

Using covariance-based structural equation modelling to evaluate the validity and reliability of the market orientation scale (MKTOR) in Indian SMEs

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KEYWORDS

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ABSTRACT

Purpose: The purpose of this study is to evaluate the validity and reliability of the MKTOR scale in the context of small and medium-sized enterprises (SMEs) to test its applicability.

Theoretical framework: Market orientation has been a pivotal subject for numerous strategic management scholars since the 1990s. Its primary emphasis is on customer satisfaction, which significantly influences organisational performance. Historically, various studies have utilised the MKTOR scale, recognised as one of the most valid and reliable metrics of market orientation, across diverse contexts. However, there exists a scarcity of empirical data pertaining to emerging nations, with the majority of these research findings focusing on large enterprises within developed economies. The present study seeks to revalidate the most adaptable and extensively employed measure of market orientation within India's small-scale sector, owing to the context-specific nature of this framework construct.

Design/methodology/approach: 248 manufacturing SMEs in India were chosen at random. The original MKTOR scale was refined and its validity was established using confirmatory factor analysis with maximum likelihood estimation.

Findings: The scale's reliability and validity were successfully established, providing support for the scale's generalizability.

Research, Practical & Social implications: By analyzing well-established approaches in understudied fields, especially in developing countries, the present study significantly adds to the corpus of information already available on market orientation. Practitioners viewed this as extremely relevant since market orientation has a substantial impact on corporate performance. Managers will gain important insights into a company's market orientation through the use of this scale, which has been successful in the Indian context. These insights include "customer orientation", "competitor orientation", and "interfunctional coordination", all of which can be used to improve performance.

Originality/value: The adoption of such results within the framework of emerging economies is illogical, as a great deal of the research concerning market orientation predominantly focuses on well-established industrial economies across the globe. This study seeks to revalidate the most flexible and widely utilised measure of market orientation within India's small-scale sector due to the construct's context-specific nature.

1. INTRODUCTION

The internationalization of businesses and the emergence of new startups have led organizations to adopt new ways of business. Concepts such as 'optimization' and 'cost reduction' are now being replaced by customer satisfaction and employee



contentment and loyalty (Gheysari *et al.*, 2012; Rogers *et al.*, 1994). As a result, now, in a dynamic and transitional business environment, it is becoming more important that the firm should market what it can sell rather than sell what it has done (Schiffman & Kanuk 2000). This customer-centric approach is perceived as an alternative to the production, product and sales concept and is termed a ‘marketing concept’, which revolves around customers, considering them as the prime prospect. For a long time, McNamara (1972) posited the marketing concept as a business philosophy that can be contrasted with its implementation through a firm’s activities and behaviors (Kohli & Jaworski 1990). The practical implementation of marketing concepts through activities and behaviors is referred to as market orientation, and firms with consistent marketing practices are known as market-oriented firms. In the literature, the implementation of a marketing concept is referred to as market orientation (McNamara, 1972; Vieira, V., Afonso, 2010.; McCarthy & Perreault 1984). Academic research focusing on market orientation was pioneered by the seminal contributions of Kohli & Jaworski (1990) and Narver & Slater (1990). Kohli & Jaworski (1990) proposed a behavioral approach and defined “market orientation” as the creation of market intelligence across an organization in terms of old and new customer needs, the distribution of intelligence across departments, and the organization’s reaction to this information. Narver & Slater (1990) proposed a cultural approach and defined “market orientation” as a culture that leads to the generation of behaviors that are significant for delivering better customer value performance.

Many researchers have investigated the market orientation construct in different contexts, considering it a predictor of performance (Julian, *et al.*, 2014; Urdeet *et al.*, 2011; Qu, & Zhang, 2014; Boso *et al.*, 2013; Kanaga, N.B., 2017; Kohli, A.K., 2017; Yaskunet *et al.*, 2023), but arriving at a univocal point is very difficult (Matsuno *et al.*, 2003). Initially, the majority of research focused specifically on developed economies and large-scale firms (Hunt and Morgan, 1995; Shapiro, 1988; Deshpande *et al.*, 1993, Kirca, *et al.*, 2005; Oyedijo, A. 2012; Dia- Mantopoulos & Hart, 1993; Greenley, 1995). However, these studies demonstrate a mixed relationship, e.g., Slater & Narver (1998) find a positive relationship, Grewal and Tansuhaj (2001) find a negative relationship, and Baker and Sinkula (1999) find no relationship between these two constructs. In their recent work, Morgan *et al.* (2014) provided a dark side of the market orientation effect on new product development performance when it is executed parallel to the entrepreneurial orientation, and they suggested that firms with entrepreneurial orientation should be aware of the potential impact of MO on new product development performance, whereas Boso *et al.* (2014) reported a proportional impact of EO and MO on performance. These ambiguous outcomes may be attributed to the absence of systematic efforts to develop a valid measure of market orientation (Kaynak & Kara, 2004). Importantly, a great deal of market orientation literature is concerned with developed industrial economies worldwide, and adopting such outcomes in the context of developing economies is irrational (Anwar & Sohail, 2003). Contentions by Sheth (2011) and Siddique (2013) indicate that contextual differences between the developing market and developed market in terms of sociocultural and business-related factors lead to multifariousness in business situations, and it becomes very important to revalidate its measures in different contexts (Gaur *et al.*, 2011). It is worthwhile to apply this scale in the context of developing and emerging economies and in the context of small-scale industry. Given the context-specific nature of the market orientation construct, the present study attempts to revalidate the most versatile and accepted measure of market orientation in the small-scale industry in India. Dana, L.P. (2000), in his seminal discourse on the evolution of entrepreneurship and small business in India, highlighted that since the LPG era (liberalization, privatization and globalization) of the Indian economy, government policy has offered great opportunities for sustainable self-employment in the country. Hence, it is envisaged that the Indian small-scale industry can provide good ground for validating the scale.

Conceptual background

As mentioned earlier, market orientation research was pioneered by Narver & Slater (1990) and

Kohli & Jaworski (1990), the majority of market orientation studies revolve around the conceptualization developed by them. Kohli & Jaworski (1990) proposed a behavioral perspective of market orientation and developed the MARKOR scale, whereas Narver & Slater (1990) posited a cultural perspective and proposed the MKTOR scale to measure market orientation (Gauzente, Claire. 1999; Harris, Lioyd, C. 2002). The MARKOR scale consists of 32 manifest variables: ten are concerned with *market intelligence creation*, eight are related to *intelligence distribution*, and fourteen are concerned with *responsiveness* dimensions. Kohli & Jaworski (1993) noted that market orientation measurement is concerned not only with the current needs of customers but also with the future needs of customers. The MKTOR scale consists of 15 items, representing the “*customer orientation, competitor orientation and interfunctional coordination*” dimensions of the scale. Although other scholars have investigated and developed different scales to measure market orientation, such as Deshpande *et al.* (1993), who developed the *DFW scale*; Lado, N. *et al.* (1998), who developed the *MOS scale*; Deshpande & Farley (1993), who developed the *MORTN summary scale*; Mavondo, Felix, T. & Farrell, Mark, A. (2000), who developed the Carr. J.C. & Lopez, T.B. (2007) developed the *MOCCM scale* (see Table I), and the central orientation of all such scales was based on these two pioneered scales.

**Table I: Scales to measure market orientation**

Author	Year	Measured Construct	Nature of Scale	Perspective of measuring Market Orientation
Narver & Slater	1990	Market orientation	Multi-item 7 pt. Likert Scale	Identified Market orientation as one dimensional construct having closely related components.
Kohli & Jaworski	1993	Market orientation	32 item scale	Activities related to intelligence Processing
Deshpande, Farley & Webster	1993	--	Likert, constant sum Scale	They developed a scale taking into account three constructs viz, culture, customer orientation, and innovativeness.
Lado, <i>et al.</i> ,	1998	Market Orientation	36-item scale called as Market Orientation Scale (MOS).	Incorporate significance of distributors, environment and stakeholders and develop a Nine Component Market orientation.
Deshpande & Farley	1998	Market orientation	10-item summary scale called MORTN scale	Develops a synthesized scale which includes Narver Slater's DFW and Kohli's scale
Farrel	2000	Market Orientation	Synthesize scale which includes various scales.	Integrates business performance with learning orientation along with market orientation.
Carr & Lopez	2007	Market Orientation	Integrated scale based on Kohli's, Slater's and Mentzer's scales called the MOCCM scale	Scale puts focus on the relationship between market orientation culture, firm conduct, and employee response

Source: Prepared by the author

Market orientation and SMEs across the globe:

Market orientation and its impact on SME performance have been studied by many researchers; *for example*, Boso *et al.* (2013) reported a positive relationship between Ghanaian SME performance and

Market orientation aligned with entrepreneurial orientation. González-Benito *et al.* (2013) reported a positive relationship between the MO and performance of European SMEs. On the basis of a study conducted in the Malaysian context, Bahari *et al.* 2023 and Sanuri *et al.* (2014) adopted Kohli & Jaworski's (1990) scale of MO and concluded that for SMEs to become more competitive, there is a need to focus on market orientation-related activities. Keskin, H. (2006) revalidated the market orientation scale developed in Western countries and extended its generalizability to emerging countries such as Turkey; for this purpose, they relied on Ruekert's (1992) scale. Despite the differences in nomenclature and dimensions, the central theme of most of the scales revolves around the two basic scales of market orientation, *viz.*, the MARKOR scale and the MKTOR scale. However, these two scales were found to be similar in the sense that both concentrate on the customer, considering them as the prime element in implementing market orientation (Gaur *et al.* 2011). While measuring market orientation across different populations, the MKTOR scale produced more consistent and valid outcomes than did the MARKOR scale (Mavondo & Farrell, 2000; Harris & Ogbonna, 2001; Greenlay, 1995a). Therefore, even though both the MARKOR scale and the MKTOR scale measure market orientation, many studies consider the MKTOR scale to be better than the MARKOR scale. Narver & Slater (1990) recognized market orientation as a one-dimensional construct consisting of three behavioural



components along with two decision criteria:

The three behavioural components comprise

- 1). “*Customer orientation*”
- 2). “*Competitor orientation*” and
- 3). “*Interfunctional coordination*”.

The two decision criteria are as follows:

1). Long-term focus

2). Profit objective.

They assumed that these three dimensions and two criterion variables are related to each other; hence, *market orientation* can be conceptualized as a one-dimensional construct. They noted that for a business to maximize its long-term profit, it should continuously create superior value for its target customers. To do so, the firm must be customer-oriented, competitor oriented and interfunctionally coordinated. Narver & Slater (1990) reported significant reliability for customer orientation (0.85), competitor orientation (0.72) and interfunctional coordination (0.71). However, the reliabilities for long-term focus (0.48) and profit objective (0.14) are statistically insignificant. Therefore, they finalized a three-component scale consisting of 15 items to measure market orientation, among which 6 items were related to customer orientation, 4 items were related to competitor orientation, and 5 items were related to interfunctional coordination. *Customer orientation* is a proper understanding of the target buyer’s requirements; to deliver superior value for them continuously, *the orientation of competitors* is one’s understanding of current and potential competitors’ strengths, weaknesses, capabilities, and “*interfunctional coordination*” involves coordinating efforts to utilize a firm’s resources to cater to the buyer’s needs and to deliver superior customer value. According to Gauzente and Claire (1999), MKTOR might be used as a diagnostic tool as it is best suited for assessing a company’s present level of customer commitment. Although Narver & Slater (1990) conceptualize the MKTOR scale as a unidimensional scale, researchers such as Ward *et al.* (2006) and Siguaw, Judy and Diamantopoulos, A. (1995) criticized it and argued that Narver & Slater’s (1990) measure of market orientation consisting of three dimensions—“Customer orientation”, “Interfunctional coordination”, and “Competitive orientation”—is not the one-dimensional construct; rather, it is more likely a constituent of separate measures. Importantly, unidimensionality signifies that a set indicator at a measurement scale represents a single construct. This is a fundamental assumption of measurement theory. Therefore, this study aims to examine the validity of the MKTOR scale in the Indian context by using confirmatory factor analysis (CFA). Although many studies have been conducted in this regard, the majority of them are concerned with developed economies and large-scale firm contexts, and very few studies are available for developing countries, with a focus on small-scale firms (Ramesh, R.S. & Ramesh, S, 2014; Gaur, *et al.*, 2011; Subramaniam, R. & Gopalakrishnan, P. 2001; Nugroho *et al.*, 2022). Therefore, researchers have attempted to study small and medium manufacturing units in India as sample units to examine the validity and reliability of the market orientation (MKTOR) scale.

2. METHODOLOGY

Among various established scales, the MKTOR has emerged as a highly respected tool, so this study aims to test whether this tool is valid for small-scale firms in developing economies. To answer this question, the main objective of the present paper is to assess the validity and reliability of the MKTOR scale in the small-scale sector of a developing economy. Hence, small and medium manufacturing units in India are taken as the sample.

Sample:

The scope of the study was restricted to manufacturing SMEs involved in the manufacturing of glass, brass and leather-based items. In the Indian context, micro- and medium-sized enterprises are defined as follows:

- (i) “A micro enterprise, where the investment in plant and machinery or equipment does not exceed one crore rupee and turnover does not exceed five crore rupees;
- (ii) A small enterprise, where the investment in plant and machinery or equipment does not exceed ten crore rupees and turnover does not exceed fifty crore rupees;
- (iii) A medium enterprise, where the investment in plant and machinery or equipment does not exceed fifty crore rupees and turnover does not exceed two hundred and fifty crore rupees.”

The sample is composed of all manufacturing SMEs, concentrated in the Agra, Aligarh and Firozabad clusters of India. Firozabad is famous worldwide for its glass-based products, such as bangles, flower pots, and other decorative items. Aligarh is well known for its brass-based products, and Agra is the world-renowned place for the leather industry. A majority of such SMEs belong to an unorganized sector and very few to the organized sector; therefore, efforts have been made to cover all SMEs irrespective of whether they are organized or unorganized. Such

The limited population space encouraged personal visits for data collection so that we could have an adequate sample size



for the study. However, personal visits require a great deal of time and other limitations; as a result, despite our repeated efforts, we were able to randomly collect data from the owners/managers of 248 SMEs. A brief overview of such units is given in Table 3. It encompasses the number of SMEs (in terms of frequency and associated percentage) concerning the items, such as the age of the respondents. Their education level, product category to which SMEs belong, capital invested, number of employees, and age of SMEs.

Table III: Demographic profiles

Item	Category	Frequency	Percentage
Age Respondents Group of	<25 Yrs.	53	21.4
	25 to 40 Yrs.	96	38.7
	> 40 Yrs.	99	39.9
Education of Respondents Level	High School	31	12.5
	Intermediate	59	23.8
	Graduation	70	28.2
	Post-Graduation	69	27.8
	Others	19	7.7
Product SMEs produces Category	Leather-based	102	41.1
	Glass based	92	37.1
	Brass based	35	14.1
	Others	19	7.7
Capital In SMEs Invested	< Rs. 25 lacs	47	19
	Rs.25 lacs to 5 Crores	101	40.7
	>Rs.5 Crores	100	40.3
No. of employees in SMEs	< 5	37	14.9
	5 to 15	75	30.2
	15 to 25	81	32.7
	> 25	55	22.2
SMEs Age	<5 Yrs.	93	37.5
	5 to 10 Yrs.	86	34.7
	> 10 Yrs.	69	27.8

Source: Author (2023)

Survey instrument:

To measure market orientation, we use Narver and Slater’s (1990) MKTOR scale. A slight adaptation was made in the scale with the feedback received from the area experts. The resource sharing among SBU items was modified to include resource sharing among different product categories. It consists of 15 items, comprising 6 items to measure customer orientation, 4 items to measure competitive orientation, and 5 items for interfunctional coordination. Each item of the scale was measured on a 5-point Likert scale ranging from *strongly agree* to *strongly disagree* with a neutral point. The variables CO1, CO2, CO3, CO4, CO5 and CO6 are indicators of the customer orientation dimension; the variables COMPO1, COMPO2, COMPO3 and COMPO4 are indicators of the competitor orientation dimension; and the variables IC1, IC2, IC3, IC4, and IC5 are indicators of interfunctional coordination (see Appendix 1 for a detailed list of variables).



Data analysis

The collected data were analyzed via confirmatory factor analysis (CFA) via maximum likelihood estimation. First, we assessed one of the basic assumptions of CFA, i.e., normality, as follows:

Assessment of normality and outliers:

Initially, descriptive analysis was performed (Table IV). For the variables COMPO2, COMPO3, and COMPO4, the z value of skewness and for the variable COMPO 2, the z value of kurtosis was greater than 2.58. This is indicative of a departure from univariate normality.

Table IV:Skewnessand kurtosis

Variables	Mean	Std.Error	Std.	Skewness	Std.Error ofz Score Skewness	Kurtosis	Std.Error ofz Score Kurtosis	z Score	
								Skewness	Kurtosis
CO1	2.19	0.08	1.25	0.75	0.15	1.92	-0.55	0.31	-0.99
CO2	2.06	0.08	1.2	0.91	0.15	2.32	-0.15	0.31	-0.28
CO3	2.1	0.08	1.21	0.96	0.15	2.45	-0.02	0.31	-0.04
CO4	2.27	0.08	1.22	0.76	0.15	1.94	-0.32	0.31	-0.57
CO5	2.21	0.08	1.19	0.84	0.15	2.14	-0.09	0.31	-0.17
CO6	2.34	0.08	1.23	0.82	0.15	2.08	-0.17	0.31	-0.31
COMPO1	2.09	0.06	0.97	0.88	0.15	2.25	0.73	0.31	1.32
COMPO2	2.02	0.06	0.95	1.18	0.15	2.99	1.61	0.31	2.91
COMPO3	2.1	0.07	1.09	1.02	0.15	2.6	0.59	0.31	1.07
COMPO4	2.04	0.07	1.11	1.04	0.15	2.65	0.32	0.31	0.59
IC1	2.31	0.07	1.17	0.66	0.15	1.69	-0.25	0.31	-0.45
IC2	2.33	0.08	1.19	0.69	0.15	1.75	-0.34	0.31	-0.61
IC3	2.21	0.07	1.1	0.75	0.15	1.91	0.01	0.31	0.02
IC4	2.35	0.07	1.1	0.72	0.15	1.84	0.09	0.31	0.16
IC5	2.41	0.07	1.11	0.66	0.15	1.68	-0.06	0.31	-0.1

Source: Auhtor (2023)

Since multivariate normality must be assessed to use confirmatory factor analysis (CFA), we applied Mardia's coefficient to test data of the same size. Multivariate kurtosis was measured with Mardia's coefficient, which was 20.915. Its normalised value, or critical ratio, was 7.292. According to Bentler's (2005) threshold of 5, the critical ratio is somewhat elevated, indicating that the data is nonnormal (multivariate). The squared Mahalanobis distance was used to further assess multivariate outliers for each observed variable. Consequently, 26 cases were excluded from the analysis. Multivariate normality was indicated by the normalised estimate of Mardia's coefficient (critical ratio), which was 4.6. We proceed with the model fit evaluation by prioritising multivariate normality for confirmatory factor analysis using maximum likelihood estimation, even though the variables COMPO2, COMPO3, and COMPO4 still did not demonstrate univariate normality with a revised sample size of 222.

Assessment of scale reliability and validity :

Following the suggestions of Hair *et al.* (2006), Indices such as normed chi-square (Chi. Sq. The Root Mean Square Error of Approximation (RMSEA), Goodness of Fit (GFI), Tucker–Lewis Index (TLI), Root Mean Square Residual (RMR) and Comparative Fit Index (CFI) were used to assess model fitness. The acceptable values of these indices indicate conceptual model fitness for the data collected. For Chi. Sq. test, its insignificance value in the analysis depicts the models' fitness, as it rejects the hypotheses supporting the difference between the observed and predicted covariance matrix. Owing to its sample size sensitivity, another version, normed chi, was used. Sq. Its division by degree of freedom (dof) is preferable in most research. Model fitness should be less than 5 (Hair *et al.*, 2003). For other indices, viz., any value of RMR below 0.08, GFI above 0.90, CFI above 0.95 and RMSEA below 0.06 are considered favorable fits. The values of all these indices for the default 3-factor MKTOR scale model (see Table 5) indicate good model fit. The CFA output revealed the goodness of fit of the 3-factor measurement model (i.e., Chi. Sq./df=1.5; RMR=0.07; GFI=0.93; CFI=0.952; and RMSEA=0.05). After testing model fitness against different fit indices, we next examine market orientation construct-convergent and discriminant validity. To determine convergent validity, each manifest variable's standardized loadings were evaluated, which range between 0.50 and 0.80, complying with the minimum threshold limit of 0.5 (Hair, *et al.*, 2006) and providing support for



convergent validity. In accordance with Fornell and Larcker's (1981) recommendation, the square correlation between two constructs was lower than the AVE of each construct (see Table V), suggesting the establishment of discriminant validity.

Table V: Squared correlation table

	CO	COMPO	IC
CO	0.5		
COMPO	0.010	0.4	
IC	0.006	0.006	0.4

**Diagonal values represent the AVEs of the concerned constructs, and nondiagonal values represent squared values. correlation between two constructs.*

Source: Author (2023)

Furthermore, in terms of reliability, the three factors were found to be reliable via three tests, *namely*, Cronbach's alpha, construct reliability (CR), and average variance extracted (AVE).

Table VI: AVE, CR, Cronbach's alpha

Factors	CR	AVE	Cronbach's Alpha
CO	0.9	0.5	0.85
COMPO	0.7	0.4	0.71
IC	0.8	0.4	0.75

Source: Author (2023)

3. DISCUSSION & CONCLUSION:

Many studies, worldwide have focused on the MKTOR scale, even though other scales, such the Ruckert (1992) and Kohli & Jaworski (1990) scales, have also been used by researchers like Appiah-Adu (1997), Keskin (2006), Salavou (2002), and Chan (1998). In their research on market orientation in developing nations, Buli, B.M. (2017) used the Laukkanen et al. (2013) scale of market orientation, which has five items that are comparable to the MKTOR scale. Gaur et al. (2011) similarly measured the market orientation of Indian manufacturing SMEs using a similar scale. The MKTOR scale was used by Amin *et al.* (2016) to gauge market orientation in the Malaysian setting. However, because the concept in question is context-specific, it is crucial to evaluate its validity and reliability in many settings. For this reason, the primary goal of the study was to revalidate the original 15-item MKTOR scale in India's small sector. *Customer orientation (CO), competitor orientation (COMPO), and interfunctional coordination (IC)* make up the original MKTOR scale. Six, four, and five components make up the basic forms of the CO, COMPO, and IC scales, respectively. The availability of information to identify the solution of a set of structural equations is ensured by the three factors, which are indicative of acceptable model identification since they are made up of at least three indications (Hair et al. 2003). Standardised item loadings were equal and above 0.5 for every item on the scale, demonstrating a high correlation between each indication and its corresponding factor. The degree to which a collection of indicators reflects the theoretical elements that underpin convergent validity is indicated by loading=>0.5. Consequently, the following are the relevant customer orientation indicators:

The related parameters are strongly influenced by interfunctional coordination and competition orientation. However, for the "competitor's orientation" and "interfunctional coordination" dimensions, the *average variance extracted (AVE)*, which shows the percentage variation collected by a construct with respect to the other constructs, was discovered to be marginally below the 0.5 threshold limit. Convergent validity is, however, sufficiently supported by large item loadings and construct dependability CRs, which range from 0.71 to -0.85. The discriminant validity of the scale is established when the squared correlation estimate between any two factors and the AVE of the corresponding factor are examined. In each case, the AVE was found to be greater than the squared correlation estimate, indicating that factors explain more variance in their constituent items than they share with other factors. The reliability and validity of the MKTOR scale in the Indian context are demonstrated by the previously indicated index values, AVEs, and CRs of the various aspects of the scale. Oczkowski and Farrell (1998) also emphasised the suitability of the most generalised measure, the MKTOR scale. Additionally, Mavondo & Farrel (2000) reaffirmed the MKTOR scale's broader acceptance across various demographics. Ho et al. (2017), Newman et al. (2016), and Rodríguez & Morant (2016) also reported a similar result.



4. RESEARCH CONTRIBUTIONS:

This study holds significance from the perspectives of scholars and practitioners. While the concept of market orientation emerged in the 1990s, the majority of this study focusses on industrialised economies. Small industries are an even more neglected sector, and rising countries have received less attention. This study contributes something to the corpus of information on market orientation by looking at well-established tools in less known contexts, namely in developing countries. Because their market orientation affects the success of the firms, practitioners consider the market orientation knowledge base to be extremely important. A firm's success and its market orientation are directly correlated, according to researchers such as Keskion (2006), Oyedijo, Ade (2012), and Narver& Slater (1990). Thus, managers can enhance their performance by learning more about a company's market orientation in terms of customer orientation, competitor orientation, and interfunctional coordination using this scale, which has been proven to be valid in the Indian setting.

5. LIMITATIONS AND FURTHER SCOPE FOR THE RESEARCH:

This study has several limitations, which in turn opens new avenues for further research. First, it is a single cross-sectional study focusing only on manufacturing SMEs, and for comprehensive generalization of the scale, it is important to empirically validate the scale in different populations, especially service sector SMEs. Moreover, this paper was not able to address the issue of the nomological validity of the scale; future researchers can address this issue to increase the acceptability of the scale. This paper is a small step toward highlighting the scope of research on *market orientation* in developing economies and small-scale industries.

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Appendix 1

- [114] Construct items of the MKTOR scale
- [115] CO1. “Our objectives are driven primarily by customer satisfaction”.
- [116] CO2.“We constantly monitor our level of commitment and orientation toward customers.
- [117] Our strategy for competitive advantage is based on our understanding of our customer's needs.
- [118] Our business strategies are driven by our beliefs about how we can create greater value for customers”.
- [119] CO5.“We measure customer satisfaction systematically and frequently”.
- [120] CO6.“We pay close attention to after-sales services”.
- [121] COMPO1. “Our salespeople regularly share information within our business concerning competitors' strategies”.
- [122] COMPO2.“We rapidly respond to competitive actions that threaten us”.



- [123] COMPO3. “We target customers where we have an opportunity for competitive advantage”.
- [124] COMPO4. “Top management regularly discusses competitors' strengths and strategies”.
- [125] IC1. “Our managers from every function regularly visit our current and prospective customers”.
- [126] IC2. “We freely communicate information about our successful and unsuccessful customer experiences across all business functions”.
- [127] IC3. “All of our functions are integrated in serving target markets”.
- [128] IC4. “All of our managers understand how everyone in our business can contribute to creating customer value”.
- [129] IC5 “We share resources among different product categories”.

