

A Study on the Factors Influencing the Purchase Intention of Automobiles

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Abstract

This paper conducted an empirical study to identify the causal relationship of factors affecting the purchase intention of automobiles from the customer's point of view. This study sets the purchase intention as a result variable and constructs a causal model with brand image, product attributes (exogenous variable), and customer value (endogenous variable) as a cause that affects purchase intention. The results of this study are summarized as follows. First, the symbolic image of the brand was found to have a very significant effect on customer value ($p=0.01$), and the external attribute of the product also had a significant effect on customer value ($p=0.1$). Second, customer value was found to have a very significant effect on purchase intention ($p=0.01$), and the functional image of the brand also had a significant effect on purchase intention ($p=0.1$). Third, there is a strong positive (+) correlation between the functional image of the brand and the symbolic image of the brand, the intrinsic attribute of the product, and the external attribute of the product, and also between the symbolic image of the brand and the intrinsic attribute of the product and There was also a positive (+) correlation between extrinsic attributes. Therefore, in order to increase customer value, automobile manufacturing companies have a functional value of products from a customer - oriented perspective. It is judged that every effort should be made to maintain a lasting relationship by grasping the values of customers, which are social values, emotional values, situational values, and cognitive values.

Keywords : Purchase intention, Brand image, Functional image, Symbolic image, Product attributes, Intrinsic attributes, Extrinsic attributes

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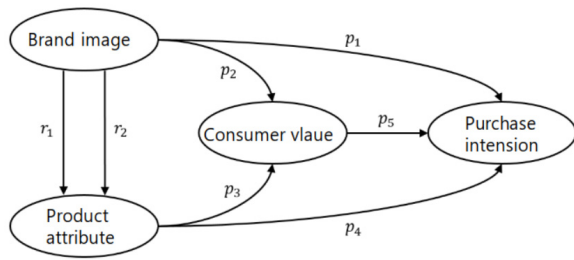
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(IoT), 5

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[Figure 1] Research model

3.2 가

[Figure 1] 가

가 H1>: 가 (+)

H1 - 1 : 가 (+)

H1 - 2 : 가 (+)

가 H2>: 가 (+)

H2 - 1 : 가 (+)

H2 - 2 : 가 (+)

가 H3>: 가 (+)

가 H4>: (+) 4.2

H4 - 1 : (+) 4.2.1

H4 - 2 : (+)

가 H5>: (+) 가

H5 - 1 : (+) 가

H5 - 2 : (+)

가 H6>:

H6 - 1 : (+) 가

H6 - 2 : (+) 가

H6 - 3 : (+) 가

H6 - 4 : (+) 가

H6 - 5 : (+) 가

H6 - 6 : (+) 가

4.

4.1

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 32 244 가 276

IBM SPSS 24
 IBM AMOS 21

4.2

4.2.1

(Varimax)

22

<Table 2>

0.5

I1, I2, I3, I4, I5, I7,

I8, I9, I10, I11, I12 11

4.2.1.1

E7, E8, E9 3

20

4.2.1.3 가

<Table 1>

F1, F2, F3, F5,

가

4

F6, F7 6

<Table 3>

S1, S2, S3, S7, S10, S11 6

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C1, C2, C3, C4, C5

4.2.1.2

4.2.2

가

<Table 1> Factor analysis result of brand image.

Concept variable	Measurement item	Component			
		factor1	factor2	factor3	factor4
Functional image	F1	.653	.324	.262	.024
	F2	.710	.147	.440	-.106
	F3	.519	.040	.572	.054
	F4	.275	-.031	.751	.153
	F5	.508	.521	.195	.019
	F6	.689	.215	.438	-.104
	F7	.631	.215	.500	-.036
	F8	.198	.356	.667	.050
	F9	-.209	.096	.692	.354
Symbolic image	S1	.638	.196	.298	.149
	S2	.817	.106	.062	.207
	S3	.822	.278	-.056	.128
	S4	.021	.089	.167	.864
	S5	.237	.177	.149	.832
	S6	.183	.634	.014	.537
	S7	.782	.320	-.050	.215
	S8	.427	.691	.053	.169
	S9	.145	.841	.199	.138
	S10	.542	.610	.118	-.004
	S11	.595	.438	.110	.233
Kaiser - Meyer - Olkin measure of standard formation suitability			0.918		
Bartlett's sphericity test	Approximate chi - square		3106.944		
	Degrees of freedom		190		
	Significant probability		0.000		

<Table 2> Result of factor analysis on product properties

Concept variable	Measurement item	Component			
		factor1	factor2	factor3	factor4
Intrinsic property	I1	.750	.074	.184	.014
	I2	.763	.028	.203	.004
	I3	.829	.089	.153	-.108
	I4	.785	-.021	.230	.148
	I5	.779	-.025	.191	.143
	I6	.301	.281	-.314	.430
	I7	.727	.137	.057	.056
	I8	.781	.048	.023	.122
	I9	.699	.150	.202	.145
	I10	.814	.023	.168	.105
	I11	.779	.025	.163	.108
	I12	.583	.141	.030	.197
	I13	.030	.671	-.088	.147
Extrinsic attribute	E1	.422	-.096	.594	.314
	E2	.175	.494	.450	-.083
	E3	.301	.122	.760	.211
	E4	.379	.184	.760	.113
	E5	.089	.118	.207	.878
	E6	.141	.147	.205	.864
	E7	-.032	.862	.020	.015
	E8	.064	.872	.059	.143
	E9	.164	.750	.262	.095
Kaiser - Meyer - Olkin measure of standard formation suitability			0.880		
Bartlett's sphericity test	Approximate chi - square		3398.277		
	Degrees of freedom		231		
	Significant probability		.000		

<Table 3> The result of factor analysis on customer value

Concept variable	Measurement item	Component	
		Factor1	
Customer value	C1	.803	
	C2	.797	
	C3	.857	
	C4	.871	
	C5	.893	
Kaiser - Meyer - Olkin measure of standard formation suitability		0.851	
Bartlett's sphericity test	Approximate chi - square		753.002
	Degrees of freedom		10
	Significant probability		0.000

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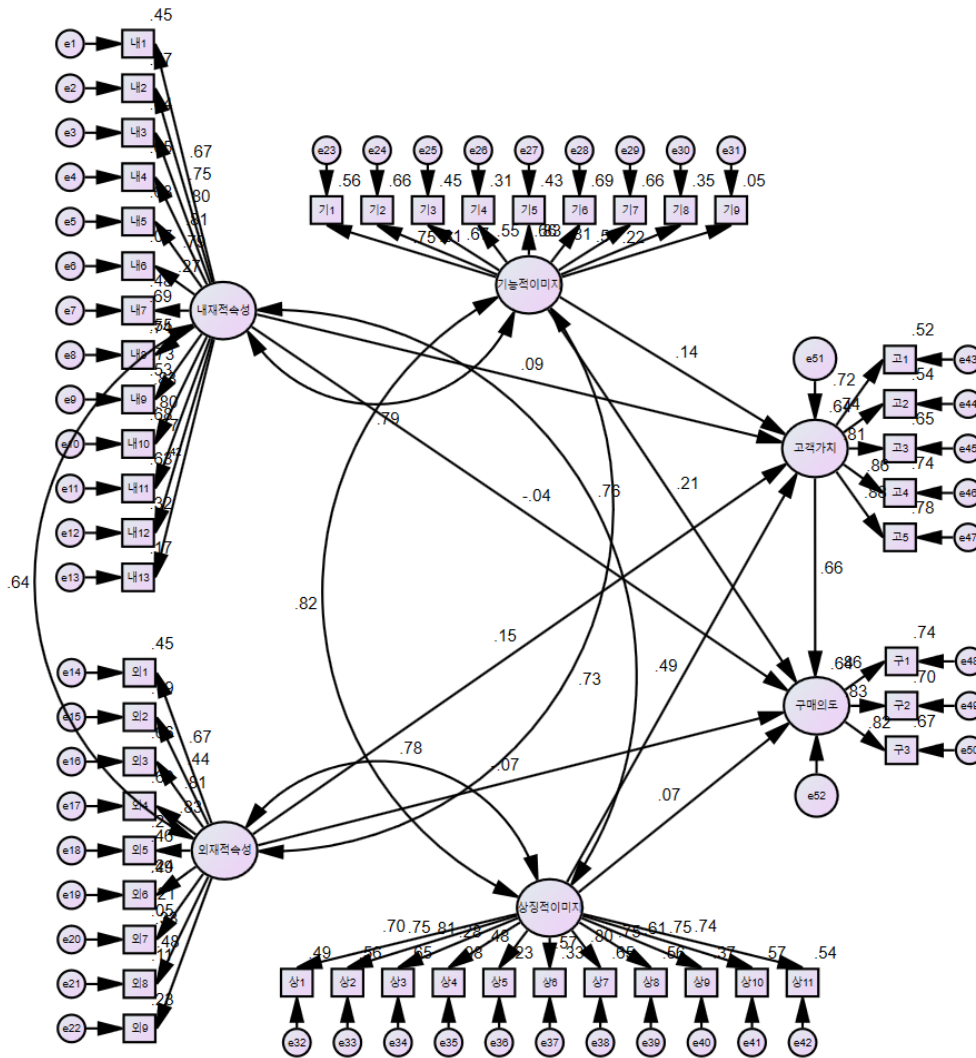
<Table 4>

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(Cronbach's α) 0.6

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[Figure 2] Early structural equation model

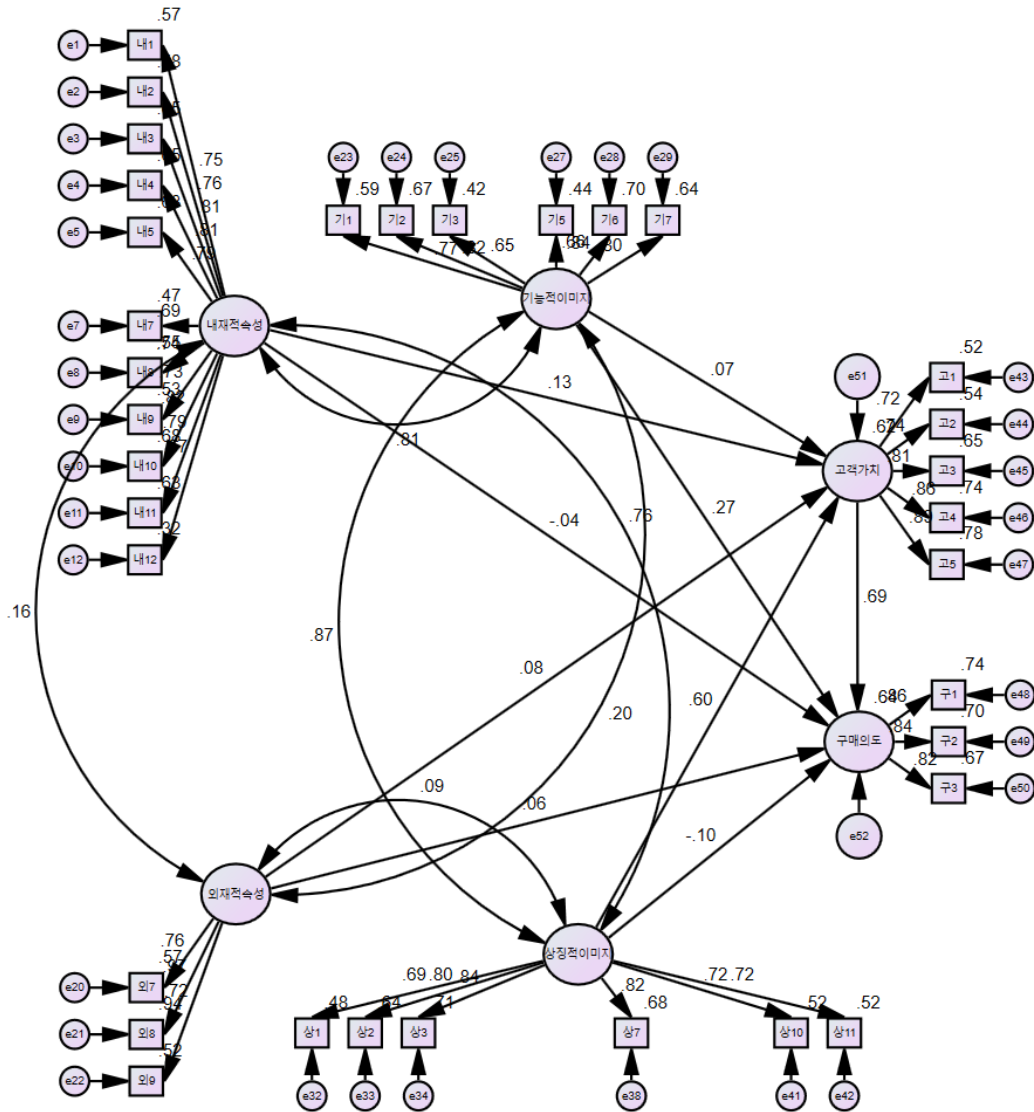
<Table 6> Results of verification of goodness - of - fit of initial structural equation model

Division	Results of analysis	Acceptance level	Suitability
CMIN/p	4055.248/0.000	Better than 0.05 reject if p 0.05	-
CMIN/DF	3.493	3 or less excellent	Unsuitable
GFI	0.541	Better than 0.9	Unsuitable
AGFI	0.496	Better than 0.85 0.8 or more, somewhat superior	Unsuitable
RMR	0.093	Less than 0.05 Excellent	Fitness
NFI	0.606	Better than 0.5	Fitness
RMSEA	0.101	Less than 0.05 Excellent Somewhat excellent below 0.08 Normal level less than 0.1 0.1 or more cannot be accommodated	Unsuitable

4.3.2.2

[Figure 3]

<Table 7>



[Figure 3] Structural equation model after factor analysis

<Table 7> The result of verification of the fitness of the structural equation model after factor analysis

Division	Results of analysis	Acceptance level	Suitability
CMIN/p	1519.736/0.000	Better than 0.05 reject if p 0.05	-
CMIN/DF	2.968	3 or less excellent	Fitness
GFI	0.727	Better than 0.9	Unsuitable
AGFI	0.682	Better than 0.85 0.8 or more, somewhat superior	Unsuitable
RMR	0.058	Less than 0.05 Excellent	Fitness
NFI	0.781	Better than 0.5	Fitness
RMSEA	0.090	Less than 0.05 Excellent Somewhat excellent below 0.08 Normal level less than 0.1 0.1 or more cannot be accommodated	Fitness

CMIN/DF 3

RMR, NFI, RMSEA

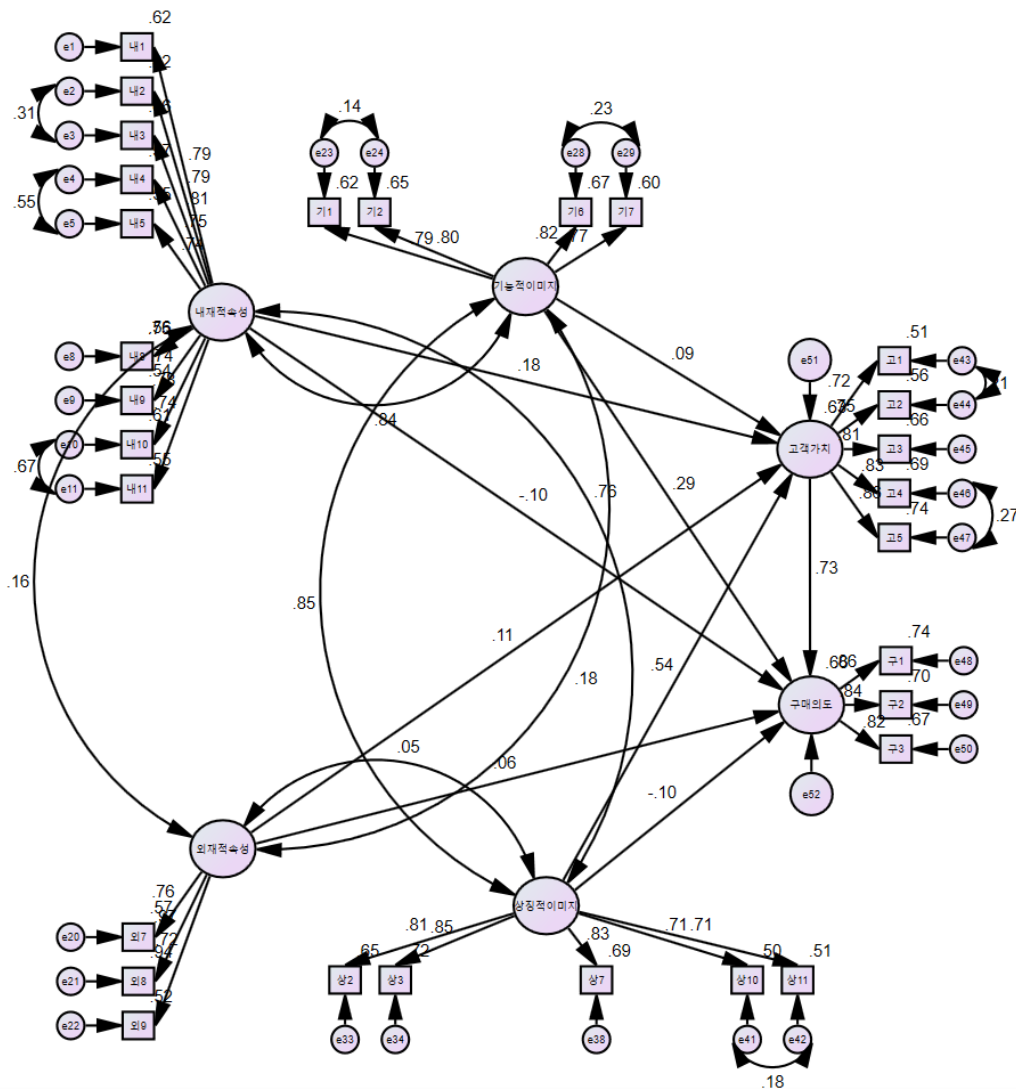
, GFI AGFI

(SMC) 0.4 <Table 8>
 12 , 0.7 3, 5, 1 , 가
 3 7 가 가 가
 M, l 4 가)
 (+) 가 CMIN 791.850 , CMIN/DF
 (e11 e10, e5 e4, e3 e2, e43
 e44, e28 e29) 3
 가 6 GFI AGFI 가 , NFI RMSEA
 , RMR 6

4.3.2.3

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[Figure 4]



[Figure 4] Final structural equation model

<Table 8> Results of verification of goodness - of - fit of the final structural equation model

Division	Results of analysis	Acceptance level	Suitability
CMIN/p	791.850/0.000	Better than 0.05 reject if $p > 0.05$	-
CMIN/DF	2.218	3 or less excellent	Fitness
GFI	0.819	Better than 0.9	Fitness
AGFI	0.779	Better than 0.85 0.8 or more, somewhat superior	Fitness
RMR	0.053	Less than 0.05 Excellent	Fitness
NFI	0.864	Better than 0.5	Fitness
RMSEA	0.071	Less than 0.05 Excellent Somewhat excellent below 0.08 Normal level less than 0.1 0.1 or more cannot be accommodated	Fitness

4.3.3 가

<Table 9> 가 (p=0.01) , 가 (p=0.1)
<Table 15> 가 . 가

<Table 9> Hypothesis test 1

Hypothesis	Contents		Path coefficient	Standard error	p - Value
1 - 1	Functional image	Customer value	.037	.134	0.782
1 - 2	Symbolic image	Customer value	.428	.097	0.000**

* $p < 0.05$; ** $p < 0.01$

<Table 10> Hypothesis test 2

Hypothesis	Contents		Path coefficient	Standard error	p - Value
2 - 1	Intrinsic property	Customer value	.157	.098	0.108
2 - 2	Extrinsic attribute	Customer value	.074	.038	0.052

* $p < 0.05$; ** $p < 0.01$

<Table 11> Hypothesis test 3

Hypothesis	Contents		Path coefficient	Standard error	p - Value
3	Customer value	Purchase intention	1.010	.152	0.000**

* $p < 0.05$; ** $p < 0.01$

<Table 12> Hypothesis test 4

Hypothesis	Contents		Path coefficient	Standard error	p - Value
4 - 1	Functional image	Purchase intention	.356	.205	0.082
4 - 2	Symbolic image	Purchase intention	-.081	.156	0.604

* $p < 0.05$; ** $p < 0.01$

<Table 13> Hypothesis test 5

Hypothesis	Contents		Path coefficient	Standard error	p - Value
5 - 1	Intrinsic property	Purchase intention	-.087	.149	0.561
5 - 2	Extrinsic attribute	Purchase intention	.079	.059	0.177

* $p < 0.05$; ** $p < 0.01$

<Table 14> Hypothesis test 6

Hypothesis	Contents	Path coefficient	Standard error	p - Value
6 - 1	Functional image Symbolic image	.452	.056	0.000**
6 - 2	Functional image Intrinsic property	.379	.048	0.000**
6 - 3	Functional image Extrinsic attribute	.091	.039	0.019*
6 - 4	Symbolic image Intrinsic property	.392	.052	0.000**
6 - 5	Symbolic image Extrinsic attribute	.034	.043	0.420
6 - 6	Intrinsic property Extrinsic attribute	.081	.037	.028*

* $p < 0.05$; ** $p < 0.01$

<Table 15> Comprehensive results of hypothesis test

Hypothesis	Hypothesis explanation	Test result
1 - 1	The brand's functional image will have a positive (+) effect on customer value.	Acceptance
1 - 2	The brand's symbolic image will have a positive (+) effect on customer value.	Rejection
2 - 1	The product's intrinsic attributes will have a positive (+) effect on customer value.	Acceptance
2 - 2	The extrinsic properties of the product will have a positive (+) effect on customer value.	Acceptance
3	Customer value will have a positive (+) effect on purchase intention	Rejection
4 - 1	The brand's functional image will have a positive (+) effect on purchase intention.	Acceptance
4 - 2	The symbolic image of the brand will have a positive (+) effect on purchase intention.	Acceptance
5 - 1	The product's intrinsic properties will have a positive (+) effect on purchase intention.	Acceptance
5 - 2	The product's external attributes will have a positive (+) effect on purchase intention.	Acceptance
6 - 1	The functional image and symbolic image of the brand will have a positive (+) correlation.	Rejection
6 - 2	The functional image of the brand and the intrinsic attribute of the product will have a positive (+) correlation.	Rejection
6 - 3	The functional image of the brand and the external attributes of the product will have a positive (+) correlation.	Rejection
6 - 4	The symbolic image of the brand and the intrinsic attribute of the product will have a positive (+) correlation.	Rejection
6 - 5	The symbolic image of the brand and the external attribute of the product will have a positive (+) correlation.	Acceptance
6 - 6	The product's intrinsic and extrinsic properties will have a positive (+) correlation.	Rejection

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