COOPETITION IN THE CONTEXT OF SUSTAINABILITY GOALS –
A SYSTEMATIC OVERVIEW

Doreen KÄMPF
Hungarian University of Agriculture and Life Sciences, Doctoral School of Management and Organisational Sciences, 7400 Kaposvár, Guba Sándor u. 40., Hungary

ABSTRACT

The article explores the literature on coopetition in relation to sustainability goals. The research is based on three parts, which specifically address the terms „coopetition” and „sustainability”, respectively, and then examine the literature that specifically focuses on the topic of „coopetition and sustainability”. In particular, the research provides the following answers: How is the novel type of mergers between competitors known as „coopetition” interpreted in academia? What is meant by sustainability? What are its origins and the driving forces that can influence cooperation with competitors? It is noted that competitive cooperations between competitors exist in many fields of entrepreneurship and cannot be attributed to one single industry. In the past, the main drivers for entrepreneurs to enter a coopetition were economic aspects. Among others, the reduction of costs, the increase or optimisation of economic performance and thus the strengthening of competitiveness vis-à-vis other competitors, as well as the opening up of new markets and the reduction of business risk. Since the adoption of the Sustainable Development Goals (SDGs) of the 2030 Agenda, however, sustainability considerations have become another driver for entering a coopetition, if not one of the main future drivers. This is because not only political requirements but also the purchasing behaviour of consumers have led to rethinking in the corporate sector.

Keywords: coopetition, competitor, sustainability, environmental protection

INTRODUCTION

The growing importance of cooperative relationships can currently be observed worldwide. The vast majority of these relationships take the form of cooperation. However, cooperation between competitors has also been noted for some time, so-called coopetition, i.e., the simultaneous existence of cooperation and competition between competitors. Previous research on coopetition usually characterises these relationships in the context of the benefits achieved. The question of what impact sustainability has on coopetition and what future directions, as well as new challenges, can be expected has become increasingly important for companies in the current period. For companies, consistent strategic orientation and its implementation is a decisive driver for successful development. The increasingly complicated structures and rules of a largely globalised economy not only confront today’s companies with the circumstances of accelerated market dynamics, intensified competition and
constantly growing product demands, but also political requirements in connection with sustainability goals (Al Danaf & Berke, 2021). After all, sustainable developments require innovative sustainability technologies in order to counteract societal challenges such as climate change and the use of finite resources. Against the backdrop of these challenges, inter-organisational arrangements in particular are moving into the centre of interest, which can take many forms - especially alliances, networks, clusters or joint ventures. For innovations that contribute to sustainable development, intersectoral cooperation is important. For the economic success of companies, the competition principle (Porter & Porter, 1998) is often referred to in the literature. However, inter-company relations as an original strategic challenge have been in the focus of strategic developments for years. Therefore, companies are less and less confronted with the decision between competition and cooperation, but more with the central question of how to effectively shape both components. This phenomenon, which is becoming increasingly common in business practice, has meanwhile given rise to the independent term „coopetition”: a paradox that integrates two supposedly fundamentally contradictory and irreconcilable strategic behavioural logics. Although research into this phenomenon has gained much interest since the early 1990s, this research topic is relatively unexplored in relation to sustainability technologies. Previous research on coopetition has generally focused on risks and benefits. There are several studies that have investigated coopetition, but there are still gaps regarding the impact of sustainability on coopetition. Furthermore, there is a lack of comprehensive overview of consumer behaviour on competitor coopetition. The aim is therefore to provide a systematic overview of coopetition and sustainability, with a focus on the influence of sustainability.

MATERIALS AND METHODS

For the literature review, the systematic review of previous research findings is used, which is a popular research tool in science. The basis is the formulation of the research question and the creation of a review overview of the formulated keywords on which the research question is based. As a result, the data selection is analysed and evaluated. The results of the literature then become the basis of the scientific explanations on which the research has already taken a stand.

The selection process

The focus of the research is on articles and studies on the topics of „coopetition” and „sustainability”. The terms sustainability and coopetition were created as follows:

Co-opetition* OR Co-opetition* AND Sustainability* OR Sustainable*

The systematic literature search was conducted in July 2022 in the electronic database EBSCOhost. Due to the broad limits of the keywords, the search in the database resulted in 1,744 titles, which were narrowed down in a multi-stage procedure. In Level 1, all works were excluded whose titles were available in non-topic databases. In Stage 2, the search evaluation was narrowed down into subject fields. Subject areas were excluded that went into the medical or psychological field
and had no connection to the economic field. In Stage 3, all articles and publications were screened according to the topic and, in Stage 4, narrowed down to German- and English-language articles. Furthermore, the research articles were reviewed again, and their content was checked, and only relevant research articles with a reference were included in Stage 5. The full text of the publications was found in various databases such as SCOPUS, Springer-Verlag and ScienceDirect.

The process of screening the literature is shown in Figure 1.

Figure 1: PRISMA flowchart

In recent years, two topics relevant to business have developed, which are to be linked as a result of this work. On the one hand, many articles have been published on coopetition, which is the starting point of the research, and on the other hand, the increasing question of sustainability. Due to the two topics that are included in
Kämpf: Coopetition in the Context of Sustainability Goals – A Systematic Overview

the research, the research is divided into three areas. The first subsection analyses the literature on the topic of coopetition and defines this term, which forms the basis for a comprehensive consideration of the topic. The second subchapter deals with the topic of sustainability and sustainability goals where a definition is provided, and the existing literature is analysed. In the third chapter, both topics are examined again in summary. The objective is to present and critically examine previous research, show the connection between this research and the existing body of knowledge, as well as identify gaps in the current body of knowledge.

Definition and emergence of coopetition

In order to understand the motivation of cooperation between competitors, the term must first be examined. The term „coopetition” is derived from the terms „cooperation” and „competition” and is thus understood as a relationship built on simultaneous competition and cooperation. This combination is intended to make interdependencies more efficient and effective and thus generate more economic rents than would be possible with the pure competition or pure cooperation. The strategy is based on the idea that through cooperation between competitors, the total value can be created and shared (Porter & Kramer, 2010).

A large number of scholars agree that Raymond John Noorda, CEO of the software company Novell, first coined the term in the 1980s/1990s and is thus considered by many to be the creator of coopetition (Daidj, 2017). The first authors to shape the paradox as the term „coopetition” and actually address it scientifically were Brandenburger & Nalebuff, (1996). Despite the fact that scientists made a significant contribution to early network research, it was not until the beginning of the 1990s that the term „coopetition” gradually gained relevance. This is because in the past, competition and cooperation were fundamentally separated before these components were developed into an important business strategy such as coopetition. But why do competitors join forces? Through strategic alliances, networks and other partnerships, companies seek to improve their performance because resources, capabilities and risks can be shared under these conditions. Various research papers refer to the origin of coopetition on game-theoretic approaches in relation to real mixed-motive games, which can be traced back to Brandenburger and Nalebuff (Brandenburger & Nalebuff, 1996). They analysed coopetition using game theory and conceptualised coopetition as a plus-sum game rather than a zero-sum game where players (rivals) can win even if rivals do not lose. The starting point of their chain of arguments is the traditional belief that business life can be compared to war as an extreme form of competition, and that only those who destroy others succeed in the long run. However, the existence of considerably more winners or companies that survive in the market than would be expected under fierce competition shows, in their opinion, that this radical thesis is not tenable. The same applies, in their opinion, to the counter-thesis that business relations can be equated with peace as the extreme form of cooperation, which cannot be affirmed either. As a result, the solution must lie in the synthesis: it cannot simply be about war or peace, but „business is war and peace” at the same time. An important aspect is that this is not an endless cycle of alternating war and peace, but both forms occur simultaneously. A condition they call coopetition. Another research focusing on
this topic was conducted by Bengtsson and Kock in an exploratory study in the 2000s. (Bengtsson & Kock, 2000) on the coordination of networks. According to this study, relationships between competitors are not only competitive, but both sides benefit if cooperative aspects are also emphasised and cultivated (Bengtsson & Kock, 2000). Porter and Kramer also concluded that the approach is based on the consideration that an overall value of competitions can be created and shared (Porter & Kramer, 2010). The basic motivation here is to create a competitive advantage over further counterparts through close cooperation, whether through new access to contacts, improved productivity and/or quality, access to raw materials or through reduced risks. Furthermore, this form offers advantages for companies facing increasing pressure to integrate the global value chain, due to „(a) the increasing importance of economies of scale and the internalisation of global activities, (b) the reduction of profit margins as a result of global competition or declining demand, and (c) the increasing need to improve productivity and efficiency”. In each case, cooperation is becoming increasingly compelling” (Luo, 2007). Furthermore, Bouncken points out that this cooperation, usually anchored in corporate strategy, is needed to cope with the dynamic business field with fluctuating uncertainties (cf. Bouncken et al., 2015). Although the paradox of coopetition has been interpreted in many ways in different theoretical frameworks in the research world, it has always been based on the same premise that coopetition refers to cooperation with competitors. Since then, a rising trend in research can be observed. With the emergence of competitor mergers and the resulting development of the term „coopetition”, it can be summarised that researchers are increasingly addressing this topic.

**Functional levels of coopetition**

While most research in the field of coopetition relates to the questions of the advantages and disadvantages of such an alliance (Dagnino & Rocco, 2011; Himpel, 2009; Garraffo & Siregar, 2021), nevertheless, further research has broadened the definition of coopetition. For example, Raza-Ullah et al. (2014) argue that simultaneous cooperation and competition between firms leads to tensions that arise at the individual, organisational and inter-organisational levels. Furthermore, the research literature differentiates between interorganisational and intra-organisational coopetition. In this context, inter-organisational coopetition examines the possibilities for shaping the network of relationships between several companies. Inter-organisational coopetition is characterised by the fact that a strategic decision is made between organisations that affect the organisation and preserves the independence of the cooperating units. In contrast, intra-organisational coopetition can be characterised by coopetition between individuals, teams (Baruch and Lin, 2012), functional units or business units within the same organisation. At the organisational level, the actors must follow the instructions of their organisation and the goals defined by the organisation are to be shared. The cooperation of an organisation with its competitors on an inter-organisational level can have different reasons. The most common ones are access to essential resources and knowledge (Bengtsson & Kock, 2000), sharing resources and knowledge to improve efficiency, and developing technical innovations through cooperation in research and development (Bengtsson & Kock, 2014; Walley, 2007), reducing risks, sharing costs...
Kämpf: Coopetition in the Context of Sustainability Goals – A Systematic Overview

(Bouncken et al., 2015), achieve economies of scale by combining similar activities (Gnyawali & Park, 2011), opening up new markets (Gnyawali and Park, 2009) and achieving economies of scope by combining complementary activities (Luo, 2005). Furthermore, Bouncken et al. (2015) categorised the objectives of coopetition into five further groups: Efficiency, Market Power, Market Exploration and Development, Innovation and Internationalisation. These scientific classifications can be found on the horizontal and vertical levels. The direction indicates at which stage of the value chain the companies are located and in which economic sector they are active. In horizontal coopetition, two companies at the same stage of the value chain work together to develop, produce and launch a new product that will compete with other coopetitors' products. Based on previous research, this type of coopetition can be expected to significantly improve the joining of competitors in terms of sustainability goals and create high synergies. Therefore, it can be assumed that horizontal coopetition has a positive influence on future innovations. Significant research on the horizontal level on creating new markets or improving the company's position in existing markets includes the study by (Ritala & Hurmelinna-Laukkanen, 2009), as firms can achieve a better competitive position by improving their capabilities and exploiting unique, inimitable, non-transferable resources (Quintana-Garcia & Benavides-Velasco, 2004). If a merger of companies from other industries takes place, you are on a different level of the value chain and cooperate vertically. In vertical cooperation, a distinction is made between customer cooperation and supplier cooperation. The relationship between the supplier and the customer has become increasingly important for several years. The supplier of today is seen and accepted as a „real” value-added partner and forms an interface for the customer himself. Coopetition at the intra-organisational level is an internal tension between cooperation and competition and arises from activities that put the organisational division of labour or cooperation in competition with each other. It can thus occur within a company when, for example, there is competition between two projects.

Definition of sustainability and emergence of the sustainability principle

Whether in business, the media or academia, the term sustainability has become part of our vocabulary in recent years. What is sustainability? The answer to this question is not only complex but also complicated by different terminology that is often associated with the environment, climate change and resource conservation. If this is not broad enough, sustainability is also associated with energy, population development, manufacturing, production, corporate environmental management and climate protection. The term is used by a wide range of actors: from Greenpeace to Friday for Future, banks, mineral water suppliers, the automotive industry and ministries, managers and consumers. However, if one translates the word „sustainability” consistently into German, it is composed of „nach” and „haltig”. The logical consequence of this is that the word means „long-lasting effect”. And this also corresponds to one of the most commonly used definitions of the term sustainability, which was formulated in the Brundtland Report of the United Nations in 1987. This states: „Humanity has the ability to make development sustainable - to ensure that it meets the needs of the present without compromising the ability of future
generations to meet their own needs.” (Hardtke & Prehn, 2001). Hauff translates this as follows: “Sustainable development is development that ensures that future generations are no worse off in meeting their needs than those living at present.” (Hauff, 1987). In summary, it can be said that the term „sustainability” is not comprehensively and accurately explained by a simple definition as others are. Rather, the concept of sustainability is the sum of numerous definitional approaches that take into account the different elements of sustainability. However, it can be concluded from an ecological as well as an economic point of view that:

1. Sustainability is always oriented towards the present and the future and thus a temporal reference is given.
2. Resources, tangible/intangible goods, economic/ecological units, etc., should be protected, especially if they are non-renewable.
3. The continued existence of a reference object is to be ensured in the short and long term.

Sustainability can thus be understood as a form of ecological and economic action that aims to ensure comparable or better living conditions for present and future generations by carefully applying the necessary element and protecting it accordingly.

The origin of the sustainability principle goes back to 1713, Carlowitz’s forest management principle. As early as 1713, Carl von Carlowitz called for „a steady and persistent use of the forest.” It has been used as the most vivid metaphor to explain the sustainability principle: Trees that are cut down must be replanted so as not to deplete the resource base - and thus the economic base. If you cut down all the forest, you have a lot of wood in the short term, but only a little over the next decades (Pufé, 2017). It was not until 250 years ago that Dennis Meadows and his team of researchers came to the decisive conclusion. The report „Limits to Growth” in 1972, based on a computer simulation, showed the deterioration of the planet if humanity did not become more resource efficient. The report marked the beginning of the more recent scientific debate on sustainable development and called for a new „world economic policy”. In the following period, politics and civil society in particular took up the resource-economy principle again, also under the awareness of the „Limits to Growth” report. In the 20th century, the global community became increasingly aware of problems such as environmental pollution, overpopulation, poverty and resource depletion. At the beginning of the century, the first international conferences on nature conservation were held in this regard. From the mid-1970s onwards, public and political interest in environmental protection issues grew. Binding regulations were adopted between states to protect the environment, such as the Washington Convention on International Trade in Endangered Species. The problems became more specific, the goals more concrete. However, the historical precursors that shaped the image of sustainability include the „Brundtland Report”, the „Rio Summit”, „Agenda 21” and the „UN Millennium Goals”.

As early as 1983, the United Nations founded the so-called World Commission on Environment and Development (WCED), an independent expert commission in Geneva. The reason for writing this Brundtland Report and founding the Commission at that time was the realisation that the quality of the environment worldwide was being significantly affected and rapidly deteriorating due to human
economic activities. It was the time of the greenhouse gas. The change in emission levels led to the accompanying climate change. The world's population was also growing, increasing the pressure on available resources. The aim of the report was to provide a perspective report on „long-term sustainable development on a global scale by 2000 and to make recommendations on how environmental concerns can be translated into greater cooperation among developing countries and among countries at different stages of economic and social development, leading to the achievement of common and mutually supportive goals that take into account the interrelationships between people, resources, environment and development, including to consider ways and means by which the international community can deal more effectively with environmental concerns, and to help establish common understandings of long-term environmental problems and the corresponding efforts required to successfully address the problems of environmental protection and enhancement, as well as a long-term agenda for action in the coming decades and aspirational goals for the global community”. to elaborate. The official title of the report was „Our Common Future”. (Brundtland, 1987) but more commonly known in the local literature as the Brundtland Report. The origin refers to the name of the chairman Gro Harlem Brundtland. The aim of this report was to give recommendations for action for sustainable development. The merit of the Brundtland Report at that time was to have brought the report of sustainable development to the public for the first time as a global uniform guiding principle. The report was the first to state that global environmental problems are mainly caused by human consumer behaviour. The perception of the problem and the resulting approach to solving it led to a strategy that brought together development and the environment and thus coined the term „sustainability”. This resulted in the definition: „sustainability” = „environment” + „development”.

The Brundtland Report was followed by the UN Conference in Rio in 1992. On the basis of the Brundtland Report, which was considered by the UN General Assembly in 1989, it was realised that there was an urgent need for action at the international level. The proposals and demands of the need for action called for at that time were to be translated into binding treaties and conventions. A total of 178 states took part in this process, the aim of which was to deal with development problems in an environmental context and to summarise the course of sustainable development worldwide. A total of six documents were agreed upon, which promoted the formal legal anchoring of sustainability. Not only were the documents signed, but also „Agenda 21” was launched, which was agreed upon as a United Nations action programme. The package of measures primarily served to encourage international organisations and national governments as well as all other political levels to act in the spirit of these goals. The successor agenda is the so-called „Agenda 2030”, which came into force on 1 January 2016.

Current development and models
Since the Rio Conference in 1972, the United Nations has been trying to create a framework for climate protection. Since then, a multitude of environmental agreements and measures have emerged. The associated access to nature as well as
social resources, knowledge, trade flows, centres and services decides between rich and poor. This results in a need for further action by the United Nations so that in September 2015 a successor framework was again set for the Millennium Development Goals (MDGs), which expired in 2015. In negotiations with 30 UN member states, a post-2015 agenda with 17 Sustainable Development Goals (SDGs) and 168 sub-goals was agreed upon together with the UN Global Compact, the Global Reporting Initiative (GRI) and the World Business Council for Sustainable Development (WBCSD). The SDGs are thus another outcome of ongoing efforts to create a framework to promote sustainable development at the global level. The aim is to create a new orientation framework for global development and environmental policy to further promote sustainable development over the next 15 years (until 2030). Businesses play a key role in enabling sustainable development, as they are major users of natural and social resources through the production and provision of goods and services. Current environmental problems such as wastewater, air emissions, soil pollution, ozone layer depletion, global warming and deforestation can be seen in large part as the result of the negative impact of business on sustainability (UNEP, 2016). Especially the merger of competitors due to this problem, one can see the importance of this issue.

The Paris Agreement thus sends a clear signal. All states are thereby held accountable. Against the background of both tightening environmental laws and ethical social regulations, nations, organisations, companies and households that apply sustainability principles have an advantage. Governments must ensure a sustainable resource base in both ecological and human terms. As far as companies and the economic perspective are concerned, they are subject to globalising and intensifying competitive pressure in terms of raw materials, costs, employees and innovation. In order to operate successfully in the medium and long term, they need to renew their business models and strategies based on sustainable development. From an economic point of view, sustainable development is first and foremost about securing the basis of life and production. This indirectly justifies the claim of sustainable development to preserve the environment globally and permanently and to develop and stabilise the economic and social system on this basis.

The term ecological sustainability has already been mentioned. However, sustainable development requires two further levels, economic and social sustainability. Whereas in the past profit-making alone was the entrepreneurial goal and thus the supporting pillar of any project, this has been supplemented by the ecological pillar due to resource scarcity and environmental pollution. Against the background that not only employees are affected by environmentally damaging business activities of companies, but also numerous internal and external players such as the social environment, communities and developing countries, the social pillar was added. The model emerged as early as the 1990s They were first used as a benchmark for sustainability in international treaties at the Johannesburg World Summit in 2002.

The three-pillar model of sustainable development is based on the idea that sustainable development can only be achieved through the simultaneous and equal implementation of environmental, economic and social goals. Only in this way can the ecological, economic and social performance of society be ensured and improved.
The three-pillar model was “style-forming” for the debate on sustainable development, as it demanded mutual acceptance of the respective interests from the ecological, economic and social actors. Despite its importance, the three-pillar model is sometimes controversial among experts. Critics complain above all that it is difficult to operationalise and that hardly any practical consequences can be derived from it. In its 2002 report, the German Advisory Council on the Environment (Sachverständigenrat für Umweltfragen) denied the three-pillar model an orientation function because it degenerated into a three-column wish list in which every actor could enter his or her concerns. Despite the criticism, this pillar model has contributed significantly to the understanding of sustainability, as it makes clear that all three foundations are needed for sustainability and are interdependent.

**Consumer behaviour: Main driver of sustainability concepts for companies and coopetition**

Companies are also forced by consumer behaviour to deal with sustainability. Consumers, especially the younger generation, have concrete ideas about sustainability and sustainable products. The consequence can be observed in purchasing behaviour. When buying products, people already pay attention to the fact that the company acts in a socially and ecologically responsible way. This change in attitude in society can be observed most vividly in the purchase of everyday products such as food and can be understood by every person. However, the effects of the change are much more far-reaching and affect not only companies in the food industry, but every company. This is because the entire corporate image is closely linked to the factor of sustainability. The image of a company is essentially determined by a few factors. These include the quality of the service, the economic success and also the issue of sustainability. The consumer certainly sees sustainability as a possible criterion when making a purchase decision. A study by Ernst & Young in 2021 (EY Future Consumer Index) (Bangemann, 2021) shows that Germans are already well aware that climate change is a fundamental problem. Thus, climate change is seen as the problem by 53 percent of those surveyed. In particular, the production and consumption of goods and services are important to consumers in Germany at 30%. The global average is comparatively 23%. However, plastic waste is of greatest concern, at 65 per cent in Germany and 73 per cent globally, ahead of climate change. German consumers are also particularly concerned about combating the consequences of climate change (38%) (global 28%), promoting sustainable use of ecosystems and biodiversity, and responsible production and consumption of products and services. This sensitivity is also noticeable in purchasing decisions. Thus, a large majority of German consumers pay attention to the sustainability and environmental impact of a product when buying it. When it comes to purchasing decisions, it was determined that fresh fruit and vegetables as well as packaged foods are at the top of the shopping list of sustainability-conscious consumers with 83 and 81 percent, respectively. They are followed by cosmetics and clothing.

According to another study by Stiftung Marktwirtschaft, competition can come from low prices, quality promises, innovative products, good service, long opening hours, attractive locations, convincing advertising and many other things that
customers potentially value. As far as customers value climate-friendly production or good working conditions for workers or „fair” payment of suppliers such as producers, companies can gain competitive advantages by precisely offering this and making it transparent.

The literature review found that sustainability can be an entrepreneurial opportunity for start-ups and established companies. Sustainable business models and innovations are an important way to differentiate oneself from the competition. Similarly, embedding positive contributions to the environment and society makes it easier to build a corporate and employer brand compared to non-sustainable business models. (Leal Filho, 2019). In most corporate business models, partnerships with other organisations play an important role. These include strategic alliances between non-competitors, strategic partnerships between competitors (coopetition), joint ventures to develop new business, and partnerships between supplier(s) and customers.

In recent decades, there has been extensive literature on both coopetition and sustainability. However, scholars have mostly studied both coopetition and sustainability in isolation in different contexts. There has been little discussion of coopetition and sustainability when they are brought together. A large body of research aims to examine what benefits these mergers have and what legal frameworks are associated with them (Bouncken et al., 2015) rather than what influences sustainability goals have on coopetition. The literature and the limited discussion on the link to sustainability suggest that there is considerable potential for systematically exploring the use of coopetition strategies by companies in relation to sustainability.

Both the systemic nature and the large scale of sustainability challenges, therefore, require targeted interactions between multiple actors at different levels: within and between industries, sectors and countries. These interactions usually involve cooperation between actors. Various research approaches have been derived from this so far, most of which refer to inter-organisational coopetition and can be divided into three categories according to the literature review:

1. The first category focuses on both coopetition and sustainability. The researchers examined coopetition with the direct intention of supporting sustainability (Christ et al., 2017; Planko et al., 2019; Sharma et al. 2021).
2. The second group focuses research on the phenomenon of coopetition under which sustainability is considered as one of the many aspects influenced by coopetition. The studies in this context are based on different aspects of coopetition, but mention sustainability as a means or an indirect result of cooperation with competitors (Jafarnejad et al., 2020; Munten et al., 2021; Nguyen et al., 2022).
3. In the third group of studies refers to the literature on corporate sustainability, where the focus of the research is on sustainability issues and considers competitors as one group of stakeholders among others responsible for sustainability (Kumar et al., 2021; Shib & Agrafiotis, 2020).
As a result, there are already research approaches with different orientations, although research in this field still has some gaps. However, it can be assumed that due to the implementation of sustainability goals, this gap can be closed in the future.

CONCLUSIONS

In summary, the paper gives an overview of the state of research on coopetition and sustainability with the result of showing insights into the emergence and the current state of research. The research showed that coopetition is still a young field of research. For example, the term was only formed in the nineties and only gained significant meaning in the 2000’s, which found further presence in today’s research literature with the meaning of sustainability. Surprisingly, it was also found that the term sustainability was defined more than two hundred years ago and only gained increasing importance with political decisions in the last forty years. This is also proof that both topics are far from being fully explored. One of the most important findings for future mergers of competitors is that sustainability is the main driver. In particular, political pressure and consumer behaviour is driving companies to coopetition in the future and to think more about and make a significant contribution to sustainability in production and supply chains. One of these pioneers in sustainable sourcing and supply chain management is, for example, a German sports equipment manufacturer that actively monitors its entire supply chain and does so together with its competitors. It also supports material suppliers and works closely with institutions to ensure sustainable practices throughout and to introduce mandatory limits for critical substances. In this way, it indirectly contributes to the reduction of waste and emissions, also for the product user, and the consumer. By doing so, it strengthens its own corporate and brand identity towards its consumers and promotes the resilience of its supply chains. Another example of how to make a difference in sustainability is shown by two large French companies: They signed a polymer recycling partnership to reach their target of 30% recycled content in car interiors. Although cosmetics manufacturers and sporting goods producers, with their correspondingly sensitive target groups, are already on the rise in terms of sustainability, more and more corporate sectors are also addressing the issue, which has been reluctant to do so until now. The literature shows that coopetition is no longer exclusively about economic aspects, but also about the creation of new innovations, and the implementation of the „three-pillar model” in which ecological, economic and social interests are in focus. In this context, the awareness of the manager is crucial to implement sustainable development as a strategy in the company. For the measurement and comparison of the results of sustainable entrepreneurial action, key figures and indicators are already implemented in some corporations. The role of networks, cooperation and coopetition is emphasised in many studies and described as forward-looking, which can be implemented on different levels, for example on the vertical level, i.e., with companies along the
supply chain, or also on the horizontal level in the cooperation of competitors, in which the implementation of ecological goals can be implemented more quickly together due to innovations. Especially on the horizontal level, a merger with competitors can significantly improve the realisation of sustainability goals and thus create high synergies.

REFERENCES


Kämpf: Coopetition in the Context of Sustainability Goals – A Systematic Overview


https://doi.org/10.1007/978-3-8349-8306-0_9

https://doi.org/10.1109/access.2020.3014460


https://doi.org/10.1007/978-3-662-58717-1


Corresponding author:

**Doreen KÄMPF**  
Hungarian University of Agriculture and Life Sciences  
Doctoral School of Management and Organisational Sciences  
7400 Kaposvár, Guba Sándor u. 40., Hungary  
e-mail: Doreen.Kaempf@web.de

© Copyright 2022 by the authors.

This is an open access article under the terms and conditions of the Creative Commons attribution (CC-BY-NC-ND) license 4.0.