



Procurement Strategy Development with Consideration of CSR: a SME Context

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Summary

CSR has received limited attention when defining competitive priorities for procurement strategy development. Thus, the paper aims to answer the question: **Considering the growing relevance of CSR, how can SMEs achieve strategic fit of the procurement strategy?** Design science research is applied in this working paper. We propose an extended competitive priority concept and offer a two-step solution procedure to develop a consistent procurement strategy, including determining the relevant dimensions of each competitive priority and weighting the competitive priorities using AHP. Lastly, we apply this solution in a small plant engineering company to develop the procurement strategy.

Keywords: SME, procurement strategy, competitive priority, CSR dimensions

Submission category: Academic working paper

Introduction

Climate change is gaining more and more attention in society and industry. A recent Deloitte survey revealed that most responding CxOs expect sustainability to gain strategic importance over the next three years (Ucuzoglu and Steinmann, 2023). Procurement can contribute to a company's sustainability efforts as a significant part of a product's greenhouse gas emissions stems from upstream supply chains (Cherel-Bonnemaison et al., 2021). In addition, companies are more and more held responsible for their impacts on society; the introduction of the German Supply Chain Act is one example for his development. Therefore, it is widely agreed that Corporate Social Responsibility (CSR), including social, environmental, ethical responsibilities, and human rights, should be part of the procurement strategy (European Commission, 2011; Nave & Ferreira, 2019).

As 90% of the companies worldwide are SMEs (World Bank, 2022), it becomes clear that they will play a role in achieving worldwide sustainability goals. Many studies confirm that CSR development creates value by reducing costs and generating competitive advantages for SMEs (Bacinello et al., 2021; Herrera Madueño et al., 2016; Ikram et al., 2019).

However, SMEs often focus on handling daily transactions and solving problems and do not consistently focus on following their strategic direction. In purchasing, this may result in a lack of strategic planning, purchase efficiency, and purchasing process development (Agndal, 2006; Morrissey & Pittaway, 2006; Paik, 2011; Pressey et al., 2009; Seung-Kuk Paik, 2021). Following this argumentation, SMEs risk not achieving strategic fit of their procurement strategy.

Strategic priority definition and alignment are essential in this process. Considering the relevance of CSR, SMEs should evaluate its importance during this process. Therefore, the following question guides this research: **Considering the growing relevance of CSR, how can SMEs achieve strategic fit of the procurement strategy?**

We followed the design science research guideline proposed by Stange et al. (2022) to structure the working paper: After introducing the topic, we lay out why there is a lack of purchasing strategy development in SMEs and why integrating CSR into the strategy is relevant for SMEs. Then we argue that competitive priorities can be applied in this context and propose an extended core competitive priorities concept involving CSR and innovation. Based on this concept, we present our two-step solution procedure. The first qualitative step is to evaluate the proposed competitive priorities. As the second step, we suggest that the order of the relevant competitive priorities should be confirmed by the quantitative approach analytic hierarchy process (AHP). Figure 1 shows the developed solution. We draw on relevant literature from SME, strategic procurement, and CSR for these two parts of the study. Next, we apply the concept in a small manufacturing company to evaluate the results. Lastly, we conclude our work and give an outlook of the next steps.

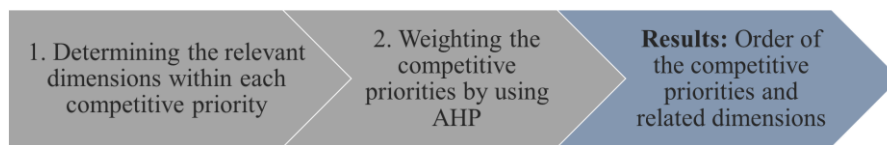


Figure 1: Procurement strategy development with consideration of CSR

Problem identification and solution objective

Research indicates that purchasing strategy is relevant for SMEs (Paik, 2011; Quayle, 2002). Windapo et al. (2019) state that procurement strategy impacts SMEs' turnover and profitability. By collecting data from 4679 Chinese SMEs in the manufacturing sector, Liu et al. (2021) show that controlling the buyer-supplier relationship strategically has a positive effect on the performance of the supply chain.

However, strategic planning of procurement is often missing in SMEs (Paik, 2011; Quayle, 2002). One aspect lacking in SMEs is the management of long-term supplier relationships (Paik, 2021). SMEs spend more time on daily routine transactions and quick responses to problems instead of strategic sourcing (Paik et al., 2009), entering a purchasing market reactively due to cost pressure or unsolicited opportunities from customer and not proactively, for example, to find innovative suppliers (Agndal, 2006). Additionally, quantitative evaluation of suppliers and purchasing performance measurements, such as total cost of ownership (TCO) or AHP, are still under development by SMEs (Paik, 2021; Pressey et al., 2009).

The development and implementation of CSR measures create value by reducing costs and generating competitive advantages for SMEs (Bacinello et al., 2021; Herrera Madueño et al., 2016; Ikram et al., 2019). A questionnaire conducted on 103 SMEs based in Brazil showed that implementing social, environmental, and human rights strategies not only support enterprises in reducing costs but also in improving their image (Bacinello et al., 2021). Ikram et al. (2019) indicate that CSR creates value by fostering employee commitment and corporate reputation. Thus, it is necessary for SMEs to consider CSR as a part of a company's strategy. Focusing on procurement strategy research indicates that SMEs often apply CSR reactively (Stekelorum, 2020). Such companies receive pressure from large buyers who obligate them to implement CSR in their supply chain (Baden et al., 2011). Due to being constrained by limited resources and capabilities, leveraging CSR as part of the procurement strategy is challenging for SMEs. Therefore, this paper proposes the first steps to develop a procurement strategy in the SME context.

According to various publications, a CSR system can be considered a part of the company's procurement strategy only if it provides financial benefits (Burke and Logsdon, 1996; European Commission, 2011; Lantos, 2001; Porter and Kramer, 2006; Smith, 2000). Thus, when defining a procurement strategy, it is necessary to evaluate CSR together with other factors, such as cost and quality. To assess the relevance of these factors, we draw on a concept of competitive priorities.

Competitive priorities are defined as a company's strategic priorities to compete in the market (Hayes and Wheelwright, 1984). Defining competitive priorities provides a common goal for different functions of the company. Quality, delivery, cost, and flexibility, developed by Hayes and Wheelwright (1984), are considered original priorities. Additional studies extend these four priorities, for example, based on the company development phases, branch characters, and external environment. Additional priorities include innovation (Díaz-Garrido et al., 2011; Miller and Roth, 1994), environment-friendliness (Lin and Tseng, 2016; Zeng et al., 2008), customer service (Russell and Harvey, 2014), and CSR (Sellitto et al., 2022; Vivares-Vergara et al., 2016).

CSR is considered a competitive priority in sustainable supply chain management and operations in the works of Sellitto et al. (2022) and Varsei et al. (2014). However, the lack of analysis on the nature of CSR and its effective categorization encumber the utilization of these terms for enterprises or further research. Therefore, we develop a concept of extended core competitive priorities compromising CSR in this work.

Defining an extended competitive priority concept

The four original competitive priorities, quality, cost, delivery, and flexibility, are seen as core dimensions (Durugbo et al., 2021; Kathuria and Partovi, 2000; Krause et al., 2001). These dimensions present the core business aspects and should always be considered when defining the company's competitive priorities. Cost performance means the ability of an enterprise to reduce the cost of its operations (Esmizadeh and Mellat Parast, 2021). Flexibility refers to the ability to respond to changes quickly (Hall, 1992). The meaning of quality depends on the functional areas. In manufacturing, for example, it is defined as conformance to specifications (Kathuria and Partovi, 2000), while in supply chain management, response time is a crucial quality measure (Esmizadeh and Mellat Parast, 2021). In procurement, the quality is measured by suppliers' ability to provide reliable materials which meet the buying companies' requirements (Krause et al., 2001). Finally, delivery is defined as the speed of delivering products or services. Table 1

gives an overview of the priorities and their dimensions.

Adoption of CSR as a competitive priority

This working paper proposes to define CSR as a competitive priority element with new dimensions by reviewing the literature. As Tamvada (2020) mentions, responsibility consists of legal requirements or moral obligations. Hence, it is not only required to fulfill legal responsibilities, but companies should also prevent making profits from endangering the rights of others, even though it is not illegal to do so (Tamvada, 2020). In addition, according to the CSR definition by the European Commission (2011), CSR reporting is an essential element of CSR implementation. Therefore, we adopt CSR as a competitive priority with three dimensions: fulfillment of legal responsibilities, fulfillment of moral obligations, and CSR reporting (see).

Legal responsibility refers to the requirements that must be fulfilled to do business, sell goods, or offer services in a market. They are regulated by international and European

law, tort law and contract law, criminal law, and labor and environmental law (Lambooy, 2014). Besides legislation, contractual engagements and private self-regulation obligations, like Code of Conduct, are part of legal responsibilities (Lambooy, 2014). For instance, SMEs implementing CSR often apply self-regulation, such as a Code of Conduct, in their supplier management strategies (Stekelorum, 2020).

Moral responsibility has a broad scope due to the moral pluralism of different cultures and requirements for various products, services, or industries (Tamvada, 2020). It means activities might not be illegal but can endanger the legal rights of others. The Business and Human Rights Resource Centre (BHRRC) reported 450 cases of human rights abuse in 2017 (BHRRC, 2017). Such activities occur especially in developing countries that provide large companies the possibility to operate their business while having weak laws (Tamvada, 2020). Mining disasters are one exemplary concern in developing countries. In 2015, the Mariana dam disaster poured 43 million tons of mud and toxic waste into Brazil's Doce River, polluting 668 km³ of watercourses from the Doce River to the Atlantic Ocean, killing 19 people (BBC, 2016; Carmo et al., 2017). Another area of concern is fast fashion. Many companies, such as H&M, Zara, and Burberry, are accused of greenwashing (Changing Markets Foundation, 2021). The fast fashion company H&M launched a sustainable clothing line – the "Conscious Collection". However, Changing Markets Foundation (2021) reported, "H&M's Conscious Collection not only uses more synthetics than in its main collection, but also one in five items analyzed were found to be made from 100% fossil-fuel derived synthetic materials." These examples show the negative consequences for the society if there is a lack of morale responsibility. Therefore, determining moral responsibilities is an important activity to ensure the rights of others.

CSR reporting is the third CSR dimension. Various studies and government documents indicate that a CSR report is a significant element for CSR implementation (European Commission, 2011; Moneva and Pajares, 2018; Varsei et al., 2014). A CSR report aims to disclose non-financial information (e.g. social and environmental information) and to provide transparency for stakeholders and the public. A CSR report legitimates the company's behavior regarding societal values and identifies sustainability risks (European Commission, 2011). In some cases, publishing a CSR report is a legal responsibility. Due to changes in the reporting regulation, starting in 2024, about 50 000 companies are required to write a CSR report, according to the European Commission (2023). In other cases, a CSR report is a voluntary tool for enterprises to communicate with the stakeholders and the public. We conclude it as a separate category due to its importance to CSR. Whether it is voluntary or legally obligated, enterprises need to develop a tool for communication. However, due to the limited resources and knowledge, SMEs are often not able to write and publish a CSR report (Moneva and Pajares, 2018). Thus, Bikefe et al. (2020) suggest that a specific reporting standard should be set for SMEs based on their operational scale.

Innovation as a competitive priority in the CSR context

Research indicates a direct relationship between CSR and innovation (Brammer et al., 2012; Holmes and Smart, 2009). Implementing CSR-related measures can increase a company's profitability by reducing costs and improving efficiency, such as recycling, reducing waste, and saving consumption (European Commission, 2011; Quairel-Lanoizelée, 2011). Innovation focuses on the technology to reduce cost and improve efficiency, such as abating waste or implementing recycling (Huo et al., 2022). Innovation is crucial in launching new products to address customer requirements, such as organic goods or recyclable packaging and papers (Sellitto et al., 2022). Thus, SMEs which actively address CSR are more innovative (Sodhi and Tang, 2018; Tang and Tang, 2012).

Hence, we conclude that innovation should also be included in evaluating competitive priorities during strategy development.

The dimensions of innovation involve product innovation, process innovation, managerial innovation, and technical innovation (Lin and Tseng, 2016; Sellitto et al., 2022). For purchasing and sourcing, Krause et al. (2001) define three dimensions for innovation: product innovation, technological innovation, and technology sharing.

Table 1 - Core competitive priorities with CSR and innovation

Competitive priority (level 1)	Dimensions (level 2)	Key references
Cost	Total cost, competitive pricing, value-added costs, quality costs	(Hayes and Wheelwright, 1984; Kathuria and Partovi, 2000; Krause et al., 2001; Lin and Tseng, 2016; Prabhu et al., 2020; Sellitto et al., 2022)
Flexibility	Volume flexibility, technological capability, modification flexibility, product mix flexibility	
Quality	Product reliability, product durability, conformance to specifications, performance quality, certification	
Delivery	Expediting, new product development time, JIT, delivery speed, delivery reliability/dependability, distance, right quality, right amount	
CSR	Fulfillment of legal responsibilities, fulfillment of moral responsibilities, CSR reporting	(European Commission, 2011; Tamvada, 2020)
Innovation	Product innovation, process innovation, managerial innovation, technical innovation, technology sharing	(Krause et al., 2001; Lin and Tseng, 2016)

Table 1 details the above-discussed competitive priorities (level 1) and dimensions (level 2). This concept serves as a basis for a holistic definition of the competitive priorities to ensure a strategic fit.

Procurement strategy development process

Based on the extended core competitive priorities concept, we develop a procurement strategy development process for SMEs. Hayes and Wheelwright (1984) argue that companies should adopt one or more priorities as their core competence in the target market. To achieve this goal, the first step of our solution aims to identify if all competitive priorities' dimensions apply in the company context. Then, the following step is to rank the remaining competitive priorities using AHP.

Determining the relevant dimensions within each competitive priority

The competitive priorities affect each other. For example, ensuring the quality of the purchased components will reduce the quality cost by decreasing inspection costs. Speeding up deliveries will increase the total cost due to the higher logistic cost. Furthermore, competitive priorities depend on enterprise size, branch, and company functions. While large companies often focus on flexibility or innovation (Sellitto et al.,

2022; Vivares et al., 2018), SMEs tend to focus on the activities that contribute to their growth and enhance their competitive advantages (Stoian and Gilman, 2017). Therefore, the competitive priorities and the corresponding dimensions (see) should be first analyzed according to the company's procurement requirements and corporate competitive advantages.

This qualitative phase aims to identify the relevant items for the procurement strategy. Interviews or workshops with the staff involved directly or indirectly in procurement strategy development should be conducted to collect the necessary information. Nicholas (1998) indicates that procurement, operations, engineering, and accounting are the four departments involved in supplier selection. Thus, participant selection should ensure that these functions are represented in the process. The goals and the explanation of the competitive priorities should be prepared before executing the workshop or interviews.

During the workshop, the participants discuss competitive priorities and the related dimensions for procurement, linking them to the corporate strategy and deciding on relevant dimensions for the next step. As a result of this step, the applicable competitive priorities and dimensions for developing the procurement strategy are selected and documented.

Weighting the competitive priorities by using AHP

Defining the relevance of the selected priorities and dimensions is crucial for the strategy development process. Due to the connectedness of competitive priorities, a pairwise comparison enables a consistent set of strategic priorities. The AHP method developed by Saaty (1987) fulfills this requirement.

AHP is a widely used method in multi-criteria decision-making (MCDM) problems since it allows the implementation of qualitative and quantitative criteria through pairwise comparisons (Lee and Drake, 2010). It is based on relative evaluations of the different criteria by experts, which leads to the creation of priority scales. Furthermore, through a consistency check procedure, AHP detects the inconsistencies in pairwise evaluations and necessitates a reassessment of the comparisons in case of discrepancies. Additionally, AHP is suitable in group decisions where more than one person is involved in the evaluation process (Saaty, 1986).

Based on the AHP process developed by Saaty (1987), the process to prioritize the selected items and sub-items is listed below:

1. For each competitive priority, the participants define its relative importance (level 1) with other priorities based on a scale from 1 (equal importance) to 9 (extreme importance). In case of more than one participant, we recommend that each participant rates individually (without discussing during the evaluation process) to avoid bias.
2. The exact process is performed for level 2.
3. For each competitive priority and dimension, the weights are calculated using the method developed by Saaty (1987). If more than one participant is involved in the process, the individual evaluations for each priority and dimension have to be combined into one value. In the SME context, we assume all participants have the same or similar overview of the entire company. Thus, we propose to use the arithmetic mean.
4. The evaluation is done by calculating the consistency ratio (CR) as shown in Saaty (1987). The evaluation is acceptable if the CR value is equal to or smaller than 0,1. If the CR shows inconsistencies, we propose to analyze the results and identify potential reasons. Then, the participants need to adjust

their assessment. A discussion or discussions should serve as a basis for adjusting the evaluation to achieve consistency.

5. When the C.R. indicates consistency, the global weight can be calculated using the approach developed by Saaty (1987).
6. In the final step, the ranking of the competitive priorities and their dimensions should be compared with the procurement requirements and the corporate strategy. If the participants agree that strategic fit is not achieved, they can work again through the evaluation (step 3) or adjust the ranking during the discussion. Finally, all participants should agree on the order.

The calculation process can be supported by software, for instance, Expert Choice Comparison[®] or Microsoft Excel. By launching the quantitative method, the company can confirm the order of the competitive priorities and their dimensions and determine the relevant competitive priorities. The defined competitive priorities and the ranking will be used for the next steps of procurement strategy development, such as supplier evaluation and selection and sourcing decision-making (e.g., make-or-buy, the number of suppliers). *Figure 2* shows the process of weighting the competitive priorities and the related dimensions.

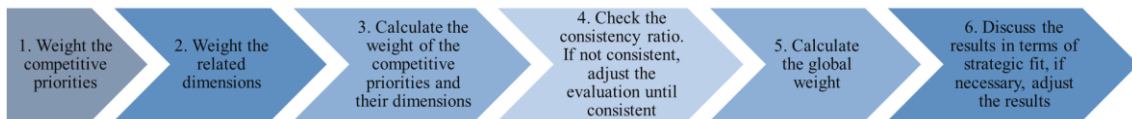


Figure 2: The process of weighting the competitive priorities and the related dimensions

Application of the defined process

To verify the feasibility of our solution, we applied it to a small plant engineering company in the green tech sector. Its corporate strategy focuses on SDG 13, and it explicitly wants to support climate protection. Furthermore, the company aims to develop a sustainable supply chain, by limiting resource utilization, for example. Lastly, it actively supports equal rights and equality, for instance, as part of the hiring process. The company aims to grow its production capacity significantly. It manufactures its products but aims to develop a mass production process. Therefore, considering its corporate strategy and growth plans, the company wanted to create a scalable procurement strategy considering CSR. A significant step to achieving this goal is to ensure the ramp-up of the component supply from workshop manufacturing to mass production. In this working paper, we report the results of testing the above-developed process to develop a consistent procurement strategy for the workshop production, as they currently do not have such a strategy. Two workshops and two meetings were organized to apply the approach.

The first workshop aimed to determine relevant competitive priorities and related dimensions based on the corporate strategy. The management of the company participated in the workshop, as they were the key decision-makers. To avoid misunderstandings, the participants received detailed explanations of the extended competitive priorities concept (see Table 1) combined with branch-specific examples before the workshop. At the beginning of the workshop, the concept was presented again. The participants were allowed to add priorities or raise concerns about missing priorities. As this was not the situation, the next step was the discussion of the relevance: All six competitive priorities of level 1 were considered relevant for the workshop manufacturing. However, the evaluation of level 2 revealed that not all dimensions are

needed. For instance, in level 1 priority *delivery*, JIT is irrelevant due to the long customer order lead time of over 12 months.

In the second workshop, we aimed to rank the level 1 priorities and level 2 dimensions, applying the abovementioned AHP process using a spreadsheet file. First, the management finished the evaluation separately without discussion to avoid bias. Then, the average value of their assessment was calculated. However, the result of this procedure was inconsistent. Therefore, in the following step, a detailed analysis of all inconsistencies was prepared and provided to the company. The main reasons for the inconsistencies were that the general managers had different views on some of the procurement priorities over time and that due to the short definition of the categories, some were interpreted slightly differently. For example, one manager indicated that CSR was much more important than other priorities, while the others focused on other criteria. The result also showed that fulfillment of legal responsibility was identified as a must-have criteria. It is seen as a necessary condition by the company to do business with suppliers. Thus, the management evaluated it with highest priority. If this must-have dimension is included into the AHP evaluation, they are always weighted with 100%, which affected the results greatly and led to unfeasibility. In this case, the dimension was excluded from the AHP evaluation. Still, it was noted as relevant criteria for the procurement processes, esp. supplier evaluation and selection, material segment management, and sourcing decision-making.

A meeting was arranged to present the evaluation results and inform the managers about the exclusion of the dimension “fulfillment of legal responsibilities”. First, the managers discussed the prioritization results and the weighting differences in the remaining categories. During the discussion, they aligned their understanding of some categories and the importance of the priorities. Then the AHP evaluation was adjusted accordingly. The exact process was utilized to determine the relevant importance of the level 2 dimensions. The result of this meeting was a consistent ranking.

In the following step, the global weight of each strategic priority was calculated using the weight of each priority and dimension. Finally, the resulting ranking and percentages were presented in the last meeting. During this meeting, the managers agreed on the order and confirmed consistency with their corporate strategy.

The next step in procurement strategy development is to segment the material and develop a material portfolio based on the ranking of competitive priorities. The sourcing strategy will then be defined according to the material portfolio. The order of the competitive priorities will also serve as a basis for supplier evaluation and definition of the strategic procurement processes. Furthermore, the two-step solution shall be applied again to develop a procurement strategy for the mass production scenario. By comparing the ranking of both scenarios, we aim to identify necessary steps in adapting procurement strategies in growth scenarios.

Discussion & Conclusion

In this study, we formulated a competitive priority definition process in the SME context considering CSR for procurement strategy development, which may be applied to handle different strategy phases. By developing an extended concept for competitive priorities, CSR was redefined into three dimensions: fulfillment of legal responsibilities, fulfillment of moral responsibilities, and CSR reporting. We conclude that these dimensions effectively enable CSR development as a competitive priority and support companies in incorporating sustainability into their procurement strategy.

The second novelty is linking the competitive priority innovation as an indispensable item to the CSR context. As soon as CSR is considered a competitive priority in

procurement, innovation shall also be adopted as a priority. Integrating innovation in this concept enables SMEs to evaluate which techniques are significant for CSR implementation and leads to the success of CSR applications.

Thirdly, we developed a solution to start defining the procurement strategy. The first step determines the relevant dimensions within each competitive priority. It allows the purchasing decision-maker to evaluate the company's purchasing requirements. In the second step, the AHP process enables SMEs to develop a purchasing strategy based on a quantitative evaluation and the company's strategy. A quantitative assessment provides transparency about the opinions of the involved functions or managers, which supports finding gaps, and ensures a strategy fit. Critical success factors in this process are a common understanding of the participants, not only of the priorities and categories but also of the corporate strategy. This alignment process can be fostered by applying the proposed approach and supporting companies in achieving strategic fit. Nevertheless, during application, we found that in the first step of the process the must-have criteria should be identified. These must-have competitive priorities or dimensions, fulfillment of the legal responsibility, for instance, should not be considered in the AHP process but in the following strategy development process.

Fourthly, CSR is a relatively new concept for SMEs, which is gaining more and more importance. Due to its relative newness in SMEs, it can be assumed that managers do not have a common understanding of the concept itself, its importance, and its potential benefits for businesses. The developed process can support companies in defining a shared understanding and in integrating CSR into their strategy.

We identify two limitations of the working paper. Firstly, only the concept of confirming the order of the competitive priorities was developed. Even though SMEs can apply this concept to ensure the strategic fit between procurement and corporate strategy, the procurement strategy process on the component or material segment level was not included. Therefore, our next step is to extend our concept by developing scalable procurement strategies based on competitive priorities in the SME context.

The second limitation is that the application only took place in a small company in the manufacturing sector. We recommend testing the developed process in other SMEs considering the implementation of CSR in their procurement strategy.

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References

- Agndal, H. (2006) 'The purchasing market entry process—A study of 10 Swedish industrial small and medium-sized enterprises', *Journal of Purchasing and Supply Management*, vol. 12, no. 4, pp. 182–196.
- Bacinello, E., Tontini, G. and Alberton, A. (2021) 'Influence of corporate social responsibility on sustainable practices of small and medium-sized enterprises: Implications on business performance', *Corporate Social Responsibility and Environmental Management*, vol. 28, no. 2, pp. 776–785.
- Baden, D., Harwood, I. A. and Woodward, D. G. (2011) 'The effects of procurement policies on 'downstream' corporate social responsibility activity', *International Small Business Journal: Researching Entrepreneurship*, vol. 29, no. 3, pp. 259–277.
- BBC (2016) *Brazil dam burst: Six months on, the marks left by sea of sludge* [Online]. Available at <https://www.bbc.com/news/world-latin-america-36230578>.
- BHRRC (2017) *Corporate impunity is common & remedy for victims is rare* [Online], Business & Human Rights Resource Centre. Available at https://media.business-humanrights.org/media/documents/files/documents/CLA_AB_Final_Apr_2017.pdf.
- Bikefe, G., Zubairu, U., Araga, S., Maitala, F., Ediuku, E. and Anyebe, D. (2020) 'Corporate Social Responsibility (CSR) by small and medium enterprises (SMEs): a systematic review', *Small Business International Review*, vol. 4, no. 1, pp. 16–33.
- Brammer, S., Hoejmoose, S. and Marchant, K. (2012) 'Environmental Management in SMEs in the UK: Practices, Pressures and Perceived Benefits', *Business Strategy and the Environment*, vol. 21, no. 7, pp. 423–434.
- Burke, L. and Logsdon, J. M. (1996) 'How corporate social responsibility pays off', *Long Range Planning*, vol. 29, no. 4, pp. 495–502.
- Carmo, F. F. d., Kamino, L. H. Y., Junior, R. T., Campos, I. C. de, Carmo, F. F. d., Silvino, G., Da Castro, K. J. S. X. d., Mauro, M. L., Rodrigues, N. U. A., Miranda, M. P. d. S. and Pinto, C. E. F. (2017) 'Fundão tailings dam failures: the environment tragedy of the largest technological disaster of Brazilian mining in global context', *Perspectives in Ecology and Conservation*, vol. 15, no. 3, pp. 145–151.
- Changing Markets Foundation (2021) *Synthetic anonymous press release: fashion industry addicted to greenwashing and fossil-fuel based synthetics* [Online]. Available at <http://changingmarkets.org/wp-content/uploads/2021/06/SYNTHETICS-ANONYMOUS-PRESS-RELEASE-UK.pdf>.
- Díaz-Garrido, E., Martín-Peña, M. L. and Sánchez-López, J. M. (2011) 'Competitive priorities in operations: Development of an indicator of strategic position', *CIRP Journal of Manufacturing Science and Technology*, vol. 4, no. 1, pp. 118–125.
- Durugbo, C. M., Anouze, A. L., Amoudi, O. and Al-Balushi, Z. (2021) 'Competitive priorities for regional operations: a Delphi study', *Production Planning & Control*, vol. 32, no. 15, pp. 1295–1312.
- Esmizadeh, Y. and Mellat Parast, M. (2021) 'Logistics and supply chain network designs: incorporating competitive priorities and disruption risk management perspectives', *International Journal of Logistics Research and Applications*, vol. 24, no. 2, pp. 174–197.
- European Commission (2011) *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions* [Online]. Available at <https://op.europa.eu/en/publication-detail/-/publication/ae5ada03-0dc3-48f8-9a32-0460e65ba7ed?msclid=745e7126c86411ec9ce5b94160eab3a3>.
- European Commission (2023) *Corporate sustainability reporting* [Online]. Available at https://finance.ec.europa.eu/capital-markets-union-and-financial-markets/company-reporting-and-auditing/company-reporting/corporate-sustainability-reporting_en.
- Hall, R. W. (1992) 'Catching up with the times', *Business Horizons*, vol. 35, no. 4, pp. 6–14.
- Hayes, R. H. and Wheelwright, S. C. (1984) 'Restoring our competitive edge: competing through manufacturing', *John Wiley & Sons*.
- Herrera Madueño, J., Larrán Jorge, M., Martínez Conesa, I. and Martínez-Martínez, D. (2016) 'Relationship between corporate social responsibility and competitive performance in Spanish SMEs: Empirical evidence from a stakeholders' perspective', *BRQ Business Research Quarterly*, vol. 19, no. 1, pp. 55–72.
- Holmes, S. and Smart, P. (2009) 'Exploring open innovation practice in firm-nonprofit engagements: a corporate social responsibility perspective', *R&D Management*, vol. 39, no. 4, pp. 394–409.

- Huo, C., Hameed, J., Zhang, M., Bin Mohd Ali, A. F. and Amri Nik Hashim, N. A. (2022) 'Modeling the impact of corporate social responsibility on sustainable purchase intentions: insights into brand trust and brand loyalty', *Economic Research-Ekonomska Istraživanja*, vol. 35, no. 1, pp. 4710–4739.
- Ikram, M., Sroufe, R., Mohsin, M., Solangi, Y. A., Shah, S. Z. A. and Shahzad, F. (2019) 'Does CSR influence firm performance? A longitudinal study of SME sectors of Pakistan', *Journal of Global Responsibility*, vol. 11, no. 1, pp. 27–53.
- Kathuria, R. and Partovi, F. Y. (2000) 'Aligning work force management practices with competitive priorities and process technology', *The Journal of High Technology Management Research*, vol. 11, no. 2, pp. 215–234.
- Krause, D. R., Pagell, M. and Curkovic, S. (2001) 'Toward a measure of competitive priorities for purchasing', *Journal of Operations Management*, vol. 19, no. 4, pp. 497–512.
- Lambooy, T. (2014) 'Legal Aspects of Corporate Social Responsibility', *Utrecht Journal of International and European Law*, vol. 30, no. 78, pp. 1–6.
- Lantos, G. P. (2001) 'The boundaries of strategic corporate social responsibility', *Journal of Consumer Marketing*, vol. 18, no. 7, pp. 595–632.
- Lee, D. M. and Drake, P. R. (2010) 'A portfolio model for component purchasing strategy and the case study of two South Korean elevator manufacturers', *International Journal of Production Research*, vol. 48, no. 22, pp. 6651–6682.
- Lin, Y.-H. and Tseng, M.-L. (2016) 'Assessing the competitive priorities within sustainable supply chain management under uncertainty', *Journal of Cleaner Production*, vol. 112, pp. 2133–2144.
- Liu, F., Fang, M., Park, K. and Chen, X. (2021) 'Supply Chain Finance, Performance and Risk: How Do SMEs Adjust Their Buyer-Supplier Relationship for Competitiveness?', *Journal of Competitiveness*, vol. 13, no. 4, pp. 78–95.
- Miller, J. G. and Roth, A. V. (1994) 'A Taxonomy of Manufacturing Strategies', *Management Science*, vol. 40, no. 3, pp. 285–304.
- Moneva, J. M. and Pajares, J. H. (2018) 'Corporate social responsibility performance and sustainability reporting in SMEs: an analysis of owner-managers' perceptions', *International Journal of Sustainable Economy*, vol. 10, no. 4, p. 405.
- Nicholas, J. (1998) *Competitive manufacturing management: continuous improvement, lean production, customer-focused quality*, McGraw-Hill/Irwin.
- Paik, S.-K. (2011) 'Supply Management in Small and Medium-Sized Enterprises: Role of SME Size', *Supply Chain Forum: An International Journal*, vol. 12, no. 3, pp. 10–21.
- Paik, S.-K. (2021) 'Positioning the State of Purchasing in Small and Medium Sized Enterprises', *Journal of Supply Chain and Operations Management*.
- Paik, S.-K., Bagchi, P. K., SkjØtt-Larsen, T. and Adams, J. (2009) 'Purchasing Development in Small and Medium-Sized Enterprises (SMEs)', *Supply Chain Forum: An International Journal*, vol. 10, no. 1, pp. 92–107.
- Porter, M. E. and Kramer, M. R. (2006) 'Strategy and society: the link between corporate social responsibility and competitive advantage', pp. 78–92.
- Prabhu, M., Nambirajan, T. and Abdullah, N. N. (2020) 'Analytical review on competitive priorities for operations under manufacturing firms', *Journal of Industrial Engineering and Management*, vol. 13, no. 1, p. 38.
- Pressey, A. D., Winklhofer, H. M. and Tzokas, N. X. (2009) 'Purchasing practices in small- to medium-sized enterprises: An examination of strategic purchasing adoption, supplier evaluation and supplier capabilities', *Journal of Purchasing and Supply Management*, vol. 15, no. 4, pp. 214–226.
- Quairel-Lanoizelée, F. (2011) 'Are competition and corporate social responsibility compatible?', *Society and Business Review*, vol. 6, no. 1, pp. 77–98.
- Quayle, M. (2002) 'Supplier development and supply chain management in small and medium size enterprises', *International Journal of Technology Management*, vol. 23, 1/2/3, p. 172.
- Russell, S. N. and Harvey, H. (2014) 'Exploring the relationships among sustainable manufacturing practices, business performance and competitive advantage: Perspectives from a developing economy', *J. Mgmt. & Sustainability* 4, p. 37.

- Saaty, R. W. (1987) 'The analytic hierarchy process—what it is and how it is used', *Mathematical Modelling*, vol. 9, 3-5, pp. 161–176.
- Saaty, T. L. (1986) 'Axiomatic Foundation of the Analytic Hierarchy Process', *Management Science*, vol. 32, no. 7, pp. 841–855.
- Sellitto, M. A., Valladares, D. R. F., Pastore, E. and Alfieri, A. (2022) 'Comparing Competitive Priorities of Slow Fashion and Fast Fashion Operations of Large Retailers in an Emerging Economy', *Global Journal of Flexible Systems Management*, vol. 23, no. 1, pp. 1–19.
- Smith, N. C. (2000) 'Changes in corporate practices in response to public interest advocacy and actions: The role of consumer boycotts and socially responsible corporate social responsibility' [Online]. Available at <http://facultyresearch.london.edu/docs/00-704.pdf>.
- Sodhi, M. S. and Tang, C. S. (2018) 'Corporate social sustainability in supply chains: a thematic analysis of the literature', *International Journal of Production Research*, vol. 56, 1-2, pp. 882–901.
- Stange, R., Schiele, H. and Henseler, J. (2022) 'Advancing purchasing as a design science: Publication guidelines to shift towards more relevant purchasing research', *Journal of Purchasing and Supply Management*, vol. 28, no. 1, p. 100750.
- Stekelorum, R. (2020) 'The roles of SMEs in implementing CSR in supply chains: a systematic literature review', *International Journal of Logistics Research and Applications*, vol. 23, no. 3, pp. 228–253.
- Stoian, C. and Gilman, M. (2017) 'Corporate Social Responsibility That “Pays”': A Strategic Approach to CSR for SMEs', *Journal of Small Business Management*, vol. 55, no. 1, pp. 5–31.
- Tamvada, M. (2020) 'Corporate social responsibility and accountability: a new theoretical foundation for regulating CSR', *International Journal of Corporate Social Responsibility*, vol. 5, no. 1.
- Tang, Z. and Tang, J. (2012) 'Stakeholder–firm power difference, stakeholders' CSR orientation, and SMEs' environmental performance in China', *Journal of Business Venturing*, vol. 27, no. 4, pp. 436–455.
- Ucuzoglu, J. B. and Steinmann, J. (2023) *Deloitte 2023 CxO Sustainability Report: Accelerating the Green Transition* [Online]. Available at https://www2.deloitte.com/content/dam/Deloitte/de/Documents/risk/CxOSustainabilityReport2023_Global_Deloitte%20.pdf.
- Varsei, M., Soosay, C., Fahimnia, B. and Sarkis, J. (2014) 'Framing sustainability performance of supply chains with multidimensional indicators', *Supply Chain Management: An International Journal*, vol. 19, no. 3, pp. 242–257.
- Vivares, J. A., Sarache, W. and Hurtado, J. E. (2018) 'A maturity assessment model for manufacturing systems', *Journal of Manufacturing Technology Management*, vol. 29, no. 5, pp. 746–767.
- Vivares-Vergara, J. A., Sarache-Castro, W. A. and Naranjo-Valencia, J. C. (2016) 'Impact of human resource management on performance in competitive priorities', *International Journal of Operations & Production Management*, vol. 36, no. 2, pp. 114–134.
- World Bank (2022) *Small and Medium Enterprises (SMEs) Finance: Improving SMEs' access to finance and finding innovative solutions to unlock sources of capital* [Online]. Available at <https://www.worldbank.org/en/topic/sme/finance>.
- Zeng, S. X., Xie, X. M., Tam, C. M. and Wan, T. W. (2008) 'Competitive priorities of manufacturing firms for internationalization: an empirical research', *Measuring Business Excellence*, vol. 12, no. 3, pp. 44–55.