

Consumers' Attitudes to the Concept of Sustainable Retail Centres

ABSTRACT

As shopping centres evolve, there is considerable emphasis on establishing and promoting a green shopping centre agenda to the local community. This exploratory study attempts to contribute to a more accurate understanding of the consumer's attitudes towards sustainable retail development practices. Data for this study was collected through a web questionnaire to examine the relationship between distinct categories of personal factors (such as attitudes, desire, concerns) and opinions on sustainability practices in shopping centres. The survey findings from 44 respondents revealed that environment factors and the moral obligation exert a major influence on perceived attractiveness of sustainable shopping premises for consumers. These results show that a green building and green practices in shopping centres are widely encouraged by consumers and so provide an endorsement of shopping centre sustainability credentials.

KeyWords: *Sustainability, Shopping centre, Green practices, Consumer attitude*

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1. INTRODUCTION

As people are becoming more aware of the damage caused to the environment by daily business activities, it has become increasingly obvious that the real estate and retail industry need to do more in relation to managing their obligations towards the environment. With a competitive environment, the UK's retail market can be regarded as a fertile place for undertaking research into ecological, geographical, and social aspects in order to comprehend key public's perceptions in creating a sustainable retail environment.

The concept of sustainable retail development has been a source of debate with UK government policies. In the past, there has been a significant concern surrounding the ecological threats and socio-economic conflicts arising from the growth in shopping centres. In today's world, shopping centres can be seen from different perspectives, being an important place of business, community interface and a cornerstone asset class for leading pension funds. In a holistic sense, sustainability is a key environmental, social, financial consideration, and shopping centre managers need to understand consumer perspectives as part of their agenda in managing the shopping centre.

Today, shopping centres management is more complex than ever with past shopping centre designs being criticised for their environmental, architectural and social impacts (Sardinha et al 2011). In addition, the retail sector is the second largest consumer of energy in the UK, costing £3.3 billion in 2013 (BCSC, 2015). Furthermore, there is increasing pressure on the real estate sector to develop sustainable shopping centres, which can contribute to urban renewal (Faulk, 2006; Southworth, 2005).

In identifying the importance of sustainability design in shopping centres, customer's decision making linked to sustainable features needs to be understood and appreciated. In light of this, the focus of this research paper is on measurable outcomes from the public towards shopping centres with green credentials. The research involves the exploration of the attitudes and perception of members of the public towards a variety of social and environmental issues in relation to a sustainable shopping centre.

The implementation of sustainability measures and resultant impact may not be easily identifiable to the consumer – general public. This research is therefore built on the theory that knowing the level of public awareness of the sustainable value of shopping centres is an importance first step. This awareness could help Government, planning authorities and key property stakeholders identify how future assets may reflect and respond to the needs of the changing demographic.

This paper brings together the quantitative findings from a web-questionnaire. An advantage of this methodology is that it uses a deductive research design, which proves and tests a theory rather than building it. This method was selected because it is a logical and easy option of collecting information, from a large number of people, that can further be analysed and produce statistically sound responses which stand for patterns of belief and behaviour (Wisker, 2009).

Following this introduction, Section Two provides a literature review covering the roles of shopping centres, sustainability concepts and corporate social responsibilities including consumer interests. Section Three details the selected methodology and associated data. Section Four provides the empirical findings and the implications for shopping centre managers and owners. The last section provides the concluding comments.

2. LITERATURE REVIEW

Shopping centres have been developed to provide a business place that includes retail spaces, facilities and services to the tenants and customers. Consequently, the location is very important, not only because it attracts successful retailers, but its accessibility also creates the community's desire to visit and shop. Besides location, sound design of a shopping centre is significant in portraying its image as a business place. It was also suggested that a shopping centre's design is a fusion of many demands, including market forces, physical constraints, management needs and local authority requirements, which taken together creates the physical form to support the shopping activity (National Retail Planning Forum 2000).

According to Hammerson (2015), to maintain and drive demand for space, future retail assets should be adaptable to changing business needs of the retail customers. Present shopping centres are already evolving to become event-hosting, exhibition hubs providing experiences, information and leisure for consumers alongside merchandising. Most are built or refurbished to perform a variety of new functions from providing business, education and community engagement spaces to offering healthcare, fitness and leisure to an increasingly ageing, diverse and connected population.

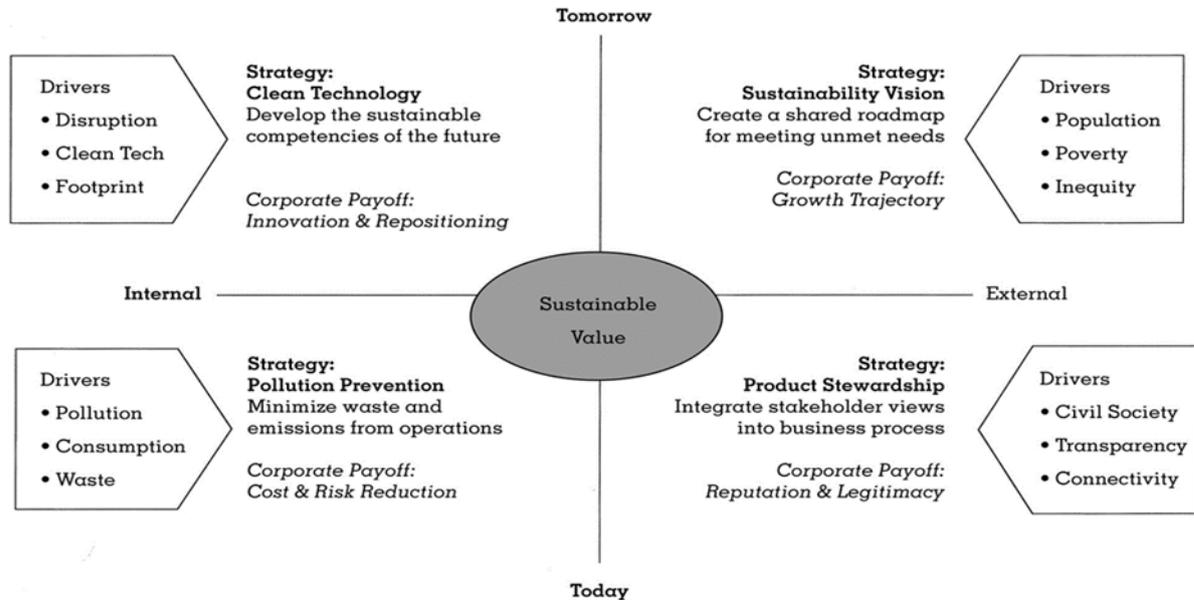
Envirowise, (2002) denotes that although the retail sector has always been a major contributor to the UK economy, with sales of £225 billion in 2001, it also produces large amounts of waste, with an estimated 12 million tonnes a year at a cost of over £360 million a year. More recently, Pitt and Musa (2008) noted that the 40 largest shopping centres in the UK consume £40 million worth of energy per year. BCSC (2015) pointed out that operating costs and lifecycle carbon impacts must be part of design decisions, particularly those relating to mechanical and electrical engineering, lighting and renewable energy.

In detailing the environmental challenges with shopping centres, core sustainable development (SD) concept are being established. This can create multiple tasks, associated with sustainability and can cover how an organisation operates in a transparent, responsive manner, through internal and extensive interaction with external parties such as suppliers, customers, regulators, communities, governmental organisations, and the media (Eichholtz et al, 2009, Milstein and Hart, 2003).

To assist in deciding how best to manage the multidimensional challenge of sustainable development, Figure 1 provides a model to best manage both now and future values of sustainability.

Figure 1

Sustainable Values



Source: Milstein and Hart, 2003

Figure 1 represent the four quadrants of sustainable value and illustrates how organisations need to perform simultaneously in all quadrants to maximize shareholder value over time. Taken together as a portfolio, such strategies and practices hold the potential to reduce cost and risk, alongside enhancement of reputation and legitimacy, accelerate innovation and crystallizing an organisation's growth path. All these strategies are crucial to the creation of shareholder value and simultaneously drive toward a more sustainable world.

Limited past research has focused on the sustainability measurement of the retail property sector. With reference to the complexity of measuring sustainability of regional shopping centres, past issues emerged with the scope to find universal quality standards. Nevertheless, Waer and Sibley (2001) found that the most unsustainable aspects of a shopping centre development are:

- i) Transport and accessibility (car facilitated shopping, traffic jam and pollution);
- ii) High energy consumption (uncontrolled energy consumption);
- iii) Social and cultural respect (compatibility of urban design with local cultural values).

The issue is the lack of unanimity on what constitutes excellence in a shopping centre's performance, covering the overlapping dimensions of social, economic, environment factors. In his research, Wehrmeyer (2001) established a framework of various functions that environmental indicators may have, in different contexts.

Waer and Sibley (2001) was more specific in determining the sustainability indicators, particularly for shopping centres (see Table 1):

Table 1 **Sustainability Indicators for Shopping Centres**

<i>Environmental group</i>	<i>Socio-Cultural group</i>	<i>Economic group</i>
Energy and Natural Resources	Functionality and aesthetic aspects	Economic Performance
Water and Water Conservation	Architectural Typology- Social	Local People Employment
Material Used in Construction	Indoor Environmental Quality	Management and Controllability
Land Use and Site Selection	Local People Trends & Facilities	
Transport and Accessibility	Customers Trends and Aspirations	

Source: Waer and Sibley, 2001

Despite taking into account the triple socio-economic-environmental line of a sustainable development, Waer and Sibley (2001 p10) accentuated the socio-cultural group by highlighting that “A significant realignment towards the more holistic “sustainable” model which will not be possible until the links between building performance and larger scales, such as community, are acknowledged”.

Therefore, the challenge for shopping centres is to improve and promote a method for understanding the value of buildings across broad issues of sustainable indicators to meet a wide variety of explicit, physical and emotional needs and aspirations of occupiers and users (local community).

3. METHODOLOGY

This paper brings together the quantitative findings from an exploratory web-questionnaire to a local community with knowledge of leading Birmingham Shopping Centres. The questionnaire soliciting opinions on green shopping malls contained closed-ended questions relating to opinions on environment concern, green building, and reasons a centre needs to be green. The respondents indicated the degree of importance of green attributes of a shopping mall and, respectively, green practices they would like to be implemented in a shopping centre. A Likert scale was adopted as it works particularly well in the context of a series of questions that seek to elicit attitudinal information about a specific subject matter (Rea and Parker, 2014)

The respondents were of different age, education, and occupation and consisted of both sexes. A total of 100 individuals were contacted by e-mail, and asked to participate in a web survey. Forty four completed the online questionnaires and deemed sufficiently complete to be useable. The majority of the respondents were of female gender (59%), aged 21-29 (34%), with a university degree (61%) and working full time (52%). It was found that most respondents shopped at a centre once a week (25%) or 2-3 times per month (25 %), for an average of 1-2 hours (34%) and spent on shopping an average of £20-£100 (59%).

4. RESULTS

The first part of the analysis used the independent sample t-test for measurement of differences in consumer's attitude on environment, built environment and green shopping centre between gender and occupation – see Table 2.

Table 2: T-test results of attitudes on environment, green built environment and green shopping centres by gender (n= 44)

Variables	Male (Mean)	Female (Mean)	Significance	Finding
Attitudes on environment	3.38	3.92	0.053	Not Significant
Attitudes on green built environment	3.84	4.05	0.542	Not Significant
Attitudes on green shopping centres	2.03	3.50	0.110	Not Significant

Note: no significant differences at $p > 0.05$

Table 2 provides the results of the t-test for gender (male/female). The results show that there were no significant differences between male and female respondents in their environmental attitudes and their attitudes on green centres. The occupation was then considered - see Table 3

Table 3: T-test results of attitudes on environment, green built environment and green shopping centres by occupation (n= 44)

Variables	Work FT&PT (Mean)	Students (Mean)	Significance	Finding
Attitudes on environment	3.88	3.50	0.142	Not Significant
Attitudes on green built environment	3.73	4.22	0.132	Not Significant
Attitudes on green shopping centres	2.48	1.77	0.018	Significant

Note: no significant differences at $p > 0.05$

Table 3 provides the results of the t-test for occupation (Work FT&PT/ Students). Based on results, it was partially supported, as the analysis showed a significant difference between those who work and those who are still studying, particularly, in their attitude on green shopping centres ($p < 0.05$).

In explore this further, as for the importance of shopping centres to be 'green' was examined by occupation.

Table 4: Results on importance of shopping centres to become ‘green’ by occupation

Variables	Work FT/PT/Self-Employed n=26			Students n=18		
	Frequency	%	Rank	Frequency	%	Rank
To save money for the customer	2	5%	5	1	6%	2
To adhere to my social values	4	11%	3	0	0%	3
To set a good example to the rest in the UK economy	7	19%	2	1	6%	2
To reduce impact on environment	21	57%	1	8	44%	1
All	3	8%	4	8	44%	1
I don't think we need green shopping centres	0	0%	6	0	0%	3
Total answers	37	100%		18	100%	

Table 4 provides the ranking of reasons why shopping centres need to be green, between those working FT/PT and students. Based on results, the majority of respondents who work either full-time or part-time (52%) answered that the need to reduce impact on environment is the essential reason why shopping centres need to be green. On the other hand, the students were split in two major groups (44% each). The first group chose environment protection as a priority. The second group indicated that apart from reducing impact on environment, shopping centres need to be green to save money for the customer, to adhere to their social values, and to set an example to the UK economy. Another significant finding is that no respondents said that there is no need for shopping centres to be green, which denotes that construction of green shopping centres is encouraged by consumers.

Part of the questionnaire contained two questions on consumer’s perception on the importance of green attributes and green practices in a shopping centre with each factor rated on a Likert scale. The selected degree of importance index places weighted significance on the frequency of responses and was calculated as follows:

Equation 1
$$\text{Imp. Index} = \sum(aX) * 100 / f,$$

where: a = the constant expressing the weighting given to each response
X = frequency of responses/total number of responses
f = range of permitted responses

The method provides an appropriate process to identify a pattern of influences on future decisions for new shopping centres attributes and green practices in retail, as it measures the frequency of the responses to the total responses, and so the response weighting relates to the influences rather than any respondent’s bias. See Table 5 for the results.

Table 5: Ranking Consumer’s Perception of attributes of a green shopping centre

Green Attributes of a Shopping Centre	Importance Index	Rank
Has a good waste management & recycling systems	76	1
Has minimum energy requirements	70	2
Is built of recycled materials using green technologies	69	3
Produces little or no carbon emissions	67	4
Focuses on biodiversity around it (vegetation on wall/roof)	66	5
Offers green choice	61	6

Table 5 indicates that a shopping centre’s waste management & recycling systems were the most important attributes for a centre to be sustainable in consumer’s opinion, followed by minimum energy requirements and use of green technologies and recycled materials in its construction process. This indicates that the consumer is not only concerned about the finished product (shopping centre) and its functional performance (waste and energy systems), but also places importance on its production (how it was built).

Similarly, Table 6 ranked the most important green initiatives to be implemented in a shopping centre.

Table 6: Ranking consumer’s perception of green initiatives in a shopping centre

Green Practices in a Shopping Centre	Importance Index	Rank
Visible communication about the impacts of each product/service purchased	88	1
A wider and affordable choice of green products/services	87	2
Visible communication about green practices	85	3
Better labelling of recycling facilities	83	4
A procedure/policy/staff to guide you	80	5
Rewards for doing the right thing	76	6

Based on Table 6 results, the most supported green retail initiatives by consumers, were visible communications about the impacts of each product/service purchased, a wider and affordable choice of green products/services, and visible communication about green practices. These choices may be considered when selecting tenants for a new shopping centre and when developing green retail marketing strategies.

5. CONCLUSION

This paper sets out to study consumer’s interest and attitude towards a sustainable shopping centre. The study assessed whether consumers are willing to shop at centres that engage in green practices. The sample cannot be truly representative of all shoppers, however, it identified that differences between shoppers do not account for the differences between perceived behaviour and attitude towards sustainable shopping centres.

For an exploratory study, the sample size (44 respondents) is smaller than ideal for such studies, but the critical sustainable attributes of a shopping centre were identified - good waste management, recycling and energy performance systems. However, the overall conclusion is that all respondents agreed of a need for shopping centres to be green and encouraged green building in general.

This preliminary work indicates that 'environment protection' or 'moral obligation' factors would determine if consumer decide to shop at a green centre. This study suggests that while having a high ecological concern, many people think that the preservation of the environment is still the prime responsibility of the stakeholders (construction and retail industry) directly impacting this environment. As a result, this will influence consumers' attitude on authority and all other stakeholders' role in solving environmental issues and their attitudes on green buildings.

On a sustainability perspective, there is a need for good public policies that encourage organisations and people to produce and consume within ecological limits and in a socially responsible manner (Prothero, and Dobscha, 2011). At present, concerns about environmental problems such as global warming, is focused at the consumer to investigate issues for themselves. The pressure on organisations is to account for their environmental performance, with renewed consumer interest in what is generally called environmental marketing.

Within marketing, the green movement has been viewed as an opportunity to identify a new market. However, Davis (1993) suggests that consumer response to green marketing efforts has fallen short of marketers' expectations. The present study suggests that green retail practices are encouraged, with consumers requiring more visible communications of product impact, green practices and a wider, affordable green choice. The results indicate that shoppers have different expectations of sustainable shopping centres - largely formed on the basis of evaluations of existing shopping centres which do not follow such practices - and that these different expectations might be reflected in their shopping behaviour.

6. REFERENCES

BCSC, 2015, *Sustainable Shopping Centres: Energy, Performance and Value*, British Council of Shopping Centres and CBRE, available at:

<http://www.cbreproperties.cz/uploads/media/properties/>

Davis J, (1993, Strategies for environmental advertising, *Journal of Consumer Marketing*, Vol. 10, No 2, p19-36

Eichholtz P, Kok N and Quigley J, 2009, *Doing Well by Doing Good? Green Office Buildings*. Center for the Study of Energy Markets, UC Berkeley, available at: <http://escholarship.org/uc/item/4bf4j0gw>

Envirowise, 2002, *Increasing profits by reducing waste in managed shopping centres*, available at: <http://www.enviro-wise.co.uk/>

Faulk D, 2006. The process and practice of downtown revitalization. *Review of Policy Research*, Vol. 23, No 2, p625-645

Hammersons, 2015, *Sustainability Vision for Developments*, available at: <http://sustainability.hammerson.com/downloads/>

- ICSC, 2016, *ICSC Shopping Center Definitions*, The International Council of Shopping Centres, available at: <http://www.icsc.org/research/references/c-shopping-center-definitions>
- Kumar R, 2014, *Research Methodology. A step-by step guide for beginners*, 4th ed, SAGE Publications Ltd, London.
- Milstein P and Hart M, 2003, Creating Sustainable Value, *Academy of Management Executive*, Vol. 17, No. 2, p217-224.
- National Retail Planning Forum, 2000, *What Makes for a Successful Shopping Centre Scheme?*, The National Retail Planning Forum, London.
- Pitt M and Musa Z, 2008, Towards defining shopping centres and their management systems, *Journal of Retail and Leisure Property*, Vol. 8, No 1, p39–55.
- Prothero A and Dobscha S, 2011, Sustainable Consumption: Opportunities for Consumer Research and Public Policy, *Journal of Public Policy and Marketing* ,Vol. 30 No 1, p31–38.
- Rea L and Parker R, 2014, *Designing and conducting survey research*, 4th ed., Jossey-Bass, USA.
- Sardinha I, 2011, Using corporate social responsibility benchmarking framework to identify and assess corporate social responsibility trends of real estate companies owning and developing shopping centres, *Journal of Cleaner Production* , Vol 8, p 1486-1493.
- Southworth M, 2005, Reinventing main street: from mall to townscape mall, *Journal of Urban Design*, Vol. 10, p151-170.
- Waer H and Sibley M, 2006, Sustainable Development for Regional Shopping Centres in the UK: Measuring the Level of Sustainability and Application of a Sustainability Assessment Model, *International Conference on Urbanism and Sustainability in a Changing World*, Jeddah.
- Wehrmeyer W, 2001, Environmental indicators for business: A review of the literature and standardization methods, *Journal of Cleaner Production*, Vol 9, No. 5, p 453-463.
- Wisker G, 2009, *The Undergraduate Research Handbook*, Palgrave Macmillan, London.