The strategic innovation under information technological turbulence: the role of organisational resilience in competitive advantage

Aluisius Hery Pratono
Faculty of Business and Economics, Universitas Surabaya, Surabaya, Indonesia

Received 29 March 2021
Revised 14 September 2021
11 November 2021
14 November 2021
Accepted 5 December 2021

Abstract

Purpose – This study aims to propose a structural model drawing from the theoretical literature, extending the relative research fields to the competitive strategy. The empirical results involve data collection of 582 data that represents various enterprises in the Indonesian context. The authors develop four scenarios of strategic innovation based on the empirical findings, which extend the discussion on the concept of competitive strategy.

Design/methodology/approach – This paper aims to examine the impact of organisational resilience and marketing communication on competitive advantage through new product development under information technological turbulence.

Findings – The results indicate that product development is less effective to firm competitive advantage during the high information technological turbulence than during low information technological turbulence. This study shows that organisational resilience and marketing communication help firms achieve a competitive advantage. The authors also identify four scenarios for strategic innovation, drawing from empirical results.

Originality/value – This paper extends the literature of resource-based views by proposing a model that concerns product development as the primary determinant of competitive advantage. In addition, this study discusses the intersection between the concept of dynamic capability and contingency theory by examining how firms deal with information technological turbulence.

Keywords Marketing communication, Competitive advantage, Product development, Organisational resilience, Innovation strategy, Information technological turbulence

Paper type Research paper

Introduction

Competitive strategy emphasis the persistent competitors in the market, which firms attempt to gain and sustain an advantage over the rivals by achieving a strong market position (Walker and Madsen, 2016). The emergence of technological turbulence raises demand for organisational change rooted in a dynamic social structure to manage intangible assets and balance innovation portfolios by cutting across traditional sectoral boundaries (Lawrence and Phillips, 2019). Teece (2019) highlights hyper-competition, which shows the capability of the organisation to recover from a crisis by generating rapid innovation and adopting greater autonomy to deal with global opportunities.

The Indonesian Ministry of Education, Cultural, Research and Technology. 0328/PKD-SDM/ST/III/2021.

The author extends the gratitude to the Indonesian Ministry of Education, Cultural, Research and Technology for providing the research grant with letter of 0328/PKD-SDM/ST/III/2021.

Competitiveness Review: An International Business Journal
Vol. 32 No. 3, 2022
pp. 475-491

1059-5422
DOI 10.1108/CR-03-2021-0046

The COVID-19 pandemic has brought unpredictable technological turbulence, making conventional competitive strategies ineffective, especially among firms adopting innovative paradigms (Vrontis and Christofi, 2019). The pandemic has pressured firms to continuously innovate by maintaining customer relationships, while other firms prefer to capitalise on their resource in shifting their product development (Zahra, 2021). Entrepreneurs seek to identify the opportunities during the pandemic by generating innovation, but many fail to exploit the valuable resources to attain competitive strategies (Audretsch *et al.*, 2021). Hence, business organisations require resilience capability by establishing various scenarios under uncertain contexts (Wernerfelt and Karnani, 1987; Meadows and O'Brien, 2020).

It appears that innovation is critical to competitive strategy during the crisis, but how a firm lays a foundation for a resilient organisation through enhancing innovation processes calls for further empirical evidence (Teixeira and Werther, 2013). The consecutive disruptions highlight the increased need to exploit the information-processing capabilities to manage the firm competitive advantage (Belhadi *et al.*, 2021). The buyer-supplier relationship plays a pivotal role in competitive advantage, but it is very dynamic. Hence, it needs to explore moderating variables to explain the dynamic relationship between the innovation process and competitive advantage (Afraz *et al.*, 2021).

This article aims to examine the impact of organisational resilience and marketing communication on competitive advantage by proposing a structural equation model. Furthermore, this study proposes information technological turbulence as moderating variable to understand the effectiveness of product development to contribute to firm competitive advantage. The second part of this article discusses the theoretical framework and proposes scenarios following the empirical results to extend the discussion on resilience strategies during the pandemic.

Literature review

Our concept for the competitive strategy rests on two mainstream theories. Firstly, this study underpins the resource-based view, which posits that resources necessary to enhance the capability to develop new products has melted into various organisational functions. Secondly, this study underpins the contingency theory to explain how the exogenous element determines the performance of the competitive strategy. The dynamic capabilities demonstrate how firms deal with information technological turbulence.

The traditional competitive strategies focus on product differentiation and cost leadership by adapting the complex economic scenarios at both organisational and aggregate levels (Festa *et al.*, 2017). The extensive development in economic discussion over competitive strategies focusses on types of market structure to support innovation, namely, the "Schumpeterian debate" (Teece, 2019). In addition, many firms at the early stage of business development seek to develop a capability to identify the opportunity and convert it into commercial innovation during the pandemic (Alvarez and Barney, 2020).

Firms face trade-off types of strategies: wait, focus and flexibility under uncertainty (Wernerfelt and Karnani, 1987). Under the dynamic environment, strategic decision focusses on resource conservation to deal with potential changes in competitive position (Bigelow and Barney, 2021). Literature shows that individual behaviour of business players demonstrates more successful impose competitive strategy than characteristics of the industry, which sets frameworks that unfortunately ignore intangible assets, firm capabilities, innovation and disequilibrium phenomena (Teece, 2019).

Competitive strategy and competitive advantage

The literature shows various competitive strategies that impose on firm performance differently (Jusoh and Parnell, 2008). A successful strategy in acquiring intangible resources involve enterprise-level capabilities to meet customer needs by generating new opportunities before others do and going partnership relevant to the dynamic business environment (Teece, 2019). The absorptive capacity to generate commercial innovation is more appropriate for small firms with a flexible organisation structure than large companies with hierarchic organisational structures (Zou *et al.*, 2018).

Product development embraces a unique task and dynamic activities that pose various levels of risk at different manufacture, which demonstrates predictable tasks, repeated movements and zero-defect output (Thomke and Reinetsen, 2012). A strategy is unique for each firm that requires different types of performance measures. Most empirical studies in strategic management adopt firm performance from value creation theory, which emphasises accounting and financial measurement (Barney, 2020).

The missing growth from creative innovation shows the gap between measured productivity growth and arrival rate for new varieties (Aghion *et al.*, 2019). Moreover, product development is a continuous process, which requires support from various stakeholders along the value chain. Hence, the ventures challenge to find the most efficient approach to deal with these different stakeholders (Barrane *et al.*, 2021). Accordingly, the question of competitive strategy comes to the survival rate of those ventures experiences (Zahra, 2021).

Product development

Creation theory argues that entrepreneurship demonstrates the ability to create opportunities by developing a competitive strategy to deal with the uncertainty of possible outcomes (Alvarez and Barney, 2020). Innovation indicates how product development meets the market by adopting the innovative process in production or service operation to generate rapid product development (Zou *et al.*, 2018). Creative destruction comes from new product development in a new plant and spring from incumbent plants (Aghion *et al.*, 2019). Allocating valuable resources to support product development is the most challenging issue among firms during environmental turbulence (Pratono and Han, 2021).

The strategy focusses on capitalising on business opportunities through exploiting information technologies by allying with other companies to generate frugal innovation (Zahra, 2021). The invention requires the dynamic entrepreneurial capability of seizing business opportunities that spring from knowledge spill-over in which regional socioeconomic or cultural clusters provide support (Audretsch *et al.*, 2021). This process requires firms to involve key partners from the early stages of product design, enactments for product safety and copyrights, and review sections through solicited feedback (Barrane *et al.*, 2021).

The innovation demonstrates how firms explore business opportunities and exploit their valuable resources to develop a new product, posing various consequences in different time horizons (Kim *et al.*, 2015). The exploration entails some unforeseen discoveries through experimentation, while exploitation is associated with product refinement by increasing the utilisation of resources (Sinha, 2015). In addition, the exploitation may adopt less-enabling technologies, which requires an intersection between intellectual property and complementary assets to support competitive innovation (Gambardella *et al.*, 2021):

H1. Product development has a positive impact on competitive advantage.

Organisational resilience

Organisational resilience shows firms adopt a positive manner to deal with the pandemic, natural risk and other catastrophic. In contrast, others are alert to minor accidents with creeping changes (Bell, 2019). Resilience literature springs from multi-disciplinary and multi-faceted presents, which involve some elements, such as readiness, adaptation and recovery (Bhamra, 2016). This approach calls for transformation and agility at an individual and the team level with varying demands of market turbulence to meet competitive advantage (Sharma and Sharma, 2020).

Organisational resilience shows the ability to recover from the crisis by increasing environmental awareness to deal with turbulence and discontinuities (Goncalves *et al.*, 2019). Risk-taking behaviour is the most prominent effort for resilience strategy (Pratono, 2021). Organisation resilience also reflects the capability to continuously manage equilibrium in a dynamic business environment by controlling the resources and absorbing an economic impact without changing the ecological structure (Melián-Alzola *et al.*, 2020). However, traditional organisations with the well-established bureaucratic procedure, hierarchic organisational structure, economies of scale and fixed employees experience an unsuccessful attempt to adopt digital products for their competitive advantage (Siachou *et al.*, 2021):

H2. Organisation resilience has a positive impact on competitive advantage.

The concept of organisational resilience emerged alongside studies on socio-ecological systems, supply chains and communities (Burnard and Bhamra, 2011). The organisational agility and resilience elements emerged from the organisational theory, which involves both an internal organisation system and external dynamic competition. Most empirical studies concerns establishing a stable organisation structure by addressing goal complexity, interpersonal approach and communication (Shafritz *et al.*, 2015). The new types of resilience shows the flexible team-based structures to enable sharing learning process across the organisation (Holbeche, 2018).

The organisation with the ability to develop strategic resilience will attain a competitive advantage in the future (Burnard and Bhamra, 2011). The competitive strategy concerns long-term survival by enhancing the normative control system to promote risk awareness (Andersson *et al.*, 2019). Furthermore, the proactive approach allows the firms to become more agile by adopting the dynamic markets through enhancing the capability to optimise the information technology support. At the same time, reactive organisations tend to be passive to anticipate the changing business environment (Granig and Hilgarter, 2020):

H3. Organisational resilience has a positive impact on product development.

Marketing communication

Traditional marketing communication focusses on delivering information through various hierarchical sequence approaches (Finne and Grönroos, 2009). The classical literature considers marketing communication from the corporate context instead of promoting stakeholder participation (Johnston *et al.*, 2020). Conventional marketing communication relies on word of mouth communication, which provides valuable resources to the competitive strategy through social media networks and youth engagement (Englund *et al.*, 2020).

Marketing communication is essential for a firm competitive advantage. However, not all firms allocate their resource to their marketing communication capability and prefer other

capabilities (Falahat *et al.*, 2020). For example, a creative communication strategy is helpful to small producers and retailers to promote their products. In contrast, social marketing communication strategies help them change their consumers' behaviour to favour more sustainable production (Mkhize and Ellis, 2020).

Adopting digital marketing research through a company website or social media is not effective in seizing opportunities from millennial consumers unless the firm can develop personalised communication with the salesperson (Hänninen and Karjaluoto, 2017). The competitive strategy requires more alignment from the marketing communication strategy by gaining support from customers (Valos *et al.*, 2016). Developing regular and continuous communication is critical to avoid the failure of cross-culture collaboration that supports competitive advantage (Pratono, 2020):

H4. Marketing communication has a positive impact on competitive advantage.

The market information is essential to support marketing-manufacturing integration, especially during the early stages of new product development (Feng *et al.*, 2018). The traditional marketing approach is mainly concerned with increasing sales that marketers convince the consumers by delivering information. In contrast, modern marketers focus on a demand-pull process, in which products are designed to meet consumers' needs and wants. The contemporary approach requires a capability to deliver information to customers by changing the philosophy of communication with customers (Blakeman, 2018). The process demonstrates a firm's capability to gain benefit from efficiency in delivering customer values relative to the competitor (Jing *et al.*, 2018).

New product development needs integration between marketing communication strategies and product development, which incorporate assessment of life cycle products in internal and external communication (Lockrey, 2015). For example, in a demand-pull situation, marketing staffs enquire about the latest consumer preferences. They then collaborate with the product development division to translate the information for designing the productive process, and finally, purchasing will find the necessary raw materials (Gonzalez-Zapatero *et al.*, 2017):

H5. Marketing communication has a positive impact on product development.

Innovation under information technological turbulence

The pandemic phenomena make the conventional approach used during the stable periods is irrelevant, which is similar to entrepreneurship at the early stage with high uncertainty to generate outcomes (Alvarez and Barney, 2020). New product development requires leveraging data and technology through a marketing ecosystem that can extract massive amounts of diverse consumer data (Zhang and Watson, 2020). Thus, technological turbulence becomes the most challenging issue in a business environment in which firms must develop a specific capability to generate incremental and radical product innovations (Vrontis and Christofi, 2019).

For firms at the early stage, allocating resources for marketing communication and product development poses a high risk. However, many of them experience survival odds (Patel *et al.*, 2021). On the other hand, firms with the dynamic capability to explore information through information technology will be able to generate high product development capabilities by revolving product cycle selling to extract consumers' high willingness to pay (Banerjee and Soberman, 2013). In addition, the interaction through social media provides valuable resources, which help firms facilitate collaboration in the

production process to improve and develop products based on the needs of consumers, which implies increasing consumer loyalty (Hidayati *et al.*, 2018).

In contrast, some firms may fail to benefit from information technology, implying low product development capacity. Hence, they may focus on market inversion using old technology (Banerjee and Soberman, 2013). Moreover, the strategy to benefit from information technologies faces other barriers such as conflicting reward systems, which implies difficulty in coordination when calls for collaboration to share resources (Gonzalez-Zapatero *et al.*, 2017). Product development under an uncertain environment demonstrates that firms struggle with dynamic capabilities, drawing from the economic theory of product imitability and competition and the study of innovation and organisation (Teece, 2019):

H6. The impact of product development on competitive advantage is less effective during the high information technological turbulence than during the low turbulence.

Research method

This study aims to understand the competitive strategy by investigating the impact of organisational resilience and marketing communication on product development, affecting competitive advantage. We also examine how information technological turbulence affects the effectiveness of product development on competitive advantage. This study conducts a survey with a designed questionnaire drawing from the previous literature to test the proposed hypothesis.

The measure

This study uses five constructs (organisational resilience, marketing communication, product development, competitive advantage and information technological turbulence) with a set of items that serve as proxy variables. Each measured item represents a single aspect of the abstract concept. Following the measurement theory explaining a behaviour phenomenon through possessing a quantitative structure (Trendler, 2009), this study adopts measures from the previous studies. Firstly, this study adopts the measures from the previous studies that involve combining variables to measure the overall concept. Then, we carefully translate the measure to avoid the risk of poorly worded questions. This measure uses ordinal Likert scales with five-point levels, from strongly disagree for the value of 1 to strongly disagree for 5.

We use the measure of competitive advantage from Porter and van der Linde (1995), which Singh *et al.* (2019) improved. For the exogenous variables, we adopt the measure of marketing communication from Morgan (2009). Three items of marketing communication involve "[. . .] the advertising program", "[. . .] enhances advertising management and creative skills [. . .]" and "promotes public relations skills". For organisational resilience, this study uses the measure that was adapted from the benchmark resilience tools (Gonzalez-Zapatero *et al.*, 2017), which involves crisis mindfulness, shifting rapidly to respond to the crisis, and "building a relationship". Finally, information technological turbulence, we adapt the measures from Zhang and Duan (2010).

Data collection

This study conducted an online survey between January and August 2020 by sending the online questionnaires with Google form to social media groups in Indonesia. The target population was Indonesian entrepreneurs who run a business. This study uses a non-

probability approach for the sampling selection method by allowing the respondents to select by themselves. The sample in the online survey incorporates the representative biases in comparison to the general population. This study uses a balanced scale and item-specific questions to reduce response bias (Kuru and Pasek, 2016).

The survey also informed the respondent that the data analysis would be anonymous to ensure that the respondents expressed profound truths in responding questionnaire. Hence, we received 582 usable responses after we removed data with more than 5% missing values. The online questionnaire involves 22 questions, consisting of 8 questions for family business orientation, 6 questions of organisational citizenship behaviour, 5 questions of prosocial behaviour and 3 questions of moral obligation. Responses are automatically entered into a database, which becomes the analysis.

The final sample of 582 respondents stated that 60.2% of them are female and 39.8% are male, with age varies from 25 to 45 years. Many of the respondents (n = 244, 42%) explain that they manage their own business, while 203 respondents work as senior managers for their family business. The other respondents (n = 135) said they only work part-time as they are still young students. The education level of respondents also varies from high school (n = 105, 18%), undergraduate programme (n = 378, 64.9%), while 99 respondents have a post-graduate education background.

Among those respondents, 378 respondents (65%) work for companies in Surabaya, while the rest work in various cities, such as Jakarta (116 respondents, 19%), Makassar (69 respondents, 11%) and Bali (19 respondent, 4%). The sample reported that 60% of the family businesses are home-based, and the first generation hired seven non-family workers on average. The respondents also stated that 38% of the observed firms meet medium enterprises' criteria, with sales ranging from IDR 2.5bn to 50bn per annum. Other 62% of respondents mention the level of sales ranges from IDR 300m to IDR 2.5bn, which meet the criteria of a small enterprise.

The analysis

This study uses the partial least square - structural equation model (PLS-SEM) method to estimate complex models with five constructs and six hypotheses. A structured model involves two primary issues: the sequences of the construct and the relationship between them, which are critical to represent the hypothesis. We adopt this approach, which is relevant for exploratory research and high statistical power to examine developing theory (Hair *et al.*, 2019). This method consists of two elements: a structural model and measurement models. The structural model exposes the constructs related to each other, attempting to explain the competitive advantage as a dependent variable.

The measurement models present the relationship between the constructs and the indicator variables. The measurement approach specifies how each construct is measured. In addition, there are two exogenous variables: organisational resilience and marketing communication, which attempt to explain other constructs in the inner model. This model also involves product development as a mediating variable and information technological turbulence as a moderating variable. When the assessment of the measurement model meets the expected results, then we analyse the structural model by examining the R-squared values of the endogenous constructs, the statistical significance of structural model relationships and the theoretical relevance of the estimated coefficients.

From the theoretical perspective, the role of the mediating variable is to explain the complicated relationship between exogenous and endogenous constructs. Specifically, this study aims to observe the relationship between organisational resilience and competitive advantage. The role of product development as a mediating variable is to clarify the

questioned relationship between the two original constructs. Related to the concept of moderating effect, the construct of information technological turbulence affects the relationship between product development as exogenous variables and competitive advantage as a dependent variable. Moderating construct changes the relationship between product development and competitive advantage. The construct of information technological turbulence is a continuous moderating effect, which is metrically measured.

Results

The first approach focusses on the assessment of the reflective measurement model by examining the indicator loadings. Table 1 presents that all outer loadings are above 0.70. The construct of marketing communication has the highest value of 0.88 for outer loadings. The results show that the variance of the measure variable explains more than 70% of the constructs, which indicate acceptable item reliability. Furthermore, the high loading values

Items	Measures	VIF	Outer loading
CA01	Sales growth performance during the past two years	2.527	0.770
CA02	Sales growth relative to direct competitors	2.827	0.834
CA04	Gross profit in the past three years	2.213	0.781
CA05	Return on asset	2.262	0.770
CA06	Return on investment	2.763	0.826
CA07	Return on sales	2.609	0.828
CA08	Overall performance	2.716	0.849
IT01	Information technology in our industry is changing rapidly	2.226	0.802
IT02	Information technology changes in our industry provide big opportunities in our business	2.219	0.811
IT03	A large number of new products have been made possible through the information technological breakthrough	2.903	0.881
IT04	Technological changes in our industry generate new ideas for product supply	2.173	0.785
IT05	Technological changes generate new ideas	2.406	0.848
MC01	Our firm promotes public relation skills	1.516	0.812
MC02	Our firm skilfully uses marketing communication	1.631	0.881
MC03	Our firm effectively manages marketing communication programme	1.602	0.779
OS01	We are mindful of how a crisis could affect us	1.468	0.764
OS03	We are able to shift rapidly from business-as-usual to respond to crises	1.373	0.834
OS04	We build relationships with organisations we might have to work with in a crisis	1.563	0.816
PD01	Our firms manages new products well	2.203	0.847
PD02	Our firm exploits R&D investment to develop new products	1.738	0.780
PD03	Our firm speedily develops and launches new products	1.884	0.785
PD04	Our firms carries out marketing test of new products or services	1.892	0.763
PD05	Our firm makes sure that product development efforts are responsive to customer needs	1.998	0.792

Table 1.
Constructs, outer loading and VIF

Note: R&D = Research&Development

of the analysis do not reach 0.95 or above, which suggests that the inflated correlations among the error terms of the measurement indicators are avoidable.

The second step of assessment for outer model assessment concerns composite reliability. Table 2 shows that values of construct reliability are in the range of 0.60 to 0.70, which indicate acceptability for exploratory study, as the value between 0.7 and 0.9 is a signal for satisfactory to good. Another measure of reliability is Cronbach's alpha that assumes the threshold. Table 2 also provides alpha values that vary from 0.77 to 0.99, which indicates reliable constructs. However, the measured value of reliability from Cronbach's alpha is unweighted, implying less precise than composite reliability that has weighted items. Hence, the true values may lay between both measures.

The following assessment step for the reflective measurement model involves the convergent validity through average variance extracted (AVE), which examines how the tendency level of the selected items explain their construct. Table 2 shows the acceptable values of AVE, which are in the range of 0.63–0.8, demonstrating that the variances of the measure variable explain around 63%–0.8% of their construct. Thus, the results indicate that the measurement models meet the required standard prior to path analysis. In addition, the values of variance inflation factors (VIF) are less than 3.0, which indicate that collinearity is not an issue for the outer model (Table 1) and inner model (Table 3).

Table 4 shows the goodness-of-fit tests, which help the researchers to avoid model misspecification. The value of standardised root means squared residual (SRMR) is 0.076, which is less than the threshold value of 0.080, indicating an acceptable fit. The value of SRMR shows how well the observed variables is interpretable by examining the average absolute value of residual correlations. For the estimated model with normal data, the SRMR outperforms the current standard (Pavlov *et al.*, 2020). The values of normed fit index (NFI) are 0.74 or lower than acceptable criteria for the factor model, which is indeterminate for the composite model.

Figure 1 provides the standardised values of the estimated coefficients that range from −1 (which indicates a strong negative relationship) to +1, which indicates a strong positive relationship. The PLS-SEM algorithm with estimated path coefficients from the structural model relationship represents the hypothesis relationship between constructs. The standard errors obtained from bootstrapping determine the level of significance for

The constructs	Cronbach's alpha	Composite reliability	AVE
Competitive advantage (CA)	0.901	0.903	0.654
Information technological turbulence (IT)	0.883	0.915	0.683
Organisational resilience (OS)	0.734	0.847	0.649
Product development (PD)	0.854	0.895	0.630
Marketing communication capability (MCC)	0.771	0.864	0.680

Table 2. Construct reliability and validity

The constructs	Competitive advantage	Product development
Information technological turbulence	1.870	
Moderating effect	1.250	
Organisational resilience	1.749	1.233
Product development	1.547	
Marketing communication	1.691	1.233

Table 3. Inner VIF values

each construct. The results indicate that organisational resilience and marketing communication significantly impact product development with a standard error of 0.052 and 0.044. However, marketing communication has a more substantial impact on product development (0.382) than organisational resilience (0.294). That means both *H3* and *H4* are acceptable.

The structural model results show that the standard error of organisational resilience on competitive advantage is 0.053, which poses a high value of *t*-statistics (5.201) and nearly zero of the *p*-value that indicates accepted *H1* (Table 5). The results also show that marketing communication significantly impacts competitive advantage with a standard error of 0.044 and a *t*-statistic value of 8.720, implying that *H2* is acceptable. Similarly, *H3* is acceptable as product development significantly impacts competitive advantage with a standard deviation of 0.47 and a *t*-statistic value of 5.019. Hence, organisational resilience has the most substantial effect on competitive advantage (0.275), followed by product development (0.234) and marketing communication (0.160).

Table 4.
Model fit

Fit measure	Saturated model	Estimated model
SRMR	0.076	0.079
d_ULS	1.606	1.708
d_G1	0.900	0.910
d_G2	0.681	0.690
Chi-square	1,457.88	1,455.35
NFI	0.747	0.747

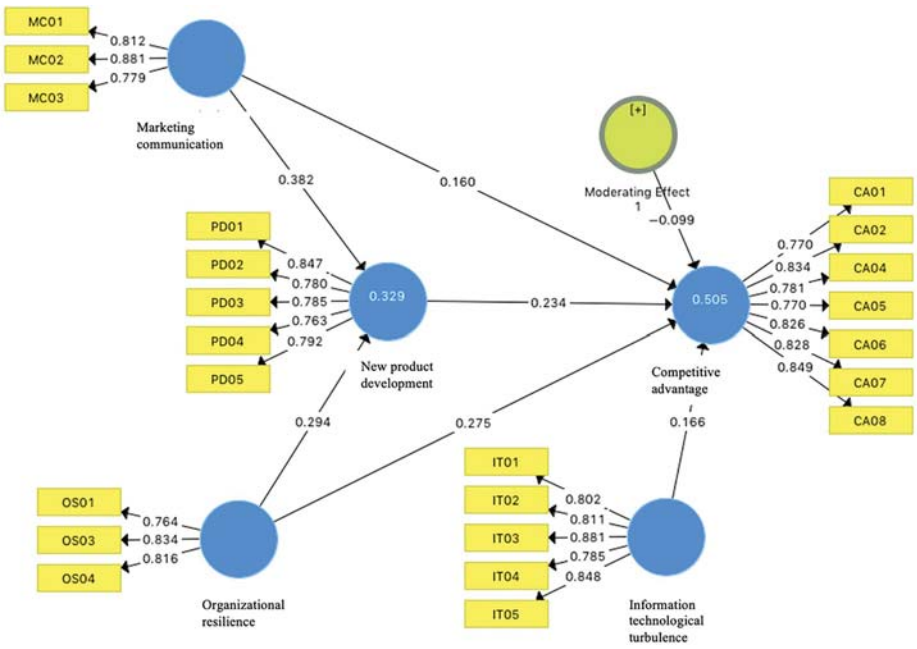


Figure 1.
Algorithm path analysis

Table 5 shows that both moderating effect and information technological turbulence have significant effects on competitive advantage. The standard deviation of the mediating effect is 0.034, while the *t*-statistics value is 3.491 that indicating the significant impact of the mediating effect on competitive advantage. On the other hand, information technological turbulence has a standard deviation value of 0.047 and *t*-statistics value of 3.491. The results indicate that information technological turbulence significantly impacts the relationship between product development and competitive advantage.

Figure 2 shows that product development has a significant impact on competitive advantage. However, product development on competitive advantage is different at various levels of information technological turbulence. The impact of product development is less effective during the high information technological turbulence than during the low turbulence. The results indicate that firms that participate in information technological turbulence experience a less competitive advantage than firms with the capability to handle information technological turbulence.

Discussion

The increasingly environmental turbulence has caused widespread competitive strategy uncertainty, which significantly influences product development. This article attempts to understand competitive strategy under information technological turbulence by applying scenario planning and strategic forecasting (Table 6).

Path	Original S. (O)	S. Mean (M)	SD (STDEV)	*T*-statistics (|O/SD|)	*P*-values
MC -> PD*	0.382	0.379	0.044	8.720	0.000
OS -> PD*	0.294	0.297	0.052	5.659	0.000
OS -> CA*	0.275	0.272	0.053	5.201	0.000
PD -> CA*	0.234	0.236	0.047	5.019	0.000
MC -> CA*	0.160	0.157	0.041	3.908	0.000
ITT -> CA*	0.166	0.171	0.047	3.491	0.001
ME -> CA*	−0.099	−0.101	0.034	2.893	0.004

Table 5.
Bootstrapping path

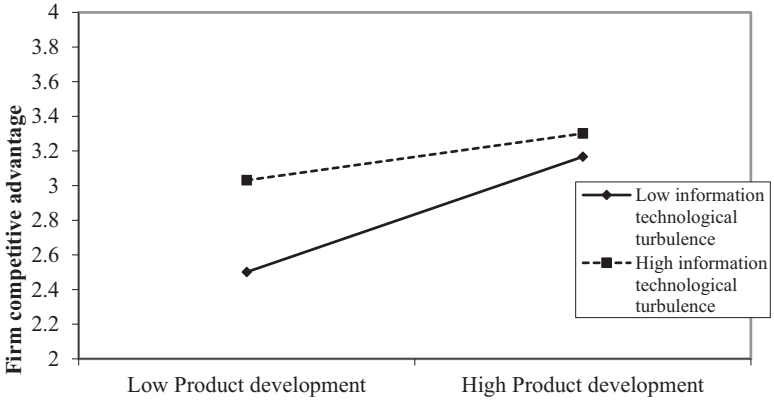


Figure 2.
Moderating effect

Theoretical implication

First of all, this study extends the literature of resource-based view by proposing a model that concerns product development as the primary determinant of competitive advantage. We argue that organisational resilience and marketing communication are resources necessary to enhance the capability to develop a new product. This study highlights the intersection between the concept of dynamic capability and the contingency theory by arguing that dynamic capabilities demonstrate how firms deal with information technological turbulence. The results also confirm the concept of creation theory, which argues that entrepreneurship reflects the ability to create opportunities by developing a competitive strategy to deal with the uncertainty of possible outcomes (Alvarez and Barney, 2020).

The competitive strategy has developed a different theory of how firms generate value by assembling resources from various stakeholders. Many economists pay too much attention to the role of the market structure supporting innovation, called a Schumpeterian debate (Teece, 2019). Hence, this article extends the concept of innovation, demonstrating how product development meets the market (Zou *et al.*, 2018) by highlighting the role of marketing communication in enhancing the product development process. This article confirms the argument, which presents that creative destruction comes from a new plant and springs from various organisation functions (Aghion *et al.*, 2019).

Managerial implication

This article develops four scenarios for competitive strategy. We suggest that firms should focus on scenarios where their relative strength. The first scenario occurs when a firm is under high information technological turbulence and has an increased competitive advantage. The company continues to struggle over the turbulence through achieving a competitive strategy by generating product development, which is not adequate to increase its competitive advantage. Hence, the managers should focus on improving organisational resilience, which is more effective to help the firm foster a competitive advantage than another construct, such as marketing communication.

Table 6.
Scenarios for competitive strategy under information technological turbulence reactive, proactive and anticipatory innovators

Variables	Low information technological turbulence	High information technological turbulence
High competitive advantage	Nurturing innovators Promoting product development to maintain competitive advantage Strengthening marketing communication to enhance product development Enhancing resilience to support product development	Anticipatory innovators: Allocation more resource for both marketing communication and organisational resilience to maintain competitive advantage, when product development is not effective to maintain competitive advantage
Low competitive advantage	Proactive innovators Allocating resources for product development during the low information technological turbulence to foster competitive advantage Promoting both marketing communication and organisational resilience to enhance competitive advantage	Reactive innovators: Deploying more resources for marketing communication which has stronger impact on competitive advantage than organisational resilience

The second scenario shows how a firm adopts nurturing approach when a firm has capability to exploit information technology and pursue a high competitive advantage. This firm demonstrates a competitive strategy with a high dynamic capability to deal with information technological turbulence. The firm can foster a competitive advantage by promoting product development. Both organisational resilience and marketing communication help firms generate product development and foster a competitive advantage.

The third scenario demonstrates a firm struggles to achieve a competitive advantage, but there is an opportunity for the firm with a robust dynamic capability to deal with information technological turbulence. Hence, the firm can advance product development to gain a high competitive advantage. Firms can also achieve a higher competitive advantage by enhancing organisational resilience and marketing communication, which also help them to improve the capability to generate product development.

The last scenario shows how a firm attempts to survive with a low competitive advantage and poor capability to deal with information technological turbulence. The firm cannot rely on product development to gain a more competitive advantage. The information technological turbulence makes product development less effective to generate a competitive advantage. Instead, the firm may rely on organisational resilience, which becomes essential for achieving a competitive advantage during the pandemic.

Research limitation

This study develops a structural model, which adopts the parsimony principle. The model involves five constructs and assumes that other constructs remain constant. Other unidentified constructs may determine the competitive advantage, especially when the variation of five constructs explains 50% of the variation of the competitive advantage construct. However, an increasing number of constructs will pose the risk of a multi-collinearity problem.

Secondly, the analysis springs from the empirical results, which involve a survey on firms in Indonesia. Each respondent represents a firm where they work as owner-managers of the family business, senior managers, or family members. Further investigation needs to involve stakeholders, which may provide a different perspective. In addition, further study may conduct in different contexts, such as multi-national companies or similar types of companies in other countries.

Finally, this article uses the proposed model to develop four scenarios. The challenge is how to make the managers aware of promoting resilience strategy towards competitive advantage. Building awareness through scenarios may need a happy story about the future. Hence, the firms would be already to do it. Future studies should develop scenarios to attract attention from the decision makers and stakeholders.

Conclusion

This article seeks to understand how competitive strategy in a turbulent scenario helps firms survive by exploring the role of product development in achieving competitive advantage under the various levels of dynamic technological change during COVID-19. The results indicate that product development is less effective to firm competitive advantage during the high information technological turbulence than during low information technological turbulence. This study shows that organisational resilience and marketing communication help firms achieve a competitive advantage. We also identify four strategic scenarios for competitive strategy, drawing from empirical results. The findings extend the literature of resource-based views by proposing a model that concerns product development

as the primary determinant of competitive advantage. This article also discusses the intersection between the concept of dynamic capability and contingency theory by examining how firms deal with information technological turbulence.

References

Afraz, M.F., Bhatti, S.H., Ferraris, A. and Couterier, J. (2021), "The impact of supply chain innovation on competitive advantage in the construction industry: Evidence from a moderated multi-mediation model", *Technological Forecasting and Social Change*, Vol. 162, p. 120370.

Aghion, P., Bergeaud, A., Boppart, T., Klenow, P.J. and Li, H. (2019), "Missing growth from creative destruction", *American Economic Review*, Vol. 109 No. 8, pp. 2795-2822.

Alvarez, S.A. and Barney, J.B. (2020), "Insights from creation theory: the uncertain context rendered by the COVID-19 pandemic", *Strategic Entrepreneurship Journal*, Vol. 14 No. 4, pp. 552-555.

Andersson, T., Cäker, M., Tengblad, S. and Wickelgen, M. (2019), "Building traits for organizational resilience through balancing organizational structures", *Scandinavian Journal of Management*, Vol. 35 No. 1, pp. 36-45.

Audretsch, D., Fornahl, D. and Klarl, T. (2021), "Radical innovation and its regional impact – a roadmap for future research", *Small Business Economics*, doi: 10.1007/s11187-021-00463-y.

Banerjee, S. and Soberman, D.A. (2013), "Product development capability and marketing strategy for new durable products", *International Journal of Research in Marketing*, Vol. 30 No. 3, pp. 276-291.

Barney, J.B. (2020), "Measuring firm performance in a way that is consistent with strategic management theory", *Academy of Management Discoveries*, Vol. 6 No. 1, doi: 10.5465/amd.2018.0219.

Barrane, F.Z., Ndubisi, N.O., Kamble, S., Karuranga, G.E. and Poulin, D. (2021), "Building trust in multi-stakeholder collaboration for new product development in the digital transformation era", *Benchmarking: An International Journal*, Vol. 28 No. 1, pp. 1463-5771.

Belhadi, A., Mani, V., Kamble, S.S., Khan, S.A.R. and Verma, S. (2021), "Artificial intelligence-driven innovation for enhancing supply chain resilience and performance under the effect of supply chain dynamism: an empirical investigation", *Annals of Operation Research*, doi: 10.1007/s10479-021-03956-x.

Bell, S. (2019), "Organisational resilience: a matter of organisational life and death", *Continuity and Resilience Review*, Vol. 1 No. 1, pp. 5-6.

Bhamra, R. (2016), *Organisational Resilience: Concept, Integration, and Practice*, Taylor and Francis, London.

Bigelow, L.S. and Barney, J.B. (2021), "What can strategy learn from the business model approach?", *Journal of Management Studies*, Vol. 58 No. 2, pp. 528-539.

Blakeman, R. (2018), *Integrated Marketing Communication: Creative Strategy from Idea to Implementation*, Rowman and Littlefield, New York, NY.

Burnard, K. and Bhamra, R. (2011), "Organisational resilience: development of a conceptual framework for organisational responses", *International Journal of Production Research*, Vol. 49 No. 18, pp. 5581-5599.

Englund, T.R., Hedrick, V.E., Duffey, K.J. and Kraak, V.I. (2020), "Evaluation of integrated marketing communication strategies used for the fruits and veggies campaign in California and Virginia", *Preventive Medicine Reports*, Vol. 18, doi: 10.1016/j.pmedr.2020.101062.

Falahat, M., Ramayah, T., Soto-Acosta, P. and Lee, Y.-Y. (2020), "SMEs internationalization: the role of product innovation, market intelligence, pricing and marketing communication capabilities as drivers of SMEs' international performance", *Technological Forecasting and Social Change*, Vol. 152, doi: 10.1016/j.techfore.2020.119908.

Feng, T., Huang, Y. and Avgerinos, E. (2018), "When marketing and manufacturing departments integrate: the influences of market newness and competitive intensity", *Industrial Marketing Management*, Vol. 75, pp. 218-231.

Festa, G., Ciasullo, M.V., Vrontis, D. and Thrassou, A. (2017), "Cooperating for competing – a small Italian wineries' internationalisation strategy case study", *Global Business and Economics Review*, Vol. 19 No. 5, pp. 648-670.

Finne, A. and Grönroos, C. (2009), "Rethinking marketing communication: from integrated marketing communication to relationship communication", *Journal of Marketing Communications*, Vol. 15 Nos 2/3, pp. 179-195.

Gambardella, A., Heaton, S., Novelli, E. and Teece, D.J. (2021), "Profiting from enabling technologies?", *Strategic Science*, doi: 10.1287/stsc.2020.0119.

Goncalves, L., Navarro, J.B. and Sala, R. (2019), "Spanish validation of the benchmark resilience tool (short-form version) to evaluate organisational resilience", *Safety Science*, Vol. 111, pp. 94-101.

Gonzalez-Zapatero, C., Gonzalez-Benito, J. and Lannelongue, G. (2017), "Understanding how the functional integration of purchasing and marketing accelerates new product development", *International Journal of Production Economics*, Vol. 193, pp. 770-778.

Granig, P. and Hilgarter, K. (2020), "Organisational resilience: a qualitative study about how organisations handle trends and their effects on business models from experts' views", *International Journal of Innovation Science*, Vol. 12 No. 5, pp. 525-544.

Hair, J.F., Risher, J.J., Sarstedt, M. and Ringle, C.M. (2019), "When to use and how to report the results of PLS-SEM", *European Business Review*, Vol. 31 No. 1, pp. 2-24.

Hänninen, N. and Karjaluoto, H. (2017), "The effect of marketing communication on business relationship loyalty", *Marketing Intelligence and Planning*, Vol. 35 No. 4, pp. 458-472.

Hidayati, I., Herman, L.E. and Farida, N. (2018), "Engaging consumers through social media to improve industrial product development: the role of customer co-creative value", *Journal of Relationship Marketing*, Vol. 17 No. 1, pp. 17-28.

Holbeche, L.S. (2018), "Organisational effectiveness and agility", *Journal of Organizational Effectiveness: People and Performance*, Vol. 5 No. 4, pp. 302-313.

Jing, C., Blintong, C. and Wei, L. (2018), "Who should be pricing leader in the presence of customer returns?", *European Journal of Operational Research*, Vol. 265 No. 2, pp. 735-747.

Johnston, J., Zawawi, C. and Sheehan, M. (2020), *Public Relations: Theory and Practice*, Routledge, New York, NY.

Jusoh, R. and Parnell, J.A. (2008), "Competitive strategy and performance measurement in the Malaysian context: an exploratory study", *Management Decision*, Vol. 46 No. 1, pp. 5-31.

Kim, G., Moon, S., Huh, M.-G. and Lee, J. (2015), "Effect of exploration on firm performance and survival", *Academy of Management*, Vol. 1, pp. 1-12.

Kuru, O. and Pasek, J. (2016), "Improving social media measurement in surveys: avoiding acquiescence bias in Facebook research", *Computers in Human Behavior*, Vol. 57, pp. 82-92.

Lawrence, T.B. and Phillips, N. (2019), *Constructing Organizational Life*, Oxford University Press, New York, NY.

Lockrey, S. (2015), "A review of life cycle based ecological marketing strategy for new product development in the organizational environment", *Journal of Cleaner Production*, Vol. 95, pp. 1-15.

Meadows, M. and O'Brien, F.A. (2020), "The use of scenarios in developing strategy: an analysis of conversation and video data", *Technological Forecasting and Social Change*, Vol. 158, doi: 10.1016/j.techfore.2020.120147.

Melián-Alzola, L., Fernández-Monroy, M. and Hidalgo-Peñate, M. (2020), "Hotels in contexts of uncertainty: measuring organisational resilience", *Tourism Management Perspectives*, Vol. 36, doi: 10.1016/j.tmp.2020.100747.

Mkhize, S. and Ellis, D. (2020), "Creativity in marketing communication to overcome barriers to organic produce purchases: the case of a developing nation", *Journal of Cleaner Production*, Vol. 242, doi: 10.1016/j.jclepro.2019.118415.

Morgan, N.A., Vorhies, D.W. and Mason, C.H. (2009), "Market orientation, marketing capabilities, and firm performance", *Strategic Management Journal*, Vol. 30 No. 8, pp. 909-920.

Patel, P.C., Feng, C. and Guedes, M.J. (2021), "Marketing capability and new venture survival: the role of marketing myopia", *Industrial Marketing Management*, Vol. 93, pp. 307-326.

Pavlov, G., Maydeu-Olivares, A. and Shi, D. (2020), "Using the standardized root mean squared residual (SRMR) to assess exact fit in structural equation models", *Educational and Psychological Measurement*, Vol. 81 No. 1, pp. 110-130.

Porter, M.E. and van der Linde, C. (1995), "Toward a new perspective of the environment-competitiveness relationship", *The Journal of Economic Perspective*, Vol. 9 No. 4, pp. 97-118.

Pratono, A.H. (2020), "Cross-cultural collaboration for inclusive global value chain: a case study of rattan industry", *International Journal of Emerging Markets*, Vol. 15 No. 1, pp. 149-170, doi: 10.1108/IJOEM-01-2017-0028.

Pratono, A.H. (2021), "Innovation strategy beyond the COVID-19 pandemic: the role of trust under disruptive technology", *foresight*, doi: 10.1108/FS-05-2021-0105.

Pratono, A.H. and Han, L. (2021), "From family business orientation to organisational citizenship behaviour: prosocial behaviour in family business performance", *Journal of Family Business Management*, doi: 10.1108/JFBM-02-2021-0014.

Shafritz, J.M., Ott, J.S. and Jang, Y.S. (2015), *Classic of Organization Theory*, Cengage Learning, Singapore.

Sharma, S. and Sharma, S.K. (2020), "Probing the link between team resilience, competitive advantage, and organisational effectiveness: evidence from information technology industry", *Business Perspectives and Research*, Vol. 8 No. 2, pp. 289-307.

Siachou, E., Vrontis, D. and Trichina, E. (2021), "Can traditional organizations be digitally transformed by themselves? The moderating role of absorptive capacity and strategic interdependence", *Journal of Business Research*, Vol. 124, pp. 408-421.

Sinha, S. (2015), "The exploration-exploitation dilemma: a review in the context of managing growth of new ventures", *Vikalpa: The Journal for Decision Makers*, Vol. 40 No. 3, pp. 313-323.

Teece, D.J. (2019), *Dynamic Capabilities and Strategic Management*, Oxford University Press, New York, NY.

Teixeira, E. D O. and Werther, W.B. Jr, (2013), "Resilience: continuous renewal of competitive advantages", *Business Horizons*, Vol. 56 No. 3, pp. 333-342.

Thomke, S. and Reinetsen, D. (2012), "Six myths of product development", *Harvard Business Review*, May, pp. 1-2.

Trendler, G. (2009), "Measurement theory, psychology and the revolution that cannot happen", *Theory and Psychology*, Vol. 19 No. 5, pp. 579-599.

Valos, M.J., Habibi, F.H., Casidy, R., Driesener, C.B. and Maplestone, V.L. (2016), "Exploring the integration of social media within integrated marketing communication frameworks: perspectives of services marketers", *Marketing Intelligence and Planning*, Vol. 34 No. 1, pp. 19-40.

Vrontis, D. and Christofi, M. (2019), "RandD internationalization and innovation: a systematic review, integrative framework and future research directions", *Journal of Business Research, in Press*, doi: 10.1016/j.jbusres.2019.03.031.

Walker, G. and Madsen, T.L. (2016), *Modern Competitive Strategy*, McGraw Hill, New York, NY.

Wernerfelt, B. and Karnani, A. (1987), "Competitive strategy under uncertainty", *Strategic Management Journal*, Vol. 8 No. 2, pp. 187-194.

Zahra, S.A. (2021), "International entrepreneurship in the post Covid world", *Journal of World Business*, Vol. 56 No. 1, p. 101143.

Zhang, J. and Duan, Y. (2010), "The impact of different types of market orientation on product innovation performance", *Management Decision*, Vol. 48 No. 6, pp. 849-867.

Zhang, J.Z. and Watson, G.F., IV (2020), "Marketing ecosystem: an outside-in view for sustainable advantage", *Industrial Marketing Management*, Vol. 88, pp. 287-304.

Zou, T., Ertug, G. and George, G. (2018), "The capacity to innovate: a meta-analysis of absorptive capacity", *Innovation*, Vol. 20 No. 2, pp. 87-121.

Corresponding author
Aluisius Hery Pratono can be contacted at: hery_pra@staff.ubaya.ac.id

emerald PUBLISHING

ISSN 1059-5422
Volume 00 Number 00 2018

Competitiveness Review

Competitiveness Review

Submit your paper

Table of contents

Author guidelines

Editorial team

Editor-in-Chief

Philippe Gugler
University of Fribourg - Switzerland
philippe.gugler@unifr.ch

Christian Ketels
Harvard Business School - USA
cketels@hbs.edu

Assistant Editor

Samuel Ferreira Gomes
University of Fribourg - Switzerland

Book Review Editor

Federica Belfanti
Università Carlo Cattaneo - LIUC - Italy

Publisher

Chloe Campbell
Emerald Publishing - UK
ccampbell@emerald.com

Journal Editorial Office (For queries related to pre-acceptance)

Ruchita Dattaram Chavan
Emerald Publishing
ruchita.emerald@kwglobal.com

Supplier Project Manager (For queries related to post-acceptance)

Uday Bhan
Emerald Publishing
udaybhan.emerald@kwglobal.com

Editorial Advisory Board

Indexing & metrics

Reviewers

Calls for papers & news

Competitiveness Review (CR) publishes academic research and conceptual policy dialogue on the competitiveness of locations at all stages of economic development.

ISSN: 1059-5422
eISSN: 1059-5422

Competitiveness Review: Volume 32 Issue 3

Subject: Strategy > International business

Table of contents - *Special Issue: Reinterpreting competitive strategies in turbulent scenarios*

Guest Editors: Giuseppe Festa, Matteo Rossi, Demetris Vrontis

Guest editorial: Reinterpreting competitive strategies in turbulent scenarios

Giuseppe Festa, Matteo Rossi, Demetris Vrontis

The impact of strategic competitive innovation on the financial performance of SMEs during COVID-19 pandemic period

Hani El Chaarani, Prof. Demetris Vrontis, Sam El Nemar, Zouhour El Abiad

The purpose of this paper is to reveal the impact of strategic competitive innovation types on the financial performance of SMEs during a very critical period: the COVID-19...

Improving competitiveness in education institutes – ABC's neglected potential

John Sorros, Petros Lois, Melita Charitou, Alkiviadis Theofanis Karagiorgos, Nicholas Belesis

Because of the education sector's evolution, accounting initiatives are required regarding competitiveness. Activity-based costing's

(ABC) neglected potential as a cost strategic...

HTML

PDF (539 KB)

Permissions

DOWNLOADS

349

The effect of corporate social responsibility practices on tax avoidance: an empirical study in the French context

Jamel Chouaibi, Matteo Rossi, Nouha Abdessamed

The purpose of this paper is to examine the negative impact of corporate social responsibility (CSR), business ethics and responsible corporate governance on tax avoidance within...

HTML

PDF (259 KB)

Permissions

DOWNLOADS

2206

Exploring the level of sustainability awareness among consumers within the fast-fashion clothing industry: a dual business and consumer perspective

Maria Papadopoulou, Joanna Papasolomou, Alkis Thrassou

Adding to competitive dynamics and sustainability literature, this paper aims to examine the implementation of environmental protection and sustainability initiatives within the...

HTML

PDF (336 KB)

Permissions

DOWNLOADS

9973

Sustainable competitive advantages for a nascent wine country: an example from southern Sweden

Olga Rauhut Kompaniets

The purpose of this study is to discuss the opportunities for and challenges faced in the development of a wine sector in a nascent wine country, as well as the necessary...

HTML

PDF (255 KB)

DOWNLOADS ALTMETRICS

1689 3

Hypercompetition: a review and agenda for future research

Annesofie Lindskov

The purpose of this study is to review and understand the dimensionality of hypercompetition, factors causing a hypercompetitive environment and the consequences of...

HTML

PDF (945 KB)

Permissions

DOWNLOADS

439

Coopetition among competitors in global industries: drivers that lead to coopetitive agreements

Francesco Maurizio Garraffo, Suzanna Lamria Siregar

The purpose of this study is to focus on a growing strategic approach in global industries: the coopetition. Cooperation among competitors, namely, coopetition, is a strategic...

HTML

PDF (830 KB)

Permissions

DOWNLOADS

391

Sustainable business models to create sustainable competitive advantages: strategic approach to overcoming COVID-19 crisis and improve financial performance

Marina Mattera, Carmen Alba Ruiz-Morales, Luana Gava, Federico Soto

The purpose of this study is to evaluate whether the implementation of sustainable business models contributes to improving a firm's performance during a global crisis, such as...

HTML

PDF (904 KB)

Permissions

DOWNLOADS

1721

The strategic innovation under information technological turbulence: the role of organisational resilience in competitive advantage

Aluisius Hery Pratono

This study aims to propose a structural model drawing from the theoretical literature, extending the relative research fields to the competitive strategy. The empirical results...

HTML

PDF (385 KB)

Permissions

DOWNLOADS

816

Uncovering the antecedents of trust in social commerce: an application of the non-linear artificial neural network approach

Alhamzah Alnoor, Hadi Al-Abrrow, Hussam Al Halbusi, Khai Wah Khaw, XinYing Chew, Marwa Al-Maatoq, Raed Khamis Alharbi

The internet creates ample opportunities to start a mobile social commerce business. The literature confirms the issue of customer trust for social commerce businesses is a...

HTML

PDF (690 KB)

Permissions

DOWNLOADS

927

ISSN:
(International Standard Serial Number)
1059-5422

Online date, start – end:
1991

Open Access:
hybrid

Editors:

- Dr Christian Ketels
- Dr Philippe Gugler

Further Information

- About the journal
- Purchase information
- Editorial team
- Write for this journal

Privacy notice

Site policies

Modern Slavery Act

Chair of Trustees governance statement

Accessibility

Competitiveness Review

COUNTRY

United Kingdom

Universities and research institutions in United Kingdom

Media Ranking in United Kingdom

SUBJECT AREA AND CATEGORY

Business, Management and Accounting
Business and International Management
Business, Management and Accounting (miscellaneous)

PUBLISHER

Emerald Group Publishing Ltd.

H-INDEX

34

PUBLICATION TYPE

Journals

ISSN

20513143, 10595422

COVERAGE

1996-2022

INFORMATION

Homepage

How to publish in this journal

philippe.gugler@unifr.ch

SCOPE

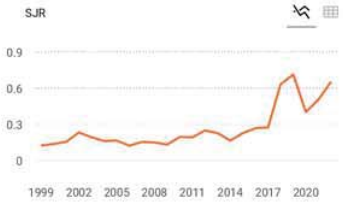
The following list indicates the key issues in the Competitiveness Review. We invite papers on these and related topics. Special issues of the Review will collect papers on specific topics selected by the editors. -Definition/conceptual framework of competitiveness- Competitiveness diagnostics and rankings- Competitiveness and economic outcomes- Specific dimensions of competitiveness- Competitiveness and endowments- Competitiveness and economic development- Location and business strategy- International business and the role of MNCs- Innovation and innovative capacity- Clusters and cluster initiatives- Institutions for competitiveness- Public policy (e.g., innovation, cluster development, regional development). The Competitiveness Review aims to publish high quality papers directed at scholars, government institutions, businesses and practitioners. It appears in collaboration with key academic and professional groups in the field of competitiveness analysis and policy, including the Microeconomics of Competitiveness (MOC) network and The Competitiveness Institute (TCI) practitioner network for competitiveness, clusters and innovation.

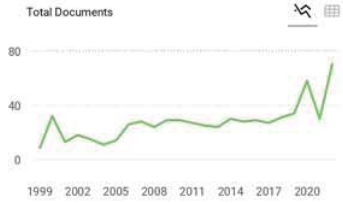
Quartiles

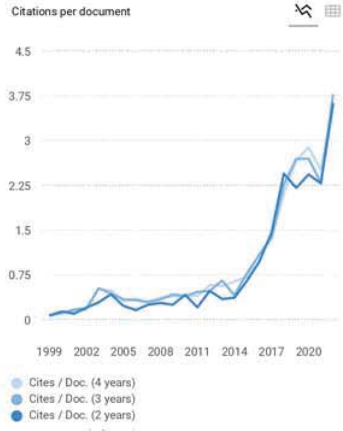
FIND SIMILAR JOURNALS

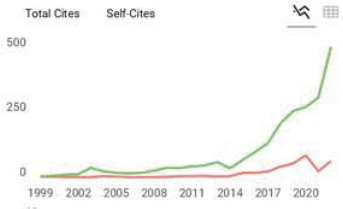
options

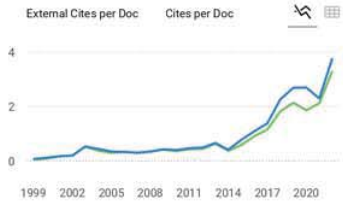
1	2	3	4	5
Global Business and Economics Review	**Journal of Innovation and Knowledge**	**Strategic Change**	**European Journal of Innovation Management**	**International Journal of Entrepreneurship and**
GBR	NLD	GBR	GBR	GBR
36% similarity	**36%** similarity	**35%** similarity	**33%** similarity	**33%** similarity

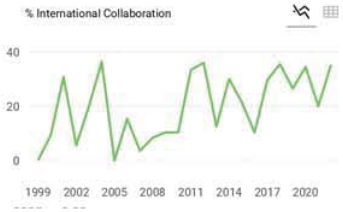


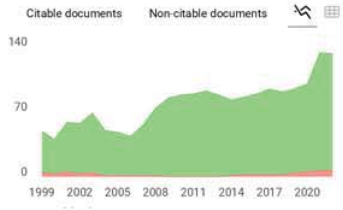


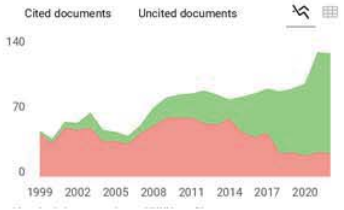












← Show this widget in your own website

Just copy the code below and paste within your html code:

```
<a href="https://www.scim
```

SCImago Graphica

Explore, visually communicate and make sense of data with our **new data visualization tool**.

Metrics based on Scopus® data as of April 2023

M **Malek Al-edenat** 8 months ago

Could we know when exactly Competitiveness Review turned out to be Q1? Because the update of such information will be in May every year.
I mean the journal could be Q2 before May and then after May of the same year could be Q1

reply

SCImago Team

Melanie Ortiz 8 months ago

Dear Malek,
Thank you for contacting us. The SJR for 2022 was released on May 1st, 2023.
Best Regards, SCImago Team

M **Mallika Saha** 4 years ago

Congratulations to Competitiveness Review for being at Q1 again in 2019!

reply

SCImago Team

Melanie Ortiz 4 years ago

Dear Mallika, thanks for your participation! Best Regards, SCImago Team

M **Moni** 4 years ago

I am little confused about this journal, it is a Q1 journal but listed ESCI. could you please explain the reasons. thank you.

reply

SCImago Team

Melanie Ortiz 4 years ago

Dear Moni,
thank you for contacting us.
Our data come from Scopus, they annually send us an update of the data. This update is send to us around April / May every year. The calculation of the indicators is performed with a copy of the Scopus database provided to us annually. The calculation of the indicators, the methodology and source used are different from the one's used by WoS or others . Best Regards, SCImago Team

Leave a comment

Name

Email
(will not be published)

Submit

The users of Scimago Journal & Country Rank have the possibility to dialogue through comments linked to a specific journal. The purpose is to have a forum in which general doubts about the processes of publication in the journal, experiences and other issues derived from the publication of papers are resolved. For topics on particular articles, maintain the dialogue through the usual channels with your editor.

Source details

Competitiveness Review

Scopus coverage years: from 1996 to Present

Publisher: Emerald Publishing

ISSN: 1059-5422 E-ISSN: 2051-3143

Subject area: Business, Management and Accounting: General Business, Management and Accounting

Source type: Journal

View all documents > | Set document alert | Save to source list

CiteScore 2022
5.0

SJR 2022
0.654

SNIP 2022
1.278

CiteScore | CiteScore rank & trend | Scopus content coverage

CiteScore 2022

$$5.0 = \frac{818 \text{ Citations } 2019 - 2022}{162 \text{ Documents } 2019 - 2022}$$

Calculated on 05 May, 2023

CiteScoreTracker 2023

$$6.5 = \frac{1{,}187 \text{ Citations to date}}{182 \text{ Documents to date}}$$

Last updated on 05 February, 2024 • Updated monthly

CiteScore rank 2022

Category	Rank	Percentile
Business, Management and Accounting └ General Business, Management and Accounting	#53/214	75th

View CiteScore methodology > | CiteScore FAQ > | Add CiteScore to your site

About Scopus

What is Scopus

Content coverage

Scopus blog

Scopus API

Privacy matters

Language

日本語版を表示する

查看简体中文版本

查看繁體中文版本

Просмотр версии на русском языке

Customer Service

Help

Tutorials

Contact us