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Examining the Relationship between Autoflex and Innovatııve Competitive Approach[a]

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Abstract

With the globalization and exponential increase of intense competition, today's global automotive industry faces different types of challenges. Due to the challenges in the automotive industry, flexibility becomes more vital for businesses in the formulation of marketing strategies. In this sense, marketing flexibility refers to the degree to which an automotive company's capability to configure its proactive and reactive marketing efforts, to struggle against challenges on quick changes in customers' expectations and environmental issues. Moreover, these struggles within the industry force organizations to adopt a more innovative competitive approach. Innovative competitive approach is used to gain a sustainable competitive advantage in the global competitive environment through designing and developing all the resources, processes, and capabilities of the organization with innovations and formulation of management strategies by analyzing both the internal and external environment. From this point of view, the present study aims to identify the relationship between AUTOFLEX and the innovative competitive approach within the automotive industry and contribute to both academicians and practitioners. To this end, a questionnaire was applied to 185 sales professionals working in the entry, value, and premium segment automotive industry in Türkiye. Before testing the hypothesis, CFA was calculated by examining the validating the factor structure. Reliability analysis was used on each scale and scales' structures via Cronbach Alpha (α). Descriptive statistical analysis was used, and skewness and kurtosis values were examined for the normality assumption. To test the hypothesis, correlational analysis through Pearson's r was performed to determine scales' coefficients. Also, regression analysis was calculated to explore the effect size of the scales. The data of the current study were analyzed via IBM SPSS Statistics 26.0 and AMOS Graphics 24. As a result of the analysis, it was found that there is a positive and significant relationship between AUTOFLEX and innovative competitive approach. Additionally, AUTOFLEX has a statistically significant effect on innovative competitive approach.

Keywords: Marketing flexibility, automotive industry, AUTOFLEX, innovative competitive approach.

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1. INTRODUCTION

The automotive industry has been enjoying strong growth and profitability in recent decades. However, the automotive industry has undergone sweeping transformations over the past decade in terms of markets, competitive standards, and capacity building (Sarti and Borghi, 2017: 41). In this sense, innovation and design capabilities (innovative competitive approach) remain critical in addition to process-engineering skills and flexibility (AUTOFLEX) to meet the expectations (Humphrey and Memedovic, 2003: 23).

The relevant literature shows that there are limited studies on both AUTOFLEX and the innovative competitive approach. Both concepts have critical importance in the current developments in the automotive industry. Therefore, the research question of this study was formulated as follows: *(a) Does AUTOFLEX affect the innovative competitive approach?* Starting from this question, these two variables are discussed in this study and the possible effects of AUTOFLEX on the innovative competitive approach are examined.

From this point of view, the whole study is divided into four vital sections. In the first part, the current literature on AUTOFLEX and the innovative competitive approach was summarized by considering the conceptual framework. In the second part, the method of the study, the scales, the participants, and the analysis of the data were explained. In the third part, the data obtained were analyzed with SPSS 26.0 and the findings within the scope of the study were reported. In the last part, the study was summarized and recommendations for theory and practice were explained.

2. CONCEPTUAL FRAMEWORK
2.1. Marketing Flexibility in the Automotive Industry (AUTOFLEX)

Today all the uncertainties, progressive globalization and accelerated technology development present in the environment pose a tremendous challenge for businesses (Shalender and Singh, 2015: 251-252). It causes to be considered marketing flexibility which is a critical strategy for a business that helps to ensure differentiation among the competitors, achievement of success, customer satisfaction, and superior performance under the environmental fluctuations (Gopakumar and Suresh, 2020: 1).

Marketing flexibility refers to developing flexibility and adaptation abilities in response to market flexibility (Beraha et al., 2018: 132). It also means that the ability to meet the varying clients' expectations with a specifically created value proposition that a business may offer within the overall framework of its corporate strategy (Sharma and Jain, 2010: 58). Namely, it defines an integrated model that is based on the concept of co-creation of value for the customers and it supposes an effectual interaction, attendance, and implementation of the diverse stakeholders engaged in making and delivering the suggestion to the customers (Gurău, 2009: 190-193).

On the other hand, the automobile industry (main theme of the article) it provides a substantial contribution to global growth and development as well as the economy. The sector is capital-intensive, promotes innovation, attracts billions of dollars in investment, and provides millions of people with a living (ILO, 2020: 3). However, it is featured by extremely erratic demand and impatient clients. In a cutthroat automobile market, sales dealers need to be able to purchase customized cars and have a short lead time for deliveries. (Lim et al., 2013: 64). At this point,

marketing flexibility comes to the fore in the automotive industry. In this regard, Shalender et al. (2017: 4) argue that the marketing flexibility in the automotive industry (AUTOFLEX) is the extent to which an automobile company can set up its marketing initiatives, both reactively and proactively, to successfully address difficulties in quickly changing client and environmental situations. Additionally, it refers to be integrated flexibility into the marketing system of an automotive organization (Shalender and Sharma, 2022: 175). Considering these definitions, AUTOFLEX can be defined as "*the adoption of flexible strategies and integrating these strategies into the marketing techniques to meet the demands of customers and increase satisfaction in the automotive industry as an innovative competitive approach.*"

2.2. Innovative Competitive Approach

As we stand at the nexus of escalating globalization, accelerating technological development, and different lifestyles, enormous strategic opportunities are developing. Businesses have learned how to survive for lengthy periods of time in the competitive market, and innovation has become the key differentiator (Bowonder et al., 2010: 19; Durdu and İpek, 2020: 112).

Businesses innovate to maintain their current competitive advantage as well as to seek out new opportunities (Shqipe et al., 2013: 15). In other words, businesses prefer innovative competitive approaches that are grounded within cost, innovation, flexibility, differentiation leaderships, or focusing on operational effectiveness (Braslina et al., 2014: 35). In this regard, innovative competitive approach the capability to produce new products of greater quality, at a lower cost, and in a shorter period (Reguia, 2014: 154). In addition to that, it is the continuous design and development of all resources, processes, and capabilities of businesses with new methods to achieve sustainable competitive advantage (Kılıç and Atalay Oral, 2018: 172).

The innovative competitive approach includes process management, business innovation, outsourcing, marketing, and management strategies in general (Kılıç and Oral, 2019: 362). All of these are critical for the businesses to achieve sustainability in terms of competitive approach. For instance, according to Erkut and Albayrak (2010: 161-162)'s study on 400 companies in the automotive industry in Turkey, innovative approaches including the process, marketing, outsourcing, innovation, and business management increase the competitiveness of the business and thus contribute to its sustainability. From this point of view, the main hypothesis of this study is proposed below:

H₁: AUTOFLEX has a statically significant impact on innovative competitive approach.

3. METHOD

As a measurement tool in the study, the questionnaire form was designed into three fundamental parts. The first part of the questionnaire included the personal information questions. The demographic data of the participants was gathered using this form. To collect data, questions about their age, gender, education level, marital status, work experience and market position of the cars or brand were asked to participants. The second part of the questionnaire contains AUTOFLEX Scale's items. The third part of the questionnaire includes Innovative Competitive Approach Scale's items. In this context, the scales used in the study are stated below:

AUTOFLEX Scale (AFS): The marketing flexibility for automobile degree of employees was assessed using the AUTOFLEX Scale developed by Shalender et al. (2017: 74). The Turkish version of the scale was adapted by Yüksekbilgili (2019: 2830). While the original scale consists of 26 items, Turkish adaptation of the scale includes 24 items (e.g., *"Our main focus is on making relation with customers rather than sales only."*, *"We do take care of changing customers' needs."*, *"We are fully capable of renewing our pricing strategy according to environment alteration."*) and six-factor structure (*price flexibility (PF), customer orientation (CO), marketing department (MD), product (PD), price (PR), and structural hierarchy (SH)*). The Cronbach's alpha (α = .884) was found to be satisfactory in the Turkish adaptation of the scale. A five-item Likert-type scale was used by the participants to indicate their degree of agreement with the assertions. The minimum score possible for each item is 1, and the maximum is 5. Answers were "strongly disagree," "disagree," "neither agree nor disagree," "agree," and "strongly agree".

Innovative Competitive Approach Scale (ICAS): The innovative competitive approach degree of employees was measured using the ICAS developed by Kılıç and Atalay Oral (2018: 182-183). The scale consists of 25 items (e.g.,*"In global competition, businesses should update their products and production methods based on technology."*, *"In a global competitive environment, businesses must innovate to satisfy their customers and provide competitive advantage."*, *"Businesses should be open to improving production and/or delivery methods in a global competitive environment."*) and five factors (*process management (PM), business innovation (BI), outsourcing (OS), marketing (MR), and management strategy (MS)*). The results demonstrated that ICAS was valid and reliable (α = .918) and fit indices were the acceptable limit (RMSEA =.07, GFI= .88, AGFI= .85, CFI= .91, IFI= .91, RMR= .063). Participants answered using a five-point Likert-type scale ranging from 1 "strongly disagree" to 5 "strongly agree".

3.1. Participants

The questionnaire was applied to 185 sales professionals working in the entry, value, and premium segment automotive industry in Türkiye. The objective of the study was explained to sales professionals in detail. They provided complete responses to all the questionnaire's queries and there were no cases where the answers to any of the questions set by the tool were missing.

3.2. Data Analysis

CFA was computed before verifying the hypothesis by confirming the factor structure. Cronbach Alpha (α) was used to assess the reliability of each scale and scale structure. Descriptive statistics were utilized, and the normality assumption was tested using skewness and kurtosis values.

For the fundamental hypothesis of the study, correlational analysis through Pearson's r was tested to find coefficients of the scales. Also, to explore the effect size of AFS on ICAS, regression analysis was used. The analyses of the current study were run utilizing IBM SPSS Statistics 26.0, AMOS Graphics 24. In the study, a type I error rate of .05, and p-value <.05 were accepted statistically significant.

4. RESULTS

4.1.Demographic Results

Following a technique known as statistical inference, researchers can make inferences about the target population with a particular level of confidence based on a sample (Martínez-Mesa et al., 2016: 326). Researchers commonly gather demographic information to describe the sample or target population in their studies. The demographic data are a fundamental part of the study (Connelly, 2013: 269). A detailed description of participants enables researchers and readers to decide to whom study findings apply and to make comparisons among replications of studies (Hammer, 2011: 261). In the study, descriptive statistics illustrating participants comprised two columns are demonstrated in Table 1.

Table 1. Demographic characteristics of the participants

Demographic information of the participants *(N=185)*							
Variable		N	%	Variable		N	%
Age	Under 25	41	22.1%	Job experience	1-5	60	32.5%
	26-35	63	34.1%		6-10	37	20.0%
	36-45	46	24.9%		11-15	43	23.2%
	Over 46	35	18.9%		Over 16	45	24.3%
Gender	Female	63	34.1%	Marital status	Married	108	58.4%
	Male	122	65.9%		Single	77	41.6%
Educational level	High school	54	29.2%	Market position of the cars or brand	Entry segment	68	36.8%
	Bachelor's degree	88	47.6%		Value segment	53	28.7%
	Postgraduate	43	23.2%		Premium segment	64	34.5%

The first column of Table 1 shows the age, gender, and educational level. Most of the participants, 63 (34.1%) were in the age group 26-35 years, while the minority of the respondents 35 (18.9%) were over 46 years. 63 (34.1%) of respondents were females, and 122 (65.9%) were males. Most of the respondents, 88 (47.6%) were bachelor's degree. However, the second column of the table was labeled with job experience, marital status, and market position of the cars or brand. 60 (32.5%) of respondents had 1-5 years of job experience and 37 respondents had 6-10 (20.0%) years of job experience, respectively. Around 108 (58.4%) of respondents were married, while 77 (41.6%) were single. About 68 (36.8%) of respondents consist of working in entry segment, while 53 (28.7%) of participants in value segment.

4.2. Scale Results

CFA was calculated to identify the construct validity of the AFS and ICAS. Because of the normal distribution of the data, the maximum likelihood was used as the estimation method. In this sense, fit index values were summarized in Table 2.

Table 2. CFA Results of the AFS and ICAS

Scales	x^2/df	p[*]	RMSEA	GFI	AGFI	IFI	CFI
AFS	3.72	.033	.086	.891	.874	.820	.914
ICAS	3.91	.026	.092	.903	.852	.886	.926

CFA analyses showed that fit indices were all within the acceptable limit for AFS and ICAS. Fix index values of the scales showed that they were fit, and they achieved an acceptable fit with the data. In addition to CFA results, mean (M), and standard deviations (SD) were

computed for AFS and ICAS with skewness- kurtosis and Cronbach (α) values and shown in Table 3 below.

Table 3. Descriptive Statistics of AFS and ICAS

Scales	*M* (SD)	Skewness	Kurtosis	α
AFS	**4.09 (8.03)**	**-.382**	**-.736**	**.896**
PF	3.95 (3.80)	-.560	-.544	.773
CO	4.26 (4.37)	-.651	-.114	.787
MD	4.36 (1.11)	-.318	-.322	.700
PD	3.85 (1.79)	-.655	.175	.728
PR	3.86 (2.88)	-.314	-.948	.714
SH	4.08 (1.56)	-.739	.498	.882
ICAS	**4.46 (6.57)**	**-1.154**	**.149**	**.926**
PM	4.44 (4.28)	-1.456	-.473	.863
BI	4.56 (2.69)	-1.043	.821	.828
OS	4.15 (3.21)	-1.590	-.336	.893
MR	4.56 (1.63)	-1.483	.218	.761
MS	4.62 (1.69)	-1.362	.789	.876

Table 3 demonstrated the M and SD scores of each scale and structures. The mean scores represent that the respondents rated between "neutral" and "agree" ($AFS_M = 4.09$; $ICAS_M = 4.46$). Skewness is a measure of the asymmetry and kurtosis is a measure of 'peakedness' of a distribution and a reference of substantial departure from normality as an absolute skew value >2.0 (Kim, 2013: 52-53). In the present study, the skewness and kurtosis values of the scales and structures had normal distribution.

As Taber (2018: 1282) argue that Cronbach alpha values of 0.70 or higher indicate acceptable internal consistency. According to the calculation of the internal consistency, AFS and ICAS was found as high reliability in this study ($AFS_α = .896$; $ICAS_α = .926$).

4.3. Hypothesis Results
The Pearson correlation coefficient is commonly utilized for data that is normally distributed and follows a bivariate normal distribution (Schober et al., 2018: 1763). In the present study, to explore the degree association between AFS and ICAS, Pearson correlation analysis was calculated. The results are summarized in Table 4 below.

Table 4. Correlation Analysis Results of AFS and ICAS

Scales	ICAS	PM	BI	OS	MR	MS
AFS	**.855**[**]	.732[**]	.664[**]	.843[**]	.775[**]	.904[**]
PF	.893[**]	.752[**]	.711[**]	.739[**]	.639[**]	.738[**]
CO	.748[**]	.874[**]	.693[**]	.633[**]	.845[**]	.652[**]
MD	.749[**]	.733[**]	.705[**]	.687[**]	.695[**]	.681[**]
PD	.839[**]	.741[**]	.755[**]	.803[**]	.808[**]	.676[**]
PR	.840[**]	.640[**]	.801[**]	.756[**]	.713[**]	.699[**]
SH	.849[**]	.835[**]	.731[**]	.634[**]	.721[**]	.630[**]

Note: [**]= p< .001, *N*=185

As illustrated in Table 4, there was a statistically significant correlation between the AFS total score and ICAS (*r* = .855; p< .001). It means that the increase in the AFS and its sub-structures' total scores created a very high increase in the ICAS and its sub-structures' total scores. Also,

to identify the effect size of AFS on ICAS, the regression analysis results are summarized in Table 5 below.

Table 5. Regression Analysis Results of AFS and ICAS

Model	R	R^2	Adjusted R^2	Std. Error of the Estimate	Sig.
	.855**	.342	.339	.33156	
	Sum of Squares	**df**	**Mean Square**	**F-test**	
AFS → ICAS	30.581	184	.110	95.181	<.001
	Unstandardized B	**Std. Error**	**Stand. Coef. β**	**t**	
	.475	.049	.855	9.759	

As a result of the Table 5, AFS has a statistically significant effect on ICAS since p-values were <.001. Adjusted R^2 reflected that approximately 34% of the variance between AFS and ICAS. Aside from the Adjusted R^2, the F-test is a significant predictor of model fit. The F-value of the test statistic is the outcome of a one-way ANOVA. The F-test is the most important when interpreting model fit since it indicates if the entire model is significant (Mooi et al., 2018: 212). From this point of view, the model was significant, and the fundamental hypothesis of the study was accepted.

5. CONCLUSION

Due to the nature of the automotive industry, the actors have been operating in an intensely competitive environment for a long time. In this sense, to maintain a leadership position in the automotive market and survive for the long haul, companies try to reinvent themselves and quickly (Gnamm et.al, 2018: 1). In this process, gaining flexibility plays strategical and crucial role. Because businesses struggle against difficulties related to the rapid change of customers' needs, expectations, and environment. Moreover, these difficulties force the players of the industry to adopt a more innovative competitive approach. Exactly like that, it is thought that companies may have the opportunity to obtain a long-term competitive edge in a globally competitive economy.

From this point of view, because of the study which aims to explore the relationship between AFS the ICAS within the automotive industry has showed that AFS has a statistically significant effect on ICAS. In this situation, it is recommended that players of the entry segment that refers to the least expensive vehicles in the different vehicle classes, the value segment which refers to the mid-price range and comprises the vast majority of vehicles sold in all markets and the premium segment which is representing highest prices should gain a more flexible structure in areas such as price, and customer-oriented marketing to adopt more innovative competitive approaches and maintain and develop their competitiveness in a challenging industry.

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