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社會責任與公司形象之關聯：風險社會之調節效果

Connections between Corporate Social Responsibility and Corporation Image: Risk Society as the Moderator

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摘 要

本研究主要探討工業進步所引發的負面效應，以電信業的電磁波為研究對象。在民眾享受行動通訊便利的同時，也需分擔其可能造成的風險。若是企業無法發揮其社會責任的功能，風險的延伸可能觸發無法彌補的後果。除了對使用者造成健康的威脅，對於企業形象也是個不定時炸彈。這亦是 Beck (1992) 所提及的迴力棒效應。企業未能以行動善盡自身的責任，當風險演變成危機時，就必須付出龐大的社會成本及資本，以彌補長期以來的責任缺口及負面形象。本研究以上述論點為研究目的，並針對企業社會責任與企業形象兩者關係之中，將風險社會加入以作為調節因子，探討該因子對於兩者交互關係之影響成因與結果。

【關鍵字】企業社會責任、企業形象、風險社會

Abstract

The focus of this research is on the negative effects brought about by the industrial progress, especially the electromagnetic field that comes along with the telecommunication industry. While modern people are blessed by the conveniences of the telecommunication, they also have to take the risks of exposing to electromagnetic field. If the corporations do not perform their social responsibility, the risks may trigger irreparable consequences. In addition to the threats to the mobile phone users, the side effects of electromagnetic field can undermine the corporate image. This is what Ulrich Beck (1992) calls “the boomerang effect”. If the corporations do not take actions to uphold their responsibility and image, large quantity of social costs and capitals will be lavished when risks have evolved to crises. This paper takes this argument as the research subject, and probes into the interconnections between corporate social responsibility and corporate image. Risk society here, is taken as the moderator and to further examine the correlations between corporate social responsibility and corporate image.

【Keywords】corporate social responsibility (CSR), corporate image, risk society

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1. Introduction

Facing the trend of technological development and globalization, modern people have to deal with the high uncertainties of the shifting everyday life. In the beginning of twenty-first century, there were major corporate scandals such as Enron, WorldCom in the U.S., and the infamous Rebar Group[1] and Zanadau case[2] in Taiwan. The credibility of large enterprises and government agencies is not as stable and secured as before. Moreover, the advanced productivity increased by machinery automation has caused environmental destruction and resource consumption. And this has brought about the increasing attention on Corporate Social Responsibility (CSR).

The concept of CSR arises from the 1970s, but it comes to maturity until this century. CSR has become a commercial business model of this century. The idea of CSR in the U.S. and in the European countries is becoming full-fledged (Cochran, 2007). Its leverage to corporation image is growing power. With a high degree of correlation with every constructs of business management and corporate profit, corporations are more active in gaining the consumers' trust and unfailing impression. Within this intricate web of interconnections, corporations that are actually performing CRS have more chances of acquiring positive images.

There is a question though, the consumers do not blindly accept all the messages delivered by the corporations and reach their decisions accordingly. Rather, their decision-making is a process of filtering messages and the consequential reactions. In light of this, Ulrich Beck comes up with the notion of "Risk Society": following the industrialization and technological development, comes along the conveniences and the environmental pollution and destruction. In Beck's term, this is called "Risk." In this context, corporations are deemed as the "manufacturers" of risk society. Therewith, consumers are dealing with paradoxical thoughts about the messages delivered by the producers of risk, and the social responsibilities shouldered by these corporations.

Mobile communication has become a necessity in the citizens' everyday life. Its convenience and value-added quality life have spread the coverage of mobile communication to every corner of Taiwan. The coverage is even more extensive than that of Hong Kong, America, and European countries. According to the World Telecommunication Development Report of International Telecommunication Union (ITU), the popularity of

[1] Chinese name is 力霸集團

[2] Chinese name is 新瑞都案

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mobile commuication in Taiwan has reached 100%, which is the leading status all over the globe. The Industrial Technology Research Institute, Taiwan, announced the results of project codename "IEK-IT IS." The Telecom Services Market Research Report had proven the high coverage of telecommunication in Taiwan more than that, the report indicated that the coverage of telecommunication in Taiwan had reached 102%.

As a result, the telecommunication service providers of this competitive market have to offer something more than merely "business" to differentiate their services. The general meaning of CSR is the ethical conducts a corporation is taking responsibility, especially in terms of all the stakeholders rather than just the stockholders. Ethical codes are set up for the employees and communities. As for business model, "open and transparent" are keys to the sustainability for the society. In the trend of global shifting and technological advancement, CSR and corporate image are in a positive correlation (Chang, 2007).

Beck has raised some issues in his "Risk Society", such as the scientific controversies (ex. generic modification) that are brought about by advanced technologies, and the risks that come along with ecological impacts (ex. global warming). These facts have made risk assessment all the more crucial and effective under the circumstances of high complexities and uncertainties; therefore, the corporations are in a difficult situation to undergo risk assessment and decision-making (Ravetz, 2004). This paper takes telecommunications industry as the research subject to probe into the interconnections between CSR and corporate image. Risk society is considered as interference factor, so as to analyze the causes of the correlations, the effects, and the degrees of influences.

2. Literature Review

2.1 Corporate Social Responsibility

In business management, a corporation is responsible for the general stakeholders, not just for stockholders. The Corporate Social Responsibility Forum has defined CSR as: A set of ethical standards for the employees. In terms of communities and environment, "open and transparent" are fundamental to the business model. The goal is to fulfill the requirements of the stakeholders and to further accomplish the social sustainability. The coverage of CSR is extensive and complex and the definition of CSR has been shifting from time to time.

Furthermore, the outlook of CSR can be discussed in three constructs: community, the actual implementation, and managers' perception (Zenisek, 1979). But then, social responsibility can be assorted into law, economics, ethics, and philanthropy (Spencer &

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Taylor, 1997). CSR can be seen as a value system, which is highly susceptible to particular ideas or ways of thinking (Aupperle, 1984). The decision-making and following actions would transcend the profit-making. Since the range of responsibility has been extended from the previous perspectives of laws and economics to other perspectives, the delimitation of CSR has been blurred and has caused further debates on the definition of the term.

In previous studies, CSR has been investigated from the consumers' perspective. In Girod and Bryane (2003), CSR has been acknowledged as a key component of a firm's image and has substantial impact upon consumer behavior. That is consumers can choose to evaluate a company based on whether the organization acts in a manner consistent with supporting the welfare of the community and society. Thus, if consumers are aware of company's CSR activities, and has a high identity salience for those consumers, the CSR activities is likely to strengthen the antecedents and consequences of consumer–company identification.

2.2 Risk Society

Giddens (1999) comments: When a society is more conscious about the future or safety issues, the idea of risk is also evolving. Since Beck (1992) published his book, Risk Society, “risk” has become an inevitable cause of disturbance. Beck points out in that “Risk Society consists of two central theses. One concerns reflexive modernization and the other is the issue of risk”. Industrialization always comes with artificial hazards such as the breakdown of the ozone layer, toxic waste, nuclear pollution and global warming. The situation of man is closely connected with impending risks. This makes people pose questions about their situation. While dealing with the initiators of the environmental risks, for example, the corporations and the consumers are having crisis of trust. In this context, the messages delivered by the corporations are checked one by one.

Compared with the pre-industrialized society, risk in the modern society is a side-effect of modernization. In the traditional pre-industrialized society, the idea of risk is associated with natural disasters, such as hurricane, flood, earthquake, famine, etc. In contrast, the industrialized world offers more protection to human lives with advanced technology. However, those “protections” come with more manufactured risks. A recent case is melamine that is blended in milk powder. Other cases are global financial crisis, dramatic climate change, sea-level rise, air pollution and pesticide residues. These are the risks that a modern man has to ponder upon, and the topics of discussion in risk society.

In responding to an event that may trigger risk, people's reaction to it may have

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intensive efficacy collectively. In order to prevent the event from spreading out, the collective consciousness and individual actions are cooperating to eliminate the possible chain of risks. Moreover, empirical science does not always affect the events in reasonable routes. Take Bovine Spongiform Encephalopathy (BSE) for instance, Lidskog (2000) notes that an individual's reaction to the crisis of BSE reveals the interconnections between historical background and social facts. That is to say, even the judgment of an expert cannot stand outside the historical context.

In terms of politics, the evolution of risk society is not a matter of choice or a process that can be resisted. Rather, it is an inevitable phenomenon of modernization. Risk society is not fully aware of the danger of its situation and the possible consequences (Beck, 1996). The premise may bring forward a great number of latent risks which will lead to uncontrollable prospects and further erode the foundation of industrialized society. The self-reflexivity of risk society is not a process of reason. This may be caused by the fact that the consequences are not predictable while the corporations are seeking interests. The side effects may reversely break up the company's long-built foundation. Under this circumstance, if corporate responsibility fails to take effects timely, and the corporation is not paying adequate attention for a long-span of time, there would be irremediable harms to the corporate image.

In modern society, the media serve as the communicator as well as the interpreter of risk information; which is to say, the media have power over the risk perception of the public. In Stone and Gronhaug (1993), they define risk perception as "a state in which the number of possible events exceeds the number of events that will actually occur, and some measures of probability can be attached to them." Moreover, there are many various risk dimensions in previous studies, such as financial risk, psychological risk, social risk, performance risk, physical risk and so on (Jacoby & Kaplan, 1972; Peter & Tarpey, 1975; Schiffman & Kanuk, 1994). However, the media are often criticized of exaggerating the content of risks, and of emphasizing dramatic effects rather than scientific evidences. There are issues to be addressed in the process of risk perception: Why is that some of the statements given by certain organizations or spokesmen are more readily accepted by the public? How are the risk communications and the corporation images connected? In terms of risk information, corporations and government are the main sources of the messages; however, the public do not easily trust either of them. In the past two decades, the public has confidence crises towards the governments and corporations in advanced countries. In the U.S., the majority of the public consider the government and the corporations as the root

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cause of the risks. Nonetheless, the government and the corporations are also the major sources of information and knowledge. This poses inner paradox in the relationship of trust between the public and the organizations.

2.3 Corporate Image

Boulding (1956) considers image as a form of subjective perception, which is not based on the contents of actual events. Personal behaviors are not conducted via pure knowledge or information. Instead, the actions are led by the perceptions and their results. Image is the result of personal perception; which is to say, image is based on personal subjectivity, and is confined by an individual's point of view, limited to the person's acquirement of information. On the other hand, Ditcher (1985) regards image as non-specific descriptions, but the collective image stored in the public's mind. Therefore, image is formed by multiple facets rather than just one characteristic. Moreover, Kotler (1997) reckons image as a person's thoughts, beliefs, and impressions about an object. The person reacts to the object in accordance with the image they have in mind. From these constructs about image, we understand that image is not detailed specifications but a holistic description and a set of ideas about things. Therefore, image can be seen as the public's subjective and holistic perception about a subject. Corporate image, on the other hand, is the consequence of the perception, which reflects the evaluation of the corporations from the market's point of view.

Worcester (1972) sees corporate image as the interconnection of the consumer's experiences, opinions, feelings, beliefs, and knowledge about the corporation. Walters (1978) comments that corporation image is the emotional perception a customer genders in response to the corporation and its activities. Therefore, this perception is subjective. Moreover, Dowling (1988) considers corporate image as a set of beliefs, emotions, and feelings a consumer holds towards the corporation (which is based on the consumer's understanding, descriptions, and memories about the corporation). Because corporation image is a mixture of the consumer's perception and perspective toward the corporation, when people think of a company, all that comes to mind is included as corporate image (Sauerhaft & Atkins, 1989).

Nguyen and Leblanc (2001) examine the factors that constitute corporate image. They suggest that the image results from the customers' perception about the corporate entities and activities that include the brand name, tradition, philosophy of management, and service. Corporate image is a combination of the customers' experiences, feelings, thoughts, and knowledge about the company. Walters and Paul (1970) define corporate image as the consumers' subjective perception about the corporations and their activities and summarize

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corporate image in the following four points:

1.Subjection: the consumers' subjective judgment.

2.Filter: the consumers only take in a certain range of messages. Therefore, only parts of the messages are being singled out. The consumers build their perspectives based on these filtered messages.

3.Elaborate: with limited known knowledge, the consumers infer what is unknown about the corporation.

4.Changeable: corporate image can be changed if the consumers' preferences are changed or their identification are being altered.

3. Research Methods

3.1 Research Framework

From the previous literature, we find positive relationship between social responsibility and corporate image (Chang, 2007). If the corporation conducts social responsibility and succeeds in delivering the messages to the consumers, there would be advancement in the perception of the corporate image, and can affect the consumer behavior and decision-making (Griffin, 2002). However, the consumers do not completely accept that messages delivered by the corporations and their community initiatives. Rather, the messages are being filtered before the consumers' decision-making. Therefore, when the consumers detect the possibility of risks, the positive relationship between the corporate responsibility and image would be undermined. That is to say, even if the corporation is taking up their social responsibility, it does not necessarily mean there will be positive effects on the corporate image. Here, this paper proposes the following research framework:

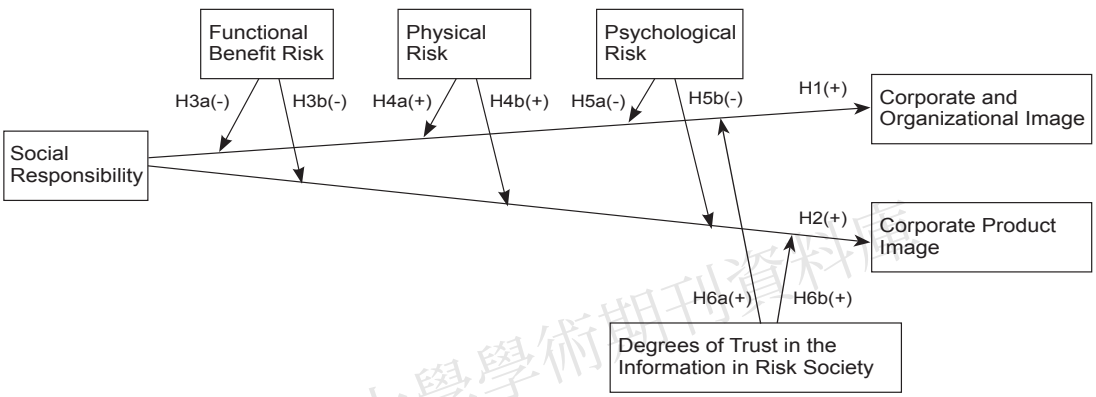


Figure 1 Research framework

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The major topic of this paper takes risk society as the conditioning moderator. The concept of risk society is constructed by the degrees of risk perception and of trust. According to the literature, risk perception has divided in three dimensions: functional benefit risk, physical risk and psychological risk. The discussions of this paper will focus on the relationship of social responsibility and corporate image. In this context, the relationship would be modulated by the risk society. Differences are made by this moderator. Based on this framework, the hypothesis is made to illustrate how social responsibility influences corporate image under various circumstances of risk society.

3.2 The Relationship between CSR and Corporate Image

Scholars have confirmed that social responsibility is significantly related to corporate image. When the corporation sets high standard in their social responsibility, corporate image would be advanced in the consumers' mind. Therefore, fulfilling social responsibility would elevate the corporate image (Chang, 2007). On the other hand, a great number of corporations incorporate social responsibility and activities as essential parts of their strategy making process (Carroli & Fabrizio, 2004). Porter and Teisberg (2006) also consider social responsibility as a foundation of competitiveness of enterprises and core operating strategy. Therewith, this research proposes the following hypotheses:

H1: Social responsibility has positive effect to corporate and organizational image.

H2: Social responsibility has positive effect to corporate product image.

3.3 Moderating Effects of Risk Society

Through the effort of social responsibility, the corporations can construct a well-developed corporate image in the consumers. According to the concept of risk society, the public starts to consider their social perception of risk, which influences their behavior and decision-making. On the other side, risk assessment is getting more difficult owning to the complexity of social development. Under these circumstances, risk assessment becomes subjective personal perception. In this research, there are three kinds of risk, functional benefit risk, physical risk and psychological risk. Functional benefit risk is defined as a loss to customers, including the possibility that the product or service is not good enough as their expectation, may need to be repaired or replaced. Physical risk is the probability that the product or service may damage human body or health. Psychological risk refers to disappointment, frustration, and shame experienced if one's personal information is disclosed. This research proposes that under different risk circumstances, risk has different

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moderate effects to the relationship between social responsibility and corporate image.

First, when consumers perceived high functional benefit risk of the product, they might consider that the corporations should make more effort on the product quality or function than social responsibility. Also lower functional benefit risk, consumers can perceive higher product value (Agarwal & Teas, 2004). Thus, this research proposes that when functional benefit risk is high, the effect between social responsibility and corporate image is lower.

H3a: Degrees of functional benefit risk perception cause negative effects to the relationship between social responsibility and corporate organizational image.

H3b: Degrees of functional benefit risk perception cause negative effects to the relationship between social responsibility and corporate product image.

Second, product with high physical risk might make consumer worried about the effect on human body and the environment. The corporations should take responsibility to solve the problem about damage. Thus, corporations have to pay attention to social welfare in order to make up for the influence. Thus, this research proposes that when physical risk is high, the effect between social responsibility and corporate image is higher.

H4a: Degrees of physical perception cause positive effects to the relationship between social responsibility and corporate organizational image.

H4b: Degrees of physical risk perception cause positive effects to the relationship between social responsibility and corporate product image.

Last, when corporations practice social responsibility through mass media, consumers would be more comforted and build confident in their heart. But with high psychological risk circumstance, consumers might lose their trust according to their psychological fear. As the reason, consumers might have doubts on the corporations' activities, which would cause consumers not to focus what they did. Thus, this research proposes that when psychological risk is high, the effect between social responsibility and corporate image is lower.

H5a: Degrees of psychological risk perception cause positive effects to the relationship between social responsibility and corporate organizational image.

H5b: Degrees of psychological risk perception cause positive effects to the relationship between social responsibility and corporate product image.

Also in Beck's opinion, the industrialization and technological development cause various risks in the society. While facing the producer of risks (i.e. the enterprises), the public has paradoxical complex due to the fact that enterprises are also the sources of the information. The corporations deliver their messages through multiple channels. Nonetheless, the public can sense gaps between the enterprises and the given messages. This

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causes crisis of confidence and paradoxical complex in the public. That is to say, the consumers have degrees of doubts toward the corporations. When the degree of confidence in the information is higher, the consumers have minimized paradoxes toward the corporations; this is supportive to the effects of delivering of messages. Thus, this research proposes that when the degree of trust is high, the effect between social responsibility and corporate image is higher.

H6a: The consumer's degree of trust causes positive effects to the relationship between social responsibility and corporate organizational image.

H6b: The consumer's degree of trust causes positive effects to the relationship between social responsibility and corporate product image.

3.4 Definition and Measurement of Variables

3.4.1 Dependent Variable

According to the literature review, the paper divided corporate image in two aspects: organizational image and product image. Here is the definition of the two categories:

1. Organizational image: the stance that consumers consider the corporation as a member of the community.
2. Product image: the opinions the consumers hold towards the products of the corporation, including, the products, the operational activities and services.

3.4.2 Independent Variable

This paper takes references from domestic and international studies and conducts corporate social responsibility in the following four constructs:

1. The interests of employees and consumers.
2. The stabilized relationship between supply and demand.
3. Benevolence and community participation.
4. Environmental protection.

3.4.3 Moderating Variable

In the past, most of the researches evolving risk society were based on qualitative studies. Which is to say, very few of the studies conduct interviews and scales. There are no effective measuring scales for this research. Therefore, this research paper takes reference from the literature of risk perception scale and confidence-building measure scale. In terms of risk perception measurement, this paper refers to the risk perception scale built by the previous scholars (Jacoby & Kaplan, 1972; Peter & Tarpey, 1975; Schiffman & Kanuk, 1994) and through factor analysis; the paper has divided risk perception in three aspects:

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functional benefit risk, physical risk and psychological risk.

3.5 Research Methodology and Design

3.5.1 Study Object and Data Collection

The major concern of this paper is the connection between corporate image and social responsibility. The research model is focused on the industry of telecommunication; and mobile phone users are the research object of questionnaire collection and survey. The method of convenience sample is the means accessing sample data. The questionnaires are reclaimed via paper and internet questionnaire. For the part of paper questionnaire, employees of my company and other staff are the target respondents. And the questionnaires are passed out to their friends and relatives (who are fitting for this survey) via these initial target respondents. For the part of internet questionnaire, e-mail is the channel of sending and receiving the questionnaire.

3.5.2 Questionnaire Design

The questionnaire is designed on the basis of surveying how social responsibility and corporate image are connected in the industry of telecommunication, within the context of risk society. The content is classified into 5 categories. Likert-Type Seven Point Scale is applied from category 1 to category 4. The first category is corporate image scale (11 items). The second is social responsibility scale (8 items). The third is risk perception scale (17 items). The fourth is information confidence-building scale (10 items). The fifth is the basic information about the respondents.

3.5.3 Data Analysis

First, descriptive statistics are used for the purpose of analyzing the effective questionnaires and the formation of the respondents' basic information. Then, confirmatory factor analysis (CFA) is applied to inspect the reliability and validity of the scales. Last, the paper examined the proposed hypothesis by hierarchical linear modeling (HRM).

4. Analysis and Results

4.1 Descriptive Statistics of Respondents Information

The questionnaires are reclaimed via paper and internet questionnaire. 800 Internet questionnaires are distributed via e-mail, and 571 of them are return (71.4%). 800 paper-based questionnaires are distributed, and 583 copies are received (72.9%). 1154 samples are collected totally. As for the basic information of the respondents, 399 respondents are male (34.6%), and 755 respondents are female (65.4%). The majority of the respondents are under

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25 years of age which counted for 618 among the total (53.6%). Most of the respondents' educational background are college which counted for 753 of the total (65.3%). The income level of most of the respondents is under NTD 30000, counted for 764 of the total.

4.2 Reliability and Validity

Each scale adopted by this research is based on the research questionnaires given the previous scholars; and modifications are made to be fitting for the research. Thus, the content validity of this paper is effective. According to Table 1, the factor loadings of each item are above 0.5, and are conforming to the standard advised by the scholars (Bagozzi & Yi, 1998). The convergent validity of each scale's items is satisfying. Also, the extracted average variance of this research paper is higher than the standard of 0.5 that is suggested by Bagozzi and Yi (1998). Therefore, the items of each scale are explanatory to each constructs.

Moreover, in Table 2, we can see in this research, each scale's Cronbach's Alpha is above the suggested standards proposed by the scholars (Nunnally, 1978). The measuring constructs of this research paper have high consistency internally. In terms of composite reliability, this paper conforms to the advised standard of 0.7 in accordance of the scholars (Fornell & Larcker, 1981). The measuring items can effectively reflect each construct. As it is shown by Table 3, square roots of AVE are compared with coefficients of each constructs, which serve as the basis of discriminant validity. The analytical results of this paper indicate that the constructs proposed by this paper have effective discriminant validity. The Chi-Square of the research model is 7874.65 and degree of freedom is 881. The result of Normed Fit Index is 0.95, Non-Normed Fit Index is 0.95. Comparative Fit Index is 0.96 and Incremental Fit Index is 0.96 are all conforming to the proposed standards.

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Table 1 Descriptions and loadings of each item and AVE of each construct

Construct	Item	Description	Loading	AVE
Corporate Organizational Image	IM1	The telecommunication service provider is actively participating and holding social welfare activities, taking interests in social issues.	0.87	0.858
	IM2	The telecommunication service provider is establishing charitable foundation, involving in community services.	0.87	
	IM3	The telecommunication service provider is sponsoring education-based activities, offering scholarships, internships and visiting.	0.86	
	IM4	The telecommunication service provider is focusing on environmental protection, promoting environmental awareness and sustainability.	0.90	
	IM5	The telecommunication service provider is promoting energy conservation and resource recycling.	0.88	
	IM6	The telecommunication service provider is highlighting the development and improvement of social and living environment.	0.85	
Corporate Product Image	PIM1	The façade of the telecommunication service provider draws your attention.	0.76	0.858
	PIM2	The institute of the telecommunication service provider is well-equipped, and provides good service.	0.91	
	PIM3	The service shops of the telecommunication service provider are clean and well-lighted.	0.85	
	PIM4	The staffs of the telecommunication service provider are well-mannered.	0.84	
	PIM5	The products and services of the telecommunication service provide are quality assured and trust-worthy.	0.81	
Corporate Social Responsibility	CSR1	The telecommunication service provider is with good social responsibility.	0.86	0.890
	CSR2	The telecommunication service provider is carrying out environmental protection activities.	0.85	
	CSR3	The telecommunication service provider is making contributions to the society.	0.79	
	CSR4	The telecommunication service provider is paying attention to its influences on the society.	0.86	
	CSR5	The telecommunication service provider is frequently sponsoring educational and cultural activities.	0.90	

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	CSR6	The telecommunication service provider is emphasizing the corporation's internal environmental protection.	0.89	
	CSR7	The telecommunication service provider is emphasizing charitable activities.	0.91	
	CSR8	The telecommunication service provider is contributing to social welfare.	0.87	
Functional Benefit Risk	FBR1	It is unwise to buy their products.	0.70	0.878
	FBR2	It is not worth it to spend the money on the products.	0.89	
	FBR3	With doubts about the cost-effectiveness of the products.	0.88	
	FBR4	With doubts about the product features.	0.80	
	FBR5	The products may not perform the desired effects.	0.60	
	FBR6	The products may be unreliable and not trust-worthy.	0.68	
Physical Risk	PhR1	The materials and technologies applied on the production of the products may cause side-effects on the human body (ex. containing toxic materials, dangerous level electromagnetic field).	0.72	0.891
	PhR2	The materials and technologies applied on the production of the products make me feel uneasy while using the products (ex. the mobile phone shell may contain toxic materials).	0.74	
	PhR3	The materials and technologies applied on the production of the products induce worries in me (ex. doubts about the safety of the level of electromagnetic field).	0.75	
	PhR4	The quality of the products is not stable, and has potential dangers.	0.80	
	PhR5	The production standards do not meet the international criteria which causes concerns about the potential dangers.	0.81	
	PhR6	The production of the products causes environmental pollution such as leakage of battery fluid, heavy-metal pollution, product recovery.	0.65	
	PhR7	The production process, the buying and using of the products may cause dangers to social security.	0.68	
	PhR8	The production process, the buying and using of the products may cause danger and injuries to other (ex. the erection of base stations).	0.66	

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Psychological Risk	PsR1	It is a waste of time to have their products.	0.84	0.725
	PsR2	The products do not save your time.	0.84	
	PsR3	My friends and relatives make fun of the products that I am using.	0.67	
Degree of Trust in the Information	TR1	The telecommunication service provider is reliable.	0.81	0.888
	TR2	The telecommunication service provider is honest.	0.83	
	TR3	I cannot get all the information I need from the telecommunication service provider.	0.79	
	TR4	The effects of the products conform to the advertisements of the telecommunication service provider.	0.88	
	TR5	The information provided by the telecommunication service provider is accurate.	0.89	
	TR6	The information provided by the telecommunication service provider is trustworthy.	0.72	
	TR7	The telecommunication service provider may hide adverse information.	0.79	
	TR8	I can get all the information I wish to know from the telecommunication service provider.	0.74	

Table 2 Cronbach's and composite reliability of each construct

Construct	Number of Items	Cronbach's	Composite Reliability(CR)
Corporate Organizational Image	6	0.946	0.950
Corporate Product Image	5	0.919	0.920
Corporate Social Responsibility	8	0.960	0.960
Functional Benefit Risk	6	0.902	0.893
Physical Risk	8	0.915	0.900
Psychological Risk	3	0.911	0.829
Trust in the Information	8	0.879	0.937

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Table 3 Discriminant validity

	COI	CPI	CSR	FBR	PhR	PsR	TR
COI	0.93						
CPI	0.68	0.93					
CSR	0.81	0.62	0.94				
FBR	0.06	0.05	0	0.94			
PhR	0.03	-0.02	0	0.93	0.94		
PsR	-0.03	-0.26	-0.06	0.51	0.62	0.85	
TR	0.51	0.55	0.63	-0.14	-0.17	0.23	0.94

4.3 Hypothesis Testing

This research seeks to comprehend the connection between dependent variables and independent variables as well as the conditioning effects. The data analysis is conducted via HRM. The results are shown in Table 4 and 5.

Table 4 shows the relationship between corporate social responsibility and corporate organizational image. From Table 4, we can see the estimated value of corporate social responsibility is 0.764 (t=32.732, P<0.01), which has reached the standard; and H1 is confirmed. As for conditioning effects, the estimated value of CSR X functional benefit risk is 0.010 (t=0.366, P>0.05), which does not reach the standard; therefore H3a is not confirmed. The estimated value of CSR X physical risk is -0.002 (t=0.080, P>0.05), which does not reach the standard; therefore hypothesis 4a is not confirmed. The estimated value of CSR X psychological risk is -0.064 (t=-2.470, P<0.025), which has reached the standard and H5a is confirmed. In terms of CSR X Trust, the estimated value is 0.015 (t=0.770, P>0.05), which does not reach the standard; therefore hypothesis 6a is not confirmed.

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Table 4 Results of HRM (Corporate organizational image, COI)

	Model 1	Model 2
	β value (t)	β value (t)
	COI	COI
Corporate Social Responsibility (CSR)	.764 (32.732)***	.756 (32.202)***
Functional Benefit Risk	.030 (1.259)	.025 (1.044)
Physical Risk	.008 (0.294)	.017 (0.642)
Psychological Risk	.005 (0.217)	.007 (0.300)
Trust	.027 (1.127)	.044 (1.814)*
CSR X Functional Benefit Risk		.010 (0.366)
CSR X Physical Risk		-.002 (-0.080)
CSR X Psychological Risk		-.064(-2.470)**
CSR X Trust		.015 (0.770)
R^2	0.610	0.614
F-change		2.957*

Table 5 shows the relationship between corporate social responsibility and corporate product image. From Table 5, we can see the estimated value of corporate social responsibility is 0.477 (t=17.392, P<0.01), which has reached the standard; and H2 is confirmed. As for conditioning effects, the estimated value of CSR X functional benefit risk is -0.129 (t=-4.142, P<0.01), which has reached the standard; and H3b is confirmed. The estimated value of CSR X physical risk is 0.120 (t=3.353, P<0.01), which has reached the standard; and H4b is confirmed. The estimated value of CSR X psychological risk is 0.030 (t=1.003, P>0.05), which does not reach the standard; therefore H5b is not confirmed. In terms of CSR X Trust, the estimated value is 0.013 (t=0.588, P>0.05), which does not reach the standard; therefore H6b is not confirmed.

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Table 5 Results of HRM (Corporate product image, CPI)

	Model 1	Model 2
	β value (t)	β value (t)
	CPI	CPI
Corporate Social Responsibility (CSR)	.477(17.392)***	.485 (17.693)***
Functional Benefit Risk	.215 (7.661)	.209 (7.433)***
Physical Risk	-.099 (-3.283)	-.089 (-2.893)**
Psychological Risk	-.204 (-7.660)	-.220 (-8.166)***
Trust	.198 (7.048)	.192 (6.724)***
CSR X Functional Benefit Risk		-.129(-4.142)***
CSR X Physical Risk		.120 (3.353)***
CSR X Psychological Risk		.030 (1.003)
CSR X Trust		.013 (0.588)
R^2	0.462	0.472
F-change		5.453***

5. Discussion

Discoveries are found after this analytical research. CSR has significant effect on both corporate organizational image (COI) and corporate product image (CPI). Under risk society, different kinds of risk perception have different effects on CSR, COI, and CPI. We can see functional benefit risk has significant negative effect on CSR to CPI but not CSR to COI. Although corporate social responsibility can provide positive effect to COI and CPI, but when consumers face functional benefit risk, they have more considered about the product quality. If consumers can't be satisfied with functional benefit of the products might cause negative effect on CPI.

Physical risk has significant positive effect on CSR to CPI but not CSR to COI. Under physical risk, consumers might doubt about the materials, process and quality of products and worried about the effect on human body and the environment. At that time, the corporations should take responsibility to solve the problem about damage and pay more attention to social welfare in order to make up for the influence. Thus, when consumers perceived physical risk, CSR has stronger effect to CPI.

Psychological risk has no significant negative effect on CSR to CPI but has significant

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negative effect CSR to COI. With high psychological risk circumstance, consumers might lose their trust according to their psychological fear and they doubt on the corporations' social response activities, which would cause the effect of CSR to COI be lower.

Moreover, degrees of trust in information do not have distinctive effects on CSR, COI, and CPI. The results may be caused by asymmetric information. For most the consumers, asymmetric information is commonly existed in the corporations. Although in the information-explosion era, there are multiple channels to access information, for most of the consumers, there is no way to obtain the "authentic" information. This makes trust in formatting a behavior of taking chances. Consequently, degrees of trust do not have distinctive effects toward CSR, COI, and CPI.

Risk and hazard are the focal issues for the past two decades. The rapid growth of science and technology do not have an overall control of risks since those "growths" are always accompanied with other side-effects. By addressing the relationship between risks, CSR, and corporate image, this paper intends to balance the growth of company interests with suppressed potential risks. However, risk is a comprehensive concept and this research takes telecommunication industry as the target subject. Therefore, further researches on other industries or other methodology to address the concept of risk can be expected in the following years since risks are spread faster than before with the global forces.

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