

The Strategy to Enhance the Driving Force of Electronic Documents and Records Management Policy- a Reflection from Green Marketing Participants' Perception, Attitude, Loyalty and Word-of-mouth Behaviors

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Outline

- **Introduction**
- **Hypotheses**
- **Methodology and measurement**
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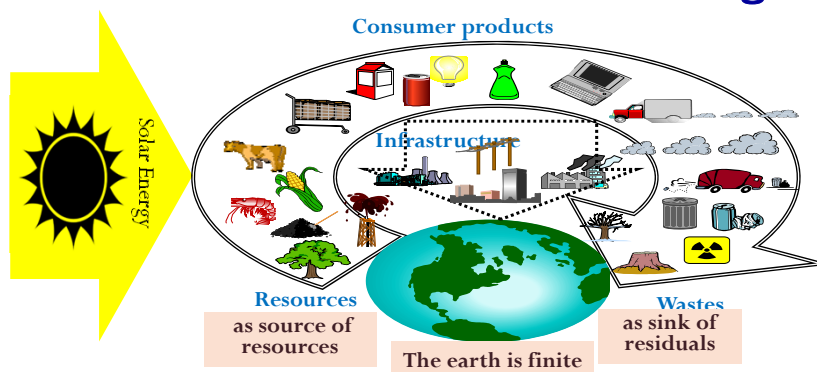
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Environmental Concern and Sustainability

From linear to circular

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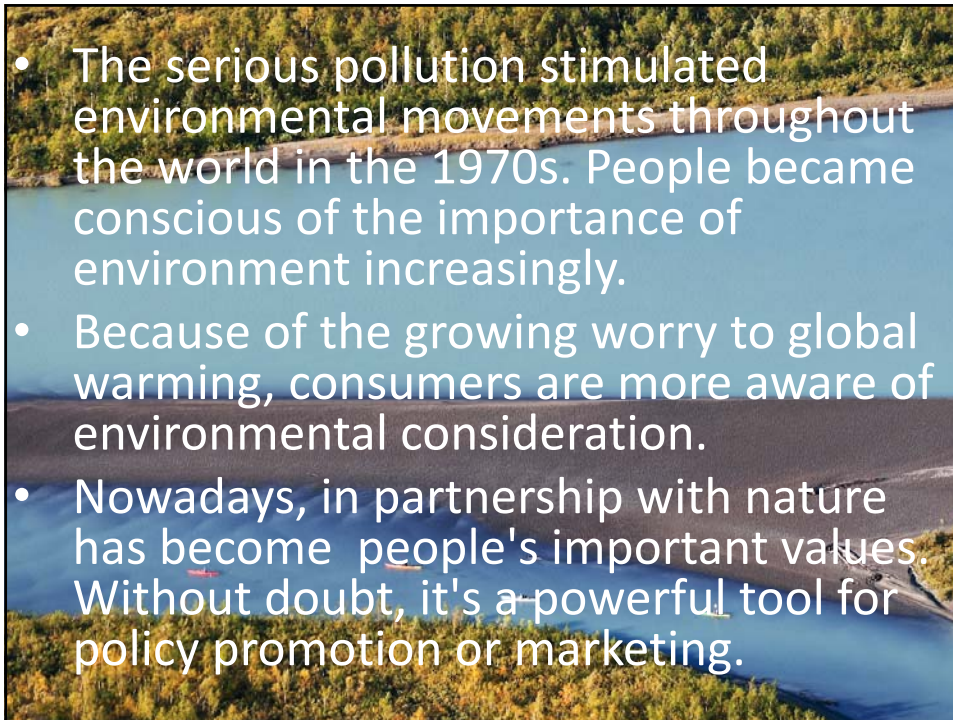
Massive flow of materials on the globe



Our planet, the earth, she satisfy all the human desires, including food, industry, infrastructure and so on. However, she also bears the serious pollution caused by human desire. But, the earth is finite.

Moriguchi, 2009

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- The serious pollution stimulated environmental movements throughout the world in the 1970s. People became conscious of the importance of environment increasingly.
 - Because of the growing worry to global warming, consumers are more aware of environmental consideration.
 - Nowadays, in partnership with nature has become people's important values. Without doubt, it's a powerful tool for policy promotion or marketing.

Introduction

- In the environmental era, green concern is indisputably an important topic for both marketing and policy promotion.
- Organizations should utilize green marketing strategies to enhance participants' perceived quality with respect to environmental concern, so that they can improve their green images and increase positive word-of-mouth(WOM) (Chen 2010).
- Consumer perceived quality is reflected in consumer trust and loyalty (Garbarino and Johnson 1999). If a company's products can be recognized by consumers, consumers will take the initiative to promote these products.

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Green marketing

- Green marketing is a concept and strategy adopted by a company to advertise its green practices as an expression of its concern for environmental issues.
- Green marketing has become a critical tool to attract participants who are environmental concerned.
- Green marketing strongly affects consumer perceptions and then generates consumers' positive behaviors continuously.
- Green marketing is important for companies. Reflecting on government agencies' policy marketing, it's important also.

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The Linkage between the “EDRM Policy” and “Green Marketing”

- According to the "Electronic Documents and Records Management (EDRM)" policy in Taiwan. Energy-saving and paper-reducing are two of the policy's most important core spirits, it means that they also meet the values of green concern.
- Further thinking, the participants' behaviors in green marketing can be applied to the EDRM policy, as a driving force of policy marketing.

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The purpose of this research

- Proposes the novel construct “environmental attitude”.
- To explore the positive relationship between green perceived quality and green WOM, and to discuss the mediation effects of environmental attitude and green loyalty.
- Generates a new framework of green perceived quality to help organizations improving their green WOM and to extend the literature on green marketing further.
- The research results can serve as reference for EDRM policy marketing.

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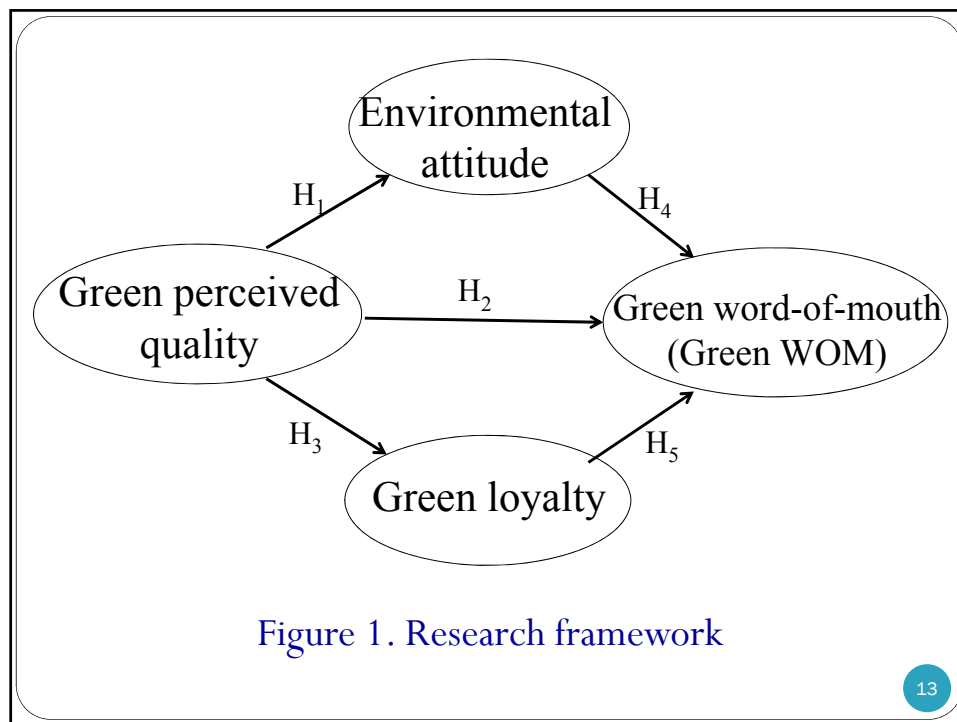
Hypotheses

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After reviewed the literatures, this study developed the hypotheses as follow:

- Hypothesis 1 (H1). Green perceived quality is positively associated with environmental attitude.
- Hypothesis 2 (H2). Green perceived quality is positively associated with green WOM.
- Hypothesis 3 (H3). Green perceived quality is positively associated with customer's green loyalty.
- Hypothesis 4 (H4). Environmental attitude is positively associated with green WOM.
- Hypothesis 5 (H5). Green loyalty is positively associated with green WOM.

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Methodology and measurement

Data collection and sampling

- This study tests the hypotheses and research framework **by means of questionnaire survey**.
- The research object of this study is consumers who have the purchase experience of green products in Taiwan.
- A total of **1500 questionnaires** were sent to the randomly sampled consumers. There are **513 valid questionnaires** and the effective response rate is 34.2%.

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The four constructs

- **Green perceived quality(GPQ):** refers to “the customer’s judgment about a product’s or a brand’s overall environmental excellence or superiority” (Chen and Chang 2013) . **Its measurement includes five items.**
- **Environmental attitude(EA):** defines as “a personal characteristics formed for a long time, sustained attention to environmental issues, and finally to make environmental protection actions”. **Its measurement includes three items.**

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- **Green loyalty(GL):** refers to “the level of repurchase intentions prompted by a strong environmental attitude and sustainable commitment towards an object, such as a product, a service, a company, a brand, a group, or so on” (Chen 2013). **Its measurement includes three items.**
- **Green word-of-mouth(Green WOM):** refers to “the extent of to which a customer would infer friends, relatives, and colleagues about positive environmental messages of a product or a brand” (Chen et al. 2014). **Its measurement includes four items.**

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Empirical results

- This study adopted quantitative research, which was conducted through a survey, and the questionnaire items were tested by using “**7-point Likert-type scale from 1 to 7**”.
- This study used structural equation modeling (SEM) to test the hypotheses by using the **AMOS 17.0** software, and to test the fit of the model.
- SEM examines two levels of analysis, the **measurement model** and the **structure model**, and the results are shown as follow.

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The results of the measurement model

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Table 1
Means, standard deviations and correlations of the constructs

Constructs	Mean	SD	A.	B.	C.
A. Green perceived quality	5.003	0.883			
B. Environmental attitude	5.125	0.971	0.673**		
C. Green loyalty	4.915	0.949	0.647**	0.668**	
D. Green WOM	4.887	1.014	0.538**	0.712**	0.598**

Note: ** $p < 0.01$.

Correlations among the four constructs are positive, and their p-value are all less than 0.01. It indicates that the correlations among the four constructs are significant.

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Table 2 Factor analysis of this study

Constructs	Number of Items	Number of factors	Accumulation percentage of explained variance
Green perceived quality	5	1	69.9%
Environmental attitude	3	1	70.9%
Green loyalty	3	1	87.4%
Green WOM	4	1	77.7%

This table shows the result of confirmatory factor analysis. The four accumulation percentage of explained variance are close to or greater than 70%, it indicates that every construct in this study can be classified into only one factor.

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Table 3

The items' loadings (λ) and the constructs' Cronbach's α coefficients and AVEs

Constructs	Items	λ	Cronbach's α	AVE	The square root of AVE
A. Green perceived quality	GPQ1	0.717	0.89	0.615	0.784
	GPQ2	0.789**			
	GPQ3	0.735**			
	GPQ4	0.837**			
	GPQ5	0.835**			
B. Environmental attitude	EA1	0.922	0.928	0.814	0.902
	EA2	0.895**			
	EA3	0.887**			
C. Green loyalty	GL1	0.820	0.851	0.661	0.813
	GL2	0.853**			
	GL3	0.784**			
D. Green WOM	GWM1	0.920	0.904	0.719	0.848
	GWM2	0.929**			
	GWM3	0.868**			
	GWM4	0.643**			

Note: ** $p < 0.01$; AVE: average variance extracted

All items' loadings (λ) are significant and all Cronbach's α coefficients are more than 0.7, AVEs are more than 0.5 and square roots are more than correlations in Table 1, it indicates that the reliability and validity are acceptable.

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The results of the structural model

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- The model-fit indices of CFA(Confirmatory Factor Analysis) were assessed to determine the model's overall goodness of fit.
- All values of model-fit indices ($\chi^2(69) = 141.324$, CFI = 0.895, NFI = 0.925, GFI = 0.938, RMSEA = 0.09) exceed their respective acceptance levels suggested by previous research (Jöreskog and Sörbom, 1989).
- The results indicate that the overall fit measures of the full model in SEM are acceptable.

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Table 4
The results of the structural model

Hypothesis	Proposed effect	Path coefficient	Results
H ₁	+	0.77***	H ₁ is supported
H ₂	+	-0.07	H ₂ is unsupported
H ₃	+	0.79***	H ₃ is supported
H ₄	+	0.65***	H ₄ is supported
H ₅	+	0.16*	H ₅ is supported

Note: * $p < 0.05$; *** $p < 0.001$

Four path coefficients are significant, but one is not. It shows that H1, H3, H4 and H5 are supported, and H2 is unsupported.

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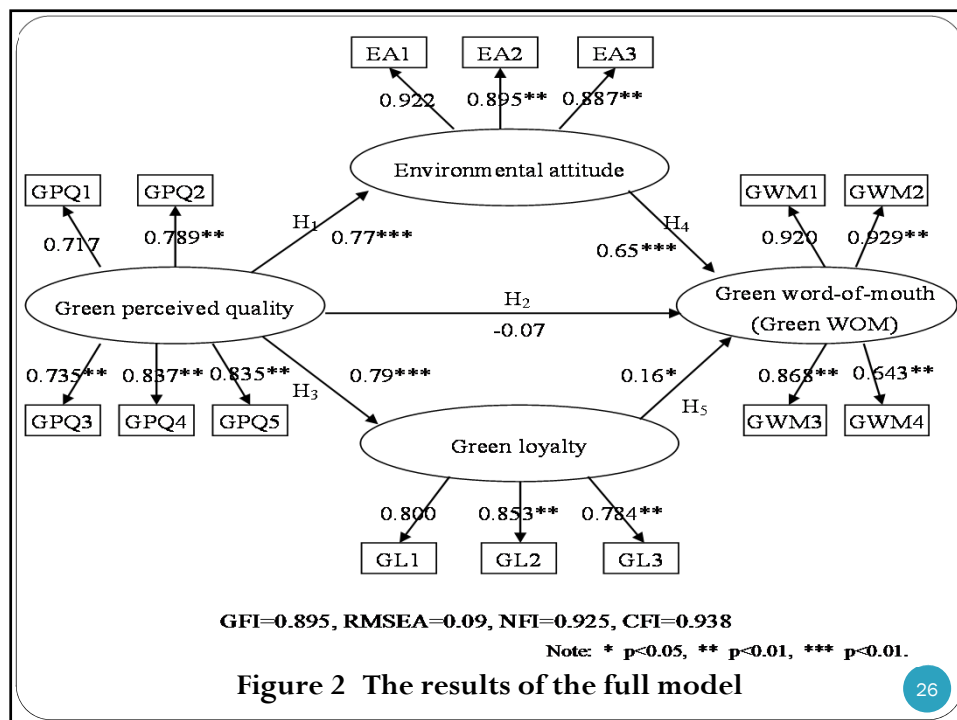


Figure 2 The results of the full model

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Conclusions and implications

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Conclusions

- Environmental attitude and green loyalty have positive mediation effects on the relationship between green perceived quality and green WOM.
- Green perceived quality doesn't affect green WOM directly, but positively affects green WOM indirectly via consumers' environmental attitude and green loyalty.
- If firms want to increase their consumers' green WOM should enhance green perceived quality to raise their consumers' environmental attitude and green loyalty in turn, should not directly put resources and efforts intend to affect green WOM.

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Academic contributions

- Combines the concepts of perceived quality, loyalty and attitude to extend the research on green marketing and to develop green WOM from the increasing of environmental attitude and green loyalty.
- Verifies the new role of environmental attitude in green marketing.
- Proves that the relationship between green perceived quality and green WOM is fully mediated by environmental attitude and green loyalty. It is a new finding.
- Extends the research of perceived quality, environmental attitude, green loyalty and WOM into the field of green marketing.

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Practical contributions

- Proves that increasing green perceived quality can increase green WOM via environmental attitude and green loyalty indirectly, not directly.
- Consumers play a role of effective information channel to contribute WOM in market. Hence, firms should well deploy their resources to raise the two positive determinants, environmental attitude and green loyalty, and then increase positive WOM.

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Future studies

- Combine marketing with human values has proven to be a powerful marketing strategy. In the environmental era, if policy marketing could combine the common values “environmental attitude”. Participants will be more willing to accept the policy, and even take the initiative to share her or his participation experience to relatives, friends, colleagues and other participants, and finally forming a strong positive word-of-mouth cycle.
- In public policy field, green marketing is rarely discussed, especially the effect of environmental attitude.

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Future studies

- Future studies can concentrate on public policy marketing , such as EDM (Electronic Documents and Records Management) policy, and compare their findings with this study.
- This study conducted in Taiwan, so future studies can concentrate on other countries and compare them.
- This study’s questionnaire surveys provide cross-sectional data, future should design longitudinal study to observe the dynamic changes of factors.

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