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Factors influencing structural power dynamics in buyer-supplier relationships: a power sources framework and application of the critical incident technique

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Abstract

Research background: Although the literature on power asymmetry and power dynamics has recognized the issue of factors that cause power shifts in business-to-business relationships, a more systematic approach and research framework regarding the identification of these factors is lacking. There are attempts in business-to-business literature to use the critical incident technique to study dynamic phenomena, but there are no studies on the factors that increase and decrease the power of suppliers in their relationships with dominant buyers.

Purpose of the article: The aim of this paper is to identify the factors that influence the most significant changes in suppliers' power in relationships with dominant buyers. An important objective is also to determine to which power sources the identified factors are assigned. This is crucial for business practitioners, who will be able to adjust their actions when managing a relationship with a dominating partner through knowledge of their own strengths as well as weaknesses.

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Methods: The study is based on analysis of questionnaires with open-ended questions, and uses the critical incident technique to investigate the behaviour of dyadic parties at key moments in buyer-seller relationships. We have focused on investigation of manufacturing companies mainly from the furniture, construction, energy and printing industries. The analysis of the data was based on the abductive approach as a combination of inductive and deductive coding.

Findings & value added: In comparison to previous studies, which did not distinguish the level of importance of each factor, we have obtained only those factors with the greatest impact on power dynamics. We have also obtained factors which can decrease suppliers' power, whereas the literature focuses mostly on factors increasing suppliers' power. The research results reveal the factors that affect an increase and decrease in the power of weaker suppliers in relationships with dominant buyers. First- and second-order factors were identified, and subsequently 3 overarching dimensions for each increase and decrease in supplier power were deduced from the results. The most important overall dimension for the increase in power was the building of suppliers' power capabilities, while the decrease in suppliers' power was most influenced by transactional changes and changes in buyer's expectations. The results can be helpful for managers in focusing their attention on expert power in order to gain knowledge and prepare a practical background for managing asymmetric relationships. It is important to mention that the critical incident technique used in this study has not yet been used to represent power dynamics in B2B relationship literature.

Introduction

Power is a central notion in business-to-business relationships (Meehan & Wright, 2012). Power within a social exchange can be understood as “the potential to affect another's behaviour, which manifests when a firm demands something incompatible with another firm's desire, and the firm receiving the demand shows resistance” (Cowan *et al.*, 2015, p. 142). In current B2B marketing literature, static viewpoints on power are in the majority (e.g., Kraljic, 1983; Bensaou, 1999). We used a dynamic power approach that has been applied to a lesser extent (see, e.g., Oukes *et al.*, 2019; Lacoste & Johnsen, 2015; Makkonen *et al.*, 2021). Power asymmetry is not a static concept as power changes over the course of a relationship. This suggests taking a dynamic viewpoint on power and power asymmetry so as to reflect the changes that occur at different stages of a partnership (Lacoste & Johnsen, 2015; Pérez & Cambra-Fierro, 2015).

In business exchanges, partners are rarely similar in terms of their resources (Siemieniako & Gębarowski, 2016; 2017; Rindt & Mouzas, 2015) or strategies, which results in differences with regards to the potential of structural power to exercise power (see Oukes *et al.*, 2019, French & Raven 1959). Naturally, and most commonly, the power of partners in dyadic B2B relationships is asymmetrical (Hingley, 2005), which means that from the resource-based view there are differences in resources between the partners (Auh & Menguc, 2009).

The factors affecting power dynamics in dyadic buyer-supplier relationships can be divided into those internal to the relationship, and external factors. The first type of factors are known as countervailing events (i.e. power shift related actions) and the latter type of factors as contextual events (Makkonen *et al.*, 2012; Makkonen *et al.*, 2021; Oukes *et al.*, 2019). We divided these contextual events into those that are external to the relationship but internal to the firm (e.g., increase of manufacturing capacity of the supplier, which may indirectly result in a better power position), or external to the firm (e.g., changes in the firm's environment, which may indirectly influence power dynamics). In our study, we analysed these three types of factors and their influence on power dynamics in business relationships analysed.

The literature on power asymmetry in business-to-business relationships points to many kinds of power-related actions, as well as factors that are external to the focal relationship and indirectly influence power dynamics in B2B relationships (e.g., Cowan *et al.*, 2015; Lacoste & Johnsen, 2015; Kubacki *et al.*, 2020; Pérez & Cambra-Fierro, 2015; Siemieniako & Miłtręga, 2018; Zadykowicz *et al.*, 2020;). The issue of how these factors differ in importance in terms of their influence on power dynamics and how they actually affect power dynamics remains unanswered in business-to-business literature. Therefore, there is a need to identify the key factors that lead to a significant increase or decrease in power in business relationships, which we have identified as a research gap.

It is important to identify how supplier power evolves in a relationship with a dominant buyer in order to distinguish the most necessary practices for maintaining a favourable balance of power ensuring successful cooperation between the two entities. An important aspect is to determine in relation to which power sources the most significant changes of power in the relationship occur. This article stresses the importance of non-mediated power sources, and shows how the most critical cases in the interaction between relationship partners influence shifts in power asymmetry.

The aim of the article is to identify factors which cause the most significant increases and decreases in weaker suppliers' power with regard to power sources in relationships with dominant buyers in the context of manufacturing industries.

A qualitative approach was applied using a questionnaire with open-ended questions, whereby managers representing weaker suppliers were asked to write answers so as to identify the most important factors that increased or decreased the power of these suppliers in their relationships with dominant buyers. The research was conducted on Polish suppliers in the manufacturing industry (mainly furniture, construction, printing and ener-

gy). We used the critical incident technique (Gremler, 2004; Flanagan, 1954) to identify factors which caused power to increase and decrease the most significantly in the relationships studied. The research method used provides novelty as there has been no previous focus in the literature on identifying the most important variables, in particular using the critical incident technique. The next section of the paper reviews the literature on the dynamic power approach and power asymmetry, which define our theoretical framework. This is followed by a section on the research method. Next, we present the findings of our qualitative research. To finish with, we have included discussion and conclusion sections.

Literature review

Theoretical background

To have the opportunity to grow, companies look for partners who have the desired resources for creating successful business relationships (Holmlund & Törnroos, 1997). Through interactions between companies, resources are exchanged, which affects the level of value creation in the business relationship (Andersen & Kumar, 2006). Differences in the resources controlled and the resulting differences in power lead to an asymmetry in the benefits distributed (Munksgaard *et al.*, 2015). Over the course of the relationship, each party will seek to maximize the benefits for themselves (Molm, 2010).

Power dynamics play an important role in business relationships (Cowan *et al.*, 2015). Thus, the level of power over the course of the relationship will change as the parties, mainly the weaker ones, assess the impact of power asymmetry on the relationship benefits they receive (Lacoste & Johnsen, 2015). As the business relationship evolves, weaker partners can reduce the level of power asymmetry, mainly through non-mediated power sources (Siemieniako & Mitreęa, 2018).

Many scientific works focus attention on the concept of structural power and are based on the sources of power developed by French and Raven (1959), that is coercive, reward, expert, referent and legitimate. The literature also classifies the sources into either coercive, or non-coercive, which includes reward, expert, referent and legitimate power (Cowan *et al.*, 2015; Handley & Benton, 2012; Kubacki *et al.*, 2020). On the other hand, Benton and Maloni (2005) used a grouping of power sources by dividing them into mediated, which contain coercive, reward and legitimate power, and non-mediated, which include expert and referent power. Coercive power mani-

fest itself by allowing the stronger party to use coercive techniques to achieve the desired behaviour of the other party. Examples of coercive power may include: imposing financial penalties, withdrawing from previously agreed-upon terms, or withholding needed support from the weaker party (Yeung *et al.*, 2009). Reward power, on the other hand, derives from the ability to reward the other party for performing their tasks in a manner exceeding expectations. Expert power, meanwhile, is when one side in a relationship possesses knowledge and experience the other side wants. Legitimate power refers mainly to the possession of formal power derived from established terms and conditions, most often a contract already in place, which may contain provisions that give a power advantage in the relationship to one of the parties. Referent power is when one company clearly respects and admires the other company's way of doing business, making cooperation with that company attractive (Nyaga *et al.*, 2013). On the other hand, referent power can also be seen from the perspective of satisfaction with the cooperation or with products received from the company, which also makes it desirable for other organisations to cooperate with this company.

Power asymmetry is a natural feature of business-to-business relationships that, when preceded by wise and effective relationship management, can be fully controlled and does not significantly affect either party (Wilkinson, 1996). Asymmetry can positively affect companies with relatively low power as they will generally show more willingness to develop, which can result in increasing their power in the relationship and also providing additional benefits to the dominant party (Pérez & Cambra-Fierro, 2015; Cuevas *et al.*, 2015). A large portion of the literature presents power asymmetry in buyer-supplier relationships through the lens of the negative effects on the weaker party in the relationship. According to Cowan *et al.*, (2015), being in a relationship with a significantly stronger partner can lead to an unbalanced distribution of the benefits of the partnership, where the weaker party will have to accept a smaller share of the benefits received. Following this pattern, companies with more power may also neglect the needs of their partners by focusing only on their own interests, thus creating less extra value from the relationship (Wolfe & McGinn, 2005).

Previous empirical studies in the field

To increase their power in buyer-supplier relationships, weaker companies often take steps to adapt to the needs and demands of the stronger side of the relationship (Nyaga *et al.*, 2013). However, not every action that seeks to increase power may always be successful. According to Lin *et al.*,

(2017), suppliers must show a willingness to make asset-specific investments in order to meet the demands of customers. In their work, Pérez and Cambra-Fierro (2015) present practices for balancing power in relationships with stronger parties, including: supplier specialization through specific investments, a focus on learning to work together, and a commitment to using informal communication channels by identifying a champion (usually a middle manager) willing to establish a closer relationship with the weaker firm. Olsen *et al.* (2014), meanwhile, propose 3 mechanisms relating to increasing power between different units in a network, that is gatekeeping, decoupling and resource allocation.

In turn, Lacoste and Johnsen (2015) show the importance of adding services to products offered, such as creating hybrid offers and investing in increasing the competences of employees in terms of specialization in the field needed to meet customer needs. Cowan *et al.* (2015) propose that managers of weaker firms facing collaboration with a stronger counterpart should focus their attention on investing in acquiring resources or competencies, looking for ways to reduce competition, and striving to become indispensable.

Research conducted by Siemieniako and Mitreĝa (2018) identified 4 groups of factors based on non-mediated power sources, in which there were also specific tactics by which weaker suppliers reduced power asymmetry in the relationship. The first group of factors called "Making extraordinary efforts" included: fulfilling the prerequisites for being chosen by a powerful customer, the role of the parent company in motivating suppliers, development of specific resources or competencies, and becoming more open in information sharing. The second group, named "Orientation on product specialization" included: focusing on a limited number of value-creating relationships, acquiring other customers on the basis of similarity to the existing one, learning within a narrow range of activity, and aiming to be the sole supplier of a specific product for the customer. The third group, called "Learning to work together" included tactics: implementing a key account management function, excellence in communication on an organisational and personal level, implementing measurement procedures to keep a large customer well-informed, and developing a team mentality on the inter-firm operational level. The fourth group of factors, meanwhile, was called "Maintaining a reasonable share of sales to the dominant customer" and contained tactics such as: expanding supplier participation in the value chain, mitigating the bankruptcy hazard, and using references from the dominant customer to acquire other customers.

According to research by Talay *et al.* (2020), smaller manufacturing companies adjust their power position using practices that strive to meet the

dominant buyer's requirements, mainly by: adjusting manufacturing processes to environmental sustainability standards, improving production capabilities so as to increase production efficiency and minimize losses, engaging employees in skills development, applying ethical practices in the workplace, and adhering to guidelines for respecting employee rights.

A study presented by Oukes *et al.* (2019) shows the factors that influence the increasing and decreasing power of a start-up in relation to stronger partners. Factors that increased the power of the start-up in question included: having expertise in a specific scientific area, as well as innovation and product uniqueness. On the other hand, factors that determined decreased power were: low material and financial resources, as well as dependence of the company's activity on received patents.

In the work presented by Makkonen *et al.* (2021), supplier power increased by providing support services to accompany products offered, as well as by convincing end users to operate with new models by organizing workshops or presentations. Another factor that increased supplier power was finding an alternative distributor in a market operated by an existing buyer, which resulted in an opportunity to terminate the existing cooperation.

In addition to the organisational factors that affect changes in the power of the weaker party, there are also external conditions that companies do not have much influence over. According to Cheung *et al.* (2010), over the course of a B2B relationship, the power of partners can change due to changes and developments in the sphere of technology, which affects the price and availability of products. The unpredictability of economic factors, e.g. changing demand for goods often resulting from changes in customers' buying behaviour or the financial condition of companies, may also have a major impact on changes in power. Another factor is the volatility of legal regulations, which can positively or negatively affect the power of suppliers. On the other hand, Wang (2011) describes the need for a firm to learn about the conditions on foreign markets from its partners due to the increasing internationalization of business.

Since there are a large number of factors in B2B relationships that can impact an increase or decrease in power, it is difficult to determine which factors are the most significant. Therefore, it is necessary to examine the factors that most influence the occurrence of changes in power.

Research method

To obtain our research results, we used a qualitative method based on the critical incident technique (CIT), which has been defined as "a set of procedures for collecting direct observations of human behaviour in such a way as to facilitate their potential usefulness in solving practical problems and developing broad psychological principles" (Flanagan 1954, p. 327). The critical incident technique (CIT) can contribute to achieving results by showing the impact of key situations (Struyf *et al.*, 2021) on the increase and decrease of power in buyer-supplier relationships. It is important to note that the critical incident technique has not yet been used to study power dynamics in B2B relationships. A study conducted by Chell and Pittaway (1998) using the CIT technique presents the impact on aspects of entrepreneurship development in the restaurant and cafeteria industry. Likewise, a study conducted by Edvardsson and Strandvik (2000) focuses on customer satisfaction in hospitality services, and presents results in which guests define key situations that have the greatest influence on the improvement of business-client relationships. In turn, Struyf *et al.* (2021) make use of CIT and case study analysis to identify overarching patterns that affect the development of digital servitization.

The CIT technique, created by Flanagan (1954) and developed by Gremler (2004), can help in the study of the behaviour of company representatives in critical situations, and show which behaviours influence changes in power in asymmetric business-to-business relationships. A limitation of the method is that interpretation of the results using the CIT technique can be problematic if the person responding relies on their subjective assessment of a situation, and cannot give a full, neutral picture of the issue under analysis (Douglas *et al.*, 2015).

We used surveys with open-ended questions on the factors that influence the increase and decrease of the power of weaker suppliers in their relationships with dominant buyers. The sample was purposefully selected after desk research in order to distinguish medium-sized and large enterprises based on the number of employees, as well as to identify whether the companies were suppliers and whether they have large, dominant customers. In order to confirm the adopted criterion, a filtering question was used in which the firm representatives interviewed were asked: "*Does your company's business partner have more / less power in the relationship?*". We examined 23 buyer-supplier relationship dyads in which the power of suppliers was lower than that of the buyer, and we received the same amount of completed surveys. The surveys were answered between March and September 2021 by senior and middle level managers responsible for rela-

tionships with business buyers and representing supplier companies in Poland from different manufacturing industries (mainly furniture, construction, energy and printing). They were asked about two issues. The first was to describe the situation throughout the history of a chosen business relationship with a stronger buyer, in which the power position of the weaker supplier increased the most and in relation to which power sources. The exact wording of the question was as follows: “*Please describe the situation in which the position of power of the supplier you represent in relation to a stronger buyer improved the most and what factors influenced this? With respect to what source of power: coercion, reward, contract?*”. The second issue related to situations in which the power of suppliers had decreased in relationships with stronger buyers, with the survey question analogous to the previous one.

Analysis of the essays received consisted of two researchers reading them multiple times and identifying the factors that caused an increase and decrease in power in the relationships studied. We applied the abductive approach (Dubois & Gadde, 2002) as a combination of deductive-inductive coding in qualitative data analysis. In order to identify the factors, an inductive approach was applied based on respondents’ answers (Makkonen, 2012). The inductively identified factors were then interpreted and coded into three deductively generated categories: (i) internal regarding the relationship, and internal regarding supplier or buyer organisations, REL-I/ORG-I; (ii) external regarding the relationship, and internal regarding supplier or buyer organisations, REL-E/ORG-I; and (iii) external regarding the relationship, and external regarding supplier or buyer organisations, REL-E/ORG-E. Another deductive analysis was conducted with the use of power source codes (French & Raven, 1959). Based on the answers provided by the managers, we coded the power increase / decrease factors according to the sources of power. Following the work of Villena and Gioia (2018), the factors obtained were assigned to first-order categories and then assigned to second-order practices and factors as themes, in which we obtained 10 factors each for both increasing (Table 1.) and decreasing (Table 2.) supplier power. We also identified three overarching dimensions for both groups of factors influencing suppliers’ increased and decreased power in their relationships with powerful buyers.

Results

The results of the study were divided into two groups: factors affecting the increase in suppliers’ power and factors affecting the decrease in power.

Factors affecting the increase in suppliers' power

Table 1 shows the factors resulting from our study, which are supplier actions and practices, as well as other factors related to the external environment of the organisations studied in increasing the power of suppliers in relation to dominant buyers.

In the group of factors influencing the increase in supplier power, 18 different first-order and 10 second-order factors emerged. There were also 3 overarching dimensions: the supplier obtaining a favourable position in the relationship, the supplier's building of power-related capabilities, and supplier recognition of favourable external events. Two of the first-order factors occurred twice with different power sources. The factor of becoming a key supplier has been assigned to legitimate and referent power sources, while the increase in production efficiency factor occurred with regard to both legitimate and expert.

Four first-order factors occurred more than once in different types of factors and in relation to different power sources, that is: the supplier obtaining exclusivity for production or services for the buyer, presentation of technological production capabilities for a key customer, increase of production efficiency, and supplier investment in technology and employees.

The most frequently reported source for increasing supplier power was the expert power source, which referred to 8 first-order factors, followed by the referent source of power, which was connected to 6 factors. In total, 16 non-mediated factors were identified that influence an increase in suppliers' power. Only 6 mediated types of power source factors were identified which influenced an increase in suppliers' power, 5 regarding the legitimate power source and 1 coercive power.

After assigning the second-order factors increasing supplier power to their types, 3 factors emerged relating to internal relationships, and internal supplier or buyer organisations (REL-I/ORG-I), 4 factors emerged relating to external relationships, and internal supplier or buyer organisations (REL-E/ORG-I), and 3 factors emerged for the group of external relationships, and external supplier or buyer organisations (REL-E/ORG-E). The overarching dimensions were assigned directly to each type of factor, but in the case of the supplier building power-related capabilities (REL-E/ORG-I), there was an overlap with group REL-I/ORG-I. The same is the case with decreasing power, where an overlap occurred in the shortages of supplier technical capabilities group.

The group of intra-organisational and relationship-specific factors (REL-I/ORG-I) reveals the advantage of suppliers that focus on increasing their power by concentrating on adapting technological capabilities to the

customer's needs, but also by using tactics of becoming a key supplier for their business partner. The bargaining chip in this situation is having the required resources to supply the customer, i.e. mainly by being able to manufacture products with an adapted machinery stock.

“Company X was one of the most important suppliers for the buyer, and in particular had exclusive rights to produce new machinery. An increase in production costs, due to rising material prices and minimum wages, forced a renegotiation of prices. Company X had more bargaining power because production had already been transferred to their plant and new model assemblies necessary for the production of key castings for the buyer were put into operation. The buyer had no choice, it could not afford a break in the supply of components for the new machines. Transferring the production to other plants would have been a too long, risky and very expensive project. The buyer was forced to accept the new terms of the contract” (respondent no. 21).

Thus, the supplier identified as Company X, which already had the technological facilities and materials required for the production of products, could freely enter into price negotiations, which increased its power in relation to the provisions of the agreement. Another factor related to this relationship which influenced the increase of the supplier's power in terms of obtaining the status of key supplier was the fact that the buyer was blocked from using another type of product due to detailed parameters of the supplier's product being added to the buyer's registered product, so changing the supplier would have meant redesigning the buyer's final product.

In the REL-E/ORG-I group, companies mainly focused on increasing their expertise power, aiming to offer more added value to their customers by developing technology, raising employee competences and optimizing production processes. An example of this type of practice can be seen in the following description from one of the surveys.

“The supplier's investment was in a prototype injection mould producing optical parts, i.e. plastic parts of luminaires used to disperse light sources in a specific way. This investment significantly increased the degree of expertise in the buyer's desired production sector, which gave a significant advantage to the supplier and contributed to an increase in orders for serial injection moulding tools and thus for parts from them” (respondent no. 5).

In comparison to the REL-I/ORG-I group, the suppliers did not only refer to the relationship studied, but were also concerned with creating the potential for having more power for future cooperation with other partners.

The third group was based on aspects from outside the organisation and outside the relationship (REL-E/ORG-E) and represents factors that are not highly influenced by either party in the relationship. The increase in the supplier's power was mainly determined by changes in the external environment, so in this case the supplier did not have to employ techniques aimed at increasing its power. For example, the COVID-19 pandemic forced many companies to adapt to new business conditions and to look for alternative sources of supply, usually on local markets.

The results show the dominance of the group based on internal factors concerning the supplier organisation. This reveals the fact that in order to increase their power in relationships with dominant buyers, companies must focus their attention on the pursuit of development mainly in terms of their resources. Striving to meet requirements and offering products that satisfy the customer can greatly influence power based on references. With regard to referent power, it is worth mentioning a correspondence that arose from the research. Buyer satisfaction with high quality products can lead to more orders for current and future buyers. It can also lead to a situation where, thanks to its pro-quality activities, a supplier can obtain the status of exclusive supplier for selected customers. Thus, the focus of suppliers on this aspect can bring significant financial benefits.

Obtaining a favourable position in the relationship can be linked to expert power. When a supplier has expert status in a particular production area, it can influence contractual provisions, especially when there are no companies with a similar level of knowledge or experience on the market. As a result, by having high expert power, suppliers can be given exclusive supplier status. In terms of intra-organisational activities influencing the increase of power in the relationship, the companies researched showed their pursuit of development by investing in the organisation's resources (mainly by improving production technology and broadening the scope of staff competence), which had the greatest impact on increasing production efficiency and reducing delivery time to the buyer. This mainly resulted in the supplier building their power-related capabilities.

The analysis concluded that the most common factors increasing supplier power were those derived from expert power. These occurred in each of the factor types, but the highest concentration of them can be observed in the REL-E/ORG-I group. This was followed by a high frequency of factors based on contractual provisions (legitimate). When the results were compared with the factors reducing the power of suppliers, it was noted that the

most frequent factors were those specifying the same power sources, with legitimate power concentrating the most factors, followed by expert factors in second place.

Within the factors relating to the internal relationship group, and internal regarding supplier or buyer organisations, some second-order factors can be considered as intentional actions aimed at increasing the supplier's own power, such as: delaying deliveries for non-payment by the buyer, or improving supplier order performance in terms of quality, cost and lead time. On the other hand, some of the factors could be activities aimed at achieving business goals, but they may also indirectly increase the supplier's power. These were mainly the factors: becoming a key supplier, and improvement of technological capabilities for a key customer, which increased suppliers' power in terms of referent and expert power.

Based on the first-order factors, a group of the most influential second-order factors was created in order to condense the results. The selected second-order factors were: signing of a contract by the supplier where there is an indication of uniqueness of supply or exclusivity in relation to other suppliers, improved supplier order performance for the buyer in terms of quality, cost and lead time, along with supplier investment in technology and employees. These second-order factors integrate the factors which show suppliers' desire to increase their power mainly in terms of expert and legitimate power. The results show that the overarching dimensions of an increase in supplier power are primarily focused on the building of supplier power, the pursuit by the supplier of a position of advantage in the relationship, and supplier recognition of favourable external events and their utilization.

Factors affecting the decrease in suppliers' power

The research results identifying the factors that influence the decreasing power of suppliers in their relationships with dominant buyers are presented in Table 2.

In the group of factors that influenced a decrease in supplier power, 24 different first-order factors emerged, of which three occurred twice for different power sources. The factor of contractual restrictions that grant the client temporary exclusivity for a specific type of product was assigned to legitimate and expert power sources. The factor of the inability to meet the product parameters specified in the contract occurred in both legitimate and referent power sources, while the factor of failure to meet the deadline for production plant start-up appeared in both coercive and expert power sources. Moreover, there were two factors which occurred three times in

different power sources. The buyer's demand to adapt operational processes through supplier investments was assigned to legitimate, coercive and expert power, whereas the factor of delays in realization of buyer orders occurred in legitimate, coercive and referent power sources.

Four first-order factors occurred more than once in different types of factors, and in relation to different power sources, that is: buyer's demand to adapt operational processes through supplier investments, increase in the supplier's price for the buyer, delays in realization of buyer orders, appearance and development of direct supplier competition.

In terms of which second-order factors decreasing supplier power belonged to which type, 5 factors emerged relating to internal relationships and to internal supplier or buyer organisations (REL-I/ORG-I), 4 factors emerged relating to external relationships and internal supplier or buyer organisations (REL-E/ORG-I), and 1 factor emerged in the group of external relationships and external supplier or buyer organisations (REL-E/ORG-E).

The overarching dimensions were assigned directly to each type of factor, but in the case of shortages of supplier technical capabilities (REL-E/ORG-I), there was an overlap with group REL-I/ORG-I. The same is the case for decreasing power, where an overlap occurred in the disruptive changes from supplier stakeholders.

The most frequently reported source for decreasing suppliers' power was the contractual (legitimate) power source, which referred to 11 first-order factors, with the next being the expert source of power, which was connected to 9 first-order factors. There were 16 non-mediated types of first-order factors which influenced the decrease in suppliers' power, as well as 14 factors identified as mediated.

Second-order factors originating from within the organisations under study and directly related to the relationship were in the vast majority factors contributing to a decrease in supplier power. In terms of power sources, factors originating in contractual power dominated, with the most important and most frequent being examples of emerging risks associated with supplier pricing of products and services. The aspect of excessive price forced buyers to look for alternative suppliers offering a lower price, but not necessarily with the same quality as the current supplier. If the quality of the products ordered by the buyer is not a priority for him, and what matters most is the cost of purchasing a given product, then naturally from the aspect of power, the supplier offering the lowest price will win. In the case of the companies studied, buyers were inclined to choose alternative suppliers from Asia, where they had to pay less for a similar quality of products. In turn, suppliers that offered their products at an already low

margin could not afford to further reduce their prices considering their existing manufacturing costs.

Another important factor relating to the same group is that buyers forced suppliers to conform to their requirements, and often had to incur additional investment costs, as in the example below.

“Adapting to the requirements and standards of a large customer is a necessary condition for starting cooperation and receiving orders. However, this adaptation is often associated with additional large investments in infrastructure, machinery and working conditions for employees. When introducing new furniture into production, a large customer dictates the price and technology, so as a supplier we have very low bargaining power” (respondent no. 13).

This factor was attributed to three different power sources that influenced the decrease in expert, legitimate and coercive power. From this example, it can be concluded that the supplier was forced to adapt its production processes in order to be able to cooperate with the customer at all (often incurring investment costs). In this example, the buyers also used coercive techniques such as "either you adapt or we do not cooperate" and "either you produce on our terms or you do not get a new product range". So naturally, the power of legitimacy was definitely on the side of the buyer, who had a better bargaining chip for negotiating the terms of the contract, and could decide what level of expertise the supplier would possess.

In the group of external relationship and internal supplier or buyer organisation factors, some can be seen in which the decrease in power of the supplier was also due to emerging supplier issues with technical resources. Therefore, factors in which the power decreased due to supplier organisation were mainly reflected in expert and referent power sources.

Among the external factors, the most important was increased intensity in competitors' activities led by ongoing development of globalisation and the consequent increase in opportunities for cooperation with alternative suppliers from other countries (in this case, China was the country where buyers mostly looked for new suppliers).

“The ability to use Chinese production and the emergence of the New Silk Road, and the resulting shorter delivery times, enabled the buyer to put pressure on Company X by threatening to reduce their orders” (respondent no. 19).

Shorter delivery times from China made the alternative of cooperation with Chinese suppliers more attractive, which translated into a decrease in

the power of local manufacturers. The quality offered by Asian suppliers was so satisfactory that the principal determinant of the attractiveness of cooperation was mainly the lower price of products. Thus, the effect of the lower price offered by Chinese partners was to put greater pressure on local suppliers to reduce their prices, which can be combined with the REL-I/ORG-I price factor discussed earlier.

When analysing factors reducing supplier power, it can be seen that factors based on contract power and expert power had the biggest share. Decreasing supplier power due to default was influenced by intra-organisational aspects in suppliers, but also reflected changes in buyers' organisations. Compared to factors increasing power, decreasing power was also reflected in the group of factors based on references. Delays in deliveries and the inability to achieve the product parameters specified in the contract translated into a higher level of customer dissatisfaction, which not only decreased the power associated with references, but could reflect on a poorer perception of the supplier as an expert in the given field of production. In this case, it can be concluded that the decrease in power due to the above-mentioned reasons may have its basis in the supplier having a lack of necessary resources and knowledge to be able to meet production needs in order to satisfy its customer.

In the case of the REL-I/ORG-I group of first-order factors, it is possible to notice actions which could be interpreted as intentional practices of the buyer in an attempt to weaken the position of its supplier. This was through, for example, introduction of a tender procedure, which influenced the establishment of price as the main factor determining the choice of supplier, and lack of provisions in the contract on the dependence of product prices on increases in raw material prices, which was to the benefit of the buyer and had a negative impact on the supplier as it had to accept significantly lower profits.

Analysis of the factors led to the conclusion that the most important factors that influenced a decrease in suppliers' power were those related to supplier product pricing, customer demands for supplier adaptation, and delays in order fulfilment. To summarise, the overarching dimensions show practices that suppliers should focus on to reduce the possibility of their power decreasing, that is responding to changes in buyer expectations or transactional changes, striving to avoid shortages of supplier technical capabilities, and responding to disruptive changes from supplier stakeholders.

Discussion

In our study, we focused on analysing power dynamics from the perspective of weaker suppliers in their relationships with dominating buyers. The results are presented using the distinction between suppliers' countervailing events as related to the focal relationships (REL-I/ORG-I), and contextual events both for suppliers and related to the external environment, that is, events external to the focal relationships (REL-E/ORG-I, REL-E/ORG-E). This helped us to show the sources of the identified factors, which made the results more systematic. This approach is largely new to the literature on power dynamics in B2B relationships (see Makkonen *et al.*, 2012; Makkonen *et al.*, 2021; Oukes *et al.*, 2019). Mapping the factors on the basis of sources of power (French & Raven, 1959), which is widely cited in business-to-business literature (Cowan *et al.*, 2015; Frazier & Summers, 1984; Handley & Benton, 2012; Kubacki *et al.*, 2020; Wilkinson, 1996; Wilkinson, 1973), allowed us to show the structure of the activities involved in changing the power of suppliers in relation to dominant buyers. The new way that we have proposed for organising the factors makes them easier to understand, so the conclusions of the study can be more easily interpreted.

The use in the study of the critical incident technique (Flanagan, 1954), allowed us to focus only on the most influential events related to power dynamics in the relationships analysed. Therefore, instead of a wide range of factors, we obtained only those that have the greatest impact on power dynamics in relationships, thus making the study unique in comparison with studies which do not distinguish between the level of importance of particular factors that influence power dynamics for weaker suppliers (Cowan *et al.*, 2015; Pérez & Cambra-Fierro 2015; Siemieniako & Mitreġa, 2018).

By identifying and analysing first- and second-order factors, we were able to extract overarching dimensions that represent a generalized, final type of practices that influence the increase or decrease of power in a relationship. This type of solution represents a novelty, and further in-depth analysis of the factors that emerged may help to develop knowledge on power dynamics in buyer-supplier relationships.

Results on increases in suppliers' power in relationships with dominant buyers are very much present in the literature (Siemieniako & Mitreġa, 2018; Lacoste & Johnsen 2015; Pérez & Cambra-Fierro 2015; Lin *et al.*, 2017), however, there is very limited research that discusses the factors that decrease supplier power in relationships with stronger buyers (Ojansivu, 2014).

The results of this paper regarding power increase factors indicate the need for buyers to develop the expertise power of suppliers, as well as to generally align suppliers' resources with buyers' requirements in order to maximize the value derived from the relationship (see Sazonenka *et al.*, 2018; Zatwarnicka-Madura *et al.*, 2019). This is evident in activities that increase supplier power with respect to the overarching dimension, that is supplier's building of power-related capabilities. Thus, supplier investments in technology or employees and increasing performance in terms of production efficiency and delivery time allows them to increase their expert power so that they can also have a greater influence on setting contractual conditions when entering into cooperation (Lin *et al.*, 2017). These results are consistent with the case study findings by Siemieniako and Mitreęa (2018), according to which improving non-mediated power has a positive effect on improving mediated power sources.

Our findings may be an extension of previous work on the topic of practices that influence power shifts. The study noted that suppliers with less power in the relationship were much more likely to improve their power by using factors from the group of non-mediated power sources (e.g., improved supplier order performance for the customer in terms of quality, cost and lead time, supplier investment in technology and employees), rather than through mediated factors, for instance delaying deliveries for non-payment by the buyer (Siemieniako & Mitreęa, 2018; Lacoste & Johnsen, 2015; Pérez & Cambra-Fierro, 2015).

In this article, the emergence of more factors affecting a decrease in supplier power than an increase shows the requirement for researchers to also focus on the aspect of decreasing factors of supplier power. The argument for this is that there is a need for practitioners to become familiar with the decreasing factors as well, in order to prevent them in the future. Based on the overarching dimensions, which are changes in buyer expectations and transactional changes, supplier technical capability shortfalls, and disruptive changes from supplier stakeholders, the theme of decreasing supplier power should be developed in further research in the area of power dynamics in buyer-supplier relationships.

Conclusions

The aim of the article has been met in that we have identified the most significant factors affecting an increase and decrease in the power of suppliers in relationships with dominant buyers. Next, we assigned the factors we obtained into 3 groups, and categorized them into different power sources.

First- and second-order factors were generated through an inductive approach, while the overarching dimensions were developed through a deductive approach, which made it feasible to obtain generalised groups of the most important factors.

This paper contributes to the literature in identifying and organizing categories of increasing and decreasing supplier power. At a further stage, the results obtained can be used to build a model and measurement scale for quantitative research so as to explore and systematize the factors that influence the change of power in B2B relationships. The use of the CIT method for the first time in the analysis of power dynamics establishes the possibility of its broader application in various aspects of research by focusing only on the most important aspects of the subject under analysis. The most important overarching dimension in terms of increasing supplier power was supplier's building of power-related capabilities, which included the REL-I/ORG-I and REL-E/ORG-I groups, as well as 5 second-order factors. The most common practice in this dimension was improved supplier order performance for the customer in terms of quality, cost and lead time. This was followed by two further practices, which are supplier investment in technology and employees, and improved supplier performance in terms of production efficiency and delivery time. In terms of reducing supplier power, the most important overarching dimension was changes in buyer expectations and transactional changes, which contained 4 second-order practices, of which the most common factor was emerging risks associated with supplier pricing of products and services.

The research suggests some implications for managers of weaker suppliers in relationships with dominant buyers. For effective management of an increase in power in the relationship, managers should focus their attention on expert power using practices that are also present in Wang (2011), although in our research on manufacturing supplier, these practices should be based on investment in technology and employees and striving to improve the supplier's performance in terms of production efficiency, product quality and delivery time to the customer. This study also suggests some implications for powerful buyers in obtaining greater value in their relationships with weaker suppliers. This should be achieved by supporting improvements in suppliers' expert power in order to fill gaps in supplier technical capabilities and minimize the impact of disruptive changes from supplier stakeholders. The paper outlines the direction suppliers should take so as to fully exploit opportunities for balancing any asymmetries, which can mainly result in greater benefits from remaining in a business relationship with a potentially stronger partner.

In our study, we have focused exclusively on identifying and presenting the factors that cause power shifts in the relationship between a weaker supplier and a stronger buyer. It is, therefore, not feasible to show the factors that would affect the aforementioned power dynamics in other types of relationship, i.e. where the supplier would have more power, which is a limitation of our research. Another limitation of our study results from focusing solely on dyadic relationships, which also prevents us from identifying factors that would affect power shifts in the context of business-to-business networks across a supply chain. Another limitation is the fact that the study relates specifically to the manufacturing industry and cannot be generalized uncritically to other industries.

Further research can focus on what we did not do in our study, which is to examine whether the identified factors were intentional actions aimed at increasing supplier power, or actions primarily aimed at achieving suppliers' business objectives in their relationships with dominant buyers, which indirectly affected a change in power on the supplier side, as in the division of factors proposed by Makkonen *et al.* (2021). One factor that reduced supplier power was in the form of a personnel change in the dominant buyer's board of directors. A study on the impact of personal branding of CEOs (Górska & Mazurek, 2021) newly hired by buyers on supplier relationships, including with respect to power dynamics, could be insightful. It is also recommended that further quantitative research be conducted to examine from the suppliers' perspective the importance of the factors identified in this study on the increase and decrease of power in relationships between weaker suppliers and dominant buyers. At the same time, an in-depth qualitative study of buyers and suppliers in the context of power asymmetry in business relationships could also be relevant. The results of such a study would recognize the differences in the significance of factors that affect the change in power in a relationship from both perspectives.

The research method used in this article can be applied to develop the theme of power asymmetry research not only in B2B relationships, but can also contribute to the development of the theme based on military operations. The origin of the critical incident technique is the Aviation Psychology Program of the United States Army Air Forces during World War II (Flanagan, 1954). This shows that the use of CIT in the military is nothing unusual. To illustrate the aforementioned thread, we can consider the example of the current military operations conducted by the Russian army in Ukraine. In this situation, the Ukrainian troops appear to be the weaker party, and the resulting power asymmetry works strongly in favour of the Russian troops. In this case, in order to be able to balance the asymmetry of power and cause an increase in their power in relation to the other side in

the conflict, the people in charge of the Ukrainian military must demonstrate ingenuity and the desire to use their powers as effectively as possible. In order to identify and categorize the weaker party's power, it is possible to refer to the power sources proposed by French and Raven (1959), for which we can identify direct military force as coercive power, knowledge of military strategies and available technological capabilities as the level of expertise, and the level of information possessed (e.g. on enemy troops or knowledge of the battlefield), and the ability to establish cooperation with other actors as referent power (e.g. receiving support from other countries). Examples of factors or practices that increase the power of the weaker side, which is Ukraine, may include: good knowledge of Russian equipment and the use of drones to effectively fight enemy vehicles, immobilising vehicles by cutting off fuel supplies, and using knowledge of the topography of the terrain to make it difficult for enemy forces to penetrate cities.

Thus, this article shows the wide field of application of the critical incident technique, and also presents many possibilities for the study of power dynamics with regard to various dimensions of the modern world.

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Annex

Table 1. Factors affecting the increase in suppliers' power

Types of Power factors	First-order categories (times occurred)	Second-order practices and factors - themes	Over-arching dimensions
REL-I / Coercive	Delaying deliveries for non-payment of the buyer (1)	1. Delaying deliveries for non-payment of the buyer	1. Obtaining a favorable position in the relationship by the supplier
Legitimate (contract)	Obtaining exclusivity by the supplier for production or services for the buyer (3) Contracting by the supplier for a project of high complexity and importance to the buyer (1)	2. Signing of a contract by the supplier where there is an indication of uniqueness of supply or exclusivity in relation to other suppliers of the buyer	
Referent	Becoming a key supplier (1) Becoming a key supplier (1)		
Expert	Buyer satisfaction with the quality of products supplied (1) Shortening the time of order fulfillment (1) Improvement of technological capabilities for a key buyer (3)	3. Improved supplier order performance for the customer in terms of quality, cost and lead time	2. Supplier's building of power-related capabilities
REL-E / Legitimate (contract)	Strategic alliance with other suppliers (1)	4. Developing a network of relationships with other suppliers and customers	
Expert	Increase of production efficiency (2) Increase of production efficiency (2) Shortening the delivery time to buyer (1) Supplier investment in technology and employees (3)	5. Improve supplier performance in terms of production efficiency and delivery time 6. Supplier investment in technology and employees	
Referent	Provision by the supplier of limited services offered on the market (1) Obtaining a quality certificate for offered product to the buyer (1) Increasing sales for another large buyer (1)	7. Provision by the supplier of limited services offered on the market the same as number 4	

Table 1. Continued

Types of Power factors	First-order categories (times occurred)	Second-order practices and factors - themes	Overarching dimensions
REL-E / Expert	Having exclusive rights by supplier to a printing technology not available to competitors (1)	8. Emerging competitors barriers	3. Supplier recognition of favorable external events
ORG-E	Complicated administrative procedures allowing purchases on the Polish market from foreign competitors (1)	9. COVID-19 forced individual buyers to rely on local suppliers	
Referent	COVID-19 forced individual buyers to rely on local suppliers (1)	10. Emerging increase of demand and shortage of supply for supplier's products (1)	

Table 2. Factors affecting the decrease in suppliers' power

Types of factors	Power sources	First-order categories (times occurred)	Second-order practices and factors - themes	Overarching dimensions
Expert	Contractual periodic customer exclusivity for specific products from a supplier (1)	Contractual periodic customer exclusivity for specific products from a supplier (1)	1. Contractual periodic customer exclusivity for specific products from a supplier	
	Buyer demand to adapt operational processes by suppliers' investments (2)	Buyer demand to adapt operational processes by suppliers' investments (2)		
	Expiration and non-renewal of quality certificates required by the buyer (1)	Expiration and non-renewal of quality certificates required by the buyer (1)	2. Buyer's requests for adaptations by the supplier	
Coercive	Buyer demand to adapt operational processes by suppliers' investments (2)	Buyer demand to adapt operational processes by suppliers' investments (2)		
	Delays in realization of buyer orders (2)	Delays in realization of buyer orders (2)	3. Delays by the supplier in fulfilling the order	1. Changes in buyer expectations and transactional changes
	Realization of excessive volume of orders for the buyer (1)	Realization of excessive volume of orders for the buyer (1)	the same as number 1	
REL-I/ ORG-I	Contractual periodic customer exclusivity for specific products from a supplier (1)	Contractual periodic customer exclusivity for specific products from a supplier (1)	the same as number 1	
	Buyer demand to adapt operational processes by suppliers' investments (2)	Buyer demand to adapt operational processes by suppliers' investments (2)	the same as number 2	
	Increase in the supplier's price to the buyer (3)	Increase in the supplier's price to the buyer (3)		
	Lack of provisions in the contract regarding the dependence of product prices on the increase in raw material prices (1)	Lack of provisions in the contract regarding the dependence of product prices on the increase in raw material prices (1)	4. Emerging risks associated with supplier pricing of products and services	
	Introduction of a tender procedure by the buyer (1)	Introduction of a tender procedure by the buyer (1)		
Legitimate (contract)	No acceptance of completed works by the buyer resulting the supplier having to pay contractual penalties (1)	No acceptance of completed works by the buyer resulting the supplier having to pay contractual penalties (1)		
	Failure to receive administrative building approval from the buyer (1)	Failure to receive administrative building approval from the buyer (1)	5. Failure to meet technical requirements for contract performance	2. Shortages of supplier technical capabilities
	Inability to meet the product parameters specified in the contract (1)	Inability to meet the product parameters specified in the contract (1)		
Referent	Inability to meet the product parameters specified in the contract (1)	Inability to meet the product parameters specified in the contract (1)		

Table 2. Continued

Types of factors	Power sources	First-order categories (times occurred)	Second-order practices and factors - themes	Overarching dimensions
	Coercive	Failure to meet the deadline for production plant start-up (1)		
		Failure to meet the deadline for production plant start-up (1)	6. Emerging supplier issues with technical resources expected by the buyer	
	Expert	Reduction of production capacity (1)		
REL-E/ ORG-I		Change of production technology by the buyer (1)		
		Supplier's knowledge limitations of the buyer market (1)	7. Supplier's knowledge limitations of the buyer market	
	Referent	Loss of more clients and dependence on the single buyer (1)	8. Loss of more clients and dependence on the single buyer	
		Change of person in the management board at the buyer (1)	9. Change of person in the management board at the buyer	
	Expert	Increased competitiveness of chinese suppliers due to shortened delivery times (1)		
REL-E/ ORG-E		The emergence of alternative suppliers in China for buyer (1)	10. Increased intensity in competitors' activities	3. Disruptive changes from supplier stakeholders
	Referent	Appearance and development of direct supplier competition (2)		