

A Creative Thinking Approach to the Role of Procurement as a Competitive Advantage in the Context of the Circular Economy Transition

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ABSTRACT

The purpose of this research was to apply creative thinking to understand the role of procurement as a competitive advantage in the context of the circular economy. We expected to discover a number of broad competitive advantage elements arising from procurement actions in the context of the circular economy transition. Businesses should adjust their strategic emphasis and begin to introduce environmentally friendly goods into their product lines, according to the conclusions of our creative thinking approach employing the six thinking hats. Furthermore, when we transition to circular economy concepts, quality control procedures and manufacturing standards should be prioritized. Companies should collaborate with strategic suppliers to acquire old items from other industries that would otherwise be considered waste, as long as they can provide the necessary value.

KEYWORDS: Procurement, Circular Economy, Competitive Advantage, Creative Thinking.

JEL CLASSIFICATION: M10, Q56.

1. INTRODUCTION

Today, we are confronted with an increasing number of critical environmental challenges. Because the linear economic model contributes to these issues, governments are seeking answers to the transition to a new, more ecologically friendly economic model (Kryshtanovych et al., 2020). As a result, the concept of economic circularity evolved, a paradigm that tries to minimize pollution not only through recycling but also through reusing the raw materials and components of the goods we consume and use every day (Bunea, 2021). Companies also want to contribute to the development and implementation of a circular model while keeping costs low and profit margins high (Corbos et al., 2022).

The market demand for products and services gives the motivation to establish, structure, and run a company. This has an impact on its profile, as well as the circumstances under which it will operate. However, its functioning requires the availability of adequate material and technical resources in proportion to the amount of activity established in relation to downstream consumer demand (Stoyanova and Angelova, 2018). The activation of the general system of relationships between a company's main functions, particularly on information flows-market investigation, portfolio preparation, ordering-contracting the material and technical basis, and provision of financial and human resources, is part of the start-up of a company's entire gear.

Material, energy, technical equipment, financial resources, etc., are delivered from outside the organization through activities that are related to and suited to its features and the changes it encounters as it advances through phases. The consequences of business operations are

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capitalized within the same external environment, based on the volume and structure of client demands, as well as the features of the competitive system in which they compete (Navarro-Garcia et al., 2014). As a result, the fate of any organization is closely related to the local and global economic and social environments. The nature of this environment places a premium on ensuring the material and technological foundations that will allow the above-mentioned activities to flourish effectively in the interests of society and its economic units at all levels and structures.

Researchers from all over the world are trying to add to this. From statistical models and quantitative research to creative techniques and qualitative research, it is our responsibility as researchers to strive to contribute to the planet's and humanity's prosperity. For these reasons, we believe that the issue we are discussing is very important, and we have decided to address it in this article. Any organization in a competitive game strives to achieve and maintain a competitive edge. Because the literature on procurement and the circular economy is dominated by quantitative research, we selected a qualitative and creative approach, which resulted in this article.

The purpose of this study is to use creative thinking to define the function of procurement as a competitive advantage in the context of the circular economy. We anticipate identifying a number of general factors of competitive advantage that come from procurement activities in the context of the circular economy transition.

2. REVIEW OF THE LITERATURE

2.1. Procurement

The practice of ensuring the material and technical aspects necessary for production in adequate quantity and structure to fulfill the company's general goals of low costs and maximum profit is known as procurement management (de Araujo et al., 2017). The activity of cooperation or collaboration between organizations to make items is also included in the same framework, as a direct result of the degree of growth and specialization in production, to diversify the economic connections between them. In essence, the concepts and characteristics of cooperation and collaboration are identical to those of procurement, because each cooperating economic unit appears as a supplier to the organization that accepts them as a general supplier (Dimitri et al., 2006).

Purchase, assurance, procurement, and buying are terms that are often used in the literature and in economic activity. However, these terms have different meanings. As a result, acquisition is a monetary transaction that involves the purchase of material or product resources and is a financial commitment (Rowlinson and McDermott, 1999).

Procurement encompasses a wide variety of purchase-related topics. The purchase is merely one stage in the long process of acquiring technical materials and equipment. The procurement process includes the activities of recognizing needs, determining their size, and the moments of fulfillment that prompt the issuing of the request or order, followed by the negotiation of supply conditions and the effective delivery of material resources (Wagner et al., 2013). Material and technical equipment insurance is frequently confused with procurement. In economic practice, material insurance has a broader meaning, involving both acquisition and the action of building the required material and technical basis using company-owned resources. Finally, supply is a procedure that completes the purchase or material insurance process by consuming material resources received from suppliers or developed within the consumer organization. As a result, supply occurs within the economic

unit, with raw materials being transported from warehouses to processing and consuming areas according to predetermined timetables. As a result, the main purpose of procurement is to offer the economic unit with comprehensive and intricate guarantees of qualitative material and technological resources that correspond to the stated location and terms at a cheap cost (Bășanu and Pricop, 2012). To achieve the aforementioned aim, several separate actions of varied complexity and difficulty are initiated and carried out in concept.

2.2. Circular Economy

The phrase "circular economy" has gained popularity in recent years. It is considered a solution to the global environmental crisis, which is as dangerous as the pandemic, but less visible.

This form of economy, as the name indicates, demands a continuous system of resource and waste creation and reuse that can be applied to a wide range of industries, including fashion, food, automobiles, and energy. Several modest to medium-sized projects have previously been completed in this sector (Stahel, 2016).

The purpose of the circular economy is to break the typical production-raw-materials-processing-consumption-waste circle. Its specific objective is to recycle material and reuse it. As a consequence, the manufacturing cycle looks like this: raw materials, processing, consumption, and waste reuse (Arsova et al., 2022). The operation is then reset to the beginning.

First, the concept of a circular economy arose in response to the need for sustainable development in terms of (excess) natural resource output and (excessive) consumption. Until recently, the economy mainly followed the acquisition-production-disposal model, which is a linear model with a life cycle for each product. Food preparation, infrastructure and building construction, consumer product manufacturing, and energy delivery are all examples of uses for precious commodities. When they have been consumed or no longer required, they are dumped as waste. Population growth and wealth, on the other hand, have increased demand for scarce resources, resulting in environmental degradation. Now is the moment to safeguard those resources and provide businesses with the knowledge required to engage in the circular economy model (Geissdoerfer et al., 2017).

Many different types of people must be active and dedicated to the transition to a circular economy. This systemic revolution is enabled by technological breakthroughs in information and communication, as well as societal growth. The circular economy may help produce new markets and better employment by altering purchasing behaviors away from traditional ownership and toward the use, reuse, and sharing of objects (Oncioiu et al., 2018).

According to research, resource efficiency has the potential to reduce raw material consumption by 17 to 24 percent by 2030. Waste reduction, greening, reuse, and other equivalent efforts could save European Union firms 600 billion euros, or 8% of annual turnover, while cutting total annual greenhouse gas emissions by 2-4 percent (Târțiu et al., 2019).

Environmental protection, increased competitiveness, innovation, and technological growth are all intertwined in talks concerning the possibilities of the circular economy. Maintaining the commodities, materials, and resources of the economic cycle, as well as avoiding or restricting waste generation, are increasingly prominent concerns on the agendas of governments, enterprises, research institutions, and nonprofit organizations.

2.3. DeBono Six Thinking Hats

Using the metaphor of wearing different colored hats, De Bono has developed a basic paradigm that, when correctly executed, has the potential to dramatically boost creative thinking and create opportunities for problem solving. The model reflects De Bono's belief that "simple procedures performed successfully are more advantageous than complicated ways that are difficult to comprehend and puzzling to apply." "There are three basic problems when we try practical thinking," De Bono notes in establishing the conceptual foundation of his six-colored hats thinking technique. He identifies and describes the issues as follows: 1) Feelings. We tend to behave without thinking, rather than relying on gut instinct, emotion, and bias. 2) A sense of helplessness. We may feel inadequate and say things like "I don't know how to think about this." "I am not sure what to do next." We try to recall everything all at once, resulting in a tangle (Kivunja, 2015).

Consider six various colored hats, each corresponding to a certain cognitive function, such as (Al Jarrah, 2019): The white hat is used to objectively assess events, using facts, figures, and information. With this hat on, it is easier to see things as they are, without any viewpoint, interpretation, critique, or feeling; emotions, experiences, and intuitions are all represented by the red hat. There is no need to wear the red hat on our heads; the black hat represents negative ideas, criticism, pessimism, and all that may possibly go wrong; the yellow hat represents potential, optimism, and optimistic thinking. When wearing this hat, we must be optimistic and see only the positive elements of the situation. The green hat denotes creativity, strange ideas, incredible assumptions, and brainstorming. The options are unlimited with the green hat on your head (you will always have to put on the black one). Blue hat - allows for monitoring and correction of thought, as well as regulating hat usage among participants.

The method allows us to look at an issue from every viewpoint, focusing on a single component at a time, yet in most cases these functions overlap, generating confusion, and other parts are neglected. When we operate in the "white-hat" phase, for example, we are only allowed to evaluate particular facts and cannot express any personal opinions or sentiments. We may use our creative abilities without fear of being criticized or mocked when we use the green hat. Another consideration is the simplicity of the method's usage (Hightower, 2019). The hat metaphor is an excellent strategy for asking ourselves or others to change the "register": When we are bewildered by a terrible and apparently hopeless situation, "changing the hat" may be the simplest way to find a solution.

We may employ lateral thinking, a method established by Edward DeBono, an experienced author on the subject, which comprises tackling difficulties indirectly and creatively while organizing our mental processes to put creative thinking into action. It is an intriguing strategy for coming up with new combinations and concepts that we would not have thought of otherwise (Atkinson, 2011).

Creative thinking can be nurtured, explored, and developed through a variety of methodologies and exercises in fields as diverse as commercial management, technological innovation, political management, artistic creativity, and life itself. Creativity is necessary in each business, be it advertising, sales, programming, or even medicine.

3. RESEARCH METHODOLOGY

The purpose of this study is to use creative thinking to define the function of procurement as a competitive advantage in the context of the circular economy. In order to attain this aim, we embarked on a multi-stage research project.

The first stage was to investigate procurement, circular economy, competitive advantage, creative thinking, and DeBono's six thinking hats.

The next step was to formulate the research topic. As a result of the literature study, we created the following research question. Can procurement become a competitive advantage for a firm in the context of the transition to the circular economy?

The third phase of our research was to select and employ the appropriate methodologies and instruments to conduct this study. As a result, we decided on a qualitative study technique. As a humanistic or idealistic method, qualitative research focuses on understanding the problem of the study. Individuals' opinions, experiences, attitudes, behavior, and interactions are studied through qualitative research. Produces non-numeric data. We chose this strategy because the research methodology is based on creative thinking and we believe that a qualitative method will allow us to better and more easily identify the characteristics of creativity in relation to the research question we developed previously.

We selected to employ the notion of parallel thinking, which we demonstrated previously in the literature study, as a research instrument. This entailed employing Edward DeBono's six thinking hats tool. We chose this technique because it promotes people's creative thinking, allowing us to address the study subject as creatively as possible.

The fourth step in our research was to create a research sheet that included the research question, some theoretical notions about procurement and circular economy that were used to set the context for the discussion, and a template with explanations of how the participants in this study used the six-thinking-hat method. 25 students from the Faculty of Management, the English language teaching division of the Bucharest University of Economic Studies, participated in this study. They were chosen based on their participation in the specialized activities of the Supply and Sales Management discipline, which have been merged into the procurement study in a current competitive setting. Furthermore, the students who comprised the study sample studied Supply and Sales Management, and as a consequence, we believe they are capable of using the tool recommended on the specific topic of this article. Thus, after receiving instructions, the students used the research sheet to answer the question under each hat in written form, allowing them to use each of the six hats on the question "Can supply become a competitive advantage for a company in the context of the transition to the circular economy?" This activity was carried out on site in a face-to-face setting.

The findings were collected in the fifth step and the preliminary analysis procedure began. The ideas communicated for each thinking hat were compressed and logically arranged to generate a more detailed description of each thinking hat.

The sixth stage of this research strategy was to perform a SWOT analysis in order to identify a number of general suggestions for businesses. The SWOT analysis was based on concepts recovered with the use of six thinking hats, which we attributed to the strengths, weaknesses, opportunities, and threats of the SWOT matrix. This resulted in recommendations, which, together with the innovative approach to research, are the key findings of this study.

4. PRACTICAL OUTCOMES OF USING SIX THINKING HATS

Six-hat thinking is a concept that helps individuals and communities view problems and events from several perspectives. In essence, the six hats teach you 'how to think' rather than 'what to think,' therefore it applies to all situations. It simplifies thinking by focusing on one

issue at a time, according to De Bono (2017), and allows for change in thinking, decreasing dispute among group members. In this section of the paper, we present the outcome of applying this tool through the ideas and opinions of the participants and through the lens of each thinking hat.

4.1. Opening with The Blue Hat

Blue Hat - The person chairing a meeting, directing a team, or handling an issue metaphorically wears the blue hat. They will often build the framework with an agenda, objectives, and scope.

The purpose of applying this creative thinking technique in our research is to determine whether the procurement function may provide organizations with a competitive advantage in the context of the circular economy. To accomplish this objective, we shall make a strategic choice to make procurement a competitive advantage for the organization while also implementing circular economy efforts. As a result, we must determine whether to prioritize procurement in the framework of the circular economy. We focus on the decision to make procurement a competitive advantage for the organization while implementing circular economy strategies while wearing hats.

4.2. White Hat Findings

White Hat - At the onset, the white hat is utilized to focus on the facts or data supplied. While wearing this hat, we must concentrate on accessible information. First, the definitions of the concepts are presented.

The circular economy is concerned with producing goods and services in a sustainable way by minimizing resource use and waste. Encourage new ways to create, manufacture, and consume things, as well as extend the useful life of products and reuse and recycle components. It replaces the concept of end-of-life with the concept of restoration, promotes the use of renewable energy, and removes toxic substances that hinder reuse (Cautisanu et al., 2018).

Recycling resources can make the production process more difficult and require the acquisition of new equipment, making a circular system more expensive than just dumping damaged and obsolete goods. Competition will also influence how items are recycled and whether they are simple to disassemble and recycle.

As the world transitions to a circular economy, the procurement department will assume a variety of vital roles. A well-managed procurement process enables a company to realize economies of scale. This will result in cheaper costs and the potential to produce more for less money. As a result, the role of an interface to and "keeper" of upstream supply network players must become more crucial.

A strong procurement system is essential for a company's seamless functioning; therefore, an organization must build one while simultaneously including parts of the circular economy system. We realize the importance of successfully managing resources and eliminating as much waste as possible to reduce expenditures and improve earnings. The white hat excels at showing that guaranteeing the appropriate operation of the circular economy, an industrial system that is restorative or regenerative by intention and design. The circular economy builds on the first "R" of trash reduction by reusing or recycling things or their components. Procurement is a critical function in a circular economy, since suppliers are difficult to find and supplies must be of high quality.

Governments around the world are attempting to develop programs that reward this kind of production, with the notion of being more eco-friendly gaining appeal in recent years. Companies have begun to apply this approach as a means of encouraging consumers to recycle by providing coupons and lowering the price of new items if they bring in old ones.

We own a company and plan to adopt circular economy operations. This requires being more ecologically conscious and reducing manufacturing expenses. This would be done using the procurement strategy, which involves purchasing raw materials from third-party vendors.

A growing number of firms are preparing to switch to a circular economy. As a result, environmentally friendly items and suppliers must be prioritized in the buying process. We can influence procurement to help other organizations achieve our green economic goal. Circular enterprises can influence procurement conditions to obtain goods and services from the circular economy system.

4.3. Green Hat Findings

Green Hat - Wearing a green hat promotes innovative and creative ideas. When thinking beyond the box, everything should be considered. Negative ideas or remarks are not permitted at this point in the process.

As procurement 4.0 affects firm operational and administrative operations while also producing new digital goods and services, it requires innovation. Businesses rely on their supplier bases to innovate in today's fast-paced global market. This will require strong cooperation between purchasing groups and large providers. Supplier development activities may focus on improving supplier quality and capabilities after components are in production.

Consumers' increased interest in sustainable goods creates commercial opportunities and possibly reputational advantages. The majority of a product's circularity is determined at the design stage, which includes the materials used. Circularity considerations of materials are usually associated with consistently beneficial outcomes. Within a business, the procurement department's profile should change from merely operational to more strategic and proactive.

It may be possible to gain a competitive advantage by replacing a component of a product with a recycled raw material or a renewable resource. Integrating ecodesign and an environmental approach into any product's (or service's) life cycle requires incorporating environmental concerns into all phases of its life cycle. Especially now, when the advantages of recycling are growing.

We may think of a few unique techniques to streamline the procurement process. Working with a company that uses equivalent raw materials to reduce waste is an option. For example, if we are in the fashion industry, a lot of cloth is thrown out; as a "side hustle" we may build another branch just with outfits made from the scraps.

Rather than obtaining fresh raw materials and completing the product with them, we may look into purchasing used resources from specialist businesses. This saves money on materials and for the company we buy from because they get compensated for resources that would otherwise be wasted. We may also reuse materials and garbage from other companies to create new products rather than just aiding in the production of existing ones.

As a business, we have every incentive to make successful procurement beneficial to our operations. Reducing waste is critical in all manufacturing processes, since it increases profit margins, but leveraging the procurement 4.0 system and digitizing and semi-automating the

process is another aim we should strive for. The more effectively we can automate a process and have a system in place that keeps track of available raw materials and estimates future raw material requirements, the more profit the company will make while minimizing its environmental impact.

The key goal of the company should be to strike the correct balance between affordability and efficiency. Purchasing objects with reusable/recyclable components, using a circular economy plan to acquire materials/products, and investing in renewable energy are some examples of actions. The main difficulty is to provide low-cost, environmentally friendly products.

One of the key advantages of adopting a circular economy strategy is that we preserve the environment by employing recycled materials rather than purchasing raw materials from firms that do not recycle.

When we practice green buying, we may concentrate on eliminating packing, which is a very clear thing to do and will be noticed quickly. We can learn about how vendor products affect our world at numerous points throughout the supply chain. We will obtain a competitive advantage by acquiring goods and services that meet our environmental criteria through green procurement.

4.4. Yellow-Hat Findings

Yellow Hat - The yellow hat, also known as the optimistic hat, is used to assess the prospective qualities of ideas generated using the green hat approach.

Collaboration with important suppliers could be a powerful source of innovation and long-term competitive advantage. As specialization and vertical fragmentation become more prevalent, networks and alliances of businesses arise whose interactions are no longer purely transactional. A collaborative environment encourages supply chain firms to be more open about their challenges in order to exchange ideas and pool information.

Improving a product's social and environmental impact across its entire value chain requires a joint effort by all value chain operators. A collaborative environment allows buyers and suppliers to share their specific concerns about sustainability, exchange ideas, and combine complementary knowledge. Each value chain actor may focus on addressing environmental and social problems at their level of the value chain, knowing that upstream and downstream players will do the same.

Buying old materials rather than new, unused ones is a wise decision, since it is both cost-effective and ecologically friendly. Waste from other companies can be transformed into new goods or used to help manufacture existing ones. This will make the company more environmentally friendly and alleviate certain circular economy difficulties while also presenting a clean and nice face to the public.

In the best-case scenario, we believe that we will be able to execute all the concepts we created. And because we are contributing to environmental improvements, our consumers and suppliers will notice our green purchases, resulting in increased attention and revenues. With a strong market position, we will enter the circular economy. Therefore, if we connect all these notions, their main goal is to use green procurement to provide our firm with a competitive advantage.

The cost of deploying these two technologies is now the most difficult obstacle. Simply being eco-friendly would significantly increase material costs, and the goods would require

reworking or perhaps scrapping the design and developing a new product if we started there. Setting such procedures gradually can be beneficial to our organization, but the key is to do it gradually.

4.5. Red Hat Findings

Red Hat - This is the intuitive hat where you may express your feelings and emotions, such as your fears and dislikes. These feelings are not justified; rather, they identify intuitions.

Significant expenditures will be required to maintain sustainability and establish a circular economy in the procurement process. In the case of the circular economy, we will need to develop new skills and train employees, as well as purchase new machinery. As a result, these trends deeply concern us.

A feasible alternative to the standard method is the circular economy. Its purpose is to keep products and resources in the value chain as long as possible. As a result, it makes sense to use procurement as a competitive advantage. We have faith that everything will go well with the support of sustainable life communities.

Using the circular economy as a business strategy is not an easy task. It requires much more thought and money than a normal approach. People and other businesses may not appreciate our efforts to go green, resulting in wasted time and money spent on something that may or may not increase profits. We may think of it as a bad investment.

The main disadvantage of this procedure is that the final product may be of low quality. Because reconditioned components are no longer brand new, they are risky to use. As a result, the objects' warranties will be reduced, or the end-user will use them more frequently. This does not bode well for the business and may be crucial in the two firms' new partnership.

We are afraid that our environmental requirements for vendors and goods/services would be overly rigorous, making it difficult to find providers. This may be reflected in the pricing of our products/services, forcing us to become excessively expensive for our clients. The second risk I see for us is that we will be unable to effectively manage our suppliers and their adherence to the environmental conditions that we established for our partnership.

With the acquisition of resources in the circular economy, we have a reduction in environmental contamination. It makes us feel better because we see it as a more fitting way of life, a remedy for past or future damage. However, obstacles develop, such as the requirement to acquire an apparatus to handle and process the used materials. What happens if our suppliers impose terms and duties on us just because we rely on them?

We believe that as customers become more aware of the importance of sustainability, they will gravitate toward firms that seek to become more environmentally friendly. Several difficulties may develop, but we feel that it is a decent starting point; nevertheless, it can always be improved. There is a risk that the purchased supplies will not meet expectations and that the damage to the product will exceed the limits of repair.

4.6. Black Hat Findings

The black hat is the negative, yet reasonable hat, since it analyzes prospective solutions or ideas to determine if they would work. Negativity without explanation must be avoided since this is a red-hat function.

All the red hat concerns are legitimate since they are all fundamentally valid issues. Employee routines will be disrupted when we modify our production processes; they will need to learn how to function in the new environment, respond quickly to changes, and deal with market-related challenges because all of the changes will affect consumers as well. Employees may be resistant to change, while some may need to be convinced, and still others may resign. However, it is clear that any company's future must take such an initiative and effect change. Being involved early in the process will provide our company with a competitive advantage in the future.

We made the transition from procurement to procurement 4.0. It is not consistent and may be too variable to provide a long-term competitive advantage. It still faces market risks. There is a major risk of material shortage since not all waste is renewable. It is a difficult method, as the entire value chain and the manufacturing chain must be addressed.

A collaborative value chain gives a competitive advantage, but there are additional risks to consider as the number of players increases, such as the possibility of losing clients due to product alterations. To maintain the resilience of the supply chain, procurement must monitor and mitigate risks such as extreme weather events, political instability, and trade wars.

Like any new sector, the circular economy lacks economies of scale and must bear significant technical costs. Although certain things may lose quality if reused or recycled, not all manufacturers demand recycling or reuse. Analyze which commodities can benefit from the three "Rs" and only apply them to those that can give a considerable advantage in procurement.

Right now, the most important worry is rising spending. If we want to make procurement a competitive advantage, we need to pay more attention to the materials we obtain. Plastic is cheap, yet adds to pollution; however, how is it harvested? Are we going to focus only on the material or on the purchasing process? When selecting a supplier, the business must exercise considerable caution, since cutting costs at the expense of quality is not a good idea. A successful procurement process must have a long-term method to identify, assess, and address supplier concerns. Unanticipated variables such as economic uncertainty, labor volatility, and natural calamities should be addressed in a procurement method.

The most serious problem for the firm is the possibility of low-quality final merchandise. A strict quality control method and strong production standards can help solve this problem. Another approach to reduce the risk suggested is to choose the best prospective supplier and build a strong connection and trust between the two companies.

If we aim to rethink the entire procurement process in our business, we will be able to gain a competitive advantage. We want to know how the products/services we intend to buy will impact the environment. We will already select recyclable products and paper over plastic in the workplace or supply chain. This is an example of smart green buying that may provide our company with a competitive advantage.

4.7. Blue Hat Concluding Results

Wearing the blue hat, we may conclude that procurement in a circular economy has the potential to deliver various benefits. It enables buyers to focus on meeting requests while also assessing life-cycle costs and potential savings. However, it provides a framework for a more complete examination of environmental impacts and waste creation throughout the product and service life cycle. In the long run, including sustainability and the circular economy into

the procurement process may give a number of advantages (as represented by the yellow and green hats), both to us and to our clients. There is no one-size-fits-all cooperation model in circular procurement. Setting the right priorities is crucial, since most businesses have a larger supplier base than they can successfully manage with their current resources. Doing so only on the basis of spend or performance may result in contempt for suppliers, which can have a substantial impact on a company's circular economy goals.

Overall, integrating new circular economy technologies to the supply side looks to be beneficial to our organization's growth, and this revolution will affect not just production but also services and consumption. Making procurement a competitive advantage for the company while promoting a green lifestyle and increasing the number of clients is a brilliant concept. Procurement in a circular economy can be profitable if the right calculations are made so that processing materials does not cost more than buying new materials, and it can be an advantage in a competitive market because few companies do this, and it could be a breakthrough in some industries as a result.

Transitioning to a circular economy requires that procurement play a more strategic role than simply ensuring material availability. Adopting a collaborative approach improves the sustainability performance of a company's supply chain.

This strategic choice for the circular economy has the potential to create a competitive advantage. Indeed, it has been recognized that these broad new notions have a number of advantages. There are some reservations about the change, particularly considering the importance of such a significant choice and the implementation of this change throughout the process. Overall, this appears to be a viable and useful strategy. Supplier collaboration requires supplier segmentation based on current and future business strategy goals, as well as periodic appraisals to meet changing business demands.

In the end, there are several benefits and drawbacks, but what matters is that the circular economy has occurred, is occurring and will continue to exist for many decades to come. Whether we like it or not, procurement is the most significant advantage in this type of economy, therefore, we must figure out how to get it. Finally, we would choose to invest in transportation and raw material expenditures since, regardless of the cost now, it would provide me and my organization with larger long-term benefits. Quality results in delighted customers.

5. SWOT ANALYSIS

We utilized SWOT analysis to systemize the ideas gathered through the six-thinking-hats instrument and to present a set of suggestions based on the aforementioned concepts. As a result, we outline the primary strengths, weaknesses, opportunities, and threats, followed by a series of suggestions based on these characteristics. As a result of the six thinking hats, the objective of the SWOT analysis was to identify critical points of emphasis in using procurement as a competitive advantage while moving to the circular economy.

5.1. Strengths

- 1) Extending the life of a product by reusing and recycling components
- 2) A well-managed procurement process that enables a company to capitalize on economies of scale.
- 3) Products designed to last longer and be easily maintained and repaired

- 4) Collaboration with important suppliers as a source of strong innovation and long-term competitive advantage
- 5) In a circular economy, procurement can give a competitive advantage by allowing companies to impose some cost limitations.
- 6) The answer is to purchase leftover resources from other sectors that would otherwise be discarded.
- 7) Having a thorough quality control procedure in place, as well as high production standards.
- 8) May save long-term costs, encourage a green lifestyle, and increase customer demand.

5.2. Weaknesses

- 1) The product's design will need to be revised.
- 2) It is more costly to use a circular system.
- 3) Making eco-friendly items has always been done, but at a higher cost, which leads buyers to opt for the cheaper option.
- 4) The most difficult obstacle in deploying these two technologies together is the cost.
- 5) The use of recycled materials can cause quality difficulties.
- 6) Using refurbished components is risky, since they are no longer brand new, and flaws may manifest earlier than intended.
- 7) Because all changes will alter employees' habits, they will need to learn how to function in the new environment, respond quickly to changes, and cope with market-related challenges.
- 8) Employees are sometimes reluctant to change.

5.3. Opportunities

- 1) Collaboration that transcends organizational boundaries.
- 2) Being eco-friendly has gained popularity among customers and businesses in recent years.
- 3) Customers are more aware that the purchase decisions they make have an impact on the environment.
- 4) Consumers' increased interest in sustainable goods creates market opportunities and possibly reputational advantages.
- 5) The opportunity to collaborate with a company in the same sector.
- 6) Supplier-buyer relationships can be sources of a 'collaborative surplus', which is generated jointly by alliance partners via contributions that neither firm could accomplish on its own.

5.4. Threats

- 1) It is difficult to find vendors in this market, and supplies must be of high quality.
- 2) Increasing shipping costs.
- 3) The suppliers with whom we do business will have an influence on our work and mission, as well as our public image.
- 4) Some clients may leave if they believe that the quality of a reused/recycled manufacturer has deteriorated.
- 5) What if our suppliers put conditions and fees on us just because we rely on them?
- 6) Different countries have different priorities, and some may be interested in green companies, while others are more concerned with alternatives, cost, and overall quality.

5.5. Recommendations and Research Limits

As a result of the SWOT analysis, the following recommendations were made as important points of emphasis in using procurement as a competitive advantage while transitioning to the circular economy.

R1 (resulted from S1, S2, S3, S5, S8; W1, W2, W3, W4; O2, O3, and T2). *Companies should shift their strategic focus to include environmentally friendly items in their product portfolios.* Even though this shift would result in higher costs and lower profit margins, as well as an increased risk of losing customers if the price is also raised, it is thought to be worthwhile in the long run due to customers who are more aware that the purchasing decisions they make have a significant impact on the environment.

Furthermore, establishing a circular system will be more expensive and the product design will need to be modified, but this is outweighed by the fact that the product life cycle will be longer, components will be recycled, and overall, the goods will last longer, allowing for a higher price. Procurement is critical because it can provide a long-term competitive advantage in the transition to the circular economy by allowing companies to set some cost constraints and benefit from economies of scale, resulting in lower cost per unit, balancing the extra expenses required for implementing circularity and increasing shipping costs.

R2 (resulted from S7; W5, W6, and T4). *As we shift to circular economy principles, quality control methods and manufacturing standards should become a top focus.* There are concerns that the use of recycled materials may result in quality difficulties because the use of recycled or reconditioned components may lead to the end product breaking sooner than planned. Furthermore, there are fears that some buyers may opt not to purchase these types of item due to their poor quality. All these worries can be put to rest by focusing on quality control and adhering to tight production standards.

R3 (resulted from S4, S6; O1, O6, and T3, T5). *Companies should work with key suppliers to purchase leftover products from other sectors that would otherwise be discarded.* It is a difficult partnership because the firm must develop clear and objective environmental standards for its suppliers and regularly review them and their adherence to the environmental requirements that were established for the collaboration to take place. Of course, supplier-buyer relationships may be sources of a 'collaborative surplus,' which is produced jointly by the alliance partners via contributions that neither firm could achieve on its own since it reaches beyond the organization's borders. Also, we should be cautious when defining selection criteria since the suppliers we deal with will have an influence on our work and purpose, as well as our public image, and we should be wary of their negotiating strength and avoid relying entirely on one supplier.

R4 (resulted from W7, W8, and T6). *Creating a suitable corporate culture and environment.* Making procurement a competitive advantage in the transition to circular economy principles is a difficult challenge. This would require modifying our production processes, which will cause disruptions in employees' routines; they will need to learn how to function in the new environment, respond swiftly to changes, and deal with market-related challenges, because all of the changes will have an influence on customers. They are quite likely to be resistant to change. For these reasons, businesses should think about developing a healthy organizational culture and work environment to truly profit or succeed from such a transformation. Of course, they should consider the corporate environment while implementing this cultural change because nations vary, and some may be interested in green firms, while others are more concerned with alternatives, affordability, and overall quality.

Like any research approach, this specific study is not without limitations and can be perfected. First, we mention that the research sample was quite limited. Second, the results we obtained are rather subjective, representing the creative opinions of the participants. However, we see these limitations as future directions of research and, in this sense, we can use the research model and apply it in a practical context in several organizations to create a certain degree of generality of the results while increasing the level of objectivity.

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