

## **Marketing Innovation, Orientation and Business Environment Effects on Newspaper Firms' Performance**

**Shailja Khanduri\***

*Assistant Professor, Department of Economics, Doon Business School, India*

---

### **Abstract**

This study is focused on analyzing the various factors responsible for the growth seen in Indian newsprint media markets while the global print media is showing a decline in revenues and market. The diverse predictors analyzed in present study are categorized in two instrument items namely marketing innovation and market orientation. Further, business environment factors are analyzed as moderators in the study. The dependent variables are market and financial performances of newsprint media firms. The regression model finds interfunctional coordination, customer orientation and product innovation factors along with technology revolution as significantly associated with market and financial performance of newsprint media firms.

*Key words:* Newsprint Media, Marketing Innovation, Market Orientation, Technology Turbulence

*JEL classification:* M20, M30, O32, L82, L13

---

### **1. Introduction**

Print news media industry makes up about eighty six percent of revenue for news publishers globally [e.g., WPT (2019)]. In year 2000, print advertising revenues globally stood at 152.2 billion U.S. dollars, which in 2017 has reduced to 63.98 billion U. S. dollars [e.g., Global Print (2019)]. During and post COVID-19 pandemic [e.g., WHO (2020)], the print media is further anticipated to face more challenges in comparison to digital media [e.g., Pandey (2020)]. Even for Pre-COVID period, print and digital media global income reduced by three percent in 2018 (yearly basis) as the advertisement income from newsprint media came down by seven percent [e.g., WPT (2019)]. Nevertheless, Indian and Chinese newsprint media markets have shown a strong growth over the years, going against the global trend [e.g., WPT (2019)]. Advertising income for Indian print media grew more than five percent in 2018 (yearly basis) and total income of Indian newsprint media industry is expected to show seventeen percent increase from year 2017 to

---

\* Corresponding author.

*E-mail address:* shailja\_k12@yahoo.com.

*Address:* Department of Economics, Doon Business School, Mi-122, Selaqui, Dehradun, Uttarakhand-248011, India.

year 2020 as predicted by Keelery (2020). The circulation figures of dailies for year 2012-2016 [e.g., WAN-IFRA (2017)] predict seventy one percent increase in newspaper subscription numbers for India, while a growth reduction of about eleven percent is seen in USA newsprint media in the same period. The few notable countries which escaped the global trend for negative growth for newsprint media market were; Portugal, India, China, Indonesia, Malaysia, Thailand, Chile and Mexico [e.g., WAN-IFRA (2017)].

The Indian newsprint industry has a huge economic sway on the financial system of India. There are 1, 18,239 registered publications (17,573 in newspaper category) as on 31 March 2018 in India [e.g., RNI (2020)]. The analysis of Indian newspaper industry would be an appealing evaluation, as the incessant expansion in the newspaper subscription in India is in contradiction with the globally falling statistics [e.g., Khanduri (2019b)]. Indian newsprint industry is well known for employing original and unique marketing strategies and societal promotional activities as mentioned in earlier findings by Khanduri and Sharma (2013) and Kukreti and Sharma (2016). Nonetheless, no systematic statistical study is available vis-à-vis role and impact of market orientation and product innovation strategies on newspaper industry in India or globally, while considering the moderating effect of business environmental factors on the same. A recent study on early stage news media startups by Sommer (2018) took a case study approach comprising of only four cases. Therefore, there is an existing research gap vis-à-vis rigorous quantitative statistical analysis of the impact of marketing innovation and orientation techniques on the newspaper firms' market share and financial performance. Consequently, this study is an effort to fill the void in published literature, which statistically analyzes the impact of environmental dynamics in concurrence with marketing orientation and innovation strategies on Indian newsprint media firm's market and fiscal performance.

## **2. Literature Review**

Market orientation is an immensely explored notion in the realm of economics, management and marketing research. Pioneering works studying market orientation consequences on firms growth are reported by Deshpande, Farley and Webster (1993), Deng and Dart (1994), Greenley (1995), Pelham and Wilson (1996) Becker and Homburg (1999), Cano *et al.* (2004) and Baker and Sinkula (2009). Similarly, effects of innovation strategies on firms' overall performances in various industries have been studied by researchers such as Schumpeter (1942), Arrow (1962), Scherer (1967), Nickell (1996), Han, Kim, and Srivastava (1998), Aghion *et al.* (2005), and Gilbert (2006).

Marketing orientation and innovation strategies are fundamental for newsprint media firm as it functions in an oligopolistic market as discussed by Khanduri and Sharma (2013). There is plentiful published literature available on newsprint media firms' marketing strategies including those by Beam (1995), Kaye and Quinn (2010), Wirtz *et al.* (2011), Westlund and Lewis (2014) and Sommer and Kerbs (2016).

Becker *et al.* (2009) published specific studies on competitive intensity among media firms while mixed innovation and product placement strategies for newsprint media are discussed by Lacy and Martin (2004). Nevertheless, the present research work implements a rigorous statistical study and classifies the various constructs and items (used to construct variables for market orientation, innovation strategies and environmental factors), as mentioned in the most cited works on general market survey instruments by Kohli and Jaworski (1990), Narver and Slater (1990), Jaworski and Kohli (1993) and Slater and Narver (1994). Accordingly, market orientation components used in present study are defined as Interfunctional co-ordination (IC), customer orientation (CuO) and competitor orientation (CoO). The ranges of managerial innovations explored in present work are societal marketing (SI), product innovation (PI) and marketing innovation (MI).

Further, studies by Knight (1997) and Pulendran *et al.* (2000) on business environmental factors effect on various firms establishes that the profit limitations, leniency in marketplace entrée, market allocation of the chief contestant and firm's status comparative to its competitors would affect the market orientation and innovation activities adopted by the firm. In present study, competitive intensity (CI), market turbulence (MT) and technology turbulences (TT) in the market are measured as business environmental factors affecting marketing activities.

The overall organizational performance comprises of financial and non-financial aspects as argued by Venkatraman and Ramanujam (1986). Accordingly, the present study classifies the firm's performances in two categories:

- Market performance (MP): It comprises of Market share in advertising, market share of customers, customer preservation, addition of fresh customers, building a positive newspaper image.
- Financial performance (FP): Sales augmentation (circulation) and firm's profit.

### 3. Research Method

Multiple regression analysis is used as the statistical analysis tools to test the various research hypotheses in the present study. Forward stepwise model selection method (with criterion of maximum attuned R-squared) is used for selection of model variables while regression analysis uses a confidence level of 95%.. Data was processed to improve the predictive power for model selection by tuning measurement level, outlier and missing value and supervised merging.

#### 3.1 Research Hypotheses

Three basic null hypotheses, which comprises of various sub-hypotheses are considered in the present study. The three basic Null Hypotheses (H1, H2 and H3) could be summarized as:

**Null Hypothesis H1:** Environmental factors have no Interaction (moderation) effect on diverse market orientation activities and innovation tactics regarding

newspaper firm's market and fiscal performance.

**Alternate Hypothesis H1'**: Environmental factors have statistically significant interaction (moderation) effect on diverse market orientation activities and innovation tactics regarding market and fiscal performance of newsprint media firms.

The three independent variables used in each regression model is combination of one independent market orientation or innovation strategies factor, one environmental variable factor and one factor which is a product of both. For the purpose of testing the null hypothesis H1, we have made four groups with nine null hypotheses in each group. The details of the four different groups of hypotheses are as follows:

- (H1a)1 to (H1a)9: There is no moderation effect of Environmental Factors on Market Orientation components to affect firm's *Market Performance*.

- (H1a)10 to (H1a)18: There is no moderation effect of Environmental Factors on Market Orientation components to affect firm's *Financial Performance*.

- (H1b)1 to (H1b)9: There is no moderation effect of Environmental Factors on Innovation Strategies components to affect firm's *Market Performance*.

- (H1b)10 to (H1b)18: There is no moderation effect of Environmental Factors on Innovation Strategies components to affect firm's *Financial Performance*.

**Null Hypothesis #02**: Environmental factors, market orientations activities, innovation strategies, and the interaction between market orientation and innovation policies are not linked with firm's *market performance*.

To test hypothesis H2, an eighteen variable multiple regression model is specified for market performance variable in this study:

$$MP = \beta_0 + \beta_1 \times CuO + \beta_2 \times CoO + \beta_3 \times IC + \beta_4 \times PI + \beta_5 \times MI + \beta_6 \times SI + \beta_7 \times MT + \beta_8 \times CI + \beta_9 \times TT + \beta_{10} \times CuO * PI + \beta_{11} \times CuO * MI + \beta_{12} \times CuO * SI + \beta_{13} \times CoO * PI + \beta_{14} \times CoO * MI + \beta_{15} \times CoO * SI + \beta_{16} \times IC * PI + \beta_{17} \times IC * MI + \beta_{18} \times IC * SI + \epsilon_1 \quad (1)$$

Therefore, the null hypothesis H2 and its alternate hypothesis are given as:

**Null Hypothesis H2:**  $H2: \beta_1 = \beta_2 = \beta_3 = \beta_4 = \beta_5 = \beta_6 = \beta_7 = \beta_8 = \beta_9 = \beta_{10} = \beta_{11} = \beta_{12} = \beta_{13} = \beta_{14} = \beta_{15} = \beta_{16} = \beta_{17} = \beta_{18} = 0$

**Alternate Hypothesis: H2'**: Environmental factors, market orientations activities, innovation strategies, and the interaction between market orientation and innovation policies are linked with firm's *market performance*.

$H2'$ :  $\beta_1 \neq 0$  or  $\beta_2 \neq 0$  or  $\beta_3 \neq 0$  or  $\beta_4 \neq 0$  or  $\beta_5 \neq 0$  or  $\beta_6 \neq 0$  or  $\beta_7 \neq 0$  or  $\beta_8 \neq 0$  or  $\beta_9 \neq 0$  or  $\beta_{10} \neq 0$  or  $\beta_{11} \neq 0$  or  $\beta_{12} \neq 0$  or  $\beta_{13} \neq 0$  or  $\beta_{14} \neq 0$  or  $\beta_{15} \neq 0$  or  $\beta_{16} \neq 0$  or  $\beta_{17} \neq 0$  or  $\beta_{18} \neq 0$

**Null Hypothesis #03:** Environmental factors, market orientations activities, innovation strategies, and the interaction between market orientation and innovation policies are not linked with firm's *financial performance*.

To test hypothesis H3, following 18-variable multiple regression model is specified for financial performance variable in this study:

$$FP = \beta'_0 + \beta'_1 \times CuO + \beta'_2 \times CoO + \beta'_3 \times IC + \beta'_4 \times PI + \beta'_5 \times MI + \beta'_6 \times SI + \beta'_7 \times MT + \beta'_8 \times CI + \beta'_9 \times TT + \beta'_{10} \times CuO*PI + \beta'_{11} \times CuO*MI + \beta'_{12} \times CuO*SI + \beta'_{13} \times CoO*PI + \beta'_{14} \times CoO*MI + \beta'_{15} \times CoO*SI + \beta'_{16} \times IC*PI + \beta'_{17} \times IC*MI + \beta'_{18} \times IC*SI + \varepsilon_2 \quad (2)$$

Therefore, the null hypothesis H3 and its alternate hypothesis are given as:

**Null Hypothesis H3:**  $H3: \beta'_1 = \beta'_2 = \beta'_3 = \beta'_4 = \beta'_5 = \beta'_6 = \beta'_7 = \beta'_8 = \beta'_9 = \beta'_{10} = \beta'_{11} = \beta'_{12} = \beta'_{13} = \beta'_{14} = \beta'_{15} = \beta'_{16} = \beta'_{17} = \beta'_{18} = 0$

**Alternate Hypothesis: H3':** Environmental factors, market orientations activities, innovation strategies, and the interaction between market orientation and innovation policies are associated with firm's *financial performance*.

$H3'$ :  $\beta'_1 \neq 0$  or  $\beta'_2 \neq 0$  or  $\beta'_3 \neq 0$  or  $\beta'_4 \neq 0$  or  $\beta'_5 \neq 0$  or  $\beta'_6 \neq 0$  or  $\beta'_7 \neq 0$  or  $\beta'_8 \neq 0$  or  $\beta'_9 \neq 0$  or  $\beta'_{10} \neq 0$  or  $\beta'_{11} \neq 0$  or  $\beta'_{12} \neq 0$  or  $\beta'_{13} \neq 0$  or  $\beta'_{14} \neq 0$  or  $\beta'_{15} \neq 0$  or  $\beta'_{16} \neq 0$  or  $\beta'_{17} \neq 0$  or  $\beta'_{18} \neq 0$ .

### 3.2 Questionnaire Design and Sampling

Present study uses primary data collected from senior-level managers/executives handling the marketing aspect of various newsprint media firms in India. Personal interviews and electronic communication was employed to contact the respondents. Statistical Package for the Social Sciences (SPSS) by IBM (2020) is used for analysis of data in the present study. Respondents among the newspapers firms operating from north and central India were randomly selected. Two hundred eleven survey questionnaires were circulated, and thirty one responses were received. The low sample size is due to the small population size of the eligible respondents for the present study as newsprint media market has an oligopolistic market structure. Therefore, inherently there would be a very small number of big

firms in the newsprint media market, which are relevant for the present study. Smaller firms, if any, do not have any structured market orientation and innovation outlook and thus not qualify as eligible respondents. Further, as the newspaper caters to the subscriber (audience) and the advertising firms (which are the major part of newspapers revenue generation) through the same channel (the newspaper); the media managers are innately secretive about their subscription numbers and success of their own marketing strategies. A manager responding to a questionnaire is therefore naturally reluctant to share information, lest it sends any negative news about the newspaper and impact the circulation and advertising revenue for the same. It may also eventually threaten his/her employment if the news reaches the owner of the publication through negative channels. A lot of personal time and efforts through various channels were thus used by author to get the responses as mentioned in the study. Therefore, after spending considerable time in the process, a sample size of thirty one is chosen for the statistical analysis. A low sample size in comparison to a large number of variables may lead to over fitting of statistical model which would give regression coefficients in lieu of the noise and not the bona fide associations in the population. However, in present work, adjusted R-squared values increased with increased variables in the best fit model. Also the R-squared change values are consistent with significant F-change values in our models. This effectively ensures that the present study is devoid of problem of over fitting the model.

The study conducted a preliminary survey using an extensive questionnaire. It was aimed to get the feedback on the nature and appropriateness of the questionnaire. Various features of questionnaire were discussed with the nine non-sample key-informants from the news print media business, who have extensive understanding and familiarity with the advertising/revenue/marketing aspects of newspaper industry. These respondents included marketing administrator, senior editors, and proprietors of promotional businesses allied with various newspaper firms. The questionnaire was then adapted and modified according to the advice and suggestions from these respondents. The exercise objective was to assemble a condensed questionnaire and to corroborate the items used for each construct such that the response predisposition and measurement oversight in the sample are narrowed [e.g., Kumar *et al.* (1993)]. The real survey amid marketing managers of various newspaper firms was then performed by private interviews, electronic mails and telephonic interviews. After getting the responses, internal consistency of the constructs was checked by implementing Cronbach's alpha value  $> 0.7$ . For reducing the components of assorted constructs, principal component analysis (PCA) with Kaiser Criterion was also performed as mentioned by Cerny and Kaiser (1977) and Costello and Osborne (2005). Figure 1 gives the various constructs used in the present study. The questionnaire feedback comprised of five sections: Section A: Newspaper firm's basic information; Section B: Constructs of independent variable i.e. market orientation parameters; Section C: Constructs of independent variable i.e. innovation strategies parameter; Section D: Constructs of Moderator variable i.e. market environmental factors; Section E: Questions on the performance of the newspaper firm's market and pecuniary performance.

There were total thirty one responses, with maximum eight responses coming from different publication/edition centers of *Amar Ujala*, six responses from *Dainik Jagran*, five responses from *Rajasthan Patrika*, four responses from *Dainik Bhaskar*, two responses from *Dainik Navjyoti* and one response each from *The Hitavada*, *Business Standard*, *Central Chronicle*, *Hindustan Media Ventures*, *The Pioneer* and *The Times of India*. *Dainik Navjyoti*, *The Hitavada*, and *Central Chronicle* have statewide reach whereas other newsprint media firms included in the study has countrywide distribution. *The Times of India* is the oldest newsprint media firm with 182 years of experience while *Business Standard* with 45 years of experience is the youngest respondent firm in present study.

Figure 1. Constructs for Independent and Dependent Variables

Construct	Items	OQ	FQ	C $\alpha$
CnO	Your commitment to serving readers/clients' needs is closely monitored	6	6	0.86
	Business strategies are driven by increasing values for customers			
	Your competitive strategies are based on understanding readers/clients' needs			
	Your objectives and strategies are driven by the creation of readers satisfaction			
	Customer satisfaction is systematically and frequently assessed			
CoO	Close attention is given to after sales service	4	2	0.73
	Your sales people share information about competitors			
IC	You achieve rapid response to competitive actions	4	3	0.73
	Information about readers is freely communicated throughout your newspaper firm			
PI	Business functions are integrated to serve market needs	6	4	0.72
	Your managers understand how employees can contribute to value for customers			
	Our newspaper firm introduces number of significant changes to the design and presentation of newspaper every year.			
	Our newspaper firm launches numbers of new newspaper supplements every year			
MI	With NPD (new product development), our newspaper firm explore/enters new markets segments.	4	3	0.81
	Our newspaper firm has employed a significant number of people dealing with innovations in newspaper presentation.			
	Our newspaper firm employs a significant number of people to cater to the latent needs of the current customers and potential customers			
SI	Our newspaper firm employs innovative methods to attract new and potential customers /readers	5	4	0.86
	Our newspaper firm stands first in the market to introduce new promotion and advertising tools.			
	Our newspaper firm actively conducts social awareness campaigns every six months			
MT	Our firm spends considerable money on public relations	6	2	0.74
	Our firm donates money to charity			
CI	Our firm actively invests resources and/or money in activities outside its business which aim to benefit the community	6	4	0.72
	Do you witness demand for your products and services from customers who never bought them before			
	Do your new customers tend to have product related needs that are different from those of existing customers?			
TT	Competition in your newspaper industry is cut throat	5	3	0.73
	There are many "promotion wars" in your newspaper industry			
	Anything that one newspaper firm can offer others can copy that immediately			
MP	Every newspaper firm introduces new competitive strategy almost every six month	5	5	0.88
	Technological changes provide big opportunities in your newspaper industry			
	It is very difficult to forecast where the technology in your newspaper industry will be in the next 2 to 3 years			
	A large number of new product ideas have been made possible through technological breakthrough in your newspaper industry			
FP	Market share – advertising	2	2	0.86
	Market share – readers			
	Customer retention			
	Attracting new customers			
	Building a positive newspaper image			
	Sales growth			
	Profit			

(OQ= Original items; FQ = Final items retained after Cronbach's alpha(C $\alpha$ ))



*Dainik Bhaskar* with 62 years of publications has the highest daily circulation of 4,579,051 copies, among all the firms. The respondent firms selected here are oldest/biggest newspaper firms of north and central India. Overall, these firms circulate more than 20 million copies daily as mentioned in report by Audit Bureau of Circulation (2019).

#### 4. Analysis of Results and Discussion

##### 4.1 Effects of Environmental Factors on Orientation and Innovation Strategies Vis-à-Vis Firms' Performance

**Null Hypothesis H1:** The study found no statistically significant evidence to reject the null Hypothesis (as  $p > 0.05$  for all 36 hypotheses tested). It indicates that we do not have sufficient evidence from the sample data to conclude any significant interaction effects between the environmental factor and the considered orientation or innovation factor, such that the interaction factor is associated with firm's market and financial performance. Incidentally, the outcome is in conformity with the pioneer paper in the field of market orientation by Jaworski and Kohli (1993), where the orientation and innovation activities outcomes on firms' profitability does not show any statistically significant moderation by market turbulence, competitive intensity and technological turbulence in general. Nevertheless, author acknowledges the fact that the potentially insufficient power of the statistical test (due to small sample size of 31) might miss the control of environmental features on innovation and orientation procedures, if the effect-size is small. Further, the lack of confirmation for moderating cause of environmental factors may also result from the poorer consistency of the measures used in the present work as no specific instrument is available to assess the marketing activities in the field of newsprint media. Therefore, a possibility exists, such that low power of present study may have missed the less significant effects of environmental factors on firms' performance.

##### 4.2 Complete Model for Firm's Market Performance and Hypothesis H1

The study further analyzes the combined effect of three market orientation factors (*CuO*, *CoO* and *IC*), three innovation strategies factors (*PI*, *MI* and *SI*), three environmental factors (*MT*, *CI* and *TT*), and four interaction factors between orientation activities and innovation strategy variables (*CuO\*PI*, *CoO\*PI*, *IC\*MI* and *IC\*SI*). The interaction factors are selected after analyzing the one to one interaction between every individual factor vis-à-vis market performance and the results for forward stepwise models are analyzed as mentioned in reference by Khanduri (2019a). Table 1 gives the model summary from SPSS, while table 2 gives the ANOVA table. The statistically significant model shows F-statistics of 21.826 (sig. = 0.000). The highest adjusted R-squared value of 0.829 is obtained for the regression model for market performance (*MP*).

Table 1. Model Summary for Firm's Market Performance Model

R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
				R Square Change	F Change	f1	f2	Sig. F Change	
0.932	0.869	-0.829	0.413114	0.869	21.826	7	23	0	2.7

Table 2. ANOVA Table for Firm's Market Performance Model

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	26.075	7	3.725	21.826	0.000
Residual	3.925	23	0.171		
Total	30	30			

Table 3 gives the t-test and standardized beta coefficients for various independent variables used in the best model for market performance. The Koenker test statistic value is 3.795 and the sig-value is 0.803. As the sig. value for Koenker test is more than 0.05, no heteroscedasticity is found (Null Hypothesis tested is for homoscedasticity). Durbin-Watson test statistics of 2.70 shows no significant autocorrelation as is expected for cross-sectional data used in present work. Change statistics values are calculated by comparing the statistics change from zero predictors to the seven predictors used in the present model. Except for  $CuO*PI$ , all the individual independent variables are statistically significant. There is no multicollinearity present among the predictors as is evident from the collinearity statistics given in the Table 3, where variance inflation factor (VIF) of less than 3 is seen for all variables.

Table 3. Beta Coefficients and T-Test Values for Firm's Market Performance Model

Model	Standardized Coefficients	t	Sig.	Collinearity Statistics	
	Beta			Tolerance	VIF
(Constant)		-1.783	0.088		
$PI$	0.562	6.646	0.000	0.795	1.258
$CuO*PI$	-0.201	-1.546	0.136	0.336	2.976
$TT$	0.317	3.857	0.001	0.840	1.190
$IC*MI$	0.482	5.215	0.000	0.665	1.504
$IC$	0.389	3.150	0.004	0.373	2.681
$CoO*PI$	-0.295	-2.372	0.026	0.368	2.717
$SI$	0.280	2.765	0.011	0.554	1.805

The best model for market performance according to highest adjusted  $R^2$  value is summarized in eq. 3 as:

$$MP = (.562 \times PI) + (-0.201 \times CuO*PI) + (.317 \times TT) + (.482 \times IC*MI) + (0.389 \times IC) + (-.295 \times CoO*PI) + (.280 \times SI) \quad (3)$$

Further, of the various available forward step wise models (in decreasing value of adjusted R<sup>2</sup>), the model without the issues of heteroscedasticity, multicollinearity and independent variables with significant t-statistics (adjusted R<sup>2</sup> value = .789, F-statistic = 19.660, sig. = .000) is given as:

$$MP = (.586 \times PI) + (.223 \times CuO) + (-.469 \times CuO*PI) + (.284 \times TT) + (.357 \times IC*MI) + (.371 \times IC) \quad (4)$$

The model summary for market performance model given in eq. 4 is shown in table 4. The Koenker test statistic value is 2.873 and the sig-value is 0.825, so there is no evidence of heteroscedasticity. There is no issue of multicollinearity where VIF values are less than 2.25 and tolerance values are more than 0.44 for all the predictors. While the interaction term *CuO\*PI* is found to be negatively associated with market performance, *PI*, *CuO*, *TT*, *IC* and interaction term *IC\*MI* are positively related to market performance.

**Table 4. Beta Coefficients and T-Test Values for Firm's Market Performance Best Model**

Model	Standardized Coefficients	t	Sig.	Collinearity Statistics	
	Beta			Tolerance	VIF
(Constant)		-0.949	0.352		
<i>PI</i>	0.586	6.083	0.000	0.759	1.318
<i>CuO</i>	0.223	2.272	0.032	0.732	1.366
<i>CuO*PI</i>	-0.469	-4.676	0.000	0.700	1.429
<i>TT</i>	0.284	3.114	0.005	0.849	1.178
<i>IC*MI</i>	0.357	3.215	0.004	0.571	1.751
<i>IC</i>	0.371	2.946	0.007	0.445	2.247

About seventy nine percent of variance in market performance of news print media firms is explained by combination of *PI*, *CuO*, *CuO\*PI*, *TT*, *IC\*MI* and *IC*. Therefore, subsequent deductions could be argued for understanding firms' market performance:

The model brings out the importance of product innovation association with market performance of newspaper firms. Better product is supposed to capture a larger market share than its rivals. For example, an Indian newspaper named *Rajasthan Patrika* (Jaipur edition) introduced the use of 3D technology concept in print. An impressive image of a fighter jet, signifying the ambition and the self-belief of the newspaper met the eyes of the subscriber. Further, it introduced the reader with the latest technique in print media and its viewing details, establishing the newspaper brand as one of the most technologically advanced among competitors. Likewise, an innovative idea by an Indian chocolate company with the

name of *Cadbury Silk* brand extended the significance of being in love with a remarkable feature of originality in the newspaper *Hindustan Times*. The newspapers had “Cadbury Silk Bands” as an attachment - which transforms into flower ribbons. *Hindustan Times* also purposely targeted daily commuters by introducing a small publication with the name of *HT Mini* in New Delhi, India. It is the condensed publication which encloses 24 pages of unfussy, witty substance from important news stories related to metropolitan news, games, leisure, and lifestyle. The *Hindustan Times* is betting on the practical form of *HT mini*, which will make it comfortable for travelers to read and hold while commuting.

Customer orientation is positively linked with firms’ market performance such that being appreciative of the client requirements and being conscious of customers’ sensitivity would promote the market performance of newspaper firms. An example is mentioned by Knolle (2016) as: *The Boston Globe* engaged a new retailer for home delivery of its product in 2016. However, the firm faced many issues with the vendor and eventually the reporters were asked to help out for delivering the Sunday newspapers. Nonetheless, the publication lost many subscribers due to late identification of the problem as they had no mechanism for customer orientation. In another instance, Slimp (2015) conducted a survey via *facebook* among general public. Out of 200 respondents, 38% subscribed to a newspaper and 62% did not. From the nonsubscribers, 51% responded that the newspaper price is too high, 37% blamed poor writing, 27% reasoned about lack of local news, 14% blamed delivery problems and 12% blamed the poor customer services of newspaper as a reason of non-subscription. No doubt, this kind of customer feedback is essential for survival of newspaper and hence customer orientation association with firms’ market performance seems logical.

The interaction term of customer orientation and product innovation is negatively associated with market performance, which indicates that when a firm is actively pursuing the product innovations for its brand, *the simultaneous initiatives for customer orientation and their implementations may not influence the market performance to a high degree as compared to their individual influence*. The reason for this could be understood as: if a firm has dedicated a lot of effort, time and money in developing an idea for product innovation from its own research and development exercise by the technical and marketing team, then it could get stuck in its path if their comes in a confusing message from the customers feedback or they may simply ignore the customers’ feedback. On the other hand, it is also possible that the firms, which have a dedicated customer’s feedback mechanism, if they try simultaneously for product innovation and spend time, money and effort on that front also, the overall market share gains may not be that effective. Significant negative correlation between customer orientation and product innovation has already been reported in published literature by Atuahene-Gima (1996) and Kohli and Jaworski (1990). Publications also suggest that customer orientation would inhibit product innovation in firms that were already highly innovative, but it could also motivate the product innovations in firms that were less innovative [e.g., Tauber (1974) and Verhees and Meulenber (2004)]. Therefore, the findings in present work

also support the literal conclusions found in the mentioned studies.

In addition, there is a positive association of technology turbulence with market performance, which indicates that if new technologies are introduced, the newspaper firms gets benefitted from it by increasing their market share. More often than not, new technology would be helpful in product innovation and market innovation in newspaper market, thus helping in newspaper firms' better market performance. Further, the newer technology may also be helpful in increasing the societal outreach of the newspaper firms and increase the market performance of newspaper firms.

The interaction term of interfunctional coordination and marketing innovation is positively associated with market performance which indicates that when there is very high interfunctional coordination, investing time and effort on marketing innovations to defy challenger would optimistically control the market performance. Therefore, it may be hinting at the possibility that when there is efficient communication between various departments of newspaper firms, marketing innovation efforts like branding, packaging, positioning of the product would be far more effective in increasing the firm's profitability due to the enriched interaction, motivated workforce and better cohesion between employees of the newspaper firms.

There is a positive association of interfunctional coordination and newspaper firm's market performance, which indicates that the firms which has a better interfunctional coordination between its various departments, where management is more open, responsive and motivational to its employees, the newspaper firm would reap its benefit in terms of increased market performance than its rivals.

### 4.3 Complete Model for Firm's Financial Performance and Hypothesis H3

The independent variables used are three market orientation factors (*CuO*, *CoO* and *IC*), three innovation strategies factors (*PI*, *MI* and *SI*), three environmental factors (*MT*, *CI* and *TT*), and three interaction factors between orientation activities and innovation strategy variables (*CuO\*PI*, *CoO\*PI*, and *IC\*MI*). The interaction factors are selected after analyzing the one to one interaction between every individual factor. We choose only those interaction terms which show statistically significant interaction effect for the dependent variable of financial performance (*FP*). The highest adjusted  $R^2$  value of .800 is obtained in regression model for financial performance (*FP*). Table 5 gives the model summary from SPSS, while table 6 gives the ANOVA table. The F-statistics is 18.137 and sig. = 0.000, so the model is statistically significant. The Koenker test statistic value is 9.246 and the sig-value is 0.235, so there is no issue of heteroscedasticity. Durbin-Watson test statistics of 2.375 shows no autocorrelation. Change statistics values are calculated by comparing the statistics change from zero predictors to the seven predictors used in the present model.

Table 5. Model Summary for Firm's Finance Performance Model

R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
				R Square Change	F Change	f1	f2	Sig. F Change	
0.920	0.847	0.800	0.447275	0.847	18.137	7	23	0.000	2.375

Table 6. ANOVA Table for Firm's Financial Performance Model

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	25.399	7	3.628	18.137	0.000
Residual	4.601	23	0.2		
Total	30	30			

The seven predictor variables are Product Innovation (*PI*), Marketing Innovation (*MI*), Societal Marketing Innovation (*SI*), Interaction term for Interfunctional Coordination and Marketing Innovation (*IC\*MI*), Interaction term for Competitor Orientation and Product Innovation (*CoO\*PI*), Competitor Orientation (*CoO*), and Interfunctional Coordination (*IC*). Table 7 gives the t-test and standardized beta coefficients for various independent variables used in the best model for financial performance.

Table 7. Beta Coefficients and T-Test Values for Firm's Financial Performance

Model	Standardized Coefficients	t	Sig.	Collinearity Statistics	
	Beta			Tolerance	VIF
(Constant)		-1.766	0.091		
<i>PI</i>	0.844	6.688	0.000	0.419	2.387
<i>MI</i>	-0.334	-2.132	0.044	0.272	3.676
<i>SI</i>	0.256	1.546	0.136	0.243	4.115
<i>IC*MI</i>	0.220	1.895	0.071	0.494	2.024
<i>CoO*PI</i>	-0.622	-5.079	0.000	0.445	2.247
<i>CoO</i>	0.403	2.706	0.013	0.301	3.322
<i>IC</i>	0.191	1.504	0.146	0.415	2.410

However, the t-test is not statistically significant for *IC\*MI* and *IC*. The beta standardized coefficients are less than  $\pm 1.000$  for all predictor variables, and VIF is less than 4.2, so there is no issue of multicollinearity. The best model for financial performance according to highest adjusted  $R^2$  value is summarized in eq. 5 as:

$$FP = (.844 \times PI) + (-.334 \times MI) + (.2567 \times SI) + (.220 \times IC*MI) + (-.622 \times CoO*PI) + (.403 \times CoO) + (.191 \times IC) \quad (5)$$

Nonetheless, the choice of sufficient adjusted  $R^2$  value, the F-statistic,

F-statistics sig. value, statistically significant t-statistic, avoiding the issues of multicollinearity and heteroscedasticity, leads us to the model with adjusted R<sup>2</sup> value = .699, F-statistic = 24.202, sig. = .000) which can be given as:

$$FP = (.691 \times PI) + (.381 \times CuO) + (-.327 \times CuO*PI) \quad (6)$$

The model summary for market performance model given in eq. 6 is shown in table 8. The Koenker test statistic value is 2.940 and the sig-value is 0.401. As the sig. value for Koenker test is more than 0.05, there is no evidence of heteroscedasticity. There is no issue of multicollinearity in predictor variables as VIF values are less than 1.1 and tolerance values are more than 0.99 for all the predictors. Durbin-Watson test statistics of 1.724 shows no autocorrelation. Product innovation and customer orientation are found to be positively associated to financial performance while their interaction term  $CuO*PI$  is negatively associated with financial performance.

**Table 8. Beta Coefficients and T-Test Values for Firm's Financial Performance Best Model**

Model	Standardized Coefficients	t	Sig.	Collinearity Statistics	
	Beta			Tolerance	VIF
(Constant)		-0.182	0.857		
<i>PI</i>	0.691	6.874	0.000	0.995	1.005
<i>CuO</i>	0.381	3.788	0.001	0.992	1.008
<i>CuO*PI</i>	-0.327	-3.257	0.003	0.995	1.005

The three factors of *PI*, *CuO* and *CuO\*P* together explain the seventy percent variance in financial performance of newspaper firms operating in north and central India. The detailed understanding of the dependence of the financial performance on the three factors is almost identical as mentioned for their association with market performance. Therefore, the following brief inferences are given from the regression model for firms' financial performance:

- The model brings out the importance of product innovation association with financial performance of newspaper firms. As explained earlier for market performance best forward stepwise model, a newspaper with novel design, content, presentation would also bring higher financial gains than its rivals. As the product innovation is important for both the market performance and financial performance of Indian newspaper firms, it could be concluded that sustained product innovation is one of the most important factor for newspaper firm's overall profitability.

- Further, positive association of customer orientation with financial performance brings out the fact that understanding the customer needs and being aware of customers' perception goes a long way in enhancing the financial performance of newspaper firms.

- The interaction term of customer orientation and product innovation is found to be negatively associated with financial performance, which indicates that when a firm is actively pursuing the product innovations for its brand, the simultaneous

initiatives for customer orientation may not be that effective enhancer of the financial performance, as they were in isolation. Similarly, when a firm is actively pursuing the customer orientation practices, any increasing investment in the product innovation may not give the expected high degree of influence vis-à-vis firm's financial progress.

## **5. Conclusions**

The main conclusions derived from the present research work could be applied to explain the robust growth of Indian newsprint media market and the knowledge gained from the present work is summarized as:

- Among the various marketing orientation and innovation strategies, few individual factors are very strongly positively correlated with market and financial performance of newspaper firm i.e. product innovation, customer orientation, and interfunctional coordination. Therefore, there should be a dedicated technical and marketing research and development wing to work on the novel ideas and employ product innovations liberally to satisfy their present subscribers and reach for the fresh customers. There should be a dedicated staff in newsprint media firms to gather information about the customer's perception, aspirations and desires from the newspaper brand and by using this information, the technical and marketing staff should apply the changes to the brand product to popularize their newspaper.

- However, if the customer orientation is very high in a newspaper firm, investing time, efforts and money on product innovation may not bring the desired results of firm's profitability and vice-versa

- Interfunctional harmonization positively influences the market performance of newspaper firms, and it must be given due importance while setting up and executing the product strategy for newspaper firms. Further, increased interfunctional coordination would improve the market performance of newspaper firms, as it would help streamline the invested time, efforts and money by firms in marketing innovation activities.

- Managers must appreciate the continuously modifying Technological advances. Indian newspaper firms will be challenged in near future owing to increasing influence of digital technology. The newspaper businesses must initiate providing funds for in-house research and development for their trademark merchandise. The marketing managers should understand the significance of technology revolution taking place, as newer technology would facilitate realization of fresh ideas on the brand product to draw fresh clientele.

- The present study didn't find any statistically significant influence of market turbulence, technology turbulence and competitive intensity on the association between various orientations and innovation strategies and performance of Indian newspaper firms. Nevertheless, the authors do acknowledge the fact that the findings may have missed the low effects of environmental factors owing to less power of the test.



## References

- Aghion, P., N. Bloom, R. Blundell, R. Griffith, and P. Howitt, (2005), "Competition and innovation: an inverted-U relationship," *The Quarterly Journal of Economics*, 120, 701-728.
- Arrow, K. (1962), "Economic welfare and the allocation of resources for invention," in *The rate and direction of inventive activity: Economic and social factors*, Princeton University Press, 609-626.
- Atuahene-Gima, K. (1996), "Market Orientation and Innovation," *Journal of Business Research*, 35, 93-103.
- Audit bureau of Circulations :  
[http://www.auditbureau.org/files/JJ%202019%20Highest%20Circulated%20\(across%20languages\).pdf](http://www.auditbureau.org/files/JJ%202019%20Highest%20Circulated%20(across%20languages).pdf)
- Baker, W., and J. M. Sinkula, (2009), "The Complementary Effects of Market Orientation and Entrepreneurial Orientation on Profitability in Small Businesses," *Journal of Small Business Management*, 47, 443-464.
- Beam, R. A. (1995), "How newspapers use readership research," *Newspaper Research Journal*, 16, 28–38.
- Becker, J., and C. Homburg, (1999), "Market-Oriented Management: A System –Based Perspective," *Journal of Market-Focused Management*, 4, 17-41.
- Becker, L. B., C. A. Hollifield, A. Jacobsson, E. M. Jacobsson, and T. Vlad, (2009), "Is more always better? Examining the adverse effects of competition on media performance," *Journalism Studies*, 10, 368–385.
- Cano, C. R., F. A. Carrillat, and F. Jaramillo, (2004), "A Meta-analysis of the Relationship between Marketing Orientation and Business Performance: Evidence from Five Continents," *International Journal of Marketing Research*, 21, 179-200.
- Cerny, C. A., and H. F. Kaiser, (1977), "A study of a measure of sampling adequacy for factor-analytic correlation matrices," *Multivariate Behavioral Research*, 12, 43-47.
- Costello, A. B., and J. Osborne, (2005), "Best practices in exploratory factor analysis: four recommendations for getting the most from your analysis," *Practical Assessment Research and Evaluation*, 10, 1-9.
- Deng, S., and J. Dart, (1994), "Measuring market orientation: A multi-factor, multi-item approach," *Journal of Marketing Management*, 10, 725-742.
- Deshpande, R., J. U. Farley, and F. E. Webster, (1993), "Corporate culture, customer orientation, and innovativeness in Japanese firms: A quadrad analysis," *Journal of Marketing*, 57, 23-37.
- Gilbert, R., (2006), "Looking for Mr. Schumpeter: Where are we in the competition-innovation debate?" in *Innovation Policy and the Economy*, MIT Press, 159-215.
- Global print advertising expenditure from 2000 to 2017:  
<https://www.statista.com/statistics/272944/global-print-advertising-expenditure>
- Greenley, G. E., (1995), "Market Orientation and Company Performance: Empirical

- Evidence from UK Companies,” *Journal of Management*, 6, 1-14.
- Han, J. K., N. Kim, and R. Srivastava, (1998), “Market orientation and organizational performance: Is innovation a missing link?” *Journal of Marketing*, 62, 30–45.
- IBM, SPSS:  
<https://www.ibm.com/analytics/data-science/predictive-analytics/spss-statistical-software>.
- Jaworski, B., and A. Kohli, (1993), “Market orientation: Antecedents and consequences,” *Journal of Marketing*, 57, 53-70.
- Kaye, J., and S. Quinn, (2010), “*Funding journalism in the digital age: Business models, strategies, issues and trends*,” New York: Lang.
- Keelery, S. (2020), “Value of newspaper revenue in India 2016-2022,” Available at: <https://www.statista.com/statistics/830131/india-newspaper-revenue/>
- Khanduri, S. (2019a), “Impact of marketing strategies on Firms performance a case study of select newspaper firms,” *PhD Thesis, The IIS University, India*, Available at: <http://hdl.handle.net/10603/240323>.
- Khanduri, S. (2019b), “Analyzing Relationship between Innovation Strategies and Performance of Newspaper Firms in North and Central India,” *Media Watch Journal*, 10, 614-627.
- Khanduri, S., and N. Sharma, (2013), “Marketing innovations: Conceptual approaches, impact, and analytical tools,” *The IIS University Journal of Social Sciences*, 2, 150-168.
- Knight, G. A. (1997), “Cross-Cultural Reliability and Validity of a scale to measure firm entrepreneurial orientation,” *Journal of Business Venturing*, 12, 213-225.
- Knolle, S. (2016), “How Putting the Newspaper Customer First Can Turn Your Business Around,” Available at: <http://www.editorandpublisher.com/feature/how-putting-the-newspaper-customer-first-can-turn-your-business-around/>
- Kohli, A. K., and B. J. Jaworski, (1990), “Market orientation: the construct, research propositions, and managerial implications,” *Journal of Marketing*, 54, 1-18.
- Kukreti, S., and N. Sharma, (2016), “Impact of marketing strategy in newspaper firms in India: Route to survival in the era of digitization,” *Research Reinforcement*, 1, 76-82.
- Kumar, N., L. W. Stem, and J. C. Anderson, (1993), “Conducting Interorganizational Research using Key Informants,” *Academy of Management journal*, 38, 1-19.
- Lacy, S., and H. J. Martin, (2004), “Competition, circulation and advertising,” *Newspaper Research Journal*, 25, 18–39.
- Narver, J. C. and S. F. Slater, (1990), “The effect of a market orientation on business profitability,” *Journal of Marketing*, 54, 20–35.
- Nickell, S., (1996), “Competition and corporate performance,” *Journal of Political Economy*, 104, 724-746.
- Pandey, M. (2020), “Print media: Chronicle of a death foretold,” Available at: <https://www.nationalheraldindia.com/india/print-media-chronicle-of-a-death-fo>

retold

- Pelham, A. M., and D. T. Wilson, (1996), "A Longitudinal Study of the Impact of Market Structure, Firm Structure, Strategy, and Market Orientation Culture on Dimensions of Small-Firm performance," *Journal of the Academy of Marketing Science*, 24, 27-43.
- Pulendran, S., R. Speed, and R. E. Widing, (2000), "The Antecedents and consequences of market orientation in Australia," *Australian Journal of Management*, 25, 119-143.
- RNI, "2020 Registrar of Newspapers for India," Available at: [http://rni.nic.in/all\\_page/press\\_india.aspx](http://rni.nic.in/all_page/press_india.aspx)
- Scherer, F. (1967), "Market structure and the employment of scientists and engineers," *American Economic Review*, 57, 524-531.
- Schumpeter, J. (1942), "*Capitalism, socialism, and democracy*," 1st edition, New York: Harper & Brothers.
- Slater, S. F., and J. Narver, (1994), "Does competitive environment moderate the market orientation performance relationship?," *Journal of Marketing*, 58, 46-56.
- Slimp K. (2015), "Kevin Slimp: Why they don't subscribe," Available at: <https://wvpress.org/wvpa-sharing/kevin-slimp-why-they-dont-subscribe/>
- Sommer, C., and I. Krebs, (2016), "Market orientation in news media: How learning about and responding to readers and competitors impacts success," *Journal of Applied Journalism & Media Studies*, 5, 441-464.
- Sommer, C. (2018), "Market orientation of news startups," *The Journal of Media Innovations*, 4, 34-54.
- Tauber, E. M., (1974), "How market-research discourages major innovation," *Business Horizons*, 17, 22-26.
- Venkatraman, N., and V. Ramanujam, (1986), "Measurement of business performance in strategy research: A comparison of approaches," *Academy of Management Review*, 11, 801-814.
- Verhees, J. H. M., and M. T. G. Meulenbergh, (2004), "Market Orientation, innovativeness, product innovation and performance in small firms," *Journal of Small Business Management*, 42, 134-155.
- WAN-IFRA, (2017), "World press trends report 2017," Available at: <http://www.wptdatabase.org/world-press-trends-2017-facts-and-figures>
- Westlund, O., and S. C. Lewis, (2014), "Agents of media innovations: Actors, actants, and audiences," *The Journal of Media Innovations*, 1, 10-35.
- WHO, (2020), "Coronavirus disease (COVID-19) pandemic", Available at: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/>
- Wirtz, B. W., R. Pelz, and S. Ullrich, (2011), "Marketing competencies of publishers and ad sales success," *Journal of Media Business Studies*, 8, 23-46.
- WPT, (2019), "World Press Trends 2019: Facts and Figures," Available at: <http://www.wptdatabase.org/world-press-trends-2019-facts-and-figures>