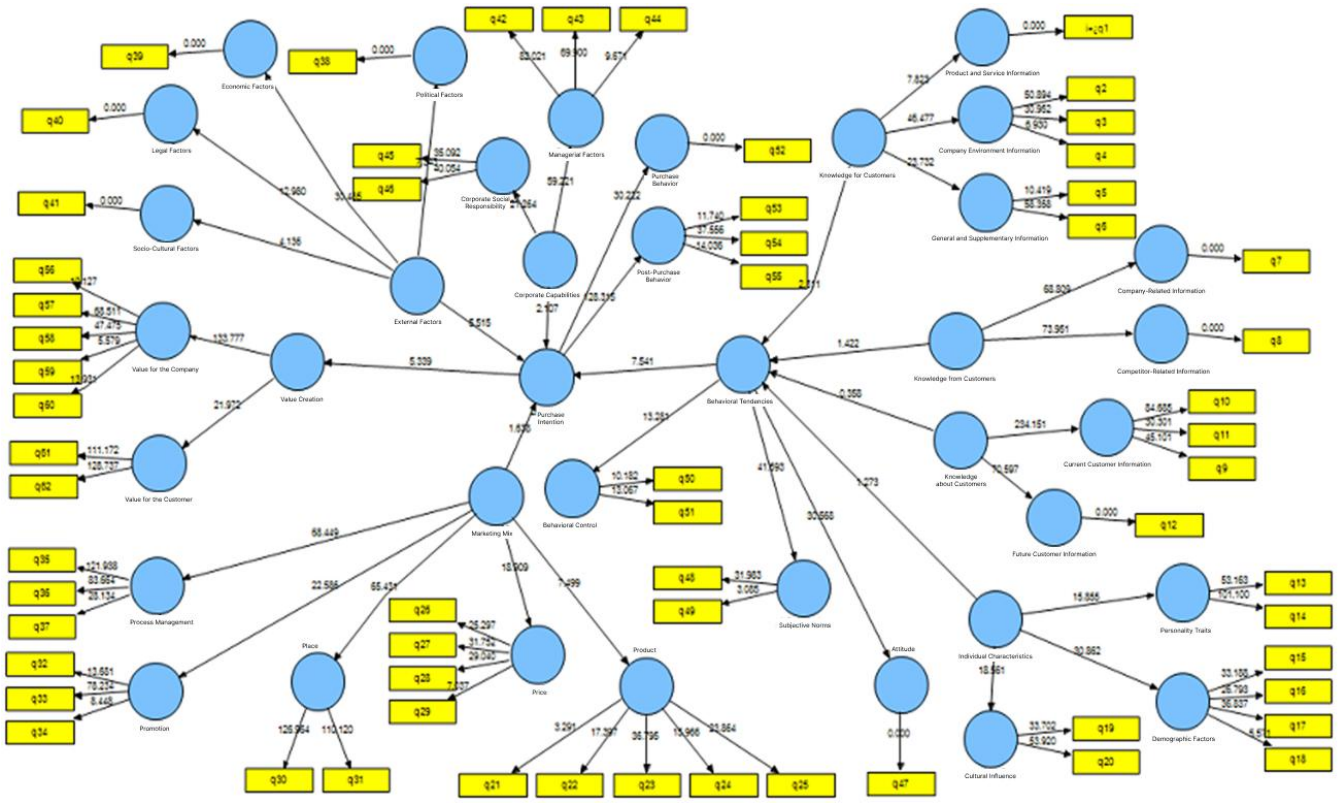

Figure 2. Structural Equation Model with Standardized Path Coefficients (T-Values)

Table 5. Results of T-Statistics and Path Coefficients for Research Hypotheses

Path	Path Coefficient	T-Statistic	Result
Knowledge for Customers → Behavioral Tendencies	0.41	2.31	Confirmed
Knowledge from Customers → Behavioral Tendencies	-0.19	1.42	Rejected
Knowledge about Customers → Behavioral Tendencies	0.06	0.35	Rejected
Individual Characteristics → Behavioral Tendencies	0.19	1.27	Rejected
Behavioral Tendencies → Purchase Intention	0.45	7.54	Confirmed
Marketing Mix → Purchase Intention	0.22	1.97	Confirmed
Corporate Capabilities → Purchase Intention	0.19	2.10	Confirmed
External Factors → Purchase Intention	0.40	5.51	Confirmed
Purchase Intention → Value Creation	0.47	5.33	Confirmed

Based on the results from the structural equation modeling, the research findings are summarized as follows:

- Given that the T-value for the path Knowledge for Customers → Behavioral Tendencies is 2.31, which is greater than 1.96, the Knowledge for Customers variable significantly affects Behavioral Tendencies (H1 Confirmed).
- Given that the T-value for the path Knowledge from Customers → Behavioral Tendencies is 1.42, which is less than 1.96, the Knowledge from Customers variable does not significantly affect Behavioral Tendencies (H2 Rejected).
- Given that the T-value for the path Knowledge about Customers → Behavioral Tendencies is 0.35, which is less than 1.96, the Knowledge about Customers variable does not significantly affect Behavioral Tendencies (H3 Rejected).
- Given that the T-value for the path Individual Characteristics → Behavioral Tendencies is 1.27, which is less than 1.96, the Individual Characteristics variable does not significantly affect Behavioral Tendencies (H4 Rejected).
- Given that the T-value for the path Behavioral Tendencies → Purchase Intention is 7.54, which is greater than 1.96, the Behavioral Tendencies

variable significantly affects Purchase Intention (H5 Confirmed).

- Given that the T-value for the path Marketing Mix → Purchase Intention is 1.97, which is greater than 1.96, the Marketing Mix variable significantly affects Purchase Intention (H6 Confirmed).
- Given that the T-value for the path External Factors → Purchase Intention is 5.51, which is greater than 1.96, the External Factors variable significantly affects Purchase Intention (H7 Confirmed).
- Given that the T-value for the path Corporate Capabilities → Purchase Intention is 2.10, which is greater than 1.96, the Corporate Capabilities variable significantly affects Purchase Intention (H8 Confirmed).
- Given that the T-value for the path Purchase Intention → Value Creation is 5.33, which is greater than 1.96, the Purchase Intention variable significantly affects Value Creation (H9 Confirmed).

4. Discussion and Conclusion

The objective of this study was to develop a model for measuring consumer knowledge and examining its impact on purchase intention in the electrical industries. To achieve this, existing research and theories related to purchasing models, consumer knowledge, and influential dimensions and indicators in these models were reviewed. However, since no specific model or theoretical framework had been proposed in this field, interviews were conducted with a group of marketing and consumer behavior experts. The collected data facilitated the use of the grounded theory strategy. Through the grounded theory research process and expert interviews, 28 components were identified within 10 dimensions: knowledge for customers, knowledge from customers, knowledge about customers, individual characteristics, marketing, external factors, corporate capabilities, behavioral tendencies, purchase intention, and value creation. The outcome of this process was the development of a proposed conceptual model at both the dimension and component levels.

The findings of this study revealed that customer knowledge (knowledge for, from, and about customers), along with individual characteristics, acts as a causal factor influencing customers' behavioral tendencies (attitude, subjective norms, and behavioral control). Behavioral tendencies, in turn, lead to purchase decision-making. Additionally, marketing factors, including product, price, place, promotion, and process management, serve as the contextual conditions influencing purchase intention. Moreover, environmental factors, such as political, economic, legal, and socio-cultural influences, along with internal corporate capabilities, including managerial factors and corporate social responsibility, act as intervening conditions affecting consumers' purchase intention in the electrical industries. Ultimately, these factors contribute to value creation for both companies and customers.

Overall, the study found that customers' behavioral tendencies are significantly influenced by their knowledge of the electrical industry and products. Specifically, knowledge for customers impacts their tendencies through aspects such as scientific and practical information about electrical products, communication with the company, product comparisons, company facilities, company environment, company location, financial information, job opportunities, supplier and consumer information. In this context, Rumokoy et al. (2025) proposed a framework identifying key success factors in customer knowledge-based relationship management, enabling organizations to leverage knowledge for customers, from customers, and about customers to enhance customer knowledge management innovations [5].

Furthermore, knowledge from customers affects their behavioral tendencies through elements such as using customer knowledge in innovation, incorporating customer ideas for continuous product improvement, accepting customer feedback, recording customer complaints, gathering customer insights on competitors, comparing company products with competitors' products, and analyzing competitors' market presence. Murillo and Garcia (2002) argued that customer knowledge should be integrated within organizations to foster innovation in services and products, generate ideas, and drive continuous improvement [21]. For example, customer knowledge regarding products, services, new product development, suppliers, and market trends can be utilized through feedback mechanisms to systematically enhance product innovation.

Additionally, knowledge about customers influences their self-concept and behavioral tendencies through elements such as customer needs assessment, understanding preferences, ensuring product accessibility, recognizing cultural and linguistic sensitivities, tracking changes in customer tastes and preferences, and predicting future consumer trends. In this regard, Melgaard et al. (2024) suggested that companies can acquire necessary knowledge

about new product or service demands through direct interaction with customers [18]. This process significantly impacts customer satisfaction, purchase intention, and loyalty.

Behavioral tendencies also serve as the foundation for purchase decision-making. In other words, for customers to make a final purchase decision, their attitudes, subjective norms, and behavioral control must be influenced. Specifically, before purchasing, individuals undergo evaluations of positive and negative aspects, emotional and behavioral motivation, and facilitators of the buying process, preparing them for the final purchase decision. Ultimately, customers' intention and willingness to purchase, coupled with their strong desire to buy, result in actual purchase behavior. Once customers make a definitive purchase decision, they proceed with the transaction, as purchase intention reflects an individual's willingness to act on a purchase.

Following this, if the perceived quality of the product aligns with its actual quality, it leads to post-purchase behaviors such as customer satisfaction, identity formation, emotional gratification, and ultimately, customer loyalty. In this regard, AbdulQader (2018) asserted that behavior always follows and depends on purchase intention [22]. For instance, purchase intention for a specific product serves as a strong predictor of actual purchasing behavior. Consequently, marketing professionals emphasize purchase intention due to its direct relationship with buying behavior [15].

Given these findings and the role of knowledge from customers, knowledge about customers, and knowledge for customers, it is recommended that electrical industry manufacturers actively engage on social media platforms. By interacting within these networks, companies can maximize their knowledge and insights regarding their customers, for their customers, and about their customers, ultimately enhancing their strategic decision-making and market positioning.

Authors' Contributions

Authors equally contributed to this article.

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Declaration of Interest

The authors report no conflict of interest.

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Ethical Considerations

All procedures performed in this study were under the ethical standards.

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