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The Culture of Purchasing Processes in Innovative Production Enterprises. The Development Perspective During the Pandemic Times

ABSTRACT

The issue of purchasing processes has been analyzed and studied by scientists for several years, and especially the time of the pandemic has shown that activities in the area of procurement require more analysis and focus on creating new values or developing a culture of these processes in organizations.

The COVID-19 pandemic caused the business world to undermine the reliability of the supply chain and showed that purchasing processes can be unstable. Purchasing functions faced demand-supply imbalances, which often lead to inventory issues, uncertain supply reliability, and high-risk relationships with various stakeholders, particularly suppliers and customers. Opaque supply chains and new realities require flexibility, a certain culture and maturity in sourcing functions to stay in business and succeed as a business in the new era. In order to build effective capabilities in purchasing processes and be able to flexibly respond to the challenges of the business environment, as well as meet the needs of stakeholders, enterprises must protect themselves with new norms, values and principles in this area.

The article, in the theoretical part, describes the term of purchasing processes, presents elements that can be considered as the basis for building a culture of purchasing processes in innovative production enterprises. The research part describes the research methodology and the results of the conducted surveys as well as the conclusions resulting from the research. The research was conducted on a group of 36 managers who deal with this area in innovative production companies listed on the *NewConnect* market in Poland. The analysis of the literature and the results of the research showed that the prospects for the development of the purchasing process culture are significantly high.

Especially this aspect has become quite important during the pandemic and companies are increasingly including these activities in key business processes.

KEYWORDS: culture of processes, purchasing processes, innovative manufacturing enterprises, stakeholders, pandemic times

STRESZCZENIE

Kultura procesów zakupowych w innowacyjnych przedsiębiorstwach produkcyjnych. Perspektywa rozwoju w czasach pandemii

Problematyka procesów zakupowych jest analizowana i badana przez naukowców od kilkunastu lat, a szczególnie czas pandemii pokazał, iż działania w obszarze zaopatrzenia wymagają większej analizy oraz skupienia się na tworzeniu nowych wartości czy wypracowania kultury tych procesów w organizacjach.

Pandemia COVID-19 spowodowała, że świat biznesu podważył niezawodność łańcucha dostaw i pokazał, że procesy zakupowe mogą być niestabilne. Funkcje zakupów stoją w obliczu nierównowagi popytu do podaży, co często prowadzi do problemów z zapasami, niepewnej niezawodności dostaw, a także wysokiego ryzyka w relacjach do różnych interesariuszy, szczególnie dostawców i klientów. Nieprzejrzyste łańcuchy dostaw oraz nowa rzeczywistość wymagają elastyczności czy tworzenia pewnej kultury i dojrzałości w funkcjach pozyskiwania zaopatrzenia, aby utrzymać działalność i odnosić sukcesy jako przedsiębiorstwo w nowej przyszłości. Aby zbudować efektywne zdolności w procesach zakupowych oraz mieć możliwość elastycznego reagowania na wyzwania otoczenia biznesowego, a także zaspokajania potrzeb interesariuszy, przedsiębiorstwa muszą zabezpieczać się nowymi normami, wartościami i zasadami w tym obszarze.

W artykule w części teoretycznej opisano termin procesów zakupowych, przedstawiono elementy, które można uznać za podstawę budowania kultury procesów zakupowych w innowacyjnych przedsiębiorstwach produkcyjnych. W części badawczej opisano metodykę badań oraz wyniki przeprowadzonych ankiet oraz wnioski wynikające z badań. Badania zostały przeprowadzone na grupie 36 menedżerów, którzy zajmują się tym obszarem w innowacyjnych przedsiębiorstwach produkcyjnych, notowanych na rynku *NewConnect* w Polsce. Analiza literatury oraz wyniki badań wskazały, iż perspektywy rozwoju kultury procesów zakupowych są istotnie duże, szczególnie aspekt ten stał się dość ważny w okresie pandemii. Przedsiębiorstwa coraz częściej wpisują te działania w kluczowe procesy biznesowe.

SŁOWA KLUCZE: kultura procesów, procesy zakupowe, innowacyjne przedsiębiorstwa produkcyjne, interesariusze, czas pandemii

Introduction

Each enterprise has its own subject of activity (commercial, industrial, agricultural, service, research and development enterprises, etc.) and its own business processes, however, purchases in modern terms create and constitute the process of managing external resources and are of strategic importance in reducing the costs of raw materials or products. In connection with the above, despite the differences in the specificity and the neglect of the purchasing function in the company for many years, currently each of the processes taking place inside the organization plays a very important role and creates a system of connected elements, creating certain norms of organizational culture. Purchasing, therefore, is an integral part of the functioning of any organization. A well-planned and conducted purchasing process saves time and financial resources of the company. This process should be refined in each of the individual sub-stages so that it runs properly.

Most production, trade and service enterprises treat the purchasing function as a “cost reduction center,” and even sometimes as a “profit increasing center.” In research and business practice, it can be seen that enterprises spend more than 50% of their revenues from the sale of products and services, and their share of purchase expenditures in the total costs of finished products has increased up to 60% in recent years (Fudaliński, 2014, p. 12). Many authors emphasize that purchases affect not only the increase in the profitability of companies, but also the overall reduction of costs and the increase in revenues or the value of the company. In addition, even small purchase savings can translate into an increase in profit, which could alternatively be achieved by a significant increase in sales or prices of products sold, or a drastic reduction in labor costs or indirect costs (Rutkowski, 2013, p. 38).

We deal with purchases in virtually every situation, from use in private life to professional life. Procurement in enterprises, however, is a much more complex and complicated process, requiring more knowledge and is carried out on a larger scale (Klepacki & Martyniuk, 2012, p. 487). Inseparable processes related to purchasing are very often other processes, such as warehousing, production planning, transport of supplies, receipt of materials, quality control of purchased goods, management and control of inventory, collection and disposal of waste. Effective supply management in a company contributes to its efficient functioning in all its spheres. The purpose of this article is to try to define the culture of purchasing processes in innovative production companies on the market during the pandemic. The research problems were formulated by the authors through the following questions: What elements can be included in the process of creating a purchasing culture in enterprises? Which stakeholders influence everyday relations in creating the culture of purchasing processes? How is the purchasing function separated in the surveyed enterprises?

Purchasing processes – definitions and functions

The dynamics of changes in the modern world of business is enormous and basically applies to all aspects and functions of the organization's activities, especially economic activity. In order to cope with these dynamics of change, enterprises should implement specific solutions aimed at adjusting internal mechanisms and processes as well as operating structures or relations to external factors – located both in the market environment (closer, micro-economic) and in the general environment (more distant, i.e., macroeconomic and meso-economic). One of the ways to ensure this fit is the implementation and to deliver the improvement of various business functions along with the development of organizational, management and technological solutions. Information resources (including data, information and knowledge) are very often a kind of a “bridge” between the inside of the organization and shaping relations with stakeholders (customers, suppliers, business partners, etc.) in order to ensure the achievement of short- and long-term goals (Woźniak, Pawlak, & Zaskórski, 2018, p. 7).

Interest in the research and development of purchasing management has been growing rapidly in the last century. In-depth research and analysis of the organization's purchasing function has been initiated by national and international purchasing associations. For example, the International Purchasing and Supply Education and Research Association, the Association of Purchasing and Supply Chain Management, the International Marine Purchasing Association, The American Purchasing Society and many others were founded to contribute to and develop purchasing management (Wereda & Wysokińska-Senkus, 2021, p. 76).

M. Leenders et al. found that the role of purchasing in an enterprise has changed in recent years due to several important factors, such as: increasing competition on a global scale, increasing interest in quality management practices, increasing importance of customer satisfaction, increasingly shorter product life cycles and constantly growing price pressures, on top of flexibility in acquiring knowledge from the environment by organizations and others (Leenders, Nollet, & Ellram, 1994, pp. 40–42). On the other hand, L. Boer and others, describing the current state of the purchasing function, state that several recent changes additionally complicate purchasing decisions: the globalization of trade and Internet access, which extends the range of supplier selection, change in the preferences of the final customer, and a wider and faster selection of suppliers on the market (Boer, Labro, & Morlacchi, 2001, p. 75). In the literature, it can be seen that the historical analysis of the development of purchasing indicates that in the 1980s, along with the increase in competition between partners on the market, enterprises began to systematically search for new areas

in which they can create and maintain a competitive advantage. Therefore, the emergence of concepts such as just-in-time (JIT), Total Quality Management (TQM), service outsourcing or supply chain accelerated the process of developing the purchasing function in enterprises. In addition, in the theory and practice of business, the term “strategic procurement” was created, which was introduced and became a concept in the scientific literature. According to many researchers, the changing role of purchasing is emphasized, where the primary interest of purchasing strategies should be the processes of planning, implementation and control in order to achieve long-term benefits for the company (Aguilar, 2002, pp. 1032–1034). K. Lysons and B. Farrington presented several perspectives regarding the definition of purchasing as shown in table 1.

Table 1. Prospects for the development of the definition of purchasing

Prospects	Purchasing characteristics
Business function	Using specialist knowledge, skills and resources in performing specific tasks, e.g., purchasing raw materials, components, products and services for processing, use or resale
Business unit	Purchasing department created by a team of employees performing and responsible for tasks defined as part of the purchasing function
Business proces	The purchasing process is a sequence of actions leading to the purchase of products or services – from the emergence of a purchase need to the payment to the supplier
Place and role in the supply chain	The essence of purchasing is obtaining resources needed in further stages of value creation in the supply chain
Relationships in the supply chain	Developing internal and external relationships is an integral part of purchasing, including, among others, relationships with internal customers and suppliers
Fulfilling the need to solve problems	Purchasing goals and tasks meet the needs of solving problems of internal and external customers
Area of knowledge and skills	Procurement management is an area of knowledge related to many others in education, such as finance, management accounting, law, marketing, operations, information technology, ethics, negotiations, psychology
Occupational specialty	Procurement management requires the development of specialist knowledge and skills of people professionally related to this area of management

Source: Lysons & Farrington, 2006, pp. 3–5.

As can be seen in the literature, purchasing in business is traditionally understood as “acquiring goods and services necessary for the functioning of the enterprise” (Rutkowski, 2013, p. 36) or as “the process of purchasing products, services and equipment from another entity legally and ethically” (Burt, Petcavage, & Pinkerton, 2012, p. 1). The definition of purchasing by K. Lysons and B. Farrington focuses on the goal of “purchasing the right quality materials in the right quantity from the right source, delivered to the right place at the right time at the right price” (Lysons & Farrington, 2006, p. 6). This approach refers to the reactive role and the transactional and operational nature of purchasing mainly consisting of ordering. In the light of current knowledge about purchasing management, it is difficult to agree with the proposed way of separating the terms “purchasing” and “procurement” according to which they mean “purchasing goods or services in exchange for money or payment equivalent”, while procurement refers to “obtaining goods or services” by any means, including by borrowing, leasing, or by force or robbery. In the Polish-language literature, there is the term “supply purchases” and this is an inaccurate translation of the English term purchasing, used by K. Lysons to define purchasing as “a function responsible for obtaining equipment, materials, components (semi-finished products), parts and services by purchasing, leasing or other legal means for consumption for production or resale” (Lysons, 2004, p. 13).

A.J. van Weele in 2010 defined procurement management as the management of external enterprise resources such as: products, services, skills and knowledge resources, necessary for the functioning of the organization and for managing its basic and auxiliary activities. Summing up the author’s approach, all the above resources should be provided on the highest and best conditions possible (van Weele, 2010, p. 7). K. Rutkowski noted that this definition allows to indicate several aspects thanks to which companies can build a competitive advantage on the market thanks to internal and external resources, including suppliers from whom companies buy not only products and services, but also knowledge and skills (in broader terms of experience, know-how or innovation), while direct and indirect purchases are used to support their basic and supporting activities, which refers to the M.E. value chain concept. M.E. Porter’s value chain treats procurement as auxiliary activities, which consist in purchasing the necessary resources to carry out basic and auxiliary activities (Porter, 2004, p. 41). Table 2 presents selected definitions of purchasing processes.

Table 2. Selected definitions of purchasing process/function

Author	Definition
Monczka, Trent, & Handfield, 2003	The purchasing process is a cycle with five distinct stages. These stages will change according to the nature of purchase and the individual organization in question. This means that, if the product is a straight re-buy, modified re-buy and a new task all together will determine the stages that will be involved or chosen in obtaining that particular need(s) from an identified and evaluated source.
Lysons & Farrington, 2006	This is a process as a set of sub-processes or stages focused on achieving an output. Purchasing process is a cycle or chain that shows the activities that purchasing goes through in obtaining a given need for operational and strategic purposes
Wan Lu, 2007	The purchasing function is important part of doing business in today's competitive environment. As a result of this development purchasing function has now moved from product-centered to a performance-centered.
Carter & Kirby, 2006, p. 6	The process of purchasing is the overall sequence of events that sum up the purchasing activity from identification of need to payment of invoices in respect of the goods or service purchased to satisfy a given need.
Emmett & Crocker, 2008, p. 4	The procurement or purchasing process has ten stages from need identification to payment of respective purchasing. This is so because most organizations emerge some stages as one in the process to reduce the lead time and other administrative cost. For instance, some organizations or corporate institutions emerge the stage of expediting and evaluation as one stage and responsibility. Based on these facts, there is no unique number of stages of the purchasing process.
Weele, 2010, p. 29	The process of purchasing has been divided into six distinct stages as specification, select supplier, give contract or ordering, expediting and evaluation of the entire purchasing process.
Lysons & Gillingham, 2003 & Weele, 2010	These authors introduced a modern way of conducting purchasing activity by the use of electronic means (e-Procurement). They suggested that, the lengthy process can be reduced or shorten through the use of electronic procurement.

Source: own elaboration based on: Mensah & Tuo, 2013, p. 122.

In connection with the above, it should be remembered that purchasing processes in a company are a key elements of business processes, without which other processes could not function, because the entire production cycle begins with the supply of raw materials and materials.

Effective management of purchasing and supply processes enables comprehensive material ordering, whereby the company can achieve maximum profits in a relatively short time and with minimal financial resources and efforts of employees from the supply sphere. These benefits will relate to maintaining positive relations with the supplier base and making some savings.

The process of creating a purchasing culture in enterprises – selected aspects

With reference to the literature and research, organizational culture is important in the process of any change in the organization, as it can support various processes and introduce new solutions in the organization's business models. Many authors have developed a number of models and typologies that take into account various features of organizational culture identified by their grouping and logical ordering (Domańska-Szaruga & Knap-Stefaniuk, 2022, p. 39). Moreover, these typologies can be one-dimensional or multi-dimensional, although two-dimensional typologies are most often used in the literature (Krukowski, 2016, pp. 205–225; Sułkowski, 2012, pp. 83–103). The most common one-dimensional typologies based on one variable include (Sułkowski, 2012, p. 84):

1. weak culture – strong culture;
2. positive culture – negative culture;
3. pragmatic culture – bureaucratic culture;
4. introvert culture – extrovert culture;
5. conservative culture – innovative culture;
6. hierarchical culture – equality culture;
7. individualistic culture – collectivist culture;
8. centralized culture – decentralized culture.

In addition, the best-known and most frequently quoted two-dimensional concepts are those proposed by E. Schein (Schein, 1992), G. Hofstede (Hofstede, 2000, p. 43) and the model of competing values of Cameron and Quinn (Cameron & Quinn, 2006).

In the case of the culture of purchasing processes, several important elements that define it should be emphasized (Glock & Hochrein, 2011, pp. 155–157):

1. Purchasing standardization, which refers to the degree to which organizational activities or routines are strictly defined (Garrido-Samanie & Gutiérrez-Cillán, 2004). Quintens, Pauwels, and Matthyssens (2006) have distinguished the process by which the standardization of products and personnel for different organizations can be

standardized. For example, the standardization of materials reduces the variety of products that need to be purchased and increases the volume for each type of material, which usually results in better purchasing conditions, while standardizing processes increases the efficiency and accuracy of the purchasing process (Sanchez-Rodriguez, Hemsworth, Martinez-Lorente, & Clavel, 2006). In addition, the use of standards in purchasing means that activities can be performed routinely, i.e., in a way that reduces uncertainty in the purchase of new, but risky materials. Trautmann, Turkulainen, Hartmann, and Bals (2009) noted that standardization limits the organization's capacity and ability to process various information, so it should only be used as a design tool for fixed purchasing. If you are looking to reduce costs, standardization can be problematic as it limits the purchase of lower quality but cheaper products.

2. Another element is specialization, which refers to the division of labor in the organization and in purchasing departments. Several authors have distinguished two forms of specialization and have suggested that tasks may be grouped by function or subject (Germain & Dröge, 1998; Robbins, 1990, pp. 84–86). The case of functional segmentation entails the division into simple and repetitive tasks that can be effectively performed in an organization (Robbins, 1990, p. 84; Daft, 1992, p. 13). The case of subject specialization, in turn, helps to reduce the problems of division, because employees are responsible for different tasks that are logically related to each other. Spekman and Stern (1979) and Juha and Pentti (2008) pointed out that specialization is an important means of reducing risk in the purchasing process, as it enables individuals to react more quickly to changes in the environment.
3. The next factor is configuration, which relates to the design of the organization's power structure and includes dimensions such as vertical or lateral, spans of control, segmentation criteria, and position numbers across departments. And a high degree of configuration of purchasing results in manufacturing enterprises that implement a large number of different project elements, such as: positions, departments, formal communication channels or control structures, they can thus better match the requirements of the purchasing situation. There are various structural alternatives to the purchasing function, such as: orientation towards placing a purchasing process employee in other purchasing units, creating a purchasing team, more broadly, creating a purchasing department, and even a purchasing department managed by the CPO (Chief Purchasing Officer).

4. Engagement can be divided into: lateral engagement and vertical engagement, and it also includes the size or extensiveness of the purchasing center. Lateral measures of engagement are the number of distinct departments or functional areas involved in the purchasing decision, while vertical engagement measures the number of hierarchical levels involved in these processes (Johnston & Bonoma, 1981). As the number of levels involved in the purchasing process increases, more information becomes available, helping to reduce uncertainty throughout the production process. It can therefore be assumed that the degree of lateral involvement in purchases increases as the purchasing decision becomes more uncertain and riskier (Dawes, Dowling & Patterson, 1992). McCabe (1987) pointed out that an increase in the size of a shopping center does not necessarily lead to a diffusion of power because decision-making power may still be exercised by a small group of people. Finally, the number of communication channels in a shopping center can also be interpreted as an indicator of engagement. The more communication channels there are in the shopping hub, the easier it is for members to influence the purchasing decision. Johnston and Bonoma (1981) analyzed the number of communication channels in a shopping center and showed that it is high, especially in centralized and less formalized organizational environments.
5. Another is formalization, which describes the extent to which an organization relies on rules and procedures for leadership or the behavior of its members (Price, 1972, pp. 107–117; Germain & Dröge, 1998; Robbins, 1990, pp. 93–97). Formalization can be achieved by defining roles and power relations, or by establishing rules governing decision-making, employee communication, or information processing within an organization (Hall, Haas, & Johnson, 1967). Organizations formalize in the behavior of their members in order to reduce its volatility and to anticipate and control processes (Robbins, 1990, pp. 93–94), although a very high level of formalization can reduce the motivation of employees of the organization (Hartmann, Trautmann, & Jahns, 2008). Formalization has often been used as a means of counteracting uncertainty or mitigating the characteristics of purchasing processes. Formalization contributes to the standardization of work by establishing rules and regulations that ensure the uniform performance of tasks by all members of the organization (Robbins, 1990, pp. 93–130).
6. One of the most important factors is the degree of (de-)centralization of purchasing processes. The first definition refers to the concentration of decision-making power and measures the extent

to which power is aggregated into one organizational unit – centralization (Germain & Dröge, 1998; McCue & Pitzer, 2000). The second definition refers to the position of the decision-making body as intermediate in the hierarchy of the organization, so lower levels can also make decisions and authority is not focused only on high levels of the hierarchy (Quintens, Pauwels, & Matthyssens, 2006). Organizations today need to consider the greater flexibility and better service of (internal) customers of a decentralized structure against the economies of scale of a centralized purchasing department. Secondly, it is worth checking which factors support the level of centralization and decentralization. Third, many authors have explored the use of centralized, decentralized and hybrid structure of purchasing processes. It turned out that hybrid applications are the most common in many industries and that the shift is from centralization towards decentralization. In manufacturing companies, highly centralized purchasing processes seem to be more widespread than highly decentralized structures (Johnson, Leenders & McCue, 2003).

Summing up, the culture of purchasing processes is largely focused on reducing purchase costs and building a good image in the eyes of suppliers. Despite all the evolution of the purchasing function culture, it is clear that there are several elements that are of great importance in building this culture in enterprises (The Evolution of Procurement Culture, 2016): “Driver #1” for the current purchasing culture is the CEO (or CFO). This is the person who should pay attention to the value creation that purchasing processes offer, especially keeping costs to a minimum. Another factor that influences purchasing culture is the CPO. It is crucial to ensure that senior stakeholder support is maintained. Therefore, maximizing cost reduction is of key importance, implemented through contract savings. This culture is reinforced by attaching bonuses to the compensation for purchases in order to achieve contract savings.

1. The third factor in purchasing culture is business leaders. Business leaders may find it difficult to identify any real business value in purchasing processes, resulting in strained relationships with other stakeholders.
2. The last group driving the purchasing culture is the supply chain. The culture of engagement is based on the desire to reduce supplier margins. With no real focus on collaboration, promoting success, or becoming a customer of choice, it is a one-way relationship focused on purchasing success. This results in commitment with little or no trust.

In summary, the purchasing process is shaped by the CEO/CFO, by a culture focused on CPO and savings that should be created by purchasing

departments, as well as a supply chain that can be shortened by bypassing some business leaders, which in turn can distort relationships with various stakeholders.

The role of stakeholders in building the culture of purchasing processes in enterprises

The term stakeholder comes from the English word “stake,” which is often explained as input, participation in an interest, or involvement in an aspect of an activity. The term also refers to the risk incurred, but also to cooperation, need and claim, demand, requirement, knowledge, expectation, or the legitimacy of demanding a certain commitment (Bourne, 2009; Wereda, 2018, p. 112).

Continuing the considerations, a stakeholder is a person, a group of people, but also an entity (enterprise, organization, office) that has an impact on the goals, functioning, or operation of a project, enterprise, product, etc. The impact should be understood as any kind of impact – real and potential – in the form of reactions, opinions, assessments, recommendations, negotiations, and complaints. A stakeholder does not have to and often is not closely related to the organization (e.g., through employment or shares held in it – such as shares). In the most general sense, stakeholders can be divided into two types: internal and external. Nevertheless, internal stakeholders are people who are directly and indirectly involved in the operation of a given organization (owners, shareholders, management, authorities, employees and their families, former employees, pensioners, applicants, apprentices, members of informal groups in the company, proxies, advisors, supervisory boards, works councils/employee organizations, members in member organizations, and their democratic bodies/authorities). External stakeholders of direct influence and involvement will be those people and entities that are not in the organization, but their activities are important and significant in everyday activities (shareholders, members of co-ownership bodies, persons with influence over co-owners, representation of members in the bodies of associations, competitors/industry and non-industry opponents (e.g., those operating in the same labor, capital, know-how, opinion, value, or idea markets), ad hoc competitors, suppliers, sales representatives and/or other sales and supply intermediaries, development funds, strategic (business) partners, customers/buyers/receivers/users/consumers, cooperatives, their members and associations, banks and other financial institutions, dealers, brokers, lobbying organizations, consulting companies, consumer organizations, employee organizations, trade unions, employers’ associations, other industry and

professional communities and business agreements, business associations, advertising, marketing, and public relations agencies, members of social and professional organizations) (Wereda, Moch, & Wachulak, 2022, p. 7).

In the case of a deeper analysis of the procurement processes and the role of stakeholders in building the culture of these processes, it can be concluded that the following groups are of the greatest importance (The Evolution of Procurement Culture, 2016):

1. CEO/CFO. This person is responsible for approving the budget, business strategy and may even decide if there is a purchasing department. The ability to decide on the future of the Purchasing Department makes them key stakeholders of this function.
2. Business/budget leaders – investors. This group is responsible for introducing requirements into purchasing processes. Losing the support of business leaders may mean the pursuit of outsourcing/automation of the purchasing department due to low budget funds.
3. Supply chain. Suppliers provide solutions that meet the requirements of business leaders. Lack of suppliers means lack of business solutions and production continuity.
4. Head of the Purchasing/CPO Department. This person is responsible for employment, raises and promotions in the purchasing team.
5. Employees of the purchasing departments, who carry out analyzes on an ongoing basis and perform the tasks of purchasing processes in order to satisfy all stakeholders above.
6. Business owners who monitor the financial situation of entities on an ongoing basis and expect to reduce purchasing costs and increase the company's profits.

Methodology

The Authors conducted the study described in the article, i.e., the subjective scope of the study is innovative production enterprises operating on the *NewConnect* market¹ in Poland. The study included 36 enterprises (the full

1 Companies from the *NewConnect* market are characterized by specific attributes that, on the one hand, will enable them to enter this market (i.e., meet the conditions for entering the market), and provide the basis for the planned and structured implementation of their goals (operational and strategic). In order to meet the requirements of this market, enterprises should adjust their management system, e.g., in the aspect of the implementation of communication processes with various classes of stakeholders, as well as the conduct of information management. This is particularly important from the point of view of guaranteeing a kind of “transparency” of these enterprises, which aims, among others, at encouraging stakeholders to cooperate and create value together.

number of entities from the population of 373 companies from Poland). In addition, most of the surveyed enterprises conduct their basic activity in new technologies (11 entities), construction (6 entities), and food products (4 entities). Next, the following should be indicated: electromechanical industry, automotive industry and other consumer goods (3 entities each).

In the study, the total selection of entities from the population in strata was used (the strata corresponded to the size of the enterprise). The respondents were managers or managers (top or middle level) responsible for the supply or logistics area, as well as top managers employed in manufacturing companies listed on the NewConnect market (1 respondent from each company). The research sample is described in detail in Table 3.

Table 3. Research sample description criteria (N=36)

COMPANY SIZE				
Micro	Small		Medium	Big
0	13		14	9
THE SCALE OF THE COMPANY OPERATION				
Local	Regional	National	European	International
0	2	10	8	16
AVERAGE ANNUAL LEVEL OF COSTS OF MAINTENANCE AND DEVELOPMENT OF THE PURCHASING FUNCTION				
below 100,000 PLN	101–300 thousand PLN	301–500 thousand PLN	501 thousand PLN–700 thousand PLN	701 thousand PLN–1 million
17	13	3	1	2
RESPONDENT'S POSITION IN THE COMPANY				
The highest level of management		Mid-level management		The lowest level of management
0		20		16

The *NewConnect* market is an example of a so-called alternative market (Over the Counter – OTC). Securities and money market instruments are traded on alternative markets. Currently, on alternative markets, apart from transactions on the currency market, futures contracts on stock indices, commodities, shares as well as CFDs and other financial instruments are also traded. Alternative markets offer investors interesting opportunities to allocate capital in various, primarily innovative and future-oriented industries. Companies listed on alternative markets offer investors a potentially high return on investment, at the same time increasing the risk of this investment. In addition, investors are not sure how the market on which the companies operate will change, and whether the external effectiveness of the company's operations (i.e., the degree of assimilation of this activity by external stakeholders, e.g., customers and cooperators) will be expected high level.

AGE OF THE COMPANY				
Very young (0–5 years)	Young (6–9 years)	Developing (10–15 years)	Experienced (16–20 years old)	Old (over 21)
0	5	13	5	13

Source: Authors' own study based on questionnaires.

The empirical study was conducted in November–December 2021 and covered the entire country (16 voivodships in Poland). Most of the surveyed enterprises are based in the following voivodships: Mazowieckie (13 entities), Wielkopolskie (4 entities) and Dolnośląskie, Lubelskie and Małopolskie (3 entities each). The collected research material was subjected to qualitative analysis.

Bearing in mind that purchasing processes affect the correct and coherent business management process, as they are a key element of the effective functioning of any organization, it is necessary to emphasize the ways of separating the purchasing function in entities. By creating an appropriate purchasing process, the company should not only shape the procurement management process, but also the culture of this function through appropriate regulations and procedures specifying, among others, desirable attitudes in this area, planning, appropriate organizational examples, incentive systems not only of a financial nature, as well as methods of communication and training employees in the field of their duties related to purchasing, reporting and controlling results, but also risk reduction or building trust in long-term relationships with suppliers. Table 4 presents the distribution of separating the purchasing function in enterprises.

Table 4. Methods of separating the purchasing function in enterprises

<i>WAYS TO SEPARATE THE PURCHASING FUNCTION</i>	<i>N</i>	<i>%</i>
No separation of the purchasing function	1	3
No purchasing department	7	19
The Purchasing Department is a separate functional unit	21	58
Central Purchasing Department cooperating with business units in different areas	2	6
The Purchasing Department is positioned in the organizational structure as a strategic area of operation	4	11
No data	1	3
In total	36	100

n – number of companies; % – percentage of the sample

Source: Authors' own study based on questionnaires.

In most cases, the purchasing department was a separate functional unit. Based on the values of the credibility ratio, no statistically significant correlations were found between the method of separating the purchasing function and the size of the enterprise $\lambda(8) = 13.78, p > 0.05$, the length of operation of the enterprise $\lambda(12) = 13.81, p > 0.05$, the scale of the company's operation $\lambda(12) = 10.76, p > 0.05$, or the position of the person completing the survey, $\lambda(4) = 5.25, p > 0.05$. This means that most enterprises (58%) had introduced a separate functional unit as the purchasing department, i.e., standardization, specialization and formalization. Moreover, the majority of enterprises stated that 75% of them had a degree of centralization of purchasing processes. In most enterprises, the configuration of the purchasing department was 7-8 employees with a managing CPO.

Table 5. Stakeholder groups with whom the respondents identified the greatest role in the daily purchasing process and building a purchasing culture

Contact	<i>n</i>	%
with internal stakeholders (employees of various levels)	23	64
with service providers related to the production process	29	81
with suppliers of raw materials and semi-finished products	11	31
with insurers	1	3
with transport companies	15	42
with the public administration	1	3
with customs offices and agencies	2	6
with universities and high schools	4	11
with the media (journalists, bloggers, Internet portals, etc.)	0	0
with others...	0	0

n – number of companies; % – percentage of the sample

Source: Authors' own study based on questionnaires.

Table 5 presents the groups of stakeholders whom the respondents contacted most often in the daily purchasing process. The most frequently indicated group of stakeholders were suppliers of services related to the production process (81%), internal stakeholders, i.e., employees of the company at various levels (64%), transport companies (42%) and suppliers of raw materials and semi-finished products (31%), while the group that was not indicated at all were the media.

Discussion

It should be emphasized that the interest in organizational culture in the literature is widely analyzed in Poland and abroad, but it cannot be confirmed that the terminology of the culture of purchasing processes is discussed in research and thoroughly explored. In research on the purchasing function, the authors adopted many concepts used in organizations. The theory was enriched with definitions and causal relationships were identified between internal and external factors in relation to the organization, and the structure of purchasing was presented. Stakeholders influencing the building of the culture of purchasing processes are also important aspects. Gianakis and Wang (2000) indicated, for example, that orientation towards external stakeholders, especially customers, favors decentralization in purchasing due to a higher degree of flexibility and shorter delivery times. Lewin (2001) finally showed that an organization's move towards a more electronic purchasing experience can lead to a reduction in the number of people in departments, which can cause anxiety among purchasing employees and a lower degree of engagement, which can distort the purchasing culture (Monczka, Trent, & Handfield, 2002, pp. 66–69).

The results of research conducted among *NewConnect* manufacturing companies have confirmed that managers indicate the basic elements of building a culture of purchasing processes by identifying a purchasing department that is standardized, specialized and formalized. Many of them emphasized that purchasing processes are centralized, but their goal is to create a hybrid level, based on building relationships with key stakeholders. In addition, the configuration of purchasing tasks with other business functions can strengthen the entire process of building an organizational culture.

Limitations and Recommendations for Future Research

The authors assumed that the study they conducted and described in this article is fragmentary, although it does present the entire population of manufacturing companies on the *NewConnect* market. The subject of the culture of purchasing processes in the future may be continued and expanded in other enterprises as well as public organizations. Further research can be carried out on a larger sample of respondents, also outside Poland, for example across the European Union. A larger sample of research will be an opportunity to develop an in-depth analysis of the literature and new conclusions based on the diverse knowledge and experience of managers from various industries.

Conclusions

In conclusion, it should be noted that the pandemic has disrupted the purchasing processes of many enterprises around the world. Previous supply chain reliability was a safe contribution to maintaining balance in purchasing processes. Opaque supply chains and a new reality require flexibility and additional focus on sourcing and purchasing functions along with risk management to keep production running. In order to build such capabilities and be able to respond flexibly to the challenges of the business environment, as well as to meet the needs of the organization, it is necessary to develop a specific culture of purchasing processes.

The research conducted and the literature review allow drawing specific conclusions regarding the role and importance of the culture of purchasing processes, especially in relation to the pandemic period. The conclusions are as follows:

1. As an important element to ensure the security of supply from existing suppliers, priority should be given to building relationships with them and achieving visibility in the direct and extended supply network through standardization and specialization of purchases.
2. Each company should be close to its stakeholders, both internal (employee relations) and external, to identify changing trends and threats on the market.
3. It is important to develop working approaches and revise the operating model so that the purchasing department becomes a proactive business partner to other departments and external stakeholders.
4. Building a forward-looking purchasing function culture that will be crisis-resistant and supported by investing in risk management capabilities or digital purchasing tools.

To sum up the above considerations, most enterprises are currently in the phase of returning to “normal” functioning and recovery, so it is extremely important to take action based on the experience of the pandemic crisis and develop a specific model of purchasing culture. An important element is to increase the visibility of the supply network in order to develop an effective business model based on relations with stakeholders.

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