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# Cross-sectional analysis of relationship between strategic orientation, structural arrangements and size of enterprises in Croatia – a pilot study

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**Objective:** To investigate the relationship between the two basic constructs of organizational design, strategic orientation, and structural arrangements, as well as to re-examine the role of enterprise size in the variations of both constructs.

**Methods:** A cross-sectional study was carried out by regular mail in the first half of 2019, using already existing and empirically validated measurement instruments for the constructs of strategic orientation and organizational structure characteristics. Management board representatives or managing directors of the contacted enterprises were asked for their views on the situation in their enterprise in relation to the researched constructs. Descriptive and bivariate statistical analyses were performed.

**Results:** On the sample of 37 enterprises, the strategic orientation ‘analyzer enterprise’ was predominant. In addition, organic organizational structure characteristics slightly prevailed over mechanistic characteristics. A regression analysis was carried out, establishing a positive relationship between strategic orientation and organizational structure characteristics ( $R^2=0.160$ ;  $P=0.014$ ), especially with communication as a characteristic of mentioned organizational structure ( $R^2=0.239$ ;  $P=0.002$ ). T-tests confirmed the significance of the role of enterprise size for organizational structure characteristics ( $P=0.067$ ). In other words, larger enterprises tend to foster mechanistic organizational structure characteristics. Variations in the types of strategic orientation of enterprises were not related to the size of those enterprises ( $P=0.296$ ).

**Conclusion:** The design and adaptation of organizational and structural arrangements of enterprises are related to their selected strategic orientation. An increase in enterprise size inevitably leads to more rigid mechanistic structural arrangements, while the status of a small enterprise does not automatically imply the ‘prospector’ strategic orientation or the successful development and implementation of innovations.

**Keywords:** enterprise size; mechanistic and organic characteristics; organizational structure; strategic orientation; strategy

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## Introduction

When choosing how to adapt to a changing environment, the dilemma of whether ‘strategy follows structure’ or whether ‘structure follows strategy’ has long existed among scientists and affected the managerial decisions of practitioners. However, relevant scientific literature from Chandler (1962) to date has managed to reach a consensus that strategy is the first and most important building block of any organization, as well as the basis for the shaping of all other building blocks of the organization, including the organizational structure (Cunha, Clegg, Gaim, & Giustiniano, 2022; Mintzberg, Ahlstrand, & Lampel, 2020; Galbraith, 2003; Nadler, Gerstein, & Shaw, 1992).

Strategy means ‘defining basic long-term goals of the organization, adjusting the directions of business activities, and allocating the resources needed to achieve defined goals’ (Chandler, 1962). The closely related notion of strategic orientation refers to strategic principles and directions implemented to direct and influence the activities of a firm and generate proper behavior for ensuring the viability and continuous performance of the business (Hakala, 2011; Gatignon & Xuereb, 1997). To adequately adapt to the observed environmental conditions, organizations develop their strategic orientation as a relatively stable pattern of behavior, including the dimensions of market, entrepreneurial, and technological orientation (Masa’deh, Al-Henzab, Tarhini, & Obeidat, 2018; Miles & Snow, 1978). The chosen strategic orientation – prospector, analyzer, defender, or reactor (Miles & Snow, 1978) – has profound effects on different dimensions of the organization, such as the efficiency at the level of the entire organization and its main constituents, achieved competitive advantage, and general organizational arrangements for the functioning and operation of the enterprise (Jassmy & Bhaya, 2016).

On the other hand, organizational structure can be equated with the basic anatomy, i.e., the ‘skeleton’ of any organization. The organizational structure constitutes an established formal system of relationships and interdependencies among individual parts of the organization, aimed at controlling and coordinating the efforts of all employees towards achieving organizational goals, namely reflected in designed formal positions and hierarchical system, prescribed means of communication and control, and defined employees’ authorities and responsibilities (Daft, 2021; Jones, 2013; Wilson & Rosenfeld, 1990). Depending on different influence factors, from the environment, technology, and enterprise size to the strategy itself, the organizational structure can take different forms (Buble, 2006). As a multilevel lever and a way of achieving the strategy and strategic orientation, the form of the organizational structure is largely defined by a limited set of choices related to the market, how to compete, and how to achieve key competencies. Effective organizational structures need to be aligned with the strategy, meaning that certain types of organizational grouping are more appropriate than others (Cunha et al., 2022; Galbraith, 2003; Nadler & Tushman, 1997). To achieve a high business performance, organic organizational arrangements are more suitable for strategies and strategic orientations that require creativity, innovation, and flexibility from the organization and employees (e.g., differentiation strategy, prospector archetype) (Daft, 2021; Jones, 2013; Cunliffe, 2008). On the other hand, mechanistic organizational arrangements are more suitable for strategies and strategic orientations based on a very clear way of doing business, tighter control, and

greater formalization (e.g., low-cost strategy, defender archetype) (Daft, 2021; Jones, 2013; Cunliffe, 2008).

Although the relationship between strategy and structure has been researched for decades, there are still many unexplored aspects of this relationship (Pertusa-Ortega, Molina-Azorín, & Claver-Cortés, 2010). According to contingency theory, harmonizing the underlying variables in an organization is the key to achieving better organizational performance, while the relevant literature continues to call for additional studies that focus on exploring internal factors that moderate the relationship between strategic orientation and performance (Adams, Freitas, & Fontana, 2019; Escribá-Esteve, Sánchez-Peinado, & Sánchez-Peinado, 2008). Organizational structure is certainly one of the internal moderators. Additionally, the existing research, oriented towards the relationship between strategy (and strategic orientation) and structure, is mainly focused on large organizations, while this relationship was not nearly as researched on samples of medium and especially small organizations (Harty, 2020; Penco, Torre, & Scarsi, 2020; Chatzoglou, Diamantidis, Vraimaki, Vranakis, & Kourtidis, 2011; Aragón-Sánchez & Sánchez-Marín, 2005; Miles, Covin, & Heeley, 2000).

Following the above, the main goal of this study is to provide answers to these questions: What is the nature of the relationship between strategic orientation and formal structural arrangements in enterprises, and are they (strategic orientation and formal structural arrangements) dependent on the size of the enterprise? According to the basic types of strategic orientation – prospector, analyzer, defender, reactor (Miles & Snow, 1978), and the presumption that formal structural arrangements can be identified with basic dimensions of organizational structure – formalization, centralization, differentiation, communication (Marín-Idárraga & Hurtado González, 2021; Angeles, Centeno, & Villanueva, 2019; Jones, 2013; Matic, 2011), two main hypotheses of the study were formulated:

H1: There is a significant relationship between strategic orientation and organizational structure characteristics in enterprises.

H2: Strategic orientation and organizational structure characteristics depend on the enterprise's size.

To test the hypotheses and thereby provide answers to the research questions, the specific objectives of this study are: 1) to gain insights into the main features of strategic orientation and organizational structure characteristics in enterprises of all sizes in the context of a developing country; 2) to investigate the relationships between strategic orientation, organizational structure characteristics and size in researched enterprises, and 3) to critically discuss research findings and contribute to the relevant literature on the relationship between strategic orientation, organizational structure characteristics, and size of enterprises.

## Methodology

To achieve the objectives of this paper, an empirical study was carried out in the Republic of Croatia from January to March 2019, collecting primary data on the strategic orientation and organizational structure characteristics in enterprises.

### Sampling procedure

Following the example of influential studies on strategic orientation and organizational structure (Claycomb & Miller, 1999; Woodside, Sullivan, & Trappey III, 1999; Conant, Mokwa, & Varadarajan, 1990), a survey questionnaire addressed to the management boards or managing directors of enterprises was used as a research instrument. The convenience sampling strategy was applied utilizing prior contacts of researchers with enterprises and the proximity of certain enterprises. Accordingly, the selected 39 enterprises were contacted, and they agreed their top management would complete our questionnaire. This was followed by mailing the survey questionnaires. Once the survey questionnaires were sent back to us, a logical check of the correctness and thoroughness of completing said survey questionnaires was carried out. In the end, 37 thoroughly and correctly completed survey questionnaires (94.9%) were collected and analyzed.

### Measurement indicators

The survey questionnaire consisted of three parts: (1) general enterprise information, (2) measurement indicators of strategic orientation, and (3) measurement indicators of organizational structure characteristics. General enterprise information included six basic enterprise characteristics: activity, ownership, age, complexity and variability of the environment, size, and predominant age of employees. Based on relevant literature (Table 1), the measurement instrument for the strategic orientation construct included a total of seven questions, where the respondents chose one of the four possible answers (strategic types) that best describes the strategic behavior of their enterprise (Matić, 2011). Mentioned instrument constitutes a concise and modified version of the existing empirically tested and validated instrument for determining strategic archetypes by Conant et al. (1990). The measurement instrument used for the construct of organizational structure characteristics included seven questions with a 5-point Likert scale, where respondents assessed the level of presence of a certain organizational structure characteristic in their enterprises. Mentioned instrument constitutes a concise and adapted version (Matić, 2011) of the instrument from the most influential studies that have dealt with measuring organizational structure characteristics, for instance, those by Koufteros, Nahm, Cheng, & Lai (2007), Paswan, Dant, & Lumpkin (1998), and Damanpour (1991). The reliability of both measurement instruments has already been empirically validated (Matić, 2011).

Table 1. Definition and operationalization of the research constructs (according to Wilden, Gudergan, Nielsen, & Lings, 2013; Kumar, Boesso, Favotto, & Menini, 2012)

<b>Reactor</b>	<b>Defender</b>	<b>Analyzer</b>	<b>Prospector</b>
Unstable strategic orientation Inability to respond effectively to changes in the environment Adaptation only under the pressure of the environment	Narrow production/market domain and modest new product development Avoiding unnecessary risks Focus on the efficiency of existing business	A mix of prospector and defender Focus on efficiency in stable market segments Innovation in dynamic market segments	Focus on product and market innovation Maximizing new opportunities Leadership in innovation in order to meet market needs
1	2	Continuum	3
<b>Mechanistic organizational structures</b>			<b>Organic organizational structures</b>
Centralized decision making Strict adherence to formal rules and procedures Strict control of information flows Detailed reporting channels			Decentralized decision making Open communication Organizational flexibility Very little emphasis on formal rules and procedures
1	2	Continuum	4
			5

## Statistical analysis

Statistical analysis has been conducted by using IBM SPSS Statistics 23 software tool. Ordinal data collected for the research constructs of strategic orientation and organizational structure characteristics were transformed into continuous variables by calculating a mean response across a set of questions and used for statistical tests. The data collected for enterprise size was grouped into two groups of enterprises – small enterprises and medium and large enterprises, and as such, was used for conducting statistical tests. Linear regression tests were used to investigate the existence and the nature of the relationship between strategic orientation and organizational structure characteristics, while the t-test for independent samples (with Levene's test of equality of variances) was used to investigate the existence and the nature of the relationship between the size of the surveyed enterprises and the two central research constructs (strategic orientation and organizational structure characteristics). Considering the size of the research sample, the normality of collected data was tested by the Shapiro-Wilk test, in relation to the researched constructs of strategic orientation and organizational structure characteristics (**Table 2**). The obtained results align with the recommended ranges and values, indicating an approximately normal distribution of the collected data (Mishra et al., 2019; George & Mallery, 2010). In conducting listed statistical tests, a level of statistical significance of  $\alpha=0.05$  ( $P<0.05$ ) was used, except for the t-test for independent samples testing where a slightly more flexible statistical significance criterion of  $\alpha=0.1$  ( $P<0.1$ ) was used.

## Results

### *Demographic parameters of the analyzed enterprises*

The research sample consisted of 37 enterprises from the Republic of Croatia. The core activity of most enterprises from the sample were a public, group, and personal services ( $n=7$ ), followed by the enterprises engaged in trade or repair of motor vehicles ( $n=6$ ), and those engaged in processing activities ( $n=5$ ). Almost two thirds of enterprises from the sample were privately owned ( $n=23$ ), while the rest of the sample consisted of state-owned ( $n=10$ ) and mixed-ownership enterprises ( $n=4$ ). The sample was dominated by enterprises that were over 20 years old ( $n=27$ ), followed by those between 11 and 20 years old ( $n=9$ ). Most enterprises from the sample believed that they do business in a predominantly complex and changing environment ( $n=15$ ). Those enterprises were followed by the enterprises believing they do business in a partially simple and stable, and partially complex and changing environment ( $n=10$ ), and then by those believing they do business in a very complex and changing environment ( $n=8$ ). The smallest enterprise from the sample employed 20 people, and the largest employed 10,908 people. The middle half of the enterprises from the sample employed between 44 and 225 people (interquartile range ( $IQR$ )=181), while half of the enterprises from the sample had more than 86 employees ( $Mdn=86$ ). Considering the criterion of the number of employees (European Commission, 2003) as an indicator of enterprise size, according to which 50 employees constitutes the dividing line between small vs. medium and large enterprises, almost two thirds of the sample con-

sisted of medium and large enterprises (n=23). Finally, in most of the enterprises from the sample (n=33), employees were mostly middle-aged (34 – 49 years of age).

Table 2. Testing the normality of distribution of the collected data related to the researched constructs (N=37)\*

Researched constructs	Skewness	Kurtosis	Shapiro-Wilk test of normality		
			Statistic	df	P
Strategic orientation:	-0.015	-0.732	0.975	37	0.575
Small enterprises	0.034	-0.565	0.932	14	0.324
Medium and large enterprises	-0.006	0.753	0.954	23	0.360
Organizational structure characteristics:	0.065	-0.349	0.982	37	0.809
Small enterprises	-0.187	-0.169	0.976	14	0.944
Medium and large enterprises	0.261	-0.558	0.968	23	0.636

\* Abbreviations: N – sample size, df – degrees of freedom, P – probability.

### *Strategic orientation and organizational structure characteristics in the analyzed enterprises*

On a 1 to 4 continuum, on average, the surveyed enterprises had the strategic type of analyzer (value 3;  $M \pm SD=2.93 \pm 0.49$ ), which is a combination of the defender (value 2) and prospector (value 4) type (Table 3). The managers of the surveyed enterprises devoted a significant amount of time to monitor their environment, and they mostly based their strategy and the achievement of competitive advantages on learning and knowledge. As for their market presence, the surveyed enterprises combined the defense of obtained market positions (for some or most market segments), accompanied by them offering stable and consistent products, with the selective entry into new markets, accompanied by more innovative and changing products. The way they competed is primarily through differentiated products/services for individual market segments. The basic characteristics that made a difference and provided an advantage to the surveyed enterprises over their competition were keeping costs under control, selectively generating new products/services or entering new markets, and the ability to carefully analyze emerging trends and adopt the ones that showed potential.

Table 3. Predominant strategic orientation in the surveyed enterprises (N=37)\*

Strategic orientation dimension†	M	SD
Monitoring the environment by the management	3.14	0.79
Knowledge as the basis of strategy and achieving competitive advantages	3.16	0.65
Predominant generic strategy	3.07	0.85
Dominant appearance on the market	2.84	0.80
Products of the enterprise vs. competition	2.54	0.87
Objectives of the enterprise vs. competition	2.86	1.00
The most important characteristic of the enterprise protecting it from competition	2.89	0.88
<b>Strategic orientation (average value)</b>	<b>2.93</b>	<b>0.49</b>

\*Abbreviations: M – mean, SD – standard deviation.

†Estimated from 1 (low) to 4 (high).

The surveyed enterprises had structural arrangements with the characteristics of both mechanistic organizational structures (functional, divisional, matrix) and organic organizational structures (team/process-based, network-based, virtual), with the characteristics of organic organizational structures being somewhat more represented ( $M \pm SD=3.65 \pm 0.42$ ) (Table 4). Given the total number of employees, the number of management levels in the surveyed enterprises was nearly optimal. In addition, there was a moderate level of formalization (existence of prescribed standards, procedures, and instructions for the execution of tasks), while centralization (most decisions being made exclusively by the top management) was very pronounced. Furthermore, the degree of specialization of employees of the surveyed enterprises was medium to high, communication was fast, easy, and rich, and the management successfully managed the business in such, still mostly flexible structural arrangements.

Table 4. Organizational structure characteristics in the surveyed enterprises (N=37)\*

Organizational structure characteristic†	M	SD
Formalization	2.81	1.24
Number of management levels	2.84	1.12
Specialization	3.43	0.87
Centralization	4.70	0.52
Communication	3.89	0.77
Flexibility of the organizational structure	3.89	0.84
Effectiveness of management methods	3.97	0.83
<b>Organizational structure characteristics (average value)</b>	<b>3.65</b>	<b>0.42</b>

\*Abbreviations: M – mean, SD – standard deviation.

†Estimated from 1 (not present at all) to 5 (completely present).

### *The relationship between strategic orientation and organizational structure characteristics in the analyzed enterprises*

The relationship between strategic orientation and organizational structure characteristics was tested by linear regression (Table 5). The produced regression model suggested that 16% of the variations in organizational structure characteristics of the surveyed enterprises could be explained by variations in the strategic orientation of mentioned enterprises. The relationship between strategic orientation and organizational structure was weak ( $R^2=0.160$ ;  $P=0.014$ ). It should be noted that, based on the range of  $R^2$  values considered acceptable in the social sciences (Vo-Thanh et al., 2020; Esfandiar, Sharifi-Tehrani, Pratt, & Altinay, 2019; Falk & Miller, 1992), the effect of strategic orientation on organizational structure could be of some significance. Therefore, it is likely that the H1 hypothesis of this study was confirmed. However, other predictors (besides strategic orientation) would also need to be included in the model to assess better how strategic orientation contributes to the observed variability in organizational structure of the analyzed enterprises.



Table 5. Results of testing the relationship between strategic orientation and organizational structure characteristics in the surveyed enterprises (N=37)\*

Dependent variable	Independent variable	Regression results	B	SE B	$\beta$	t	P
Organizational structure characteristics (total)	Strategic orientation	Constant=4.369 F (1.35)=6.667 P<0.05 R <sup>2</sup> =0.160	0.348	0.135	0.400	2.582	0.014
Communication	Strategic orientation	Constant=5.497 F (1.35)=10.974 P<0.01 R <sup>2</sup> =0.239	0.775	0.234	0.489	3.313	0.002

\*Abbreviations: F – F-test of overall significance, R<sup>2</sup> – goodness-of-fit measure, B – unstandardized beta, SE B – standard error for the unstandardized beta,  $\beta$  – standardized beta, t – t test statistics.

Communication, unlike other organizational structure characteristics, showed the greatest susceptibility to the influence of variations in strategic orientation (Table 5). Thus, according to a statistically significant regression model ( $P < 0.01$ ), 24% of the variations in communication in the surveyed enterprises could be explained by variations in their strategic orientation.

### *The role of the size of the analyzed enterprises in their strategic orientation and organizational structure characteristics*

The relevant literature assumes enterprise size plays a significant role in its chosen strategic orientation and orientation's usefulness for business results. In this study, the results of testing the differences in the strategic orientation of the surveyed enterprises in relation to their size indicated that there was no statistically significant difference in strategic orientation between small, medium, and large enterprises ( $t(35) = 0.540$ ;  $P > 0.10$ ) (Table 6). On the other hand, the assumption that larger enterprises foster structural arrangements that are more rigid, formalized, and unlikely to change (i.e., characteristics of the mechanistic organizational structure) was confirmed as statistically significant ( $t(35) = 1.540$ ;  $P < 0.10$ ). With one tested relationship being statistically significant (organizational structure characteristics in relation to size) and the other one not being statistically significant (strategic orientation in relation to size), hypothesis H2 of this paper was partially confirmed in its part related to organizational structure characteristics.

Table 6. Results of testing the role of the size of the surveyed enterprises in their strategic orientation, as well as in the characteristics of the organizational structure (N=37)\*

Dependent variable	Levene's test for equality of variances	Enterprise size				Mean diff.	t	P
		Small (n=14)		Medium and large (n=23)				
		M	SD	MD	SD			
Strategic orientation	F (1.35)=0.009 P>0.10	2.02	0.51	2.11	0.48	-0.09	0.540	0.296
Organizational structure characteristics	F (1.35)=0.485 P>0.10	3.73	0.43	3.51	0.40	0.22	1.540	0.067

\*Abbreviations: M – mean, SD – standard deviation.

## Discussion

The study achieved its main goal by providing answers to the research questions on the existence and the nature of the relationship between strategic orientation and formal structural arrangements in enterprises and are they (strategic orientation and formal structural arrangements) dependent on the size of the enterprise. In this sense, two research hypotheses set in the study were empirically tested and H1 was confirmed, whereas H2 was partially confirmed. Apart from investigating their mutual relationship, conducted study offered insights into the main features of strategic orientation and organizational structure characteristics in enterprises of all sizes in the context of developing county, thereby achieving two of its three specific research objectives. Third specific research objective, focused on the critical discussion of the research findings, is achieved in the following text.

By confirming the H1 hypothesis, this study supported the notion of a significant positive relationship between strategic orientation and formal structural arrangements in enterprises of all sizes. Obtained findings suggest that variations in the strategic orientation result in adjustments in organizational structure characteristics of mentioned enterprises. Whether they wish to be leaders in the innovation of new products/services, develop and enter new markets, or defend the obtained market position with increased efficiency, enterprises must adapt their organizational and structural arrangements to the chosen strategic type. The shift in the strategic orientation of an enterprise from the defender to the prospector type results in an adjustment of its structural arrangements, namely towards arrangements that are more dominated by the characteristics of organic organizational structures. Strategies and strategic orientations that strive to direct organizations on a path of creativity, innovation, constant adaptation, and development of new products/services, as well as development and entry on new markets, require appropriate organizational arrangements in their implementation. Organic organizational arrangements free of a myriad of formal rules, procedures and established processes, with a narrow range of management control and significant vertical and horizontal differentiation, fostering the decentralization of authority, as well as intense cooperation and mutual adjustment by employees, teamwork, and rich formal and informal communication, represent an ideal lever for the application of strategic orientation based on innovation and adaptability (Daft, 2021; Jones, 2013).

Above discussed results support the conclusions of Mishra, Kumar, Sharma, & Dubey (2018) that prospectors have more flexible organizational structure in comparison to those of defenders, and the conclusions of study by Pleshko (2007), which found a link between the strategic orientation of enterprises and their structural configurations, where majority of enterprises were strategic type of the defender or analyzer, and those enterprise had combined structural configuration. Additionally, the results related to the H1 hypothesis of this paper, although obtained on a very small sample, present a contribution to the relevant literature, as the lack of research on the relationship between strategic orientation and organizational structure, on the samples of enterprises of all sizes, is repeatedly stressed by scholars (Harty, 2020; Penco et al., 2020; Chatzoglou et al., 2011; Aragón-Sánchez & Sánchez-Marín, 2005; Miles et al., 2000). Further, findings in this study emphasize communication as an aspect of organizational and structural arrangements

that is significantly more susceptible to the effects of changes in strategic orientation than formalization, centralization, or differentiation. This is not surprising given the fact that rich, uninhibited and fast communication inside and outside the enterprise as well as the availability of quality and required information are among the key success factors of the chosen strategic orientation (Kumar & Sharma, 2017).

Our study only partially confirmed the H2 hypothesis. Namely, study findings suggest that the size of the enterprise plays a significant role in defining its organizational structure characteristics, and does not play a significant role in choosing strategic orientation of the enterprise. This is somewhat surprising given the predominant position in the relevant literature, according to which medium and large enterprises perform better as prospectors, compared to defenders and analyzers, whereas small enterprises perform better as defenders (Saraç, 2019). Although, considering the definitions of strategic types of analyzer and, above all, prospector (Miles & Snow, 1978), it can be assumed that small enterprises, due to their great ability to adapt and innovate, are more suitable for these strategic types and are the best for implementing innovations, this is not the case. Quite opposite, small enterprises proved to be at a disadvantage compared to large enterprises when it comes to introducing and organizing the tools and techniques needed to create innovations (Ejdys, 2014). Successful innovation is a complex task for small- and medium-sized enterprises that do not have the resources and know-how to invest in R&D activities and thus cannot always turn R&D into effective innovation, namely also due to organizational challenges (Laforet, 2008). Moreover, small enterprises would rather choose the defender strategic type than be innovation leaders, i.e., take on the prospector strategic type (Laforet, 2008). Therefore, being smaller and more flexible without adequate organizational and management settings does not guarantee enterprises a greater ability to create or effectively implement innovations, especially not on a constant and long-term basis. In this sense, the results of this study, related to the relationship between the size and strategic orientation of enterprise, seem to differ from the relevant literature's dominant stance.

On the other hand, the existence of the relationship between enterprise size and organizational structure characteristics has already been documented in the relevant literature (Daft, 2021; Jones, 2013; Sikavica, 2011; Buble, 2006; Child, 1973) and has been further confirmed by the results of this study. Enterprises become more vertically and horizontally differentiated, standardized, and formalized as their size increases, namely with employees who are highly specialized and with formally defined channels of communication, while the centralization of authority to some extent gives way to decentralization. Such large enterprises inevitably lose organizational flexibility and the ability to adapt to changes in the environment. This is also their biggest challenge when it comes to surviving in the current highly volatile environment. In fact, with the increase in enterprise size, organic characteristics of the organizational structure give way to mechanistic characteristics, calling into question organizational adaptability and readiness to adopt new and different (innovations).

### *Study limitations and future research opportunities*

As any, this study has its limitations. The first limitation of this study is its small sample, consisting of only 37 enterprises. A sample of this size makes generalization of research

findings somewhat difficult. Furthermore, the convenience sampling method was used for data collection, which may have led to a bias in the selection of sampled enterprises. In addition, the study covered several activities, even though results from only one industry would have been more valid given our sample size (Chatzoglou et al., 2011). Another limitation of this study is related to the issue of common method bias (Jordan & Troth, 2020), as the same respondent answered questions about the independent (strategic orientation) and the dependent variable (organizational structure characteristics). Finally, although regression tests that were conducted have established a statistically significant relationship between strategic orientation and organizational structure characteristics, to draw conclusions on causation, endogeneity needs to be eliminated from research models (Antonakis, Bendahan, Jacquart, & Lalive, 2010), namely either by conducting the necessary statistical procedures for testing endogeneity in models, or by applying longitudinal studies.

Given the study's results and limitations, it would be advisable to carry out similar studies on a significantly larger sample of enterprises of all sizes, as well as in an international context. The longitudinal study design is the adequate design for a valid demonstration of the interrelationship between strategic orientation and organizational structure, as well as to the influence of the size of enterprise in their formulation and mutual relationship. In addition, other demographic variables of enterprises such as ownership, age, location of the registered office, nature of the environment/industry where the enterprise operates (complexity, variability), etc., would certainly be worth exploring as potentially important determinants of strategic orientation, organizational structure, and their relationship. How certain organizational structure characteristics are defined by the chosen strategic orientation, as well as why some of them (communication) are more susceptible to variations in the strategic orientation than others (formalization or differentiation) should be clarified by the future studies on relationship between strategic orientation and structural arrangements of enterprises.

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## References

- Adams, P., Freitas, I. M. B., & Fontana, R. (2019). Strategic orientation, innovation performance and the moderating influence of marketing management. *Journal of Business Research*, *97*, 129–140.
- Angeles, A., Centeno, E., & Villanueva, C. E. (2019). Examining structural flexibility factors in SMEs: A mixed methods study in Mexico. *Electronic Journal of Business Research Methods*, *17*(1), 28–42.
- Antonakis, J., Bendahan, S., Jacquart, P., & Lalive, R. (2010). On making causal claims: A review and recommendations. *The Leadership Quarterly*, *21*(6), 1086–1120.
- Aragón-Sánchez, A., & Sánchez-Marín, G. (2005). Strategic orientation, management characteristics, and performance: A Study of Spanish SMEs. *Journal of Small Business Management*, *43*(3), 287–308.
- Buble, M. (2006). *Menadžment*. Split: Faculty of Economics, University of Split.
- Chandler, A. D. (1962). *Strategy and structure: Chapters in the history of the industrial empire*. Boston, USA: The MIT Press Ltd.
- Chatzoglou, P. D., Diamantidis, A. D., Vraimaki, E., Vranakis, S. K., & Kourtidis, D. A. (2011). Aligning IT, strategic orientation and organisational structure. *Business Process Management Journal*, *17*(4), 663–687.
- Child, J. (1973). Predicting and understanding organization structure. *Administrative Science Quarterly*, *18*(2), 168–185.
- Claycomb, V., & Miller, S. J. (1999). The relationship between market-based organisational learning orientation and organisational structure across various contingency variables. *Journal of Marketing Management*, *9*(2), 1–18.
- Conant, J. S., Mokwa, M. P., & Varadarajan, P. R. (1990). Strategic types, distinctive marketing competencies and organisational performance: A multiple measures-based study. *Strategic Management Journal*, *11*(5), 365–383.
- Cunha, M. P., Clegg, S., Gaim, M. & Giustiniano, L. (2022). *Elgar introduction to designing organizations*. Cheltenham, UK: Edward Elgar Publishing.
- Cunliffe, A. L. (2008). *Organization theory*. Thousand Oaks, CA: Sage.
- Daft, R. L. (2021). *Organization theory & design*. Andover, UK: Cengage learning.
- Damanpour, F. (1991). Organisational innovation: A meta-analysis of effects of determinants and moderators. *Academy of Management Journal*, *34*(3), 555–590.
- Ejdys, J. (2014). Strategic orientation of small and medium size enterprises. *Economics and Management: 2014*, *19*(4), 346–358.
- Escribá-Esteve, A., Sánchez-Peinado, L., & Sánchez-Peinado, E. (2008). Moderating influences on the firm's strategic orientation-performance relationship. *International Small Business Journal*, *26*(4), 463–489.
- Esfandiar, K., Sharifi-Tehrani, M., Pratt, S., & Altinay, L. (2019). Understanding entrepreneurial intentions: A developed integrated structural model approach. *Journal of Business Research*, *94*, 172–182.
- European Commission. (2003). *Recommendation concerning the definition of micro, small and medium-sized enterprises - document number C(2003) 1422*. Retrieved from [http://publications.europa.eu/resource/cellar/6ca8d655-126b-4a42-ada4-e9058fa45155.0004.01/DOC\\_1](http://publications.europa.eu/resource/cellar/6ca8d655-126b-4a42-ada4-e9058fa45155.0004.01/DOC_1)
- Falk, R. F., & Miller, N. B. (1992). *A primer for soft modeling*. Ohio, USA: University of Akron Press.
- Galbraith, J. (2003). *Strategy and organization consulting*, Center for Effective Organizations Publication G 03-19 (447). Retrieved from [https://ceo.usc.edu/wp-content/uploads/2003/05/2003\\_19-g03\\_19-Strategy\\_and\\_Organization\\_Consulting.pdf](https://ceo.usc.edu/wp-content/uploads/2003/05/2003_19-g03_19-Strategy_and_Organization_Consulting.pdf)
- Gatignon, H., & Xuereb, J. M. (1997). Strategic orientation of the firm and new product performance. *Journal of Marketing Research*, *34*(1), 77–90.

- George, D., & Mallery, M. (2010). *SPSS for Windows step by step: A simple guide and reference, 17.0 update, (10a ed.)*. London, UK: Pearson.
- Hakala, H. (2011). Strategic orientations in management literature: Three approaches to understanding the interaction between market, technology, entrepreneurial and learning orientations. *International Journal of Management Reviews, 13*(2), 199–217.
- Harty, R. (2020). *Exploration of the relationship between market information resource and new product development: The role of strategic orientation as an integrating mechanism in micro and small firms* (Doctoral dissertation). Retrieved from <https://pure.qub.ac.uk/en/studentTheses/exploration-of-the-relationship-between-market-information-resour>
- Jassmy, B. A. K., & Bhaya, Z. M. A. (2016). Strategic orientation and effects on organisational performance - Analytical study in real estate banks in Al-Dewaniya Province. In Popa, I., Dobrin, C., & Ciocoiu, C. N. (Eds.). *Proceedings of the 10th International Management Conference: Challenges of Modern Management, 10*(1), Bucharest, Romania: Faculty of Management, Academy of Economic Studies, 200–212.
- Jones, G. R. (2013). *Organisational theory, design, and change (7th ed.)*. London, UK: Pearson Education Limited.
- Jordan, P. J., & Troth, A. C. (2020). Common method bias in applied settings: The dilemma of researching in organizations. *Australian Journal of Management, 45*(1), 3–14.
- Koufteros, X. A., Nahm, A. Y., Cheng, T. E., & Lai, K. H. (2007). An empirical assessment of a nomological network of organisational design constructs: From culture to structure to pull production to performance. *International Journal of Production Economics, 106*(2), 468–492.
- Kumar, K., Boesso, G., Favotto, F., & Menini, A. (2012). Strategic orientation, innovation patterns and performances of SMEs and large companies. *Journal of Small Business and Enterprise Development, 19*(1), 132–145.
- Kumar, V., & Sharma, R. R. K. (2017). An empirical investigation of critical success factors influencing the successful TQM implementation for firms with different strategic orientation. *International Journal of Quality & Reliability Management, 34*(9), 1530–1550.
- Laforet, S. (2008). Size, strategic, and market orientation effects on innovation. *Journal of Business Research, 61*(7), 753–764.
- Marín-Idárraga, D. A., & Hurtado González, J. M. (2021). Organisational structure and convergent change: Explanatory factors in SMEs. *Journal of Small Business and Enterprise Development, 28*(6), 908–926.
- Masa'deh, R., Al-Henzab, J., Tarhini, A., & Obeidat, B. Y. (2018). The associations among market orientation, technology orientation, entrepreneurial orientation and organisational performance. *Benchmarking: An International Journal, 25*(8), 3117–3142.
- Matić, I. (2011). *Međuovisnost razvijenosti organizacijskog učenja i izbora arhitekture organizacije* (Doctoral dissertation). Faculty of Economics, University of Split.
- Miles, M. P., Covin, J. G., & Heeley, M. B. (2000). The relationship between environmental dynamism and small firm structure, strategy, and performance. *Journal of Marketing Theory and Practice, 8*(2), 63–78.
- Miles, R. E. & Snow, C. C. (1978). *Organisational strategy, structure, and process*. NY, USA: McGraw-Hill.
- Mintzberg, H., Ahlstrand, B., & Lampel, J. B. (2020). *Strategy safari*. London, UK: Pearson.
- Mishra, D., Kumar, S., Sharma, R. R. K., & Dubey, R. (2018). Outsourcing decision: do strategy and structure really matter? *Journal of Organisational Change Management, 31*(1), 26–46.
- Mishra, P., Pandey, C. M., Singh, U., Gupta, A., Sahu, C., & Keshri, A. (2019). Descriptive statistics and normality tests for statistical data. *Annals of Cardiac Anaesthesia, 22*(1), 67–72.
- Nadler, D. A., Gerstein, M. C., & Shaw, R. B. (1992). *Organisational architecture: Designs for changing organizations*, San Francisco, USA: Josey-Bass Publishers.
- Nadler, D., & Tushman, M. (1997). *Competing by design: The power of organisational architecture*. Oxford, UK: Oxford University Press.
- Paswan, A. K., Dant, R. P., & Lumpkin, J. R. (1998). An empirical investigation of the linkages among relationalism, environmental uncertainty, and bureaucratization. *Journal of Business Research, 43*(3), 125–140.

- Penco, L., Torre, T., & Scarsi, R. (2020). Does strategic orientation influence strategy formulation and organisational design in Italian food medium sized enterprises? The role of the family. *British Food Journal*, 122(5), 1397–1419.
- Pertusa-Ortega, E. M., Molina-Azorín, J. F., & Claver-Cortés, E. (2010). Competitive strategy, structure and firm performance: A comparison of the resource-based view and the contingency approach. *Management Decision*, 48(8), 1282–1303.
- Pleshko, L. P. (2007). Strategic orientation, organisational structure, and the associated effects on performance. *Journal of Financial Services Marketing*, 12(1), 53–64.
- Saraç, M. (2019). Which firms outperform the others under uncertainty: Revisiting Miles and Snow typology. *International Journal of Social Inquiry*, 12(1), 261–285.
- Sikavica, P. (2011). *Organizacija*. Zagreb: Školska knjiga.
- Vo-Thanh, T., Vu, T. V., Nguyen, N. P., Nguyen, D. V., Zaman, M., & Chi, H. (2020). How does hotel employees' satisfaction with the organization's COVID-19 responses affect job insecurity and job performance? *Journal of Sustainable Tourism*, 29(6), 907–925.
- Wilden, R., Gudergan, S. P., Nielsen, B. B., & Lings, I. (2013). Dynamic capabilities and performance: strategy, structure and environment. *Long Range Planning*, 46(1-2), 72–96.
- Wilson, D. C., Rosenfeld, R. H. (1990). *Managing organizations – Text, readings and cases*. NY, USA: McGraw-Hill Book Company Limited.
- Woodside, A. G., Sullivan, D. P., & Trappey III, R. J. (1999). Assessing relationships among strategic types, distinctive marketing competencies, and organisational performance. *Journal of Business Research*, 45(2), 135–146.