







# “A strategic framework for developing sustainable value propositions”

<b>AUTHORS</b>	Adwoa Yeboaa Owusu Yeboah  Abdul Bashiru Jibril   Petr Novak  
<b>ARTICLE INFO</b>	Adwoa Yeboaa Owusu Yeboah, Abdul Bashiru Jibril and Petr Novak (2022). A strategic framework for developing sustainable value propositions. <i>Problems and Perspectives in Management</i> , 20(4), 407-421. doi: <a href="https://doi.org/10.21511/ppm.20(4).2022.31">10.21511/ppm.20(4).2022.31</a>
<b>DOI</b>	<a href="http://dx.doi.org/10.21511/ppm.20(4).2022.31">http://dx.doi.org/10.21511/ppm.20(4).2022.31</a>
<b>RELEASED ON</b>	Tuesday, 13 December 2022
<b>RECEIVED ON</b>	Wednesday, 18 May 2022
<b>ACCEPTED ON</b>	Thursday, 27 October 2022
<b>LICENSE</b>	 This work is licensed under a <a href="https://creativecommons.org/licenses/by/4.0/">Creative Commons Attribution 4.0 International License</a>
<b>JOURNAL</b>	"Problems and Perspectives in Management"
<b>ISSN PRINT</b>	1727-7051
<b>ISSN ONLINE</b>	1810-5467
<b>PUBLISHER</b>	LLC “Consulting Publishing Company “Business Perspectives”
<b>FOUNDER</b>	LLC “Consulting Publishing Company “Business Perspectives”



NUMBER OF REFERENCES

71



NUMBER OF FIGURES

2



NUMBER OF TABLES

6

© The author(s) 2023. This publication is an open access article.



## BUSINESS PERSPECTIVES



LLC "CPC "Business Perspectives"  
Hryhorii Skovoroda lane, 10,  
Sumy, 40022, Ukraine  
[www.businessperspectives.org](http://www.businessperspectives.org)

**Received on:** 18<sup>th</sup> of May, 2022

**Accepted on:** 27<sup>th</sup> of October, 2022

**Published on:** 13<sup>th</sup> of December, 2022

© Adwoa Yeboaa Owusu Yeboah,  
Abdul Bashiru Jibril, Petr Novak, 2022

Adwoa Yeboaa Owusu Yeboah, M.Com,  
Ph.D. Student, Faculty of Management  
and Economics, Tomas Bata University  
in Zlin, Czech Republic; Assistant  
Lecturer, Department of Marketing  
and Supply Chain Management, School  
of Business, University of Cape Coast,  
Ghana. (Corresponding author)

Abdul Bashiru Jibril, Ph.D., Assistant  
Professor, Department of Marketing  
and Strategy, Rabat Business School,  
International University of Rabat,  
Morocco.

Petr Novak, Ph.D., Associate  
Professor, Faculty of Management and  
Economics, Tomas Bata University in  
Zlin, Czech Republic.



This is an Open Access article,  
distributed under the terms of the  
[Creative Commons Attribution 4.0  
International license](https://creativecommons.org/licenses/by/4.0/), which permits  
unrestricted re-use, distribution, and  
reproduction in any medium, provided  
the original work is properly cited.

### Conflict of interest statement:

Author(s) reported no conflict of interest

Adwoa Yeboaa Owusu Yeboah (Ghana), Abdul Bashiru Jibril (Morocco),  
Petr Novak (Czech Republic)

# A STRATEGIC FRAMEWORK FOR DEVELOPING SUSTAINABLE VALUE PROPOSITIONS

## Abstract

The discussion on firms' sustainability performance has resulted in business organizations becoming more conscious of sustainability issues and implementing strategies to ensure sustainable value propositions. The purpose of this study is to explore strategies that firms could use to develop sustainable value propositions. Through an extensive literature review, the study proposed a conceptual framework and further developed hypotheses suggesting that the strategies such as stakeholder involvement, flexible decision-making, and social and environmental values could influence sustainable value propositions. The hypotheses were tested through quantitative research analysis using data collected from owners/managers in 143 SMEs in the coastal areas of Ghana. The data supported almost all the hypotheses, namely H1, H2, and H5-H8 with T-values and P-values of  $> 1.96$  and  $< 0.05$ , respectively. This finding indicates that all three core antecedents of sustainable value propositions contributed 78 percent of variations in the model. However, contrary to expectations, the result also showed that shareholder orientation and employee orientation with T-values and P-values of  $< 1.96$  and  $> 0.05$ , respectively, did not support sustainable value propositions resulting in rejecting H3 and H4. Despite this outcome, the study concludes that all three strategies are relevant and valuable to firms in developing sustainable value propositions.

## Keywords

SMEs, sustainability, flexible decisions, sustainable propositions, Ghana

## JEL Classification

M14, M19

## INTRODUCTION

There are concerns about the planet's sustainability and how firms can contribute to it (Brundtland, 1987). Such concerns have led to several actors, such as individuals, pressure organizations, and governments, drawing attention to the rate at which the Earth is suffering degradation and exploitation, especially from business organizations. These business organizations exploit the resources of the Earth while causing damage in the form of pollution, waste, and destruction of biodiversity (Cohen & Winn, 2007). To curb this problem, firms must expand the scope of their activities (Shepherd & Patzelt, 2011) by providing sustainable value propositions.

Sustainable value propositions ensure that firms offer to their markets products and services that support society, the environment, and at the same time, their financial interests (Boachie-Mensah & Owusu Yeboah, 2015; Hörisch et al., 2014; Payne et al., 2017). This means that business organizations must provide goods and services that do not harm the environment in their production or use. Moreover, companies should consider the general society (employees, customers, or the general community) and, finally, guarantee the financial sustenance of the business.

Several strategies have been used to analyze how firms can become sustainable. Most studies typically examine the entire value creation

model, including sustainable value propositions, value creation, and value capture (Bocken et al., 2014). However, there is a gap in the sustainability literature on strategies that can contribute to achieving each element in a sustainable business model. The present study aims to fill this gap by focusing on strategies that firms can develop for sustainable value propositions for their markets. It is necessary to fill this gap because it will contribute to the literature on sustainable value propositions and sustainable business models – under-studied areas – and, eventually, to sustainability in general.

## 1. LITERATURE REVIEW AND DEVELOPMENT OF HYPOTHESES

According to the Brundtland Report (1988), the Earth cannot support the use and abuse of its resources, and the signs are all over, namely climate change and extinction of plant and animal species. Furthermore, existing records indicate that the current consumption rates are not sustainable (Baldassarre et al., 2017). Besides, there is an entire earth-wide movement embracing and campaigning for sustainability. These reasons create the right environment and make it fitting that all business decisions are analyzed within the scope of sustainability. In this direction, the study argues that sustainable value propositions are excellent opportunities for firms to attain sustainability in line with the triple bottom line (Gilles & Christine, 2016; Elkington, 1998). This paper focuses on sustainable value propositions and strategies that firms can use to develop them.

Relevant and appropriate literature was identified for the variables to provide a theoretical basis. These works helped to clarify the constructs and their relationships. To appreciate sustainable value propositions, it is necessary to first examine their value propositions. Extant literature reports that value propositions have existed for four decades. However, it was only in 1995 that it appeared in the EBSCO database. It has since attracted several researchers who have explored it from different perspectives (Payne et al., 2017). For example, it has been discussed using the SD logic (Chandler & Lusch, 2015; Grönroos & Ravald, 2011). Antonopoulou and Begkos (2020), Satar et al. (2019), Taylor et al. (2020), and Truong et al. (2012) applied it in the e-commerce and digital setting. Müller (2012) also examined it in the context of design-driven

innovation and technology. Other studies have also examined it in the healthcare sector (Egui et al., 2019; Jumbam et al., 2020).

Payne et al. (2017, p. 245) define the concept as a strategic tool facilitating communication of an organization's ability to share resources and offer a superior value package to targeted customers. Hence, value propositions are a business' promise to use its resources to satisfy its customers through providing products, services, ideas, or any such offering acceptable to customers. The definition also highlights communication as a crucial feature of firms' value propositions. Organizations must interact with their customers to determine their interests when designing their value propositions. A previous definition by Chandler and Lusch (2015) provides a similar idea and further highlights three possible outcomes in the interaction. These outcomes are economic, financial, and social value. This draws attention to the concept of sustainability performance and how value propositions can contribute to it, i.e., sustainable value propositions.

This paper adopts the definition by Patala et al. (2016) of sustainable value proposition, which is a promise on the economic, environmental, and social benefits that a firm's offering delivers to customers and society at large, considering both short-term profits and long-term sustainability. The study contributes to the existing literature by proposing three practical ways businesses can create sustainable value propositions. These include involving stakeholders, instituting flexible decision models, and pursuing social and environmental goals.

The first strategy involves the role of stakeholders. The stakeholder theory highlights the vital role that stakeholders perform in business operations. Whether external or internal, they contribute to a business's existence because they affect and are affected by a company (Freeman et al., 2010, p. 9). The extant literature suggests that organizations

must work actively with stakeholders to achieve success (Mathur et al., 2008). The power/interest grid indicates how influential some stakeholders can be and why businesses cannot ignore even the weakest of their stakeholders. The fact is that businesses must include relevant stakeholders in all major decisions if they are to be successful.

Beyond the role of stakeholders in the business environment, Hörisch et al. (2014) argue a direct connection between sustainability and stakeholder theory based on Pedersen et al. (2013). They assert that both concepts expand businesses' focus, ensuring that all relevant stakeholders and their economic, social, and environmental interests are catered for. Additionally, sustainability is described as a multi-stakeholder concept (Waligo et al., 2013), meaning that its success revolves around stakeholder participation and acceptance. Businesses must hence work with their stakeholders to realize their sustainability goals.

Considering that value propositions provide opportunities for businesses to work with their stakeholders through co-creation (Morioka et al., 2016; Owusu Yeboah et al., 2020; Ranjan & Read, 2016), they can introduce sustainable value propositions to their stakeholders and work with them, drawing ideas from them so that they achieve sustainable outcomes. This approach makes it easier to solicit the support of stakeholders in implementing their sustainability goals. The introduction of sustainable value propositions can be in product and service innovations and processes with sustainable benefits for a firm and its stakeholders.

In discussing stakeholder orientation (involvement), Yau et al. (2007) explore four groups of stakeholders. These groups are customers, competitors, employees, and shareholders (Greenley et al., 2004; Kotter & Heskett, 1992). From previous literature, these are the principal groups of stakeholders who have the most significant impact on the performance of firms. Regarding customer orientation, Jaworski and Kohli (1993) highlight the critical role of customers and encourage firms to try and appreciate customers' needs and wants so that firms can satisfy this group of stakeholders. Considering that competitors are in a rival relationship with firms, firms must benchmark competitors' performance (Armstrong & Collopy,

1996) and proceed to predict, monitor, understand, and counter their activities (Yau et al., 2007). Samuels et al. (1990) emphasize that shareholders' interests must be accommodated; this is done by maximizing their wealth. Finally, Freeman et al. (2010) insist that firms should invest in their employees because of their vital role in their growth and development. According to them, neglecting employees has negative implications for the business. The discussion highlights the role of stakeholder orientation on value propositions. The same arguments can be extended to sustainable value propositions.

The second strategy for attaining sustainable value propositions involves implementing flexible decision-making. Decision-making is a vital organizational function. It is a process that enables an organization to select the "most appropriate" option from a set of options that may be available to it (Eisenfuhr, 2011). It is important to note that firms (organizations) must make decisions that cover all business functions, including marketing, economic (financial), operations (productions), and human resources. According to Lunenburg (2010), the optimal goal of the decision-making process or any organizational decision-making model is to satisfy the firm's interest, so it may be safe to conclude that organizations survive on effective decisions.

Existing firms usually have developed policies and programs that guide their course of action. In all their functional areas, they operate based on existing processes and goals they have held onto and have perfected for as long as the firm has existed. These are prized because most of these have immensely contributed to the firm's growth and development (Balmer & Burghausen, 2015). Besides, they have become part of the organization's memory and cannot be easily discarded. However, most of these are geared toward the traditional goal of maximizing shareholders' value despite any negative long-term effect on other stakeholders. These are the goals that modern management practices are challenging. The current argument is sustainability, a concept that aims to create value for different stakeholders the business organization deals with. Since this idea is still new to most firms, firms should implement flexible decision-making models (Mangla et al., 2014; Mangla et al., 2013) by

creating sustainable options for their traditional goals to gradually incorporate sustainability into their activities. By this, they should identify each of their organizational activities and practices and provide options that would produce similar outcomes yet produce social and economic benefits for their stakeholders. Moore and Manring (2009) explain that firms should offer more sustainable solutions for their activities.

Firms' value propositions can help them to enhance their sustainability performance. They can strategically develop and implement policies and programs to ensure that all three sustainability goals are reflected and achieved. Since the firm's value proposition speaks to the core of its existence by communicating to stakeholders what they should expect from the firm, it can be a channel by which they can establish their commitment to sustainability. This suggestion makes it easier for firms to incorporate sustainability measures into the firm without overwhelming them. It has been suggested that firms are unable to implement sustainability goals because they lack the requisite skills (Lee et al., 2021). The availability of those options puts organizations in a "sustainability-ready" mode, ensuring that when the opportunity is ripe, they can contribute to sustainability. Additionally, readily available possibilities motivate them to try some of the options they have invested resources into developing.

The final approach to introducing sustainability value propositions emphasizes social and environmental values as equally important as economic values. Some arguments suggest that social and environmental goals are prominent values that firms should strive to achieve. These include protecting the environment and the people (internal or external) who are associated with the business (Manninen et al., 2018). In this direction, Kristensen and Remmen (2019) report that limiting all values to money is neither possible nor desirable. Instead, business organizations should identify strategies to create additional values other than money for themselves and their stakeholders. This shift can encourage businesses to plan for these other values when making value proposition decisions. Bocken et al. (2014) identify several ways entrepreneurs can approach this. They include using fewer resources, using waste as inputs,

identifying newer sources of inputs in non-renewable resources, enhancing functionality, influencing consumer behavior, and providing outputs that directly benefit society and the environment. In considering social and environmental values, it is imperative to contemplate the role of employees in this respect. Liu et al. (2010) assert that when employees participate in cause-related marketing strategies, which are mainly social and environmental, it yields positive outcomes. However, there is a research gap in the extent to which emphasizing social and environmental goals influence employee orientation.

Considering the ensuing discussion, the existing literature indicates that each of the three strategies plays a vital role in developing sustainable value propositions. It is, therefore, necessary to empirically study the relationships among the variables.

This paper contributes to the sustainable value propositions literature by (1) discussing three strategies firms can use to build sustainable value propositions and (2) using quantitative methods to explore the impact of the three strategies on sustainable value propositions. First, the study conceptualizes and summarizes the literature review in Figure 1, where stakeholder involvement, flexible decision-making, and socio-environmental values all directly impact sustainable value propositions. The framework also shows a possible relationship between flexible decision-making, employee orientation, and socio-environmental values and employee orientation.

Therefore, the study hypothesizes that:

*H1: Customer orientation positively influences sustainable value propositions.*

*H2: Competitor orientation positively influences sustainable value propositions.*

*H3: Shareholder orientation positively influences sustainable value propositions.*

*H4: Employee orientation positively influences sustainable value propositions.*

*H5: Flexible decision-making positively influences employee orientation.*

Source: Authors' elaboration.

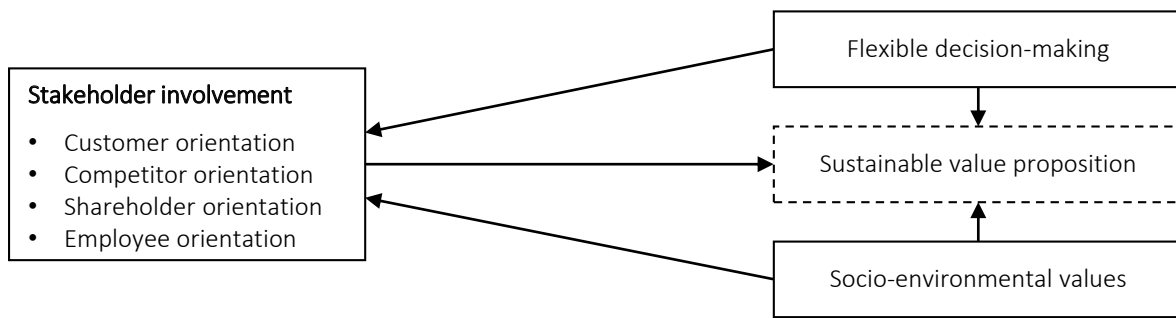


Figure 1. Conceptual model

- H6: Flexible decision-making positively influences sustainable value propositions.
- H7: Social and environmental goals positively influence employee orientation.
- H8: Social and environmental goals positively influence sustainable value propositions.

## 2. METHODOLOGY

The study employed a non-randomized sampling technique, precisely the purposive sampling method. This sampling method is considered when subjects for the sample are picked by the judgment of the researcher. Since the study was about using value propositions as opportunities for implementing sustainability strategies among SMEs in Ghana, it was imperative to consider the 'vulnerable' institutions categorized as SMEs. The study argues that it is possible to obtain a representative sample through sound judgment, which saves time and money (Al Buraiki & Rahman Khan, 2018; Black, 2019; Etikan et al., 2016). The instruments were provided to the respondents in both hard and soft copy formats.

The instrument was delivered to only owners and managers of the selected SMEs, which included firms in industries such as service, agriculture, manufacturing, construction, and trading in the coastal areas of Ghana. Before the main data collection, targeted firms and owners were pre-informed about the intended study through phone calls, email messages, WhatsApp, Facebook, and LinkedIn messages. The study also reiterates

that, prior to the actual data collection, a pre-test involving 20 owners and managers of SMEs was undertaken to prune the variables and constructs under study. This contributed to confirming the reliability and validity of the constructs using Cronbach's alpha values.

The data collection yielded 143 valid responses representing 88% of the total 162 responses that were initially gathered. 143 responses were deemed appropriate as the remaining had issues with incomplete responses. Table 1 shows the characteristics of the respondents involved in the study. The responses received were analyzed using PLS-SEM (partial least squares and structural equation modeling) technique with the help of the ADANCO software version (Henseler, 2017). However, the descriptive statistics were achieved using the SPSS software.

Table 1. Socio-demographic profile of respondents

Source: Authors' field data from Ghana.

Details		Frequency	Percent (%)
Gender	Female	71	49.7
	Male	72	50.3
Age	Below 20 years	1	.7
	20-25 years	28	19.6
	26-30 years	41	28.7
	31-35 years	24	16.8
	36-40 years	22	15.4
	Above 40 years	27	18.9
Educational level	Diploma/cert.	33	23.1
	Bachelor's degree	87	60.8
	Postgraduate	23	16.1
Position in the organization	Owner/Manager	73	51.0
	Manager	70	49.0
Managerial level, if any	Senior	31	21.7
	Middle	57	39.9
	Lower	34	23.8

**Table 1 (cont.).** Socio-demographic profile of respondents

Details		Frequency	Percent (%)
Category of SME	Micro (1-5 employees)	75	52.4
	Small (6-30 employees)	57	39.9
	Medium (31-100 employees)	11	7.7
Nature of business	Service	35	24.5
	Agriculture	24	16.8
	Manufacturing	26	18.2
	Construction	18	12.6
How old is the business?	Trading	40	28.0
	0-5years	56	39.2
	6-10years	59	41.3
	11-15years	23	16.1
	Above 20 years	5	3.5
Sample size (n)		143	100

### 3. RESULTS

The data for the work were collected from SMEs in Ghana. These firms operate in the service, agriculture, manufacturing, construction, and trading industries. To achieve the aims of the study, only owner-managers and managers were part of the respondents. The result shows that 143 SMEs obliged the request by “fully and accurately” responding to the instrument. From this, 49.7% and 50.3% represented women and men, respectively, with just about 19% being over the age of 40 years. This indicates that most of the respondents are youthful and quite educated, with a minimum of a diploma or a certificate.

The research constructs were developed from relevant literature. The study comprised four research constructs. In addition, there were three independent constructs (stakeholder involvement, flexible decision-making, and social and environmental values) and one dependent construct (sustainable value propositions). The items and their sources are provided in Table 3. A seven-point Likert scale was used to measure the responses, with 1 indicating “completely disagree” and 7 indicating “completely agree.” This was because it is easier and takes respondents less time to fill out than open-ended items (Leung, 2011). Besides, it was helpful for the purpose of the study. The items for the construct “flexible decision-making” were newly developed for the study through an extensive literature search (Alacreu-Crespo et al., 2019; Mangla et al., 2014).

The study examined the presence of CMB (common method bias) by using the suggested approach by Bagozzi and Yi (1988). Here, the items for the construct were cautiously developed. The questionnaire also informed the respondents that they would be treated with the utmost confidentiality. Additionally, the instrument was designed to ensure that respondents were anonymous. Respondents also had the option to leave the analysis at any time. To further enhance the investigation, the data were subjected to a full multicollinearity test; specifically, VIF (variance inflation factor), to ascertain common method variance (CMV). These analyses proved that CMV was not an issue since the VIFs were less than ten, which is the threshold figure (Kock & Hadaya, 2018). The results show that concerns about CMB are minimal (Table 3).

Two basic tests for measurement assessment in quantitative research, i.e., tests of reliability and validity, were performed. This is recommended by most experts (Jakada et al., 2020; Shiau et al., 2019). Appendix A, Figure A1, displays the results of tests of measures’ internal consistency and reliability. The  $\alpha$ -values (Cronbach’s alpha) for all the constructs were above 0.7, indicating that all the constructs met the minimum threshold of the reliability test. At the same time, the composite reliability of the latent constructs using Dijkstra-Henseler’s rho ( $\rho_A$ ) and Jöreskog’s rho ( $\rho_C$ ) was above 0.7 (Dijkstra & Henseler, 2015; Hair Jr et al., 2020). The average variance extracted (AVE) from the correlated constructs was also above the cut-off value of 0.5 (Table 2). The Kaiser-Meyer-Olkin (KMO) for sampling adequacy was used to assess the factor loadings’ suitability. The results show that it met the required threshold of more than 0.5. The KMO result for this study is 0.89, which is considered optimal for further analysis. Additionally, Bartlett’s test showed a significance level of 0.000, which is below 0.05 (p-value). Customers (with a loading of 0.457) were dropped from the study as the loadings were below the 0.50 threshold.

Additionally, the results from factor analysis showed that all the factor loadings were greater than 0.50 and each loaded strongly on the associated factors, confirming a successful convergent and discriminant validity (Bagozzi & Yi, 1988;

**Table 2.** Construct reliability

Source: Author's analyses from ADANCO 2.2.1 software.

Construct	Dijkstra-Henseler's rho ( $\rho_A$ )	Jöreskog's rho ( $\rho_c$ )	Cronbach's alpha( $\alpha$ )	Average variance extracted (AVE)
Customer orientation	0.8700	0.8932	0.8491	0.6294
Competitor orientation	0.8235	0.8771	0.8137	0.6412
Shareholder orientation	0.8839	0.9184	0.8815	0.7379
Employee orientation	0.8347	0.8866	0.8294	0.6619
Flexible decision-making	0.7530	0.8532	0.7430	0.6599
Social and environmental goals	0.8824	0.9100	0.8766	0.6694
Sustainable value proposition	0.9537	0.9587	0.9520	0.6994

Note: Kaiser-Meyer-Olkin Measure of Sampling Adequacy  $\rightarrow$  0.884. Bartlett's Test of Sphericity Approx. Chi-Square = 6116.517. df = 528. Sig. = .000.

Kwarteng et al., 2021). Hence, no item of the corresponding construct was dropped (Table 3).

Table 4 shows the test of discriminant validity. The pioneer criterion (Fornell & Larcker, 1981) was used in this study to assess the presence of discriminant validity among the latent variables, as Henseler et al. (2015) suggested. This

criterion suggests that for a construct to be discriminant, the AVE of any two given latent constructs must be greater than 0.5. (Henseler et al., 2015; Khan et al., 2019). The results obtained from Fornell-Larcker's criterion of discriminant validity reveal that both basic and stringent assumptions of the constructs were established. Hence, from the estimates obtained, discrimi-

**Table 3.** Constructs, indicators, loadings, and variance inflation factor

Source: Authors' analyses from ADANCO 2.2.1 software.

Construct	Indicator	Loading	VIFs
<b>Stakeholder involvement (Yau et al., 2007)</b>			
Customer orientation	CUST1: Competitive strategies are based on understanding customer needs.	0.5914	1.3703
	CUST2: Customer satisfaction is systematically and frequently assessed.	0.8623	2.5789
	CUST3: Our commitment to serving customer needs is closely monitored.	0.8363	2.1183
	CUST4: Close attention is given to after-sale service.	0.8347	2.1826
	CUST5: Our objectives and strategies are driven by creating customer satisfaction.	0.8110	1.9773
Competitor orientation	COMP1: Salespeople share information about competitors.	0.7627	1.5804
	COMP2: Top management regularly discusses competitors' strengths and weaknesses.	0.8463	1.9229
	COMP3: We achieve rapid response to competitive action.	0.7810	1.6901
	COMP4: Customers are targeted when we have an opportunity for competitive advantage.	0.8105	1.6330
Shareholder orientation	SHOR1: Our objectives are driven by creating shareholder wealth.	0.8534	2.3740
	SHOR2: Senior managers have regular meetings with shareholders.	0.8938	2.9185
	SHOR3: We regularly compare our share value to that of our competitors.	0.8356	2.2005
	SHOR4: Designated managers have the responsibility of satisfying shareholders' interests.	0.8523	2.3676
Employee orientation	EMPOR1: We have regular staff appraisals in which we discuss employees' needs.	0.8567	2.1703
	EMPOR2: We have regular staff meetings with employees.	0.7897	1.7758
	EMPOR3: As a manager, I try to find out the true feelings of my staff about their jobs.	0.8276	1.8456
	EMPOR4: We survey staff at least once a year to assess their attitudes toward their work.	0.7778	1.8473
Flexible decision-making	FDM1: I believe that selecting the most preferred course of action by a large number of employees is best for the organization's progress.	0.8234	1.5739
	FDM2: I believe that the quality of views expressed by customers and individuals at all levels is best for achieving a sustainable value proposition.	0.7688	1.3909
	FDM3: I believe that the value of products must reflect the price the customers are willing to pay.	0.8431	1.5170
Social and environmental goals (Calik & Bardunee, 2016; Hojnik et al., 2020)	SEG1: I perceive that firms that emphasize social goals provide better customer service.	0.7877	2.2391
	SEG2: I perceive that firms interested in social issues interact better with their customers.	0.8393	2.7657
	SEG3: I believe that firms concerned with environmental issues produce less waste.	0.8083	2.3835
	SEG4: I believe that firms concerned about environmental values create fewer emissions and pollution.	0.8578	2.4087
	SEG5: I think firms concerned about environmental issues use fewer resources.	0.7956	1.8641



**Table 3 (cont.).** Constructs, indicators, loadings, and variance inflation factor

Construct	Indicator	Loading	VIFs
<b>Stakeholder involvement (Yau et al., 2007)</b>			
Sustainable value propositions (Clauss, 2017)	SVP1: Our product innovations are in line with sustainability goals.	0.7628	2.3638
	SVP2: We address new unmet customer needs from a sustainability perspective.	0.8738	3.6737
	SVP3: Our products regularly solve customer needs and contribute to sustainability goals.	0.7884	2.5014
	SVP4: We regularly take advantage of opportunities that arise in new or growing markets, contributing to sustainability goals.	0.8044	2.8627
	SVP5: We regularly address new, unserved markets that can contribute to sustainability goals.	0.8783	2.9043
	SVP6: We constantly seek new customer segments and markets for our sustainable products and services.	0.8742	2.3483
	SVP7: We try to increase customer retention by offering sustainable products.	0.8322	2.7353
	SVP8: We emphasize sustainability to increase customer retention.	0.8429	3.0780
	SVP9: We regularly utilize new distribution channels that support sustainability.	0.8687	3.5575
	SVP10: We constantly modify our distribution channels with sustainability in mind.	0.8288	2.9209

**Table 4.** Test of discriminant validity (Fornell-Larcker criterion)

Source: Author's analyses from ADANCO 2.2.1 software.

S/n	Construct	1	2	3	4	5	6	7
1	Customer orientation	<b>0.6294</b>						
2	Competitor orientation	0.5692	<b>0.6852</b>					
3	Shareholder orientation	0.5349	0.6412	<b>0.7379</b>				
4	Employee orientation	0.5774	0.5313	0.5037	<b>0.6619</b>			
5	Flexible decision-making	0.4979	0.4684	0.3189	0.5044	<b>0.6599</b>		
6	Social and environmental goals	0.2840	0.2676	0.2750	0.3084	0.2688	<b>0.6694</b>	
7	Sustainable value proposition	0.5015	0.6095	0.5040	0.6229	0.5276	0.3422	<b>0.6994</b>

Note: NB: Squared correlations; AVE is in the diagonal in bold.

nant validity was achieved (see the diagonal in bold).

After the model assessment, the structural model was also examined. This involved testing the hypothetical relationships among the constructs (Hair Jr et al., 2020). This was done using the regression coefficients ( $\beta$ ) and the significant values T-values > 1.96 (or P-values < 0.05) of the research constructs. In all, eight hypotheses were tested (H1-H8). Table 5 summarises the hypothetical paths (relationships) in which six hypotheses were significant while the remaining two were not.

The analyses also showed the coefficient of determination –  $R^2$  (predictive power) of the research model (particularly the endogenous and the dependent variable). The coefficients indicate the percentage of variation in the dependent variable, as explained by the independent variable. For example, the outcome variable (sustainable value proposition) was explained by the predictive variables with 78 percent. In contrast, the endogenous variable (employee orientation) was explained by 55 percent by the exogenous variables (flexible decision-making and social and environmental goals) (Table 5 and Table 6).

**Table 5.** Analysis of hypothetical paths

Source: Authors' analyses from ADANCO 2.2.1 software.

Effect	Regression coefficient (beta)	Standard bootstrap results				
		Mean value	SD	t-value	p-value (2-sided)	Decision
H1: Customer orientation → Sustainable value proposition	0.3976	0.3914	0.0969	4.1029	0.0000	Supported
H2: Competitor orientation → Sustainable value proposition	0.2432	0.2500	0.1141	2.1309	0.0333	Supported
H3: Shareholder orientation → Sustainable value proposition	-0.0125	-0.0111	0.0934	-0.1341	0.8934	Not supported
H4: Employee orientation → Sustainable value proposition	0.1412	0.1428	0.0781	1.8075	0.0710	Not supported
H5: Flexible decision-making → Employee orientation	0.5775	0.5747	0.0732	7.8858	0.0000	Supported
H6: Flexible decision-making → Sustainable value proposition	0.2117	0.2105	0.0874	2.4208	0.0157	Supported
H7: Social and Environmental goal → Employee orientation	0.2560	0.2599	0.0804	3.1833	0.0015	Supported
H8: Social and Environmental goal → Sustainable value proposition	0.1441	0.1415	0.0600	2.4004	0.0166	Supported

**Table 6.** Predictive power of the model

Construct	Coefficient of determination (R <sup>2</sup> )	Adjusted R <sup>2</sup>
Employee orientation	0.5523	0.5458
Sustainable value orientation	0.7832	0.7734

## 4. DISCUSSION

The findings indicate that two sub-dimensions of stakeholder involvement (customer orientation and competitor orientation) positively influenced sustainable value positions, thereby resulting in accepting H1 and H2. This outcome supports Morioka et al. (2016), Owusu Yeboah et al. (2020), and Ranjan and Read (2016), who highlighted the vital role of stakeholders and particularly mentioned customers in attaining sustainability. However, the other two dimensions (employee orientation and shareholder orientation) did not influence sustainable value propositions. Therefore, H3 and H4 were not accepted in the current study.

The study further shows that flexible decision-making influences employee orientation and sustainable value propositions; therefore, H5 and H6 are accepted. The findings support the position that decision-making is vital for firms' growth (Balmer & Burghausen, 2015; Eisenfuhr, 2011; Lunenburg, 2010). However, flexible decision-making models (Mangla et al., 2014; Mangla et al., 2103) are effective when dealing with sustainable value propositions. Finally, the assertions that emphasizing social and environmental goals positively influences employee orientations and also sustainable value propositions were also supported in the study resulting in accepting H7 and H8. These results support Bocken et al. (2014), Kristensen and Remmen (2019), and Manninen et al. (2018).

An interesting outcome of the work is the demographic background of SMEs, managers, and owner-managers. It shows that most of the managers and owner-managers are youthful and educated. The findings support Johnstone and Lindh (2018), who showed that youthful people highly support sustainability efforts. This finding indicates that age and level of education are relevant factors when discussing sustainability issues. Since sustainability is a trending issue, educated and youthful people are more likely to be interested in it. However, the findings go contrary to Wiernik et al. (2013) that older people are inclined to sup-

port sustainability goals. The second demographic issue of interest is the age of businesses and how it may affect their interest in sustainability goals. The study involved businesses with ages ranging from 0 to above 20 years. The majority of the firms were above 5 years old, which shows that they are well-established and have probably survived the major teething challenges of SMEs and can contribute to sustainability. This outcome is similar to Adomako et al. (2019), who reported that older firms are more likely to undertake sustainability activities.

This paper introduced a composite model that has been shown to influence sustainable value propositions. This provides a basis for other researchers interested in sustainable value propositions and sustainability in general when conducting future research. This is relevant because it provides empirical evidence for their propositions instead of relying on conceptual studies or arguments. Additionally, the current study offers a gap from the result that shareholder and employee orientations did not support sustainable value propositions. These outcomes could have been because employees and investors may need more time to prepare for this strategic move. For example, employees may feel inadequate for such a task. In addition, investors may not be ready to sacrifice their investments for sustainability, which is viewed as an expense. Whatever the situation is, it is necessary for researchers in this field to investigate this in different settings so that a plausible explanation can be assigned to this phenomenon. It will be exciting since the two sub-dimensions belong to the same variable, which may help to better develop and strengthen it.

Furthermore, the study introduces a scale for flexible decision-making. This attempt is based on an extensive literature review of the concept. This outcome will assist other researchers in incorporating the concept into their studies, even in other business or management specializations. It will also trigger studies that will fine-tune it to be useful in other studies and contexts. These expectations,

if realized, will result in better development of the concept for extensive use.

This novel study explores the effect of stakeholder orientation, flexible decision-making, and social and environmental goals on sustainable value propositions in a developing economy. As with all new studies, the model must be further tested to ascertain its validity. Furthermore, although this is an empirical study, much of the theoretical arguments are conceptual. Therefore, the outcome of this study must be applied with some caution until several other studies have validated the model. Nevertheless, this presents a research opportunity in sustainability so that additional contributions can be made to the existing sustainability literature.

The study is also limited by its setting; it was conducted among SMEs in a developing economy. The reality is that the outcome of this paper may

not readily apply to other forms of businesses like large-scale enterprises, multi-national firms, and not-for-profit firms. Their unique goals and structure may require examining other ways of developing sustainable value propositions. Even SMEs in other business environments may want to consider socio-cultural, economic, and legal factors that confront their activities, as these may differ from those that affect the firms in the study. Next, researchers can attempt to apply the model or some variations of it in other settings, for example, in developed economies and other forms of businesses, to falsify the current paper's hypotheses.

Finally, the sample size presents some limitations. Even though it is sufficient for a study of this nature, a larger size is preferable so that the findings can easily be generalized to the population. In addition, researchers can replicate this study with larger sample sizes to validate the model.

---

## CONCLUSION

The goal of this study was to explore how firms could develop sustainable value propositions. To do this, the paper discussed three strategies that firms can use in building sustainable value propositions and followed them with quantitative methods to assess the impact on sustainable value propositions. To achieve this, data were collected from 143 managers and owner-managers in Ghana on the following aspects: stakeholder involvement, flexible decision-making, and emphasis on social and environmental goals. The result of the study indicates that except for shareholder orientation and employee orientation, which are sub-dimensions of stakeholder involvement, all the factors, including the two other sub-dimensions of stakeholder orientation (competitor orientation and customer orientation), affected sustainable value propositions.

From this study, SMEs have become aware of additional strategies that they can invest in to enhance their sustainable value propositions. Concerning stakeholder orientation, they can focus on meeting the interests and desires of customers. When this is effectively done, their customers may support and contribute to their efforts in developing sustainable value propositions. Additionally, they must carefully monitor and respond to their competitors' strategies, especially those relating to sustainability, to guide them in developing sustainable value propositions. Furthermore, SMEs can consider implementing flexible decision-making strategies by decentralizing their decisions so that more employees can contribute to creative ways by which they can design sustainable value propositions. They may also want to create sustainable alternatives so that they can quickly implement those options when the opportunity arises. Finally, SMEs must focus on social and environmental goals instead of limiting their efforts to purely economic considerations. Doing this allows them to develop value propositions that have sustainable outcomes. Even though the paper suggested that employees and shareholders are likely to reject sustainable value propositions, firms must continue to engage and encourage employees and investors to appreciate the need to pursue sustainable value propositions.

Finally, policymakers can target older firms and encourage them to engage in sustainability projects. Specifically, it is crucial to provide tax incentives, technical assistance and training, and regulatory policies aimed at protecting the firms so they will be motivated to develop sustainable value propositions.

## AUTHOR CONTRIBUTIONS

Conceptualization: Adwoa Yeboaa Owusu Yeboah.  
 Data curation: Abdul Bashiru Jibril.  
 Formal analysis: Adwoa Yeboaa Owusu Yeboah, Abdul Bashiru Jibril.  
 Funding acquisition: Adwoa Yeboaa Owusu Yeboah, Petr Novak.  
 Investigation: Adwoa Yeboaa Owusu Yeboah, Abdul Bashiru Jibril.  
 Methodology: Abdul Bashiru Jibril.  
 Project administration: Adwoa Yeboaa Owusu Yeboah, Petr Novak.  
 Resources: Adwoa Yeboaa Owusu Yeboah, Petr Novak.  
 Software: Abdul Bashiru Jibril.  
 Supervision: Petr Novak.  
 Validation: Adwoa Yeboaa Owusu Yeboah, Petr Novak.  
 Visualization: Adwoa Yeboaa Owusu Yeboah, Abdul Bashiru Jibril.  
 Writing – original draft: Adwoa Yeboaa Owusu Yeboah, Abdul Bashiru Jibril.  
 Writing – review & editing: Adwoa Yeboaa Owusu Yeboah.

## ACKNOWLEDGMENT

This paper was supported by IGA/FaME/2021/004: SME Innovation Performance, Firm Sustainability performance and Influence of Pandemic on Entrepreneurial wellbeing.

## REFERENCES

- Adomako, S., Amankwah-Amoah, J., Danso, A., Konadu, R., & Owusu-Agyei, S. (2019). Environmental sustainability orientation and performance of family and nonfamily firms. *Business Strategy and the Environment*, 28(6), 1250-1259. <https://doi.org/10.1002/bse.2314>
- Al Buraiki, M. A., & Rahman Khan, D. M. F. (2018). Finance and Technology: Key Challenges Faced By Small and Medium Enterprises (SMEs) in Oman. *International Journal of Management, Innovation & Entrepreneurial Research*, 4(2), 01-12. <https://doi.org/10.18510/ijmier.2018.421>
- Alacreu-Crespo, A., Fuentes, M. C., Abad-Tortosa, D., Cano-Lopez, I., González, E., & Serrano, M. Á. (2019). Spanish validation of General Decision-Making Style scale: Sex invariance, sex differences and relationships with personality and coping styles. *Judgment and Decision Making*, 14(6), 739-751. Retrieved from <https://ideas.repec.org/a/jdm/journal/v14y2019i6p739-751.html>
- Antonopoulou, K., & Begkos, C. (2020). Strategizing for digital innovations: Value propositions for transcending market boundaries. *Technological Forecasting and Social Change*, 156, 120042. <https://doi.org/10.1016/j.techfore.2020.120042>
- Armstrong, J. S., & Collopy, F. (1996). Competitor orientation: Effects of objectives and information on managerial decisions and profitability. *Journal of marketing research*, 33(2), 188-199. <http://dx.doi.org/10.2307/3152146>
- Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16(1), 74-94. <https://doi.org/10.1007/BF02723327>
- Baldassarre, B., Calabretta, G., Bocken, N. M. P., & Jaskiewicz, T. (2017). Bridging sustainable business model innovation and user-driven innovation: A process for sustainable value proposition design. *Journal of cleaner production*, 147, 175-186. <https://doi.org/10.1016/j.jclepro.2017.01.081>
- Balmer, J., & Burghausen, M. (2015). Introducing organisational heritage: Linking corporate heritage, organisational identity and organisational memory. *Journal of Brand Management*, 22, 385-411. <https://doi.org/10.1057/bm.2015.25>
- Barbosa, M., Castañeda -Ayarza, J. A., & Lombardo Ferreira, D. H. (2020). Sustainable Strategic Management (GES): Sustainability in small business. *Journal of Cleaner Production*, 258, 120880. <https://doi.org/10.1016/j.jclepro.2020.120880>
- Black, K. (2019). *Business statistics: for contemporary decision making*. John Wiley & Sons.
- Boachie-Mensah, F. O., & Owusu Yeboah, A. Y. (2015). Environmental dimensions of corporate social responsibility and brand equity. *European Journal of Applied Business Management*, 1(2), 17.
- Bocken, N. M. P., Short, S. W., Rana, P., & Evans, S. (2014). A

- literature and practice review to develop sustainable business model archetypes. *Journal of Cleaner Production*, 65, 42-56. <https://doi.org/10.1016/j.jclepro.2013.11.039>
13. Brundtland, G. H. (1987). Brundtland report. Our common future. *Comissão Mundial*, 4(1), 17-25.
  14. Calik, E., & Bardudeen, F. (2016). A Measurement Scale to Evaluate Sustainable Innovation Performance in Manufacturing Organizations. *Procedia CIRP*, 40, 449-454. <https://doi.org/10.1016/j.procir.2016.01.091>
  15. Chan, H., He, H., & Wang, W. (2012). Green marketing and its impact on supply chain management in industrial markets. *Industrial Marketing Management*, 41(4), 557-562. <https://doi.org/10.1016/j.indmarman.2012.04.002>
  16. Chandler, J. D., & Lusch, R. F. (2015). Service Systems: A Broadened Framework and Research Agenda on Value Propositions, Engagement, and Service Experience. *Journal of Service Research*, 18(1), 6-22. <https://doi.org/10.1177/1094670514537709>
  17. Clauss, T. (2017). Measuring business model innovation: conceptualization, scale development, and proof of performance. *R&D Management*, 47(3), 385-403. <https://doi.org/10.1111/radm.12186>
  18. Cohen, B., & Winn, M. I. (2007). Market imperfections, opportunity and sustainable entrepreneurship. *Journal of business venturing*, 22(1), 29-49. <https://doi.org/10.1016/j.jbusvent.2004.12.001>
  19. Dijkstra, T. K., & Henseler, J. (2015). Consistent partial least squares path modeling. *MIS Quarterly*, 39(2), 297-316. <http://dx.doi.org/10.25300/MISQ/2015/39.2.02>
  20. Egui, E., Kuo, P. C., Mba, P. S., Nelson, M., Aranha, G. V., Abood, G., Godellas, C. V., & Baker, M. S. (2019). The laparoscopic approach to distal pancreatectomy is a value-added proposition for patients undergoing care in moderate-volume and high-volume centers. *Surgery*, 166(2), 166-171. <https://doi.org/10.1016%2Fj.surg.2019.04.019>
  21. Eisenfuhr, F. (2011). *Decision making*. New York, NY: Springer.
  22. Elkington, J. (1998). Partnerships from cannibals with forks: The triple bottom line of 21st-century business. *Environmental quality management*, 8(1), 37-51. <https://doi.org/10.1002/tqem.3310080106>
  23. Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1-4. <http://dx.doi.org/10.11648/j.ajtas.20160501.11>
  24. Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of Marketing Research*, 18(3), 382-388. <https://doi.org/10.2307/3150980>
  25. Freeman, R. E., Harrison, J. S., Wicks, A. C., Parmar, B. L., & de Colle, S. (2010). *Stakeholder theory: The state of the art*. New York, NY: Cambridge University Press.
  26. Frow, P., & Payne, A. (2011). A stakeholder perspective of the value proposition concept. *European journal of marketing*, 45(1/2), 223-240. <https://doi.org/10.1108/03090561111095676>
  27. Gilles, N., & Christine, L. C. (2016). The Sustainable value proposition of PSSs: the case of ECOBEL "Shower head". *Procedia CIRP*, 47, 12-17. <https://doi.org/10.1016/j.procir.2016.03.043>
  28. Greenley, G. E., Hooley, G. J., Broderick, A. J., & Rudd, J. M. (2004). Strategic planning differences among different multiple stakeholder orientation profiles. *Journal of Strategic Marketing*, 12(3), 163-182. <https://doi.org/10.1080/0965254042000262887>
  29. Grönroos, C., & Ravald, A. (2011). Service as business logic: Implications for value creation and marketing. *Journal of Service Management*, 22(1), 5-22. <https://doi.org/10.1108/09564231111106893>
  30. Hair Jr, J. F., Howard, M. C., & Nitzl, C. (2020). Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. *Journal of Business Research*, 109, 101-110. <https://doi.org/10.1016/j.jbusres.2019.11.069>
  31. Henseler, J. (2017). *Adanco 2.0. I-User manual*. Kleve: Composite Modeling GmbH & Co.
  32. Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115-135. <https://doi.org/10.1007/s11747-014-0403-8>
  33. Hojnik, J., Biloslavo, R., Cicero, L., & Cagnina, M. R. (2020). Sustainability indicators for the yachting industry: Empirical conceptualization. *Journal of Cleaner Production*, 249, 119368. <https://doi.org/10.1016/j.jclepro.2019.119368>
  34. Hörisch, J., Freeman, R. E., & Schaltegger, S. (2014). Applying Stakeholder Theory in Sustainability Management: Links, Similarities, Dissimilarities, and a Conceptual Framework. *Organization & Environment*, 27(4), 328-346. <https://doi.org/10.1177/1086026614535786>
  35. Jakada, M. B., Kassim, S. I., Hussaini, A., Mohammed, A. I., & Rabi'u, A. (2020). Construct validity and reliability of individual work performance questionnaire. *Ilorin Journal of Human Resource Management*, 4(2), 155-164.
  36. Jaworski, B. J., & Kohli, A. K. (1993). Market orientation: antecedents and consequences. *Journal of marketing*, 57(3), 53-70. <https://doi.org/10.2307/1251854>
  37. Johnstone, L., & Lindh, C. (2018). The sustainability-age dilemma: A theory of (un)

- planned behaviour via influencers. *Journal of consumer behaviour*, 17(1), e127-e139. <https://doi.org/10.1002/cb.1693>
38. Jumbam, D. T., Reddy, C. L., Makasa, E., Boatin, A. A., Rogo, K., Chu, K. M., Nangombe, B., Oladapo, O. T., Meara, J. G., & Maswime, S. (2020). Investing in surgery: A value proposition for African leaders. *The Lancet*, 396(10243), 7-9. [https://doi.org/10.1016/S0140-6736\(20\)30482-7](https://doi.org/10.1016/S0140-6736(20)30482-7)
  39. Khan, G. F., Sarstedt, M., Shiau, W.-L., Hair, J. F., Ringle, C. M., & Fritze, M. P. (2019). Methodological research on partial least squares structural equation modeling (PLS-SEM). *Internet Research*.
  40. Kock, N., & Hadaya, P. (2018). Minimum sample size estimation in PLS-SEM: The inverse square root and gamma-exponential methods. *Information Systems Journal*, 28(1), 227-261. <https://doi.org/10.1111/isj.12131>
  41. Kotter, J. P., & Heskett, J. L. (1992). *Corporate Culture and Performance*. New York: Free Press.
  42. Kristensen, H. S., & Remmen, A. (2019). A framework for sustainable value propositions in product-service systems. *Journal of Cleaner Production*, 223, 25-35. <https://doi.org/10.1016/j.jclepro.2019.03.074>
  43. Kwarteng, M. A., Jibril, A. B., Nwaiwu, F., Pilik, M., & Chovancova, M. (2021). The prospects of Internet-Based Channel Orientation for the competitiveness of service companies on the domestic market. *International Journal of Information Management*, 58, 102223. <https://doi.org/10.1016/j.ijinfomgt.2020.102223>
  44. Lee, C. M. J., Che-Ha, N., & Syed Alwi, S. F. (2021). Service customer orientation and social sustainability: The case of small medium enterprises. *Journal of Business Research*, 122, 751-760. <https://doi.org/10.1016/j.jbusres.2019.12.048>
  45. Leung, S.-O. (2011). A comparison of psychometric properties and normality in 4-, 5-, 6-, and 11-point Likert scales. *Journal of Social Service Research*, 37(4), 412-421. <https://doi.org/10.1080/01488376.2011.580697>
  46. Liu, G., Liston-Heyes, C., & Ko, W. W. (2010). Employee participation in cause-related marketing strategies: A study of management perceptions from British consumer service industries. *Journal of Business Ethics*, 92(2), 195-210. <https://doi.org/10.1007/s10551-009-0148-3>
  47. Lunenburg, F. C. (2010). The decision-making process. *National Forum of Educational Administration and Supervision Journal*, 27(4). Retrieved from <https://pdf4pro.com/view/the-decision-making-process-national-forum-1203b.html>
  48. Mangla, S. K., Kumar, P., & Barua, M. K. (2014). Flexible decision approach for analysing performance of sustainable supply chains under risks/uncertainty. *Global Journal of Flexible Systems Management*, 15(2), 113-130. <https://doi.org/10.1007/s40171-014-0059-8>
  49. Mangla, S., Madaan, J., & Chan, F. T. (2013). Analysis of flexible decision strategies for sustainability-focused green product recovery system. *International Journal of Production Research*, 51(11), 3428-3442. <https://doi.org/10.1080/00207543.2013.774493>
  50. Manninen, K., Koskela, S., Antikainen, R., Bocken, N., Dahlbo, H., & Aminoff, A. (2018). Do circular economy business models capture intended environmental value propositions? *Journal of Cleaner Production*, 171, 413-422. <https://doi.org/10.1016/j.jclepro.2017.10.003>
  51. Mathur, V. N., Price, A. D. F., & Austin, S. (2008). Conceptualizing stakeholder engagement in the context of sustainability and its assessment. *Construction Management and Economics*, 26(6), 601-609. <https://doi.org/10.1080/01446190802061233>
  52. Moore, S. B., & Manring, S. L. (2009). Strategy development in small and medium sized enterprises for sustainability and increased value creation. *Journal of Cleaner Production*, 17(2), 276-282. <https://doi.org/10.1016/j.jclepro.2008.06.004>
  53. Morioka, S. N., Evans, S., & de Carvalho, M. M. (2016). Sustainable Business Model Innovation: Exploring Evidences in Sustainability Reporting. *Procedia CIRP*, 40, 659-667. <https://doi.org/10.1016/j.procir.2016.01.151>
  54. Müller, M. (2012). Design-Driven Innovation for Sustainability: A New Method for Developing a Sustainable Value Proposition. *International Journal of Innovation Science*, 4(1), 11-24. <https://doi.org/10.1260/1757-2223.4.1.11>
  55. Ormazábal, G. (2018). The Role of Stakeholders in Corporate Governance: A View from Accounting Research. *Foundations and Trends® in Accounting*, 11(4), 193-290. <https://doi.org/10.1561/14000000053>
  56. Osterwalder, A., Pigneur, Y., Bernarda, G., & Smith, A. (2014). *Value proposition design: How to create products and services customers want* (2<sup>nd</sup> ed.). John Wiley & Sons.
  57. Owusu Yeboah, A. Y., Kwarteng, M. A., & Novak, P. (2020). Value Creation Through Social Media Marketing: A Threat to Sustainability Performance? In S. K. Sharma, Y. K. Dwivedi, B. Metri, & N. P. Rana (Eds.), *Reimagining Diffusion and Adoption of Information Technology and Systems: A Continuing Conversation* (pp. 475-486). Springer International Publishing. [https://doi.org/10.1007/978-3-030-64861-9\\_42](https://doi.org/10.1007/978-3-030-64861-9_42)
  58. Patala, S., Jalkala, A., Keränen, J., Väisänen, S., Tuominen, V., & Soukka, R. (2016). Sustainable value propositions: Framework and implications for technology suppliers. *Industrial Marketing Management*, 59, 144-156. <https://doi.org/10.1016/j.indmarman.2016.03.001>
  59. Payne, A., Frow, P., & Eggert, A. (2017). The customer

- value proposition: Evolution, development, and application in marketing. *Journal of the Academy of Marketing Science*, 45(4), 467-489. <https://doi.org/10.1007/s11747-017-0523-z>
60. Pedersen, E. R. G., Hove, H. E., Frier, C., Søby, J., & Jennings, V. (2013). Stakeholder thinking in sustainability management: The case of Novozymes. *Social Responsibility Journal*, 9(4), 500-515. <https://doi.org/10.1108/SRJ-08-2012-0101>
61. Ranjan, K. R., & Read, S. (2016). Value co-creation: Concept and measurement. *Journal of the Academy of Marketing Science*, 44(3), 290-315. <https://doi.org/10.1007/s11747-014-0397-2>
62. Samuels, J. M., Wilkes, F. M., & Brayshaw, R. E. (1990). *Management of company finance*. London: Chapman and Hall.
63. Satar, N. S. M., Dastane, O., & Yusnorizam, M. (2019). Customer Value Proposition for E-Commerce: A Case Study Approach. *International Journal of Advanced Computer Science and Applications*, 10(2). <https://doi.org/10.14569/IJAC-SA.2019.0100259>
64. Shepherd, D. A., & Patzelt, H. (2011). The new field of sustainable entrepreneurship: Studying entrepreneurial action linking “what is to be sustained” with “what is to be developed”. *Entrepreneurship theory and practice*, 35(1), 137-163. <https://doi.org/10.1111/j.1540-6520.2010.00426.x>
65. Shiau, W.-L., Sarstedt, M., & Hair, J. F. (2019). Internet research using partial least squares structural equation modeling (PLS-SEM). *Internet Research*, 29(3), 398-406. <https://doi.org/10.1108/IntR-10-2018-0447>
66. Taylor, S. A., Hunter, G. L., Zadeh, A. H., Delpechitre, D., & Lim, J. H. (2020). Value propositions in a digitally transformed world. *Industrial Marketing Management*, 87, 256-263. <https://doi.org/10.1016/j.indmarman.2019.10.004>
67. Truong, Y., Simmons, G., & Palmer, M. (2012). Reciprocal value propositions in practice: Constraints in digital markets. *Industrial Marketing Management*, 41(1), 197-206. <https://doi.org/10.1016/j.indmarman.2011.11.007>
68. Waligo, V. M., Clarke, J., & Hawkins, R. (2013). Implementing sustainable tourism: A multi-stakeholder involvement management framework. *Tourism Management*, 36, 342-353. <https://doi.org/10.1016/j.tourman.2012.10.008>
69. Wiernik, B. M., Ones, D. S., & Dilchert, S. (2013). Age and environmental sustainability: a meta-analysis. *Journal of Managerial Psychology*, 28(7), 826-856. <https://doi.org/10.1108/JMP-07-2013-0221>
70. Xu, M., & Hu, W. Q. (2020). A research on coordination between economy, society and environment in China: A case study of Jiangsu. *Journal of Cleaner Production*, 258, 120641. <https://doi.org/10.1016/j.jclepro.2020.120641>
71. Yau, O. H., Chow, R. P., Sin, L. Y., Alan, C. B., Luk, C. L., & Lee, J. S. (2007). Developing a scale for stakeholder orientation. *European Journal of Marketing*, 41(11-12), 1306-1327. <https://doi.org/10.1108/03090560710821198>

# APPENDIX A

Source: ADANCO 2.2.1 software.

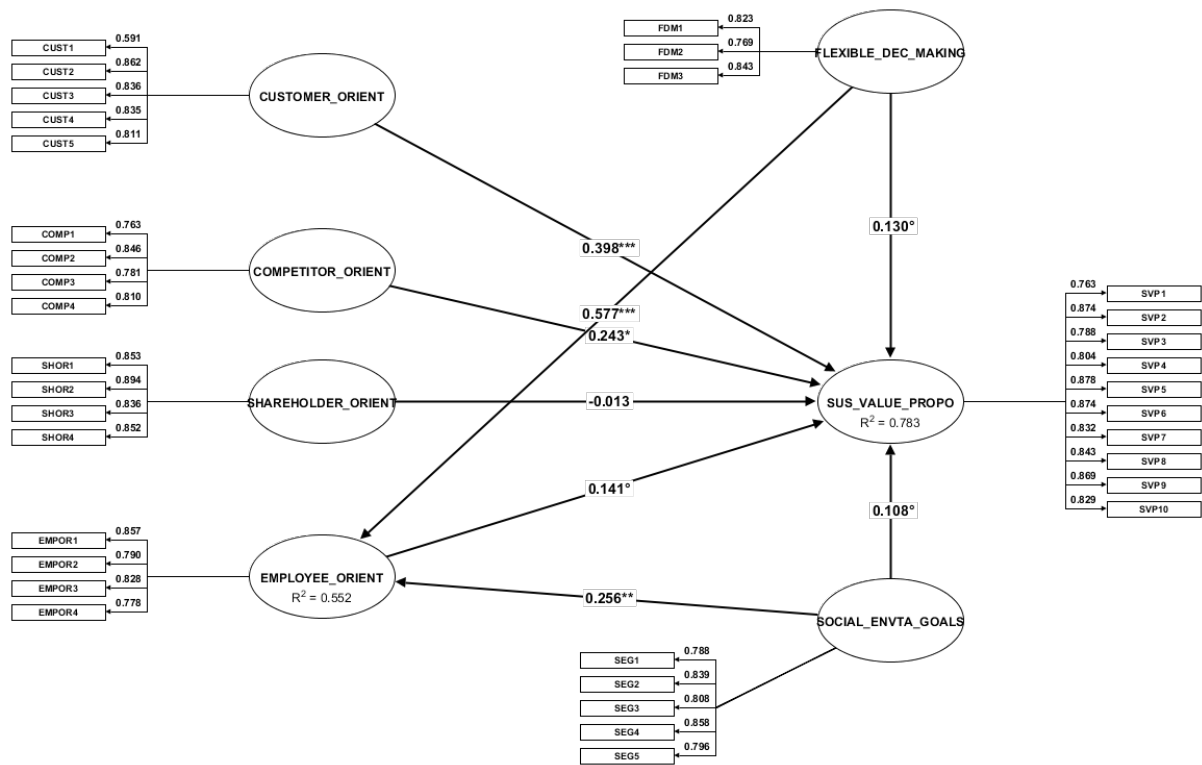


Figure A1. Estimated research model: Output model