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SCM600 Logistikk

Sustainability in production: The case of Brambles Ltd.

Zeray Teklay Habtesion

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Preface

This bachelor's thesis marks as the final research paper assignment of my bachelor program in Logistics and Supply Chain Management at Molde University College- specialized University in Logistics 2023.

This bachelor's thesis based on the number of subjects that I had in the last 3 years, as the world continues to evolve, the importance of sustainability production become more significant than ever, and my thesis focus on the characteristics of an organization that make it eligible for remaining sustainable in terms of production. In this paper, I will explore the concept of sustainable production and the ways in which production companies can incorporate sustainability into their operations.

I would like to thank my wife and my children for your support throughout the years. Your sacrifices and commitment to my education have meant a lot to me, and I thank you for everything you have done.

I would like to thank my supervisor Tolcha, Tassew Dufera, for your guidance and support, which have been invaluable. You helped me to overcome challenges and expand my knowledge and thank you for all the time and effort you have invested in me.

Molde 31.05.2023

Zeray Teklay, Habtesion

Abstract

Sustainability is an essential variable that has to be considered by organizations that intend to engage in long-term growth and a positive relationship with consumers. The current research was carried out to investigate the key features of organizations that could make them even more sustainable. The author conducted a narrative literature review and a case study on a company called Brambles Ltd. to find out the most important variables that could make a company sustainable. In addition to technological innovations and resource management, such organizations would have to focus on environmental benefits and invest more money in eco-friendly solutions and the development of approaches that are based on the principles of reuse and recycling.

The researcher tried answering the research question that was posed at the beginning of the thesis and supported their claims with evidence from relevant literature. Therefore, the key values pertaining to sustainable production were identified within the framework of the narrative literature review. Additional quantitative studies could extend the researcher's knowledge base and help gain more insight into sustainability and its impact on production.

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1.0 Introduction

Sustainability is a rather broad term that stands for an organization's ability to cover objectives associated with environmental protection. This is an important topic because it dwells on how corporate structures could appeal to employers and end-users to maintain a closer connection between business objectives and environment-friendly goals. The current assignment is going to cover the most significant issues pertaining to sustainability in production to explain the importance of protecting the environment from negative anthropogenic influence. Therefore, it is vital to get acquainted with the following information if one expects to broaden their knowledge in the field of sustainability. The assignment will appeal to both professional readers and lay audiences because it explains the need to enhance sustainable production and occasionally perform sustainability checks to ensure that proper environmental protection can be achieved.

Sustainability has become an increasingly important concept in the production industry as companies recognize the need to reduce their environmental impact and promote social responsibility. This essay, we will outline the importance of sustainability in production and the benefits that it can bring to companies and society as a whole (Forest and Feder, 2011). Firstly, sustainability in production is essential because it helps to preserve natural resources. The production industry is a significant user of resources such as water, energy, and raw materials, and it can significantly impact the environment. By adopting sustainable practices, companies can reduce their reliance on finite resources and minimize waste (Ruppel, Roschmann and Ruppel-Schlichting, 2013). This can help to preserve resources for future generations and ensure their availability for future production needs.

Secondly, sustainability in production can help to reduce environmental pollution. Many production processes generate waste and emissions that can be harmful to the environment and human health. Companies can reduce their environmental impact and minimize pollution by adopting sustainable practices. This can help to protect natural habitats, wildlife, and human health. Also, sustainability in production can lead to cost savings. Sustainable practices can help companies to reduce their energy and resource consumption, which can

lead to lower operating costs (Flood *et al.*, 2022). Additionally, by reducing waste and improving resource efficiency, companies can minimize their waste disposal costs. This can lead to cost savings and improved profitability.

Another idea is that sustainability in production can improve a company's reputation and brand value. Consumers are increasingly concerned about the environmental impact of the products they consume, and companies that adopt sustainable practices can differentiate themselves from competitors and attract environmentally conscious consumers (Teske, 2019). Additionally, companies that adopt sustainable practices can improve their relationship with stakeholders such as employees, suppliers, and local communities. Finally, sustainability in production is essential for promoting social responsibility. Companies are responsible for minimizing their environmental impact and promoting social welfare (World Bank and International Monetary Fund, 2012). By adopting sustainable practices, companies can contribute to the achievement of the United Nations Sustainable Development Goals, which aim to promote sustainable development and social responsibility.

Considering the above information, the most evident benefit that can be associated with sustainability in production is the increased probability of positive sales. It means that employers may focus on corporate social responsibility and prioritize environmental protection instead of worrying about profits (Parajuli, Thoma and Matlock, 2019). Even consumers tend to alter their purchasing habits based on how social and environmental variables affect their daily existence. Hence, a customer can be expected to pay more money for products that consider environmental impact and its potential negatives. The importance of sustainability in production can be explained with the help of all the times when an organization can save costs by switching to environment-friendly solutions and consuming less energy. Hence, the subject of the successful application of sustainability is contingent on the idea that not all energy-efficient companies can remain successful over time.

One area where a great deal of research is missing is how government incentives affect local sustainability. For instance, small and medium enterprises might have to cope with the increasing pressures of grant-related opportunities when assessing competitive abilities and potential outcomes of sustainable manufacturing (McKinnon *et al.*, 2015; Turnhout *et al.*, 2020). In other words, sustainability cannot be generated out of thin air since employees and managers have to maintain high morale to identify with green manufacturing practices.

Teamwork and recognition are vital because they encourage organizations to go beyond hard work and begin making a positive difference instead of merely saving resources. Accordingly, the main question that organizations have to answer when pursuing sustainability is whether they can innovate in a timely manner to do what is expected of them. Not all improvements can contribute to sustainable manufacturing, so additional research has to be deployed to create an extended evidence base on the decrease in carbon footprint. In turn, it will make a positive change across the community and bring more attention to sustainability issues.

The research question that the current project intends to answer is as follows: ***What are the key characteristics of an organization that make it eligible for remaining sustainable in terms of production?*** Hence, this study aims to investigate the literature and develop an argument on the topic of corporate sustainability to find ways to explain why specific organizations are much more likely to fail at reaching their sustainability objectives. The following hypothesis is being tested in this study”:

H₁: Corporate sustainability, circular economy, and skillful change management represent the foundation for consistent sustainability in production.

A comprehensive review of the literature will be necessary to explain the phenomenon of sustainability in production and see how improvements could be achieved without interfering with corporate processes. Hence, the idea will be to conduct a case study on one of the most sustainable organizations globally – Brambles Ltd.

– and investigate why this company became so successful compared to its competition.

3.0 Literature Review

3.1 Socioeconomic Influences

It is safe to say that the most significant part of a footprint generated by a company lies within the borders of social and environmental influences. It means that business leaders contribute to the sustainability of their organizations by instilling effective governance and choosing the best ways to satisfy consumers via eco-friendly solutions (Deng *et al.*, 2019;

Manupati *et al.*, 2020). The most probable path to remaining sustainable – for many companies – might be to retain talent and deploy stringent regulations intended to mediate the environmental impact and address the most significant issues in real-time (Correa *et al.*, 2019). This is a leadership-based approach that requires critical thinking and numerous successful initiatives. The latter can be expected to optimize resource consumption and help corporate managers avoid situations where their environmental footprint generates too many negatives (Kumar, Singh and Kumar, 2021). The scope of achieving higher levels of sustainability in production is to develop direct and indirect ways to affect the treatment of products and their connection to the value chain (Di Vaio *et al.*, 2020; Rainbird, 2004). Hence, suppliers are responsible for ensuring that the environment can be proactively protected from unethical and poorly planned practices.

Another important topic of discussion is corporate readiness to improve the supply chain and procurement procedures. Purchasers often affect how companies are setting up their sustainability measures, meaning that there has to be a clear vision to affect sourcing decisions and their impact on the organization's future (Bocken, Boons and Baldassarre, 2019; Strange and Magnani, 2017). Without sustainability, it can be hard to expect a company to win big and remain at the top of the market while lacking certain skills or instruments.

Sustainable procurement is another crucial topic that must be covered when discussing successful production because value chains must be upstream to remain viable over time (Rainbird, 2004). Also, it is important to ensure that the approach to supply chain management has holistic features and functions on the basis of capabilities and processes that respect environmental and social variables (Caldera, Desha and Dawes, 2019). For example, the company might determine the baseline and then focus on initiatives intended to create value and generate sustainable procurement (Kshetri, 2021; Sarkar *et al.*, 2021). With a cross-functional approach to various supply management processes, the management is going to create room for decarbonization and further enhancements.

The next means of describing the organization is to predict its capability to shift and integrate valuable strategies that adhere to sustainable procurement principles. While tracking organizational performance, the team might be interested in determining the baseline for

production and seeing how cost-effective designs could reduce the carbon footprint generated by the company (McKinnon *et al.*, 2015; Raut *et al.*, 2019). This would require the team to understand its internal strengths and investigate internal data sources to perform a top-down evaluation of risks. This benchmarking could become the primary means of establishing a new, environment-friendly platform for an organization that has not addressed the socioeconomic implications of sustainable production earlier (Silva and Figueiredo, 2020; Saeed and Kersten, 2019). Such actions will also affect industry norms because key suppliers will look at how the organization focuses on stable procurement and required corporate enhancements (Tunn *et al.*, 2019). Over time, the processes would have to be quantified to generate a significantly more skilled workforce and a meaningfully smaller carbon footprint for future generations.

3.2 Environmental Impacts

Major trade-offs associated with sustainability cannot be ignored when discussing the environmental impact of emissions because improved production has to be monitored by skilled analysts who have access to good data sources. The increasing volume of emissions generated by irresponsible organizations has to be mitigated by corporations where carbon abatement strategies were prioritized over incomes (Bocken, Boons and Baldassarre, 2019). The overall value that is created through the interface of procurement and numerous other opportunities can be explained by reinforcements associated with environment-friendly solutions. In a sense, unethical labour practices could become a commonality over time, predicting a steep organizational downfall (Sarkis, 2020; Xu *et al.*, 2019). To avoid negative outcomes, corporations might resort to sustainability in production and build workplace environments where environment-related objectives are put at the forefront. Consequently, delivery time, product quality, and cost-effectiveness become the core criteria to investigate when looking at sustainability (Li *et al.*, 2020; Raut *et al.*, 2019; Yu *et al.*, 2021). The change in demand also directs the approaches taken by an organization when dealing with carbon footprints and their impact on corporate longevity and relationships with consumers.

One more way to describe sustainability and explain its importance is to examine how carbon emissions are included in the given business agendas. For instance, if a corporation does not discontinue high-impact behaviours in an attempt to earn more money, it will cause a significant backlash in the future (Meherishi, Narayana and Ranjani, 2019; Negri *et al.*,

2021). Incremental improvements are explicitly hard to achieve, but purchasing decisions are easier to accomplish when potential environmental and social outcomes can be predicted (Di Vaio *et al.*, 2020). In other words, awareness is the key driver of sustainability in production, especially if the overall carbon footprint is successfully curbed by the given organization. Thus, purchasing decisions represent another viable solution to consider when discussing innovation and disrupted manufacturing processes (Bai and Sarkis, 2020; Saurabh and Dey, 2021). From collaborations with suppliers to diverse sourcing, it is crucial for corporate boards to predict their carbon footprint to establish a name for themselves in the marketplace (Bititci *et al.*, 2004; Correa *et al.*, 2019). A smaller initiative could be scaled over time to give rise to other pilot projects and see how those could be enhanced to achieve a long-lasting impact on the industry.

3.3 Renewable Energy and Environment-Friendly Solutions

To a certain extent, sustainability in production could be subject to the need for new energy sources and power-based solutions in order to generate new facilities worldwide and attract new suppliers. Companies need to make the transition to ensure that procurement and production processes are safe and eco-friendly enough to be considered for future reference (Cai and Choi, 2020; Carino *et al.*, 2020). Corporations could organize innovation sprints to re-evaluate the technological, economic, and environmental basics of their operations (Parajuli, Thoma and Matlock, 2019). Thus, business cases represent one of the foundations of sustainability because they define how new market approaches can be handled in the safest manner. At the same time, retailing operations have to be expanded and covered to explain the most significant connections between adopting new technologies and acquiring higher levels of sustainability (D'Eusanio, Zamagni and Petti, 2019; Kumar *et al.*, 2020; Sanders *et al.*, 2019). This is why many companies often aim at long-term contracts and create new strategies intended to reduce input costs and resource scarcity (Turnhout *et al.*, 2020; Vadakkepatt *et al.*, 2021). Hence, one of the gaps that the current literature review addresses is the need for additional controls that are required to develop durable business processes. The latter can be expected to curb the overall carbon footprint and decrease the amount of toxic waste resulting from production.

The ultimate idea that has to be addressed is another potential gap between sustainability and organizational strategies where the shift that has to be made relates to environment-

friendly approaches. Any potential supplier would have to be reviewed through the prism of sustainability to ensure that scalability can be achieved without disrupting any of the existing policies. According to Caldera, Desha and Dawes (2019), it means that the team should possess certain technical skills and address the capability gaps to ensure that cleaner production can be attained. While managing performance and developing greater sustainability, companies would have to address negative environmental influences and establish a more robust risk management approach (Esmailian *et al.*, 2020; Karaosman *et al.*, 2020; Tseng *et al.*, 2020). It means that internal controls have to become more stringent for upstream supply chain activities and enhance the potential for sustainability (Strange and Magnani, 2017). Hence, a thoroughly sustainable business model has to be addressed through the prism of the organization's readiness to shift its operations (Mangla *et al.*, 2020; Tunn *et al.*, 2019). With this information in mind, responsible corporations should have sustainable tools and data management practices to cover consumer needs and respond to environmental challenges.

3.4 Corporate Sustainability

One of the primary impacts of corporate sustainability on the production industry is the promotion of environmental stewardship. By incorporating sustainable practices into their operations, companies can reduce their carbon footprint and minimize their impact on the environment. For example, companies can implement energy-efficient technologies in their production processes or switch to renewable energy sources such as solar or wind power. Additionally, companies can minimize waste and pollution by adopting circular principles and reducing the use of non-renewable resources (McKinnon *et al.*, 2015). These practices benefit the environment and help companies save costs in the long run by reducing their energy and resource consumption.

Another impact of corporate sustainability is the promotion of social responsibility. Companies can significantly impact the communities in which they operate, and it is essential for them to consider their social impact. For example, companies can implement fair labour practices and ensure safe working conditions for their employees. They can also support local communities through charitable giving and volunteer work (Sarkar *et al.*, 2021). Additionally, companies can work to promote diversity and inclusion in their workforce and supply chain, creating a more equitable society. Corporate sustainability can also have a significant impact on a company's reputation and brand. Consumers are increasingly concerned about the social and environmental impact of the products and services they consume,

and companies that prioritize sustainability can build a positive brand reputation (D'Eusanio, Zamagni and Petti, 2019). This, in turn, can lead to increased customer loyalty and greater financial success. Additionally, companies that prioritize sustainability can attract and retain top talent who are motivated by a company's commitment to social and environmental responsibility.

In addition, corporate sustainability can drive innovation and cost savings in the production industry. By prioritizing sustainability, companies can identify new opportunities to reduce costs and create efficiencies in their operations. For example, companies can implement lean manufacturing principles, which prioritize reducing waste and improving efficiency in production processes (Sanders *et al.*, 2019). They can also invest in new technologies that reduce their environmental impacts, such as using renewable energy sources or implementing carbon capture and storage systems. These practices benefit the environment and lead to cost savings and improved operational efficiency.

However, there are also challenges to implementing corporate sustainability in the production industry. One of the main challenges is the cost of implementing sustainable practices. Companies may need to invest in new technologies or change their operations, which can be expensive in the short term. However, these investments can lead to long-term cost savings and benefits for the environment and society. Another challenge is the industry's lack of standardization and regulation (Deng *et al.*, 2019). While there are some standards and certifications for sustainable practices, there is no universal framework for measuring and reporting sustainability performance. Additionally, there is a lack of regulation in some areas, which can lead to companies prioritizing short-term financial gain over long-term sustainability.

3.5 Change Management

One of the primary impacts of change management on the sustainability of the production industry is the ability to adapt to changing environmental regulations and societal expectations. As environmental concerns become more prevalent, regulations around emissions, waste disposal, and resource consumption become more stringent. Companies that fail to comply with these regulations risk fines, legal action, and reputational damage (Tunn *et al.*, 2019). Change management can help companies adapt to these changes by identifying

areas where they need to improve their environmental performance and implementing new processes and technologies that minimize their impact on the environment.

Another impact of change management on sustainability in the production industry is the ability to address social and ethical concerns. As consumers become more socially conscious, companies must adapt their practices to meet these expectations. For example, companies may need to address concerns about labour practices, supply chain transparency, or animal welfare (Karaosman *et al.*, 2020). Change management can help companies implement new processes and procedures that address these concerns and ensure that they are operating in an ethical and sustainable manner. Additionally, change management can impact the production industry's operational efficiency (Kumar *et al.*, 2020). By identifying areas where processes can be streamlined or automated, companies can reduce their energy consumption and resource usage, leading to cost savings and improved sustainability performance. For example, companies can implement lean manufacturing principles, which prioritize reducing waste and improving efficiency in production processes (Vadakkepatt *et al.*, 2021). Change management can help companies identify areas where these principles can be applied and implement new strategies that improve sustainability performance.

However, there are also challenges to implementing change management in the production industry. One of the main challenges is resistance to change from employees or stakeholders. Change can be disruptive and challenging, and some individuals may resist new processes or technologies. Companies need to communicate the need for change and provide training and support to employees to help them adapt to new ways of working (Esmailian *et al.*, 2020). Another challenge is the cost of implementing change management initiatives. New processes, technologies, or training programs can be expensive, and companies may need to invest significant resources to implement them. However, these investments can lead to long-term cost savings and improved sustainability performance, making them worthwhile investments in the long run.

3.6 Circular Economy

The future of the circular economy in the production industry is promising, with many companies adopting circular economy principles and strategies to reduce their environmental impact. As consumers become more aware of the environmental effects of the

products they consume, companies are under increasing pressure to adopt sustainable practices. Circular economy principles offer a way for companies to achieve sustainability goals while also improving their bottom line (Raut *et al.*, 2019). One of the key areas where circular economy principles are being applied in the production industry is in material and resource management. By adopting circular economy principles, companies can reduce their reliance on finite resources and minimize waste. For example, instead of disposing of materials after use, companies can recycle or repurpose them, creating a closed loop of resource use (Meherishi, Narayana and Ranjani, 2019). This can lead to cost savings, as companies can reduce their reliance on virgin materials and waste disposal costs.

Another area where circular economy principles are being applied is product design. By designing products with circularity in mind, companies can extend the life cycle of their products and reduce waste. For example, companies can design products that are easily repairable or upgradable, reducing the need for consumers to purchase new products. This can lead to increased customer satisfaction and loyalty, as consumers are able to use products for more extended periods of time (Caldera, Desha and Dawes, 2019). Adopting circular economy principles in the production industry also creates new business opportunities. As companies seek to reduce waste and improve resource efficiency, they are looking for new ways to repurpose materials and generate value from waste. This has led to the emergence of new industries, such as the recycling and waste management industry, which are focused on creating value from waste (Bocken, Boons and Baldassarre, 2019). Additionally, circular economy principles are leading to new business models, such as product-as-a-service, where companies retain ownership of products and are responsible for their repair and maintenance.

However, there are also challenges to the widespread adoption of circular economy principles in the production industry. One of the main challenges is the lack of infrastructure to support circular economy practices. For example, there may not be adequate facilities for recycling or repurposing materials, or the transportation infrastructure may not be optimized for circular economy practices. Additionally, regulatory barriers may prevent the adoption of circular economy practices (Strange and Magnani, 2017). Another challenge is the need for a cultural shift in the production industry. Circular economy principles require a shift away from the traditional linear economy model, where resources are extracted, used, and disposed of. This shift requires a change in mindset and culture, as well as a willingness to experiment with new business models and processes.

4.0 Brambles, Ltd: The Case of Sustainability and Value

The company titled Brambles Ltd. is one of the most significant contributors to the notion of sustainable logistics across the globe. It represents a powerful force in the field of commerce because it cares about the supply chain and establishes pioneering approaches to every issue pertaining to logistics bottlenecks. The biggest advantage that Brambles tends to boast is a highly detailed, circular business model that does not resemble any other sustainable strategy employed by logistics organizations (Brambles, Ltd., 2022a). The principle of sharing and reusing aids the corporation in terms of enabling consumer feedback and collecting reusable containers and pallets to protect the environment. Through the minimal impact on nature and humans, Brambles's top-tier management expects to increase its supply chain's overall efficiency and maintain an approach to customers where they are served in line with their immediate needs. The safety of the company's supply chain also remains in check because of the ways in which the management treats available resources (Brambles, Ltd., 2023a). Thus, the implementation of a circular business model leaves enough room for the organization to recognize the most effective (and ineffective) solutions that can have an influence on trading operations across the globe.

The most important part about Brambles is that the company does not shy away from methods that help the management extract valuable lessons quickly and lessen the pressure on clients and employees. Environmental well-being is crucial, so there is practically no way for companies to deploy linear business models and expect the same output as Brambles (Brambles, Ltd., 2022b). Hence, the organization's regenerative supply chain is one of the biggest advantages because the team recurrently addresses the possibility of remaining nature-positive while promoting the values of resilience and reuse. This is also an opportunity for Brambles to create additional social value while protecting ecologically sound ideas. While reducing emissions, the company tries to remain vigilant and create a supply chain that can regenerate and help both the management and the clients realise the importance of breaking existing trends related to consumption and anthropogenic harm that can be given to society and the environment (Brambles, Ltd., 2022b). In order to restore nature and step away from wasting resources, more companies have to employ a similar approach and strengthen their eco-friendly setups to give back more instead of merely taking from the environment (Brambles, Ltd., 2022a). The company employs its vision to make the best use of its strengths and close the gaps related to how its weaknesses can be treated.

Most importantly, the company tends to improve its sustainability and promote the value of regeneration to make existing supply chain nodes much more perceptive. Over time, it will be necessary to integrate existing ambition and to think about enhancing the company's resilience and capitalizing on how corporate value could be created (Brambles, Ltd., 2023b). Brambles makes progress in this field rather quickly since business cost evaluation can be deemed reliant on the social contract that can be created between society and sustainable organizations. To an undeniable extent, the company was able to address uncertainties inherent in modern supply chain management and provide good leadership to strengthen business pillars and remove every degenerative pathway pertaining to supply chains. Brambles do not exploit flawed model standards because the company maintains several practical directions that may be helpful when trying to remain sustainable and appeal to a larger audience. Thus, the majority of adverse effects are removed by the team through the interface of regenerative ambitions that multiply the positive impact of sustainability (Brambles, Ltd., 2022a). Regenerative supply chain management is the core value inherent in the company's vision, and it seems to complement the corporation's relationships with customers as well. An ethical supply chain helped Brambles create a name for itself and establish a corporate environment where increased awareness is valued significantly more than commercial success.

Brambles' commitment to sustainability is reflected in its corporate sustainability strategy based on three pillars: Zero Harm, Zero Waste, and Zero Carbon. The Zero Harm pillar focuses on ensuring the safety and well-being of employees, customers, and the community. The Zero Waste pillar focuses on reducing waste and promoting the circular economy, while the Zero Carbon pillar focuses on reducing carbon emissions and promoting renewable energy (Brambles, Ltd., 2022a). The circular economy is a critical component of Brambles' Zero Waste pillar. The company has developed a circular business model that promotes the efficient use of resources and minimizes waste. Brambles achieves this through its pallet and container pooling services, which allow customers to share and reuse pallets and containers instead of buying new ones.

Brambles' pallet pooling service is based on the circular economy principle of "reduce, reuse, and recycle." The company collects used pallets from customers, repairs them if necessary, and puts them back into circulation. This reduces the amount of waste generated

by the pallet industry and promotes the efficient use of resources. By using Brambles' pallet pooling service, customers can reduce their environmental impact and save money on pallet procurement and disposal (Brambles, Ltd., 2023b). Brambles' container pooling service operates on the same circular economy principles. The company collects used containers from customers, repairs them if necessary, and puts them back into circulation. This reduces waste and promotes the efficient use of resources (Brambles, Ltd., 2023a). By using Brambles' container pooling service, customers can reduce their environmental impact and save money on container procurement and disposal. Brambles also promotes circular economy principles through its innovation initiatives. The company has developed a new type of pallet, called the "Brambles Blue," which is made from 100% recycled plastic (Brambles, Ltd., 2022a). This pallet is fully recyclable and can be reused multiple times. By developing this innovative product, Brambles is promoting the efficient use of resources and reducing waste.

In addition to its circular economy initiatives, Brambles is also focused on reducing its carbon footprint. The company has set a target to reduce its Scope 1 and 2 carbon emissions by 60% by 2025. To achieve this, Brambles is investing in renewable energy, such as solar and wind power, and improving the energy efficiency of its operations.

Several organizations have recognized Brambles' commitment to sustainability and circular economy principles. The company has been included in the Dow Jones Sustainability Indices (DJSI) World and Australia indexes for eight consecutive years (Brambles, Ltd., 2022a). In 2020, Brambles was ranked first in the Commercial Services and Supplies sector in the DJSI World Index. CDP (formerly known as the Carbon Disclosure Project) has also recognized the company for its leadership in environmental transparency and performance.

Climate-related consciousness is what brings so many new insights and sets Brambles apart from the competition. Hence, further development of a regenerative future is a way to create integrative, resilient supply chains that resolve global challenges instead of amplifying them. Numerous other organizations cannot achieve sustainability levels maintained by the company at the moment because Brambles' pace is nearly perfect (Brambles, Ltd., 2023c). Innovations are carefully implemented to respond to the challenges that have been brought up by the COVID-19 pandemic and its drastic consequences. The team's collective commitment allowed Brambles to protect sustainability-related efforts from continuing supply chain

disruptions. Sustainable markets are required worldwide to prevent hostile exposures to unprecedented issues asking for more careful resource usage. From decision-making to relationships with consumers, every action taken by Brambles is aimed at improving the environment and making it much more focused on mitigating shortages and remaining close enough to the supplier base, (Brambles, Ltd., 2022b). The company's regenerative supply chain became the result of a long-term collaboration that had to be maintained to discover more value chain efficiencies pertaining to the transformation of the given supply chain.

On the other hand, Brambles is a remarkable example of a company maintaining perfect sustainability in production because of how it operates and develops human resources while ensuring consistent digitalization of the existing supply chain. Thus, the organization can utilize sustainability and value creation equally to establish a digital future that can generate new value for consumers. Platform innovations are important because they help resolve supply chain challenges and develop an environment that makes the best use of the circular strategy employed at Brambles (Brambles, Ltd., 2022b). Anthropogenic influence on the environment is a critical element that is carefully investigated by the company's management to improve operational processes and establish an environment where assets can be relocated freely, and customer contingency can be maintained. The current method of reorientation is crucial since it contributes to how the company addresses its governance, social, and environmental challenges while responding to the expectations that can make a business more or less sustainable. Brambles' ambitions regarding climate-related issues are also crucial because they represent how the organization tends to benchmark its performance and develop an entirely new agenda (Brambles, Ltd., 2023c). This kind of leadership generates financial returns and prominent social feedback while also exposing some of the most significant environmental advantages of the circular model. Such a highly pragmatic approach motivates numerous other businesses in the field of production to capitalize on decarbonization and establish new supply chain collaborations.

Ultimately, it has to be noted that the company develops industry partnerships quickly while implementing its circular agenda to improve sustainability. Zero-waste and reduced carbon consumption policies are essential because they contribute to how the company manages supply chain risks while highlighting the most considerable advantages associated with the goals that Brambles' customers might have on a long-term scale. The primary subject to

mention here is the existence of planet-positive initiatives that help the company address its operations within the framework of forests, climate, and waste. For example, Brambles tends to achieve its climate-related objectives while recycling different production materials (Brambles, Ltd., 2022b). On the other hand, supply chains are enhanced due to the business-related positives that promote circular tools and drive collaboration while improving the workplace. Regenerative supply chains require stronger management and a better understanding of how Brambles and its customers must cooperate in developing a healthier environment. Community-positive initiatives deployed by Brambles are essential because the company knows how to add resilience and focus on nature while protecting the organization's economic sustainability as well. From food rescue to natural capital preservation, Brambles utilizes every strategy to improve the situation and advocates for the circular agenda (Brambles, Ltd., 2023c). The current case study highlights the importance of sustainability in production and outlines several variables that have to be in place if an organization expects to employ an eco-friendly approach while successfully sustaining its production goals.

5.0 Methodology

For the paper, the researcher picked the narrative literature review methodology in order to report on the existing knowledge and generate an objective overview of how sustainability in production can help organizations remain relevant. A comprehensive analysis of the literature is required because it may create a premise for quantitative research on the topic and focus much more on the inherent issues in the published literature to explore the gap (Matanda, 2022). For the current narrative literature review, the author picked 25 articles from peer-reviewed journals and attempted to highlight the most repeated topics. It was important for the researcher to identify and justify some of the factors that could contribute to sustainability in production and its scalability. Hence, the ability to validate hypothesis H₁ might be the key contributor to improved dynamics. Even if several articles might be biased, the overall verdict can be considered valid if the topic was covered successfully. Hence, the appropriateness of a research technique involving a narrative literature review can be deemed high and verifiable (Machi and McEvoy, 2021). To increase the objectivity of potential findings, the researcher applied several criteria, such as only picking articles published after 2018 and including information about sustainability in production.

Even though narrative literature reviews are unsystematic, they still represent a vital source of knowledge because they can help individuals address summarized reviews of relevant evidence. All of the separate pieces of information were brought together to create a readable recap of what could be the most important variables contributing to sustainability in production. Hence, a narrative literature review is one of the central means of creating a broader perspective on the topic and discussing both theoretical and practical implications relating to the issue (Dekkers, Carey and Langhorne, 2022). A balanced review of evidence can become extremely helpful in the future, paving the way for a critical appraisal of why sustainability in production plays such an important role while remaining largely invisible. It is also important to acknowledge that the current narrative literature review can be one of the ways to bring to light some of the barriers that affect production and organizations looking forward to achieving improved sustainability. Hence, the current paper's author will refrain from focusing on their opinion to review relevant arguments and organize them in a way that would predict objective conclusions and make the best use of methodological rigor.

The number of journal articles for the current narrative literature review was picked with respect to the scope of the evaluation and the desired depth of evidence analysis. Considering that there were no specific guidelines for including articles, the researcher exercised flexibility to achieve a coherent and comprehensive synthesis of relevant evidence. The total number of articles for the current literature review was 25 because common recommendations for similar research projects mention picking from 20 to 50 articles (Machi and McEvoy, 2021; Matanda, 2022). The major themes pertaining to the topic of the dissertation were addressed in rich detail, even without fixed rules that can be met in systematic reviews, for example. The key concepts and findings in the field were identified and investigated to address vital perspectives and controversies. A comprehensive understanding of the topic was achieved by picking highly relevant, peer-reviewed articles. Overall, the existing narrative literature review allowed the author to avoid the most common pitfalls of data analysis and overcome general bias by categorizing available data. The author's interpretation of facts related to sustainability in production can be deemed free of faulty conclusions and misjudged evidence. A detailed synthesis of available information was required to outline the case for sustainable production and see what advantages could be related to this area of research. It is essential to reckon with further evidence because it can serve as the foundation for quantitative investigations revolving around sustainability and the inherent potential of organizations looking to scale their operations.

6.0 Results

6.1 Primary Points

The first vital insight that has to be considered is the need for a circular economy if the organization expects to achieve as much as possible in its area of practice. The whole value chain has to be affected by sustainable operations in order for the circular economy to be considered adequate and irreplaceable (Strange and Magnani, 2017). For example, consistent ecodesign is one of the crucial elements that must be included in the company's agenda if it needs more sustainability. Production efforts have to focus on correct design solutions and increase the popularity of approaches that require recycling. At the same time, innovation and efficiency may come to mind when discussing circular economy because it represents the primary means of optimizing available resources (Deng *et al.*, 2019; Manupati *et al.*, 2020). Another reason to look at the circular economy is the inherent fixation on renewable energy and all the opportunities that come with it, affecting product manufacturing processes. According to Rainbird (2004), circular economies thrive on sustainable consumption and correct prioritization of corporate goals. It makes it safe to say that a circular economy almost always guarantees the deployment of environmentally sound consumption trends.

Another important finding that has to be considered here is the need for corporate sustainability. Production efforts might have extremely low chances of turning out positive if the team does not pay enough attention to capacity limitations and social collaboration (Di Vaio *et al.*, 2020). For the current research, it means that corporate sustainability precedes production sustainability because it creates an environment where green-oriented innovations are pushed forward. In line with Caldera, Desha and Dawes (2019) and Tunn *et al.* (2019), it also has to do with corporate social responsibility because environmental and social problems have to be addressed by organizations just as often as financial conundrums. The increasing variety of strategies intended to help production companies avoid unnecessary emissions and waste shows how corporate sustainability has become significantly more important to different companies (Kshetri, 2021; Sarkar *et al.*, 2021). In addition to sustainability, even social welfare could be enhanced via efforts aimed at eco-friendliness, as broader involvement of third-party organizations could either improve or hinder business

models and activities performed to scale the current approaches (McKinnon *et al.*, 2015). Even enhanced social collaboration efforts could transpire over time, allowing a sustainable production company to focus significantly more on what the industry needs and not the amount of money the company could make while ignoring the environment. Companies that prioritize sustainability can benefit financially, attract top talent, and build a positive brand reputation. However, implementing sustainable practices can be expensive, and there are challenges to standardization and regulation. The production industry must work together to overcome these challenges and embrace sustainability as a critical component of long-term success.

The ultimate point to be made here is the need for substantial change management, where organizational managers would invest more efforts in thoroughly understanding what is necessary to advance production initiatives. Numerous challenges are yet to be resolved, from technologies to inherent methods, because consistent changes can be implemented only with competent specialists in place (Correa *et al.*, 2019). For example, the case study of Brambles proves that any organization can enhance its production operations by spending more resources on planning certain changes without breaking the existing workflow. At the same time, it is vital to understand that change management has to be implemented step by step because positive outcomes cannot be achieved right after switching to a more sustainable business model (Bocken, Boons and Baldassarre, 2019; Xu *et al.*, 2019). Dynamic circumstances of modern environmental conditions reinforce the idea that solid competitiveness drives higher levels of sustainability, especially if fast-paced changes can be deployed proactively instead of reactively (Li *et al.*, 2020). Nevertheless, this finding also sends back to the fact that sustainable production requires a highly skilled workforce that understands the critical sources of resistance and knows how to overcome those.

6.2 Secondary Points

A number of secondary variables were identified within the framework of the narrative literature review. For example, several researchers pointed out the importance of knowing consumption trends and applying additional efforts to understand the economic and social background of sustainability (Meherishi, Narayana and Ranjani, 2019). Consumption trends must be associated with holistic knowledge and the overall environmental impact an organization can generate when engaging in production operations. Sustainability as a whole

requires corporations to focus strongly on environmental topics, but it is fair to assume that social and economic aspects of consumption trends can be studied to prevent the disruption of critical operations (Negri *et al.*, 2021). Without keeping in touch with the latest insights, organizations will not be able to maintain favourable business outcomes.

Another idea that becomes evident from the current literature review is that production companies have to benefit from renewable sources in order to be able to capitalize on economic growth. Hence, new offers can lead to a thoughtful exploration of economic development pillars and a much more environmentally friendly corporate agenda (Mangla *et al.*, 2020). Various environmental threats cannot be overlooked because they affect the overall carbon footprint and destabilize the economic conditions in the region. This is why there are so many issues concerning inefficient trade efforts and the inability to stimulate good investments when an organization does not function in line with sustainability protocols (Esmaeilian *et al.*, 2020; Karaosman *et al.*, 2020). Green growth is impossible without renewable resources, and production companies have to utilize this feature fully to reach the highest level of development.

One more particular finding is that many production companies overlook the existence of environmental degradation, which may transpire past anthropogenic effects and cause irreversible changes to the environment. Human activities could lead to uncontrollable negative outcomes that could make it harder for businesses across the globe to restore vital resources and combat pollution (Tseng *et al.*, 2020). Without biodiversity and resource availability, no organization will be able to thrive and live up to consumer expectations. This is why researchers also point out climate change when discussing organizational performance and socioeconomic consequences of the existing natural resource crisis (Turnhout *et al.*, 2020; Vadakkepatt *et al.*, 2021). Natural ecosystems are no longer safe, and it can have a long-term impact on all stakeholders involved in the process of resolving the issue.

Yet another insight is the need for proper resource conservation because it can help organizations reduce the amount of resources that have to be spent on emission control. Resource management is one of the crucial responsibilities that have to be maintained by an organization to remain relevant in today's business (D'Eusanio, Zamagni and Petti, 2019). Hence, if there is a specific product life cycle, a company should validate its resource con-

servation strategy to be able to recycle and recover if necessary. With little to no raw products being utilized in production, any given organization could reach higher levels of sustainability by simply avoiding unnecessary waste (Kumar *et al.*, 2020). Instead of disposing of resources, the organization should review environment-friendly options for running the business and focus on how it could motivate other stakeholders to switch to more consistent outlooks on sustainability.

As a continuation of the previous topic, in this could also highlight the importance of recycling and reuse efforts, especially in the field of production. With so many sources of emissions, companies need to focus on sustainability-inducing efforts, such as altered packaging, conservation of natural resources, and minimization of waste (Cai and Choi, 2020; Carino *et al.*, 2020). It is also interesting how organizations across the globe could focus on developing new products utilizing used materials, whereas requiring less energy for production as well. Another reason recycle-and-reuse attitudes are vital is that emissions and costs can be cut short due to strategies focused on renovation and collaboration (Sanders *et al.*, 2019). Over time, it could help industry leaders create new jobs and avoid unnecessary purchases, saving up space and money for innovative projects.

The ultimate element of sustainability in production that can make a significant difference in organizational outcomes is improved resilience. A company that strives to enhance its eco-friendly approaches can be expected to achieve significantly more in the modern business environment because it may survive the energy transition and increased interconnectedness (Raut *et al.*, 2019). The new business measures are going to make the given business scalable and bound to proper optimization. Sustainable investments are also going to redefine how production companies view environmental benefits and their regulatory boundaries. According to Bititci *et al.* (2004), strategies and visions of production companies have to be aligned against relevant political agendas, but only to an extent where all stakeholders adequately support environmental research.

7.0 Discussion

7.1 Reduced Emissions and Renewable Energy

Based on the information that was collected from relevant literature, it can be safe to say that the primary factor that can help organizations remain sustainable in production is the willingness to reduce greenhouse gases. Many corporations nowadays have begun recognizing the importance of the circular economy and its positive influence on the business ecosystem. Hence, the prime purpose of engaging in sustainable activities is to prevent resource exploitation and adhere to meaningful use principles (Mangla *et al.*, 2020). Therefore, consumption trends can be altered to reduce the greenhouse effect and see how various negative outcomes can be prevented or mitigated quickly if necessary. From production to any other industry, sustainability can be achieved only in the case where enough attention is paid to the environment and its overall condition.

Another venue to be explored by researchers on the topic of sustainability is the use of renewable sources of energy. The ability to step away from outdated energy sources and limited approaches to resource management can be seen as a possible way to dematerialization and positive consumption (Deng *et al.*, 2019; Tseng *et al.*, 2020). This is why circular economy is mentioned so often, and even the case of Brambles proves the effectiveness of paying more attention to the environmental element of business relationships. Without the need to exploit nature, production companies would turn to significantly more eco-friendly solutions and curb their carbon footprint for future reference.

7.2 Circular Economy

One more vital insight is that available resources have to be reused because it is one of the key contributors to the development of the circular economy and its derivatives. Sustainability in production might motivate individuals to invest in recycling efforts (Walters, 2004; Yu *et al.*, 2021). An increase in the prevalence of such trends can be seen as a business opportunity for corporations that are not afraid of promoting operations that seem too costly and unproductive. Instead of disposing of certain materials, businesses have to find more ways to utilize everything in their possession to support the recycling rate and keep moving forward. Research articles included in the narrative literature review make it safe to say that

carbon emissions cannot be ignored any more (Karaosman *et al.*, 2020). Hence, resource reuse and energy savings have to be included in the agendas of modern companies if productivity has to be enhanced together with public relations. More businesses have to look at how natural ecosystems function and replicate those examples to achieve sustainability. The complexity of relationships between different elements of the environment makes it impossible to waste resources that could be employed to improve the current state of affairs.

7.3 Corporate Sustainability

Firstly, the future of corporate sustainability will involve a shift toward a circular economy. This means that materials are kept in use for as long as possible, and waste is minimized. In the production industry, this will involve designing products and production processes with reuse and recycling in mind. Companies will need to invest in new technologies and innovations to enable the transition to a circular economy, such as closed-loop production systems and innovative recycling techniques. Also, corporate sustainability will involve a greater focus on renewable energy (Saeed and Kersten, 2019). The production industry is a significant user of energy, and much of this energy comes from non-renewable sources such as fossil fuels. Companies will need to transition to renewable energy sources such as solar, wind, and hydropower to reduce their reliance on non-renewable sources and minimize their carbon footprint (Manupati *et al.*, 2020). This will involve investing in renewable energy infrastructure, such as solar panels and wind turbines, and working collaboratively with energy suppliers to increase the availability of renewable energy.

Accordingly, the future of corporate sustainability will involve a greater focus on supply chain sustainability. Companies must work collaboratively with their suppliers to ensure sustainable practices are adopted throughout the supply chain. This will involve conducting sustainability audits of suppliers, establishing sustainability criteria for supplier selection, and collaborating with suppliers to develop sustainable solutions (Bai and Sarkis, 2020). Companies will also need to ensure that their suppliers are meeting international sustainability standards. There is also enough room for a greater focus on social responsibility. Companies will need to prioritize the well-being of their employees, the communities they operate in, and the wider society. This will involve adopting sustainable practices that promote social welfare, such as investing in employee training and development, promoting diversity and inclusion, and engaging in community development initiatives (Di Vaio *et al.*, 2020). Companies will also need to ensure that their products and services are sustainable

and promote social welfare, such as by promoting sustainable consumption and production patterns.

Finally, the future of corporate sustainability will involve a greater focus on transparency and accountability. Companies will need to be transparent about their sustainability performance and provide stakeholders with clear and accurate information about their environmental and social impact. This will involve measuring and reporting on sustainability performance using standardized metrics. According to Saeed and Kersten (2019), Companies will also need to be accountable for their sustainability performance by establishing sustainability targets and goals and reporting progress towards these targets to stakeholders.

7.4 Change Management

Firstly, change management will involve a greater emphasis on stakeholder engagement. Stakeholder engagement refers to the process of involving stakeholders in decision-making processes. In the context of sustainability in the production industry, stakeholders may include employees, customers, suppliers, and local communities. Companies will need to engage with stakeholders to understand their sustainability concerns and priorities and involve them in developing and implementing sustainability initiatives. This will involve using a range of engagement methods, such as stakeholder surveys, focus groups, and community meetings. At the same time, the future of change management will involve a greater focus on collaboration and partnerships. Sustainability in the production industry is a complex and interconnected issue, and companies will need to work collaboratively with other organizations to achieve sustainability goals. This will involve forming partnerships with suppliers, customers, and other stakeholders and collaborating with industry associations, governments, and NGOs. Considering the evidence from Manupati *et al.* (2020) and Mangla *et al.* (2020), Collaboration and partnerships will be critical to addressing sustainability challenges that are beyond the scope of individual companies, such as reducing greenhouse gas emissions, improving water management, and reducing waste.

The future of change management will involve a greater emphasis on data and analytics. Companies will need to collect and analyze data on their sustainability performance to understand their impact on the environment and society and identify improvement opportunities. This will involve using sustainability metrics and key performance indicators (KPIs)

to measure progress toward sustainability goals (Negri *et al.*, 2021). Data and analytics will also be critical for identifying trends and patterns and for identifying areas where sustainability initiatives can be optimized for maximum impact. The ultimate focus is on innovation and technology. Companies will need to invest in new technologies and innovations to enable the transition to a more sustainable future. This will involve adopting innovative production methods that minimize waste, reduce energy consumption, and promote the use of renewable resources. Companies will also need to adopt new technologies that enable better tracking and monitoring of sustainability performance, such as sensors and Internet of Things (IoT) devices (Tseng *et al.*, 2020). Additionally, innovation and technology will be critical for developing new sustainable products and services that meet the needs of customers and society.

7.5 Manufacturing Practices

The third factor that can be pointed out is the need to reduce the negative impact on the environment by addressing the prevalence of manufacturing across all industries. Knowing that much more waste is being generated than recycled at the moment, it is vital to find new ways to exploit unusable or unwanted products (Vadakkepatt *et al.*, 2021). Production processes are not easy to maintain and alter, so it is crucial to see how the manufacturing agenda can be transformed to include more environment-friendly approaches and avoid pollution. The importance of this factor can be explained through the interface of climate change and its anthropogenic foundation. Production-related operations reduce the quality of natural resources available to humans, so adopting sustainable practices can be deemed fundamental before companies run out of resources completely (Li *et al.*, 2020). The willingness to try new economic models and attract sustainability makes reducing energy consumption and costs possible. The focus on long-term efficiency is important because it can be expected to improve the quality of technological innovation and smart usage of digital resources. Even consumers are going to become significantly more invested when they see the inherent value of sustainability and corporate efforts aimed at easy reuse and recycling.

7.6 Prevention of Environmental Degradation

One more idea has to be considered when looking at the need to alter the current approaches to sustainability in production and prevent further environmental degradation. For

instance, if there is decreased land productivity, businesses have to focus on ecological outcomes prior to considering any of the values related to monetary benefits (D'Eusanio, Zammagni and Petti, 2019; Sarkis, 2020). This has to be an empowering approach that is going to prevent further losses and help the organization focus on biodiversity first and then the global economy. Environmental degradation must be slowed down for sustainability to make sense if production companies eventually choose to pursue environmentally sound objectives. The whole supply chain can be altered with the help of such instruments, so it takes a lot of time and resources to monitor the impact of existing tools on the environment (Sanders *et al.*, 2019). Based on the example of Brambles, a circular economy can become one of the possible solutions due to improved resource usage and constant encouragement related to sustainability. In the current environment, it shows how waste should become a resource as well instead of being discarded completely. Land quality and resource usage patterns also have to be considered when dwelling on the need to pursue sustainability and its derivatives.

Conservation of natural resources is the next vital insight that has to be noted when communicating the importance of sustainability in production and the ways of achieving it. Many companies nowadays choose to bypass the limits of linear economy in order to step away from consistent material extraction and focus on how more resources could be saved (Carino *et al.*, 2020). Even though it may be seen as non-practical, it could ultimately lead to improved operational efficiency, which is also a crucial value in today's business. Regardless of the business expectations, corporate actors recurrently require feedback and assistance to understand how to utilize available resources and save more. In the case of sustainability in production, companies have to boost their recycling and reuse processes to ensure that pollution is not going to affect the local environment to an incredibly large extent. Hence, a recommendation here might be to pay more attention to waste management and new businesses that could emerge from the deployment of eco-friendly initiatives (Meherishi, Narayana and Ranjani, 2019; Xu *et al.*, 2019). High standards related to production can improve sustainability because they are closely linked to the concept of innovation. Thus, voluminous old-fashioned operations could be streamlined to account for waste management and protect the environment or promote sustainability.

7.7 Recycle-and-Reuse Framework

The recycle-and-reuse rhetoric is essential for the concept of sustainability because it shows how consistent investments can be utilized to improve the company's supply chain and boost the organization's infrastructure. This study demonstrates that material values are inferior to their ecological counterparts, especially on a long-term scale (Saeed and Kersten, 2019). Potential returns on investment have to be evaluated on the basis of the rate of recycling and reusing waste and less popular materials that usually do not have a positive rating. In a sense, sustainability in production can be seen as dependent on long-term decision-making where environmental consequences and health concerns are valued more than business outcomes. This idea has to be reiterated because the value of corporate operations may increase after consistent exposure to value-adding efforts, such as reuse and recycling (Kumar, Singh and Kumar, 2021; Sarkar *et al.*, 2021). Regardless of the type of waste, production companies should capitalize on environmental benefits while keeping in mind the growing diversity of waste types. At the end of the day, it could serve the company a highly appreciated lesson and protect its consumers from negative backlash.

An additional reason why sustainable companies are much more successful is the ability to develop new opportunities. Consumer consumption trends are significant, but knowing how economic growth has to be paired with sustainability to not hurt the environment is crucial (Cai and Choi, 2020). If the management fails to recognize the value of eco-friendly initiatives, there will be less room for development and further success. Hence, it is vital to review trends and become a trendsetter in the industry in order to recycle and reuse successfully. The growing levels of productivity are going to drive innovation and test the given company's ability to remain in line with sustainable practices while looking for higher profits. In a sense, economic challenges can motivate organizations to develop new ways of thinking and maybe, capitalize on sustainable production environments. Not only could this unlock additional value, but it would also help the management exert dominance in the field and appeal to consumers (Silva and Figueiredo, 2020). Even if it is going to be treated as a trend, more organizations will separate pure monetary focus from the need to create sustainable options for all operations. Linear value chains quickly become outdated, so it means that new business models have to be built on the basis of sustainable ideas to optimize operations and spark collaboration between various stakeholders.

Such new insights are also vital because they prove that sustainability is one of the direct contributors to new job opportunities in the field of production. When Brambles created its approach to a circular economy, the company aimed to establish a system that would be enough to lead the industry (Kshetri, 2021). This finding implies that employment opportunities arise because the environment requires protection and not because businesses grow in terms of their financial feedback. This may also give rise to innovative environmental techniques that can eliminate climate change issues and provide new employees with enough confidence regarding their efforts. Sustainability has to protect non-renewable resources, so it is a global concern that has to be addressed from different angles if companies expect to achieve successful re-manufacturing and recycling. From the point of risks associated with environment-friendly efforts, production companies can capitalize solely on new business models and their predicted efficiency (Kumar *et al.*, 2020; Negri *et al.*, 2021). The intensity of labor shortage continues to affect businesses worldwide, making it understandable why many organizations struggle with sustainability in production while having some of the best results in the industry. Service economy can be applied to the current case to achieve an environment where sustainability is treated as a fundamental element of business and not just a valuable add-on.

7.8 Business Resilience and Positive Consumer Feedback

The next significant element that has to be considered when planning a sustainable business in production is resilience. The need to recycle and create new ways of using old resources makes it essential for companies to influence their decisions and acquire raw materials with a long-term plan in mind (Esmailian *et al.*, 2020). Fluctuating prices can impact the future of an organization as well, so it is just as crucial to focus on the existing supply chain and how it can be set up to assist the company in maintaining progress. Hence, resilience is important for potentially sustainable organizations because it can drive the management toward solutions that revolve around event prediction and successful mitigation of negatives. For example, businesses have to be able to respond to extreme conditions to continue operations and adjust to the requirements without losing too much grip on their corporate agenda. It also shows how a sustainable organization has to become beneficial for the consumer as well. Hence, the philosophy of a circular economy employed at Brambles might get replicated further by other organizations looking to pursue green initiatives (Saurabh and Dey, 2021). Consumers' feedback is vital here because it can contribute to creating a loyal

fanbase that is ready to support the company and its vision if it is in line with the region's environmental needs. Instead of treating it as something discouraging, businesses have to focus on the economic benefits of renting and leasing instead of owning numerous items that can destroy the environment.

The ultimate reason for organizations to side with environment-friendly solutions is the ability to increase demand and positive responses from consumers. Regardless of the economic approach taken by the company, it is vital to promote sustainable development to collect new evidence on the advantages of reusing and recycling. The advent of a completely new set of demand and supply rules can contribute to job openings and improved logistics (Bai and Sarkis, 2020). Without a doubt, marketing and production platforms have to be converted to something much more sustainable in order for organizations to manufacture durable products while making sure that the environment remains intact. This is why interactions with consumers have to be treated as unique representations of patterns that have to be learned by businesses if they expect to reach the level of true sustainability. In other words, brand loyalty and customer satisfaction can be contingent on sustainability as long as the company chooses to collaborate, participate in eco-friendly endeavours, and attract new investors (Manupati *et al.*, 2020). While it can be a financially stressful initiative, the objective should be to follow up on every successful initiative and protect finite natural resources by picking sustainability over any other potential business-related advantage.

7.9 Summary of Key Findings

Change management, corporate sustainability, and circular economy are three key concepts that significantly impact the performance and perception of the production industry. This essay, discussed the importance of these concepts and how they can contribute to the success of the production industry. Change management is the process of planning, implementing, and managing changes in an organization. The production industry is constantly evolving, and change management is necessary to keep up with the latest trends and technologies. Change management involves identifying the need for change, communicating the change, and managing the transition to the new way of working. Change management is important for the production industry because it enables organizations to adapt to changing market conditions, respond to customer needs, and remain competitive.

Corporate sustainability is the integration of environmental, social, and economic considerations into business operations and decision-making. The production industry significantly impacts the environment and society, and corporate sustainability is necessary to mitigate this impact. Corporate sustainability involves identifying and addressing sustainability issues, such as reducing carbon emissions, minimizing waste, and promoting social responsibility. Corporate sustainability is important for the production industry because it can improve the company's reputation, reduce costs, and increase stakeholder engagement.

The circular economy is a business model that aims to eliminate waste and promote the efficient use of resources. The circular economy involves designing products and services to minimize waste and promote reuse, recycling, and refurbishment. The circular economy is important for the production industry because it can reduce the environmental impact of production processes, create new business opportunities, and promote sustainable consumption patterns.

Consequently, there are several ways to define how these three factors affect sustainability in production and pave the way for relevant improvements:

Improved Efficiency: Change management enables organizations to implement new technologies and processes that can improve efficiency and productivity. By identifying areas where improvements can be made and implementing changes, production companies can reduce waste, increase efficiency, and improve profitability.

Reduced Environmental Impact: Corporate sustainability and circular economy can help production companies reduce their environmental impact. By adopting sustainable practices, such as reducing greenhouse gas emissions, minimizing waste, and promoting the efficient use of resources, companies can minimize their impact on the environment and promote sustainable development.

Improved Reputation: Corporate sustainability and circular economy can improve the reputation of production companies. By adopting sustainable practices and communi-

cating these to stakeholders, companies can demonstrate their commitment to social responsibility and environmental stewardship and build trust with customers, employees, and other stakeholders.

Increased Innovation: Circular economy can promote innovation and create new business opportunities. By designing products and services for circularity, companies can create new revenue streams and increase their competitive advantage. The circular economy can also encourage collaboration and partnerships, leading to new innovations and opportunities for growth.

Enhanced Stakeholder Engagement: Corporate sustainability can improve stakeholder engagement by demonstrating a company's commitment to social responsibility and environmental stewardship. Companies can build trust and foster long-term relationships with stakeholders by involving stakeholders in sustainability initiatives, such as community engagement programs or environmental education campaigns.

Considering hypothesis H₁ and the case study on Brambles Ltd., it can be concluded that the hypothesis that corporate sustainability, circular economy, and skillful change management represent the foundation for consistent sustainability in production can be validated. The following insights hint at the fact that sustainability in production depends on a circular economy and vice versa:

Stakeholder Engagement. The importance of this concept goes beyond the mere effectiveness of circular economy practices. The case of Brambles displayed the company as a knowledgeable user of the principles of reusing and sharing. Hence, consumer engagement is a vital element of the company's strategy that is often overlooked. The process of the circular economy requires stakeholders to share and gather feedback recurrently to validate their sustainability efforts. Consequently, the idea for Brambles was to come up with relevant indicators of success, and similar strategies could be applied by other production companies for better performance outcomes.

Long-Term Collaboration and Partnerships. Another explicit insight that has to be noted when discussing the case of Brambles is that the organization quickly develops collaborations with other businesses. From the point of circular economy and sustainability, it

is a crucial validation threshold because common sustainability goals make companies more scalable over time. Circular business models should be based on partnerships that promote brand recognition and unique approaches to an economy where skillful change management represents the key to organizational profit. Consistent sustainability is not easy to achieve, but Brambles made sure that the company's efforts were based on long-term interests and not short-term solutions.

Digitalization and Innovation. The ultimate insight that has to be mentioned in relation to validating the study's hypothesis is that a digital future represents an exceptional value for consumers. In turn, they can make the best use of new practices by siding with what Brambles values the most. An increasing grade of reliance on technology makes it crucial to optimize supply chain processes and develop instruments that fortify the positive status of circular economy principles. The successful integration of technology allowed Brambles to achieve an outstanding level of corporate sustainability. Other businesses from the production industry could achieve such results upon replicating the most significant operations carried out by Brambles as well.

In conclusion, change management, corporate sustainability, and circular economy are three key concepts essential for the production industry's success. By adopting sustainable practices and embracing change, companies can improve efficiency, reduce their environmental impact, enhance their reputation, increase innovation, and engage stakeholders. The production industry significantly impacts the environment and society, and by embracing these concepts, companies can contribute to a more sustainable future for all. The findings presented above represent an expected result because they contributed to a better understanding of why sustainability in production can be one of the main reasons for the success of industry leaders. This phenomenon can be explained by the fact that there are more than enough particular factors that have to be monitored by organizations that expect to increase the grade of adherence to sustainable measures. The research question was also answered successfully because the current investigation pointed out numerous variables that have to be nurtured by production companies to become and remain sustainable. The significance of these findings can be explained by the fact that many organizations overlook the value of sustainability and focus solely on income volume and stability. Such results make it safe to say that there are going to be additional issues in the future if respective organiza-

tions choose to underestimate the impact of sustainability on long-term outcomes. Production companies must pay more attention to supporting the environment and ensuring that recycling-and-reuse attitudes can be popularized. The key limitation of this study is the lack of quantitative data since most generalizations come from the narrative literature review and a case study.

8.0 Conclusion

The objective of the current dissertation was to find the key characteristics of an organization that maintains sustainable production. In order to answer this question, the researcher elaborated a hypothesis revolving around the principles of corporate sustainability and change management to explain the need for sustainable production as a whole. A narrative literature review and a case study of Brambles Ltd were carried out to validate the hypothesis and establish the most important points about sustainability in production.

The key finding is that the growing network of sustainable solutions has to be viewed as one of the essential ways to gain more control over available resources. Modern supply chain managers have to focus on the development of solutions that provide continuous support for equitable growth and organizations that value sustainability as a whole. Along with the circular economy, change management and corporate sustainability were found to be the key predictors of improved production operations and an environment-friendly organizational strategy. Hence, sustainability has to remain one of the central strategic interests of various organizations because it serves as a pillar for improved collaboration between stakeholders. Another vital idea to consider was the array of secondary findings from the literature review, including consumption trends, environmental degradation, and improved resilience. The case study of Brambles was a perfect example of how a company can find an optimal balance between economic goals and environmental sustainability. Every initiative – no matter how small – can be expected to contribute to a much safer production environment where both corporate and social interests are considered.

Overall, the argument is that sustainability in production is one of the key predictors of successful businesses. An organization that knows how to remain sustainable can be successful on a long-term scale and represents a positive example for other companies. In this thesis, the key variables associated with sustainability in production were identified and discussed in an attempt to explain the success achieved by certain organizations. In order to

answer the research question at hand, it was necessary to conduct a case study and ensure that those findings aligned with what had been identified during the narrative literature review. At the same time, the main findings show that an organization should be versatile and flexible to attain sustainability and remain in line with the market needs. Even though quantitative insights did not support the current findings, there are indications that sustainable production requires a lot of time and money. The significance of the given thesis can be supported by the idea that even smaller organizations could achieve sustainability in production in case they consider switching to environment-friendly initiatives.

9.0 Reference List

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