Exploring The Sales -Acceptance Nexus in a Sustainable Business Model

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Abstract- **The study sets out to explore the sales-acceptance nexus i.e., association between acceptance level for a sustainable concept and sales, with respect to a sustainable business model that is working on a sustainable concept (Refill concept) and taking a step towards environment through plastic reduction. The prime focus of business was not only sales, but also to ensure adoption of such practices. Therefore, the main objectives of this study were to gather insights about acceptance level and estimated sales for such concepts and product, followed by a hypothetical assumption.**

The research was exploratory in nature, where a survey was conducted with a sample size of 214 respondents selected from seven different colonies located within urban areas of Jhansi. Data collection was completed through formal talk with direct face to face interview carried out with the agreed participants. Statistical analysis, chi-square test of independence was used to analyse and interpret the results. The findings revealed a significant association between acceptance level and sales; leading to rejection of null hypothesis and was concluded that there was a moderate correlation found between these variables. Thus, a small shift was observed towards sustainability but on an average level and such type of products and concept can be acceptable but more efforts to be needed for the same to approach more sales.

Index Terms- Sales, Acceptance, Nexus, Sustainable Business Model.

I. INTRODUCTION

In today's world sustainability is gaining more insights at industrial levels. Many businesses, start-ups, FMCG & industrial units are moving ahead towards it and are working on it to take a small step towards. There are many ways to approach the issue of sustainability, but the simplest way, which can unite all stakeholders, is that kind businesses attract more customers, that can be developed by business models working on sustainability. So, a small concept of Sustainable Business Models (SBMs) has been discussed in this research paper, which can be understood as; sustainable business models present an ideal type of business model that focuses on generating positive environmental & societal impact through the role of business (Bocken, 2021). As claimed by Rex Freiberger, CEO of superlative media, it generates value for everyone involved without draining the resources that help to create it. SBM is essential for success in today's business and is relatively at a nascent stage in many developing countries which has a major role to abade environmental degradation (Karuppiah et.al, 2023).

Businesses with SBM considers a wide range of environmental, economic & social factors across their business operations & when making decisions. These businesses monitor the impact of their operations to ensure that their short-term decision making also benefits long-term goals for resilence and sustainability. Further, it incorporates pro-active multi-stakeholder management, creation of monetary & non-monetary value for a broad range of stakeholders & hold a long-term perspective, and descriptive knowledge about the process organisation undergoing to move into new sustainable business model, in terms of both start-ups and corporates can be generated (Geissdoerfer et.al, 2018).

Sustainable businesses embrace sustainable sales and has a positive impact. Companies that integrate such types of practices leads to boost a positive attitude towards their brand and loyalty. In recent trends consumers are favouring product and brands that demonstrates environmental responsibility.

According to 2024, Global buying green report, 79% of consumers are actively looking for sustainable packaging & 82% are willing to pay more for these

products. So, from this we can observe that consumers are becoming aware of the impact that businesses have on environment. Consumers are more likely to choose companies that have a strong sustainability record and are willing to pay a premium for such products and service, which further leads in increased sales and higher profits.

Overall, it can be concluded that, sustainable business models can help in reducing environmental impact, for the sake of people & society, either in terms of sustainable packaging, waste reduction, or providing sustainable product & service. Further, the sustainability can be used as selling point by them, that can help a business to increase their sales and earn high profit.

II. REVIEW OF LITERATURE

Karuppiah et.al, (2023), reviewed on sustainable business models (SBMs) and analysed the trends of research on SBMs over years and the emerging research areas of sustainable business model. Another part of their study focused on emerging areas in SBM, where opportunities, challenges and future research were identified. Their findings revealed that most studies related to SBM are qualitative in nature, while manufacturing industry is most focused industry in the study related to business model. The main purpose of SBM is to safeguard the environment.

Bashir et.al (2020), emphasized on importance of BES (Business Experimentation for Sustainability), which means business testing with new and sustainable practices in a real-world context to learn, iterate and improve the impact on society and the environment. The aim of their study was to investigate how a reiterative BES process can inform the design of more sustainable business models. Their BES cases revolve around prospective refill-based concepts developed for cleaning products. FMCG retail model involves selling large amount of consumer goods in single use plastic containers. Their empirical setting was for a new business model that involve plastic reduction in Orkla Home & Personal care, in Norway, which is a traditional FMCG model. In this study they have shed light on how parallel and intertwined innovation and experiment can inform such a transition; also, their three study revealed barriers and drivers for more sustainable business model in FMCG sector, so, this shows the reiterative nature of business experimentation for sustainability.

Jain & Hudnurkar (2022), emphasised on sustainable packaging. As, today's consumer are more aware of their product choices and also harmful effects of single use packaging, and everyone is looking for a sustainable option now a days, so many business models are focusing on this they are shifting towards adoption of a sustainable option. Their study focused on to analyse consumer perception and behaviour regarding eco-friendly and sustainable packaging. Their findings revealed that people agree about sustainable packaging but the increased price of sustainable packed goods hinder and discourage them. Where the younger generation considered price as a constraint, rather this, the older generation's first concern was environmental impact on priority and price was secondary, so a positive correlation was noticed between increased awareness about environment and consideration of the impact of purchases among the consumers. Also, it was observed that factors like education and awareness along with the drive make change really boost the purchase of sustainably packed goods, and additionally words like natural, organic, biodegradable further drive the purchase.

Silva Nunes et. al, (2022), discussed challenges faced by business model related to sustainability, in their research paper entitled, "Challenges of business models for sustainability in startups", how these challenges affect business models for sustainability in the context of an emerging country. Their study emphasised on case study of two start-ups selected from Brazil, those are concerned with environmental and social issues. To carry out these challenges SVEM tool was used through workshop. Their findings revealed that barriers and challenges of business models for sustainability in start-ups are found in different categories like institutional and organisational culture, market and sales, innovation, research etc were all barriers faced. Although, the conclusion revealed that there is a need to reformulate public policies and have greater participants of actors involved.

Rubio- Andres et.al., (2025), explored the reality of Corporate Sustainability Strategy & sales performance in entrepreneurial SMEs. Their study investigates that implementing a corporate strategy affect sales performance of SMEs. And addresses the issue & establishes a relationship model that links CSS as an independent variable with sales performance as final variable, mediated by innovation and sustainable performance. Their findings revealed a positive relation between sales and sustainability strategy.

Doorn et. al., (2017), questioned whether 'making sustainable product helps or hinder sales' in their study. As large brand manufacturers have embraced sustainable products as part of their sustainability strategy, and many national brands are introducing new sustainable products. Their study emphasised on effect of sustainability claims on new product sales. For this they collected sales data from of period 2008 - 2011 available to them. Their findings revealed a negative effect and introduction of new sustainable product leads to less sales as expected.

III. RESEARCH GAP

The main purpose of Sustainable Business Model is to safe guard the environment, hence, inputs from society are crucial in devising SBMs (Karuppiah et.al). Large brand manufacturers and national brands are embracing and moving towards sustainable products. Recent research studies also emphasised the effect on sales of sustainable products. As considered from past data; consumer preferences have changed since then, especially among young generation. They were interested in sustainability & if they could promote it through new ideas (Doorn et.al.). Further a shift was observed with respect to consumer's purchases and interest towards sustainable products. Consumers were becoming aware of the impact that businesses have on environment and are likely choosing such business models those have strong sustainability records.

A similar Business model is discussed in this research paper, which is currently working on a sustainable concept towards environment (Plastic reduction) through their concept entitled, "Concepts of Refills: Reuse and Exchange". As a business model; its primary focus is not only on sales but also to ensure adoption of such practices; through their concept in consumers daily purchase and taking a step towards environment. Their sustainable concept ensures people to reuse their hard plastic household cleaner bottle (those are generally single used plastic) through their refill concept. So, whether accepting a sustainable concept can bring sales for the firm, i.e., are acceptance and sales related.

Thus, the study sets out to explore the sales - acceptance nexus i.e., association between acceptance level for a sustainable concept and sales.

IV. OBJECTIVES OF RESEARCH

1. To study about acceptance level for a sustainable concept.

2. To estimate sales percentage for sustainable concept.

V. HYPOTHESIS

H0: There is no association between acceptance level for a sustainable concept and sales.

H1: There is an association between acceptance level for a sustainable concept and sales.

VI. METHODOLOGY

Nature of research

The present research is exploratory in nature, as it aimed at exploring the association between two variables i.e., acceptance level and sales.

Sampling & Sample Size

The sampling frame includes household females within Jhansi (main working location of the selected business model), and the one who were user of such products for which sustainable concept (Refill concept) could be accepted.

Non- probability purposive sampling was preferred for the study, for which seven nearby residential colonies, located within urban areas of Jhansi were chosen. Namely, Shivaji Nagar (a densely populated colony), Manu Vihar colony near civil lines, Veerangana colony near medical college, JMK Colony etc.

Fifty respondents were targeted from each colony, but because of few limitations, on an average only 30 respondents were considered true from each colony; those who agreed to interact with us. Because of which the considered sample size was 214 respondents, selected from seven colonies.

Data Collection

Data collection was completed through a formal talk, with direct face-to-face interview carried out with the respondents. For which; an interview guide was prepared (Annexure 1).

Firstly, as permission grant only agreed one's were chosen. Secondly, as per mentioned in interview guide the sustainable concept i.e., refill concept was explained to them and how exchange system worked, which leads a motivating step towards plastic reduction was briefed.

The final step was, their opinion was recorded and enquired, whether they were interested in such a concept that enables them to take a small step towards

plastic reduction (either in terms of acceptance as yes (but will try later) or in terms of purchase of trial pack for first time).

Lastly, every response was coded with a sequence code with reference to their area initials and acceptance level for such concept was recorded and the purchase details along with their contact information was recorded by firm as customer database.

VII.   ANALYSIS & FINDINGS

1.   Acceptance level of sustainable concept.

The acceptance level was simply analysed using percentage estimate based on yes/ no counts, where it was found that, 45% acceptance was estimated for sustainable concept, as depicted from Figure. 1;

Figure. 1

2.   Sales estimate

Few part of sales were observed along with acceptance level from few respondents; which is depicted from another bar graph below Figure. 2, where it was found that from 45% acceptance level 17% part was of sales.
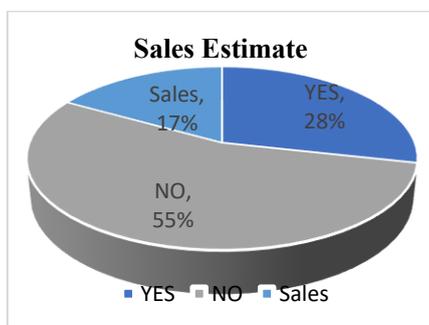

Figure. 2

3.   Hypothesis Testing

Statistical Test: A 'Chi- square test of independence' was conducted to explore the association between two variables. The analysis was completed using SPSS software.

Table 1
Case Processing Summary

	Cases					
	Valid		**Missing**		**Total**	
	N	**Percent**	**N**	**Percent**	**N**	**Percent**
Acceptance level of Sustainable Concept * Sales Achieved	214	100.0%	0	0.0%	214	100.0%

Table 2
Acceptance level of Sustainable Concept * Sales Achieved Crosstabulation

			Sales Achieved		
			No	**Yes**	**Total**
Acceptance level of Sustainable Concept	**No**	Count	117	0	117
		% within Acceptance level of Sustainable Concept	100.0%	0.0%	100.0%
	Yes	Count	61	36	97
		% within Acceptance level of Sustainable Concept	62.9%	37.1%	100.0%
Total		Count	178	36	214
		% within Acceptance level of Sustainable Concept	83.2%	16.8%	100.0%

Table 3

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	52.205[a]	1	<.001		
Continuity Correction[b]	49.586	1	<.001		
Likelihood Ratio	65.955	1	<.001		
Fisher's Exact Test				<.001	<.001
N of Valid Cases	214				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 16.32.

b. Computed only for a 2x2 table

Table 4

Symmetric Measures

		Value	Approximate Significance
Nominal by Nominal	**Phi**	.494	<.001
	Cramer's V	.494	<.001
N of Valid Cases		214	

Table 1 represents 100% valid cases used for analysis. The analysis revealed a significant association between acceptance level for a sustainable concept and sales, where, χ^2 (1) = 52.20, p < .001 (Table 3) and φ = 0.49 (Table 4). The cross tabulation of acceptance level and sales achieved revealed a distinct pattern based on Yes- No counts (Table 2). First scenario revealed with respect to 'No' count of Sales Achieved, where, a high percentage for no acceptance and no sales (100%) was observed as compared yes acceptance and no sales count (62.9%). Second scenario revealed with respect to 'Yes' count of Sales Achieved, where higher percentage for yes acceptance and yes sales (37.1%) was observed as compared to no acceptance -yes sales counts (0%). Further a rejection of null hypothesis was observed.

VIII. DISCUSSION

The present research aimed to explore the sales-acceptance nexus (relationship) between two variables i.e., acceptance level for a sustainable concept and sales achieved. Whether acceptance of a sustainable concept by respondents could pursued them to purchase a product for sake of environment. The first objective of the study revealed 45% acceptance for sustainable concept, i.e., few people in some manner support that plastic should be reduced and such concept could be accepted in terms of product. They agreed in terms of 'yes' they would try such product but later, as they needed time to think on it. On other hand, second objective revealed that; from 45% acceptance, 17% of respondents purchased it and tried the firm's product for first time as a supporter of their sustainable concept.

Further, the association between two variables was tested statistically using Chi- square test of independence. The calculated chi square statistics was, χ^2 (1) = 52.20, p < .001. Since the p-value is less than the significance level (α = 0.05), the null hypothesis is rejected and alternate one accepted. This suggested a statistically significant relationship between acceptance level for a sustainable concept and sales. The phi value of the statistics i.e., φ = 0.49, revealed a moderate correlation between two variables. Hence, these results suggest a significant association and highlights the importance of acceptance level with sales.

IX. CONCLUSION

The study explored a clear positive but moderate relationship between acceptance level of sustainable concept and sales i.e., we can say that people are interested in such concepts and a small shift can be observed towards sustainability but on an average level. Consumers are getting aware of such businesses and few of them are seeking out for sustainable products.

The present business model's initiative is a supportive one and like this many other business model's, small start-ups are working on and moving towards sustainability. These type of business models can help in reducing environmental impact for sake of people and environment in terms of sustainable packaging materials, providing sustainable products or services etc. But along with these inputs from society is also a crucial one as, if people or consumer will not accept such type of practices, how sustainability can be achieved?

X. SUGGESTIONS

Future research should investigate low sales related issue, discovered from present study, for the firm as compared to acceptance level. As sales are a crucial part of any working firm. Further investigation should be related to customer centric approach to identify their correct needs and reason for non- acceptance.

XI. LIMITATIONS

Few hinderances were faced during research, such as while explanation; communication gap was observed from respondent's side, level of understanding, lack of awareness for such concepts and product; and lastly geographical region also affects such type of studies.

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ANNEXURE 1

INTERVIEW GUIDE

> *Concepts of Refill: Reuse & Exchange*
>
> *Hi, I am from AGS Solutions & I am conducting a small survey on a refill concept & plastic reuse. I would like to explain our concept & gather your insights w.r.t concept & product we are offering. It will hardly take 5 minutes for such explanation. Would you like to interact with us (Y/N)?*
>
> 1. *Showing a small pamphlet of refill concept; containing concept and product offering.*
> 2. *Our refill concept helps you reduce your hard plastic household cleaner bottle by reusing them again & again through this concept, where the empty bottle is taken back. Do you understand the concept?*
> 3. *Discount scheme: Every time return of empty refill bottle will provide you with some discount or vouchers.*
> 4. *Would you like to accept our concept and take small step towards it, by trying our trial pack? Yes (Try now/ think on it) / No.*
> 5. *Recording of Demographics details who purchased it as consumer database.*
> 6. *If you like our product and wish to use it further, please contact on the number provided on refill bottle.*
>
> *Thank You.*