





Environmental initiatives: A study of dyadic buyer and supplier relationships in the South African Fast-Moving Consumer Goods industry

**Authors:**

Arno Meyer¹ 
 Wesley Niemann¹ 
 Pierre-Roux van Pletzen¹ 
 Danie Smit¹ 

Affiliations:

¹Department of Business Management, Faculty of Economic and Management Sciences, University of Pretoria, Pretoria, South Africa

Corresponding author:

Arno Meyer,
 arno.meyer@up.ac.za

Dates:

Received: 03 Apr. 2019
 Accepted: 30 July 2019
 Published: 19 Sept. 2019

How to cite this article:

Meyer, A., Niemann, W., Van Pletzen, P.-R. & Smit, D., 2019, 'Environmental initiatives: A study of dyadic buyer and supplier relationships in the South African Fast-Moving Consumer Goods industry', *Journal of Transport and Supply Chain Management* 13(0), a448. <https://doi.org/10.4102/jtscm.v13i0.448>

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Background: In the current fast-paced markets, customer demands are changing and environmental considerations have placed organisations under pressure to integrate and implement environmental initiatives in their business and supply chain functions. This pressure forces organisations to respond better to the changing global trends and customer demands.

Objectives: The purpose of this generic qualitative study was to explore environmental initiatives within the context of a dyadic buyer–supplier relationship in the South African fast-moving consumer goods (FMCG) industry.

Method: Semi-structured interviews were conducted with 12 participants. These interviews were conducted with six organisations who were engaged in a dyadic buyer–supplier relationship.

Results: The findings indicate that organisations implementing environmental initiatives experienced improved collaboration between supply chain partners. Improved collaboration leads to enhanced product quality, cost savings in the long-term and transparency between organisations. The drawbacks from environmental initiatives included increases in planning time and high capital investment. Implementing environmental initiatives revolve around buyer–supplier relationships that are strategic in nature and should not be underestimated by organisations. To improve buyer–supplier relationships, organisations are recommended to devote more capital and resources to environmental initiatives.

Conclusion: This study determined the predominant environmental initiatives within the South African FMCG context and showed how environmental initiatives influence buyer–supplier relationships.

Keywords: green supply chain management; fast-moving consumer goods; FMCG industry; dyadic relationships; environmental initiatives; qualitative research; South Africa.

Introduction

Nobel laureate Wangari Maathai stated, 'The environment and the economy are really both two sides of the same coin. If we cannot sustain the environment, we cannot sustain ourselves'. Historically, organisations primarily focused on profit without considering the impact of its activities on the environment and people on the planet (Carter & Easton 2011:54). The changing and complex nature of customers made it imperative for organisations to incorporate environmental practices, together with their corporate governance policies, to avoid the risks of reputation-damaging events and solecisms. Dyadic relationships are derived from the field of sociology. A dyadic relationship is a group of two individuals or organisations that can be linked via common interests, relations, work and cooperation (Liden, Anand & Vidyarthi 2016:139). Hence, the dyadic relationship for this study refers to the buyer–supplier relationship in the fast-moving consumer goods (FMCG) industry's supply chain environment.

In 2018, the Nielsen Global Responsibility Report showed that a staggering 81% of 30 000 respondents reported that organisations should actively participate in environmental initiatives to improve the environment in which they operate. However, 73% of the respondents indicated that they were willing to pay more for a product or service produced by organisations that were environmentally conscious. This shows how organisations are prepared to increase their investments into green supply chain management (GSCM) practices (Okanga & Groenewald 2017:1696). The focus of GSCM practices is not only on the total impact of the

organisation, but also incorporates its supplier's activities. Green supply chain management ensures sustainability, that is, in enhancing the overall performance of the supply chain (Green et al. 2012:292).

However, it may not be feasible for an organisation to implement GSCM practices without the successful collaboration of its suppliers to support any environmental initiatives. The reason is because of the large number of outsourced activities where organisations are held accountable for their own actions and the actions of the suppliers in their supply chain (Lee et al. 2014:39). However, the problem is that GSCM is not yet a mature and well-distinguished practice (Murfield & Tate 2017:1320). For example, it is difficult to put a rand value on an oil spill, or on the prevention costs thereof. Similarly, GSCM is more than just using paper cups instead of plastic cups. This is because GSCM depends on the organisation's efforts used to achieve sustainable operations for its success (Rahim, Fernando & Saad 2016:147). It is mainly for this reason that greater efforts are required for organisations to reduce their environmental impact or carbon footprint (Lintukangas, Hallikas & Kähkönen 2015:321–333).

Green supply chain management has been researched in extant literature in both developed and developing countries (Jafarzadeh-Ghouschi 2018:81). The top 10 countries in terms of GSCM research (from high to low) include the People's Republic of China, United States, Taiwan, England, India, Canada, Malaysia, Australia, Italy and Denmark. Based on this information, it clearly shows that research in developing countries, especially African countries like South Africa, is poorly represented in GSCM literature. However, GSCM received a significant amount of attention in more developed countries. The predominant studies on the drivers of and barriers to GSCM failed to address the implications of dyadic relationships during the implementation of environmental initiatives.

Extant literature indicates that to decrease the environmental effect of the supply chain, organisations need to scrutinise the source of inputs and collaborate with participating suppliers during the preliminary stages of product development (Green et al. 2012:291). The findings suggest that organisations need to shift from transactional suppliers to suppliers willing to commit themselves to long-term environmental initiatives, which is also supported by the research of Govindan et al. (2015:67). These transitions require both parties to realise how the changes will influence performance when incorporating environmental initiatives (Butner, Geuder & Hittner 2008:10). Furthermore, Cummins (2016) indicates that up to 70% of an organisation's carbon footprint is attributable to their upstream and downstream supply chain partners. Therefore, organisations need to consider how their buyer-supplier relationship affects the overall supply chain cost and quality performance factors (Du, Li & Song 2016:1600).

The objectives of this qualitative study were twofold: firstly, to determine the predominant GSCM practices of

buyer-supplier organisations in an African developing country such as South Africa and, secondly, to explore and focus on the dyadic buyer-supplier relationship perspectives and the implications they have on environmental initiatives. Although GSCM received a significant amount of attention, a limited number of studies address the implications of dyadic relationships during the implementation of environmental initiatives. This article also responds to the future research suggestions of Murfield and Tate (2017:1341), recommending that dyadic buyer-supplier relationships should be investigated in order to provide in-depth insights into specific supply chains and how to disseminate environmental requirements to the upstream supply chain partners to create a 'green bullwhip effect'. Similar to the concept of the bullwhip effect, Lee et al. (2014:39) suggest that 'environmental requirements also change significantly at times, and are passed along the supply chain to varying degrees'.

The focus of this study is on the South African FMCG industry. The FMCG industry is one of the largest industries in the world (Mvubu & Naude 2016:274). The FMCG industry is also characterised by its multiple supply chain partners. Suppliers typically supply low-cost non-durable products with a short shelf-lifespan (Mvubu & Naude 2016:274). Fast-moving consumer goods products include food and beverages, dry goods, cosmetics, household cleaning products and toiletry products. Therefore, the integration of environmental initiatives into buyer-supplier relationships is noteworthy for South African FMCG organisations, as this is a fast growing industry (Rahim et al. 2016:152). According to Nielsen Connected Commerce Report (2018), global FMCG purchasing has increased by 15% in the last 2 years; however, in South Africa, FMCG purchasing has increased by 48% in the same period. To put this into perspective, South Africans spent R31 900.00 per second in FMCG stores in 2017.

The study aims to answer the following research questions:

- What are the predominant environmental initiatives within the South African FMCG industry?
- How do environmental initiatives influence buyer-supplier relationships within the South African FMCG industry?
- What are the main benefits and drawbacks of environmental initiatives on dyadic buyer relationships within South Africa's FMCG industry?

The aim of this study was to provide more insights into the effects of dyadic relationships on environmental initiatives within South Africa's FMCG industry. It is imperative to determine the predominant environmental initiatives so that organisations can prioritise activities and allocate resources accordingly. It may allow FMCG organisations and practitioners to gain an in-depth understanding of the implications of dyadic supplier-buyer relationships and to exploit the advantages to avoid mistakes. These buyer-supplier relationships may contribute to the various levels where an organisation may experience environmental collaboration across the organisation's network. Thus, researching and understanding the implications of dyadic

buyer–supplier relationships may help organisations benchmark the benefits and costs, as well as encourage smaller South African organisations to participate in environmental practices.

The structure of the remainder of the article covers a comprehensive literature review pertaining to South Africa’s FMCG industry, buyer–supplier relationships, GSCM and the main drivers of and barriers to GSCM. It is followed by a description of the methodology with relevant research design, sampling, data collection and analysis. Then research findings are presented. The article concludes with the theoretical implications, managerial recommendations and the limitations of the study and recommendations for future research are discussed.

Literature review

The South African fast-moving consumer goods industry

The FMCG industry is a dynamic, competitive and fast-paced industry and is described as the largest industry in the world (KPMG 2014:4). The FMCG industry predominantly consists of goods sold rapidly, consisting mainly of non-durable items consumed frequently and on a daily basis by customers (Mvubu & Naude 2016:274). It is one of South Africa’s most important prospering economic sectors for Gross Domestic Product (GDP) growth. In 2011, the FMCG industry sales surpassed a trillion rand for the first time. By 2016, this amount increased to R1.46 trillion (Statistics South Africa Report 2018). Large formal FMCG retailers account for 68% of South Africa’s market and informal small, medium and micro enterprises (SMMEs), such as ‘spazas’, small informal superette-style shops and mid-sized wholesalers, encapsulate the rest of the market share (Dicey 2016).

Profit margins of goods and services in the FMCG industry are typically low; therefore, competitive advantage is gained by selling large volumes to FMCG retailers (Mvubu & Naude 2016:274). Green et al. (2012:290) state that this intense competition between suppliers may also lead to suppliers being more committed to GSCM practices and initiatives set out by FMCG organisations, suggesting that the power asymmetry in this particular buyer–supplier relationship is skewed towards buyer organisations, that is, FMCG retailers. It also corroborates the findings of Sutton-Brady, Kamvounias and Taylor (2015:122), stating that the extremely condensed nature of the FMCG industry influences the buyer–supplier power imbalance.

Lacoste and Johnsen (2015:229) suggest that supplier performance in the FMCG industry is more process-driven, whereas supplier performance in other industries is more relationship-driven. However, Copeland (2013:423) suggests that strategic suppliers are often more eager to work with buyers on environmental initiatives, suggesting that buyer organisations are moving away from transactional supplier relationships and more towards strategic relationships with

their key suppliers, thus focussing on environmental initiatives (Chkanikova 2016:478).

Buyer–supplier relationships

Categorising buyer–supplier relationships can be achieved by using the portfolio approach, as explained by Kraljic in the purchasing portfolio matrix (De Villiers, Nieman & Niemann 2017:33). Kraljic highlights buyer–supplier relationships to be considered as a strategic function of an organisation. The purchasing portfolio model guides organisations to form strategic relationships with a limited number of suppliers because of limited resources (Pagell et al. 2010:58–60). Based on this logic, it is not advisable to form strategic relationships with all suppliers, as this level of commitment is too vast and costly to maintain (Cao & Zhang 2011:164).

Kraljic’s model outlines that relationships differ because of the type of purchase or categories of spend. Allocating resources appropriately enhances purchasing performance (Pagell et al. 2010:57). Kraljic’s portfolio approach comes with challenging consequences when managing the environmental practices, as each situation with suppliers is unique. Both Chkanikova (2016:478–494) and Pagell et al. (2010:57–73) suggest that emphasis should be placed on environmentally aware sourcing decisions. Furthermore, companies should constantly evaluate their relationships with their suppliers and strategically consider the integration of green practices.

Another aspect of Kraljic’s model is complexity management. It can be key to maintain strategic relationships. Hence, complexity managed within and between organisations plays a vital role in the relationship (Mota et al. 2015:1). When enabling factors such as trust, transfer of information and clear goals are not aligned between organisations, complexity becomes evident (Nyaga et al. 2010:104). The Kraljic model states that suppliers should focus on building trust and commitment to contribute favourably towards improved performance and buyer satisfaction for the outcomes that buyers need to value (Meyer et al. 2017:1; Nyaga et al. 2010:101). In the context of this research, the services suppliers should offer to FMCG organisations should adhere to and jointly contribute to environmental initiatives.

Green supply chain management

Green supply chain management practices are supply chain management activities that attempt to conserve the integrity of the global environment. Therefore, projects may incorporate impact reduction activities, namely: (1) recycling, material purification and low-density packaging design; (2) environmental data gathering including vendors, products as well as processes; and (3) waste elimination processes such as biodegrading and incineration (Walker et al. 2008:75). Organisations can effectively leverage internal resources to track and monitor such environmental activities across all organisational functions using green supply chain integration (GSCI) (Wong, Wong & Boon-itt 2015:15).

Wong et al. (2015:14–15) explain that strategic collaboration and integration across internal resources form part of GSCM. Internal resources such as senior management, quality control and organisational functions, when integrated, use an integrated management system to support organisations in managing the environmental impact of their supply chain (Wong et al. 2015:15). Increasing customer demands motivate organisations to work and pinpoint innovative environmental solutions (Green et al. 2012:292; Peuckert 2014:77–94).

Walker et al. (2008:72) indicate that organisations may encounter more barriers to the drivers of environmental supply chain projects. Knowing the causes and effects of these drivers and barriers helps to emphasise the importance of GSCM practices in all buyer–supplier relationships. The internal drivers of the organisation that focus on environmental initiatives include the personal commitment of leaders, middle management, policy entrepreneurs and stakeholders (Walker et al. 2008:69–73). These internal drivers seek to reduce costs by reducing waste and pollution often leading to production efficiencies and quality improvements.

The external drivers of an organisation usually focus on environmental initiatives such as legislation, particularly when companies are proactively innovative in their approach to regulatory compliance. External competitors also act as drivers for GSCM projects for organisations to seek competitive advantage and improved performance (Walker et al. 2008:69–73). External drivers include an increase in public awareness, consumer demand for environmentally conscious goods and processes. Additionally, the influence of non-governmental organisations (NGOs) concerned with corporate ‘greenwash’ is an attempt to seem interested in protecting the environment (Walker et al. 2008:80).

The barriers identified are primarily external in nature and include cultural myopia, cost implications, level of corruption, government legislation and lack of incentives, customer ignorance, lack of education or knowledge, industry-specific barriers and technology (Niemann Kotze & Adamo 2016:977–1013). External barriers identified include lack of supply chain transparency, poor supplier commitment, lack of laws and policies and industry-specific barriers. According to Niemann et al. (2016:979–984), the barriers with the greatest effect are cultural, cost and government legislation. An organisation’s internal barriers focussing on environmental initiatives usually result in cost reductions at the expense of green practices. These include lack of management commitment and lack of buyer awareness (Mittal & Sangwan 2014:584).

Methodology

Research design

This study applied a generic qualitative research methodology. This type of research aligns the study to identify an exploratory basis of opinions and perspectives of managers in buyer and supplier organisations (Plano Clark

& Creswell 2015:289). It creates an understanding of participants’ opinions on a specific phenomenon (in this particular study being the dyadic buyer–supplier relationships) at a specific time (Percy, Kostere & Kostere 2015:78). Each participant of the study was interviewed once only to define the time horizon as cross-sectional (Babbie & Mouton 2001:93–95).

Sampling

Six dyadic relationships were investigated, consisting of 12 organisations. One participant represented each respective organisation. A purposive sampling method was used to include homogeneous and snowball sampling. The use of purposive sampling for the study allowed the researcher to select specific buyer–supplier relationships and pertinent individuals to contribute to the topic.

Generic qualitative research includes the collection of qualitative data in semi-structured interviews. The collected data are analysed and the results are used to conclude the themes identified (Kahlke 2014:40). In Table 1, all the participants involved in this study are described where ‘B’ represents buyer organisations and ‘S’ represents supplier organisations. The respective colours indicate the dyadic linkages. Additionally, it is important to note that the participants were not merely buyers and sellers, but middle and top management that has a more holistic and strategic point of view of the respective organisations.

Data collection

Semi-structured interviews were conducted. One of the advantages of conducting semi-structured interviews was that the researchers had more control over the information obtained (Creswell 2012:218). This provided flexibility to adapt and gather the required data (Rowley 2012:262). A discussion guide developed for the study’s research questions and available extant literature underwent a pre-test with a single individual. The pre-test helped the researchers to change the discussion guide to allow an easier understanding of the respective interviewees. All the interviews were audio-recorded and transcribed by the researchers within 7 days of the interview.

TABLE 1: Participant details.

Participant number	Position	Organisation number	Years in industry	Gender
P1	Depot Manager	B1	6	Male
P2	Produce Procurement Manager	S1	13	Male
P3	Group Logistics Executive	B2	17	Male
P4	Managing Director	S2	13	Female
P5	Distribution Centre Manager	B3	8	Male
P6	Branch Manager	S3	19	Male
P7	National Portfolio Manager	B4	29	Male
P8	Commercial Executive	S4	25	Male
P9	Merchandise Executive	B5	28	Male
P10	Sustainability Manager	S5	20	Male
P11	Chief Executive Officer	B6	10	Male
P12	Account Manager	S6	5	Male

Data analysis

Thematic analysis was used to analyse the data gathered. Thematic analysis pinpoints, examines and records the themes of the gathered data (Braun & Clarke 2012:57). The researchers followed the guidelines of Braun and Clarke (2012:57–71) by familiarising themselves with the raw data which were examined from the audio recordings and the corresponding transcriptions. Codes were used from the literature and linked to the inductive codes, which were created from the data, to create a code list. Similar codes were grouped together to identify sub-themes. The researchers were all involved in the coding and analysis of the raw data. Researchers actively reviewed the perspectives and findings of the other researchers. This was done to increase the study's trustworthiness and to decrease biased perspectives of any one researcher.

Trustworthiness

The criteria to ensure the trustworthiness of the study include credibility, dependability, confirmability and transferability (Polit & Beck 2012:584; Shenton 2004:64). Credibility entails that the findings of the study offer an accurate reflection of the state of the phenomenon in reality (Polit & Beck 2012:585). Voluntary participation and the confidentiality of participants guaranteed the use of reliable methods such as purposive sampling and thematic analysis (Polit & Beck 2012:584–585; Shenton 2004:64–69). Dependability was used to ensure that the findings were consistent and similar when the same context, participants and methods involved are in a replicated study (Polit & Beck 2012:585; Shenton 2004:71). The researchers ensured an in-depth and detailed description of the participants, context and methodology provided to create a well-defined path for future attempts to replicate the study.

Confirmability was used for the objectivity of the findings and the fact that they are not influenced by the researcher's own ideals or frame of reference (Shenton 2004:64). To help improve confirmability, the researchers used clear audit trails that would ensure that the findings are a true reflection of the participants' opinions. Transferability was also used for another setting or context (Polit & Beck 2012:585; Shenton 2004:67–71). A comprehensive explanation of the context of the qualitative study, as well as the discussion guide and interview protocol of the study, is provided.

Ethical considerations

The relevant Research Ethics Committee at the University of Pretoria approved the study. Each participant signed a

consent form, giving voluntary consent for the interview. The researchers emphasised that the information gathered during the interviews will be treated as anonymous and confidential. To ensure that the participants were comfortable before and during the interview, the researchers reminded the participants that they might withdraw from answering a question.

Findings

This section provides findings of the four themes identified and extracted from the collected data. The following themes were identified: (1) influence of environmental initiatives upon buyer–supplier relationships, (2) issues influencing buyer and supplier management, (3) predominant environmental initiatives and (4) effects of environmental initiatives on dyadic relationships. The related sub-themes are discussed under each main theme.

Predominant environmental initiatives from a South African perspective

The first research question identifies the predominant environmental initiatives within the South African FMCG industry. Table 2 summarises the predominant environmental initiatives discussed by participants.

Five participants discussed the reduction in plastics as a popular topic amongst buyer and supplier companies. The approach of correctly managing plastics through recycling or incineration varied between supplier and buyer companies, which are evident in the following quotes:

'I think currently it is a plastic issue. If you look at the media on environmental issues it is dominated by plastic issues, because it is on a high level. It is dominant through managers and everyone who is commenting on it, saying 'Listen guys, we need to change this, it is becoming a huge problem in the total environment'. This plastic issue has been a very dominant or prominent issue on the table.' (P8, male, Commercial Executive)

'[a]nd then with that is reduction of plastics. So, if you are going to produce something at the moment using plastic, everybody wants to get rid of it.' (P1, male, Produce Procurement Manager)

'Plastic is the only thing that may not be sure where it fits, but it is something that is becoming a very environmental issue. The whole use of plastic is an issue that is driven by consumers and has become very pertinent in pollution of the oceans and the fact that many of the plastics used are not biodegradable.' (P8, male, Commercial Executive)

Three participants mentioned that the carbon footprint needs to be a predominant environmental initiative. Global warming has been a major topic over the last decade with greenhouse gasses and emissions stemming from CO₂

TABLE 2: Predominant environmental initiatives identified by respondents.

Sub-themes	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	Total
Plastic reduction	X	-	-	X	-	-	X	X	X	-	-	-	5
Carbon footprint	-	-	-	-	X	-	-	-	-	X	-	X	3
Waste management	-	X	X	-	-	-	-	-	-	-	-	-	2
Water usage	-	-	-	-	-	X	-	-	-	-	X	-	2

P, participant.

released by transportation and industry. Prior research conducted by Sundarakani et al. (2010:43) recommends that a significant effort needs to be made within organisations to reduce their carbon footprint. Refer to the exemplary quotes:

'The fumes are the most important thing that we must look at, because we really need to be responsible in the way that we protect our ozone layer.' (P12, male, Account Manager)

'I think it is just where the issues involving the environment are currently, like burning a lot of coal in your boilers or driving a lot of products around.' (P8, male, Commercial Executive)

Waste management refers to recycling, cutting down on non-eco-friendly products and the correct disposal of materials regarded as waste (Walker et al. 2008:75). The participants regarded waste management as the predominant environmental initiative because they explained that it has a significant impact on the environment, as shown in the following quotes:

'Where we basically can make a big difference is waste management, utilisation of vehicles, reduction of trips, less vehicles on the road, less diesel and carbon footprint improvement.' (P2, male, Depot Manager)

'Anything that has a direct influence on the sustainability of our environment, be it source material, be it the relationship with various parties that actually provide that stuff to you. Also the safe disposal thereof afterwards starts impacting the environment.' (P3, male, Group Logistics Executive)

Two participants emphasised the importance of water management with regard to recycling. In South Africa, a country plagued with low levels of annual rain, the need for environmental initiatives is a major priority, as clear in the following quotes:

'Our water and contamination of water is without doubt our biggest problem for our country. We are not an agriculture rich country. Go and have a look at the average rainfalls rate. To think that we are taking it and contaminating it.' (P11, male, CEO)

'The Cape Town suppliers actually said to us that due to the environmental programme, they were already on a water saving scheme. So they were already geared up for this drought. There was no real shortage from our local farmers, because they were already using that minimal amount of water due to practices that were installed.' (P1, male, Produce Procurement Manager)

These findings are consistent with the extant literature on the benefits and performance impacts of environmental initiatives (Corbett & Klassen 2006; Murfield & Tate 2017; Walker et al. 2008).

Influence of environmental initiatives on buyer–supplier relationships

In the initial stages of adopting the environmental initiatives, the conflict between the buyer and supplier organisations was evident. As relationships grew stronger, collaboration, trust and alignment reduced conflict, which is evident in the following quotes:

'I mean once we have understood what they can do and once they understand what we can do, we obviously went through

stages where you have to understand each other. There might be conflict or there might be disagreement, but that is part of it. You work through it. If you believe in the end goal where you want to be, then you work through those things to get to the end goal.' (P3, male, Group Logistics Executive)

'So if you look at the changes there was a little bit of negativity in the beginning. I was not there, but I heard that it was a bit tough in the beginning, but at the moment it is amazingly positive.' (P1, male, Produce Procurement Manager)

Nyaga et al. (2010:101–114) demonstrate the benefits within relationships such as information sharing, joint relationship endeavours and investments that lead to trust and commitment. In the process, trust and commitment lead to an increased level of satisfaction and performance, as shown in the following quotes:

'Trustworthy suppliers are quite important and from my experience it's very important for us to share some of the vision, you know, similar goals for that matter.' (P5, male, DC Advanced Manager)

'This is the only way you are going to get to different solutions: if you work together.' (P3, male, Group Logistics Executive)

Previous research suggests that transparency leads to improved performance between organisations and the findings of this study correlate with the extant literature. Suppliers often find themselves in a competitive environment leading to suppliers being more committed to environmental initiatives ultimately increasing the collaboration efforts between buyer and supplier organisations (Green et al. 2012:290). This is clear in the following quotes:

'I think it is more forced on us by market conditions than for anything else, so we are always in a cost improvement state of mind and that we stay competitive in the market.' (P8, male, Commercial Executive)

The findings of this study highlight that environmental initiatives have become part of the organisation's culture, thus improving the organisation's relationships and ultimately making them more strategic, as shown in the below quotes:

'Obviously it's not only positive, but also the right thing to do ...' (P1, male, Produce Procurement Manager)

'... it all stems from your sustainability policy that is integrated into company DNA and that strategy gets revised on an annual basis ...' (P10, male, Sustainability Manager)

In addition, the findings suggest that the importance of strategic sourcing impacts buyer–supplier relationships when implementing environmental initiatives. This links with the research of Chkanikova (2016:478–494) and Pagell et al. (2010:57–73), emphasising environmental awareness of source decisions. This is clear in the following quotes:

'Absolutely, again we don't see it as environmental initiative, but if we are able to make a choice between two identical products where the commercial production is pretty similar, but there is that initiative that one of those suppliers have a positive impact on the environment, it will impact the purchasing decision.' (P9, male, Merchandise Executive)

Interestingly, the research found that suppliers use similar criteria when choosing to do business with buyers:

'We are trying to ensure that we are moving in a direction where we are only supplying organisations that are in line with our future strategy and future growth. In order for us to do that, we need to have a strategy from our side, saying that the kind of products which we are promoting or marketing are in line with environmental effectiveness. It would vertically affect the supplying strategy.' (P12, male, Account Manager)

Butner et al. (2008:10) state that organisations in a buyer–supplier relationship consider how performance is affected when incorporating cost, quality and service with environmental standards. This study found that the cost, quality and service considered by organisations when balancing performance measures with environmental requirements are consistent with the findings of Butner et al. (2008:10). This is shown in the below quotes:

'Certain products across the country and making sure that our supply chain is as optimal as possible regarding environmental issues. So you know at the end of the day that all of these environmental factors are sort of bestowed or captured into the products.' (P8, male, Commercial Executive)

'Thirdly, what is the impact of the environmental decision on the overall cost of that product?' (P3, male, Group Logistics Executive)

Issues influencing buyer and supplier management and development pertaining to environmental initiatives

The second research question of the study focuses on the main issues facing an organisation implementing environmental initiatives. Table 3 provides a brief overview of the issues experienced by participants of organisations, clearly indicating the cost as a predominant factor when implementing environmental initiatives.

An organisation's level of investment and the cost implications of environmental initiatives were identified as key influencers of GSCM. The challenges identified by Niemann et al. (2016:977–1013) included cost implication and lack of knowledge. The study also explained that one of the challenges is cost, as mentioned by one respondent:

'I need to understand your current business standing, and when it comes to cost, I mean anything according to my experience, anything that leads to environmental effectiveness leads to using more money. Environmental initiatives have a high cost factor. You need to ensure that whatever it is you need to do, you need to make sure that it aligns with the current capabilities of an organisation because the costs are very high.' (P12, male, Account Manager)

Rahim et al. (2016:147) point out that an organisation's success lies in its efforts to achieve sustainable operations. To address this challenge, organisations have realised the need for sustainable practices and the reduction of their environmental impact. Organisations need to invest greater efforts toward sustainable practices. This study also found sustainability to be a factor when implementing environmental initiatives, as expressed by the following quote:

'Sustaining product quality and ensuring the way it is produced, leads to environmental effectiveness.' (P12, male, Account Manager)

This study identified the experience of organisations relating to the issues of commitment regarding environmental initiatives. Some participants mentioned this as one of the first issues experienced when implementing environmental initiatives:

'You've got to get buy in first. I had to get buy in from the marketing department and the Board to make sure that they are happy with the fact that I am continuing the process ...' (P7, male, National Portfolio Manager)

When investigating the challenges regarding environmental impact, qualitative data gathered identify practicality as an issue, which was not found in previous studies. Buyer and supplier organisations may be capable of pursuing specific environmental initiatives. However, the low level of practicality-specific environmental initiatives is avoided, as stated in the following quote:

'Can it be done, does it make sense, is there benefit, is it sustainable?' (P3, male, Group Logistics Executive)

Effects of environmental initiatives upon dyadic relationships

The final research question aimed to identify the benefits and drawbacks of environmental initiatives on buyer–supplier relationships. Peuckert (2014:77–94) and Green et al. (2012:292) point out that the competitive market drives suppliers to become more motivated to work with buyers, to pinpoint innovative environmental solutions. The findings of the current study confirm that organisations are collaborating to identify the best environmental initiatives, to help them sustain a competitive position in the market, which is evident in the following quote:

'[B]y working together we are forming strategic directions and initiatives. This means that we work on their position in the market, and their strengthening in the market consequently this leads to growth and sustainability.' (P12, male, Account Manager)

Production efficiencies and quality improvements are the result of internal drivers aiming to minimise cost by reducing

TABLE 3: Overview of participants' responses.

Sub-themes	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	Total
Cost implications	X	X	-	X	-	-	X	X	X	X	X	X	9
Commitment	X	-	X	X	-	-	X	-	-	X	-	X	6
Sustainability	-	-	X	X	X	X	-	-	-	-	-	-	4
Practicality	-	-	X	-	-	-	-	-	-	-	-	-	1

P, participant.

waste and pollution (Walker et al. 2008:69–73). The findings of this study confirm that cost is reduced by reducing waste products, ultimately leading to the improvement of product quality, as clear from the below quotes:

‘At the moment it is amazingly positive, due to the fact that they are actually now saving money, because they are using a lot less water, a lot less pesticide and herbicide, a lot less of all of those products.’ (P1, male, Produce Procurement Manager)

‘So there is a positive side to doing this. It is not all negative and costly. You get a benefit and you get a reward for it afterwards, because of the effect it has on your product quality, and you also do it with a responsible supplier.’ (P11, male, Account Manager)

Lastly, this research identified organisations experiencing longer planning times with regard to the environmental initiatives. This aspect was not identified in the literature review and it adds to the contributions of this study, as referred to in the following quotes:

‘It is getting people involved and it takes time.’ (P4, female, Managing Director)

‘Look, you have to be more patient and you have to put a lot more people in place to follow-up.’ (P2, male, Depot Manager)

Conclusion

Summary of findings

This research sought to determine the predominant environmental initiatives between buyer and supplier organisations and investigated the benefits and drawbacks of environmental initiatives upon dyadic relationships. It was found that when implementing environmental initiatives, buyer–supplier relationships undergo friction. In the long-term, benefits justify the investment required when building strong relationships. In South Africa’s FMCG industry, buyer organisations included environmental initiatives as a key requirement in their supplier selection criteria.

Buyer and supplier relationships are built on high standards of quality and trust. They include providing high-quality goods and services, to be sustainable over the long-term. This study confirms that similar requirements were implemented both on the buyer’s and the supplier’s side. When investigating an organisation’s level of investment into green initiatives, the phrase ‘going green costs a lot of green’ is relevant to both buyer and supplier organisations. Investment includes the need for capital, skilled resources, research and development, labour requirements and training. These challenges may discourage buyer and supplier firms when developing and managing environmental initiatives.

In addition, the challenge of managing the organisation’s environmental impact involves two key elements, namely practicality and sustainability. When implementing environmental initiatives, both buyer and supplier organisations expressed concern regarding the risk involved, the level of commitment and investment required for specific environmental initiatives. This means that collaboration between the buyer and supplier needs to create a win-win situation. If this is not created, the environmental initiative

will not be sustainable in the long run. The collected data suggested that both buyer and supplier organisations are aware of the environmental impact on the management of plastic, water and other waste. Buyers and suppliers need to become more susceptible to the use of supplementary products, in order to reduce the overall environmental impact of the organisation.

Benefits exist for both the buyer and supplier where collaboration is evident. The key lies in the strategic alignment of supply chains sharing information and resources proven to yield short-term and long-term benefits. The potential benefits include cost saving, improved quality and improved sales. The study found that long-term benefits are from strong buyer and supplier relationships earning trust. A high level of trust between the buyer and supplier proved to be a success factor when implementing environmental initiatives. The study also highlighted potential drawbacks to implementing environmental initiatives. It found that organisations do not feel the need to invest or procure substitute products when plastics are cheaper than alternative biodegradable solutions. A second drawback was an increase in planning time and time required to implement environmental initiatives. Although the South African FMCG market is highly competitive, not all organisations are willing to invest the time and money required to implement sustainable environmental solutions.

Theoretical implications

Firstly, the literature review identified that the buyer–supplier relationship becomes strategic when implementing environmental initiatives. Buyer organisations also integrate environmental initiatives into their supplier selection criteria. The research confirms the extant literature from a South African FMCG industry context. Secondly, the literature reviewed recognised issues on the implementation of environmental initiatives, namely cost implications, lack of knowledge and labour requirements. The findings indicate that these issues were consistent with the previous research findings. This study further contributed by investigating the predominant environmental initiatives from a South African FMCG industry context. The findings identified four environmental initiatives: waste management, plastic reduction, water recycling and carbon footprint. Lastly, the findings identified the implications of environmental initiatives on buyer–supplier relationships. Benefits included competitiveness, cost saving and improved product quality. Drawbacks included longer planning times and cost implications of implementation. The current study’s findings corroborate the implications found in a previous investigation by Murfield and Tate (2017:1319–1350).

Managerial recommendations

This study has several implications for managers in buying and supplying organisations. Firstly, the findings regarding the implementation of environmental initiatives suggest that buyer and supplier organisations should increase their

operational transparency before implementing environmental initiatives, to manage challenges. Both organisations need to understand the processes and objectives of all the parties involved. Secondly, suppliers need to be aware that implementing environmental initiatives with their customers could potentially strengthen their competitive position in the market. Therefore, buyer organisations should ensure their environmental strategies aligned with those of their suppliers, as buyer organisations are liable for the acts of their suppliers. Finally, it is difficult to manage the implementation of environmental initiatives, as both organisations need to collaborate and develop a measurement system specifically related to environmental initiatives. This will ensure effective management. Several organisations have already implemented measurements such as water usage, emissions and waste into their scorecards. These measurements serve as differentiators or order qualifiers.

Limitations and directions for future research

There are several limitations of this study. Firstly, a cross-sectional time horizon only provides a snapshot of reality (Babbie & Mouton 2001:93–95). This is information gathered at one point in time between buyer and supplier organisations. It would be beneficial if a similar study is conducted, using a longitudinal time horizon, as it would provide more insights into how the relationships evolve over a long period. Next, this study was conducted within the FMCG industry, which is seen as a very broad spectrum. Future research should focus on other industries in South Africa in order to identify whether the general findings of this study are consistent across different industries. Lastly, participants may be hesitant to share negative experiences, especially if the experiences are sensitive in nature, when interviewing participants. Quantitative research, namely the use of surveys, specifically the anonymity thereof, could encourage participants to be more open when disclosing negative experiences.

Acknowledgements

Competing interests

The authors declare that they have no financial or personal relationship(s) that may have inappropriately influenced them in writing this article.

Authors' contributions

P.V.P. and D.S. collected data for the research as part of their honours degree. A.M. and W.N. acted as the supervisors of the research and prepared the manuscript.

Funding information

The authors declare that they have no financial or personal relationships that may have inappropriately influenced them in writing this article.

Data availability statement

The data is stored in accordance with institutional policy.

Disclaimer

The views and opinions expressed in this article are those of the authors and do not necessarily reflect the official policy or position of any affiliated agency of the authors.

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