

Improving brand safety through brand risk management activities: A case study of F&B enterprises in Vietnam

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Abstract—This research aims to evaluate the impact of brand risk management activities on the brand safety of enterprises in the food & beverage manufacturing and processing industry in Vietnam. The research data was collected from random questionnaires with 401 respondents from 72 enterprises (both large and SME enterprises) in the food & beverage manufacturing and processing industry in Vietnam. Research results indicate that all four factors of brand risk management activities including strategy, processes, personnel, and investment have impacts on the brand safety of enterprises in the food & beverage manufacturing and processing industry in Vietnam. The result confirms important roles in promoting brand risk management activities to help the brand has stable and sustainable development.

Index Terms—Brand, brand risk management, brand risk management activities, brand safety

I. INTRODUCTION

Risk management is the identification, assessment, and prioritization of risks through the rational and economical application of resources to reduce, monitor, and control the probability of unfortunate events [1]. Enterprise Risk Management – ERM is an essential innovation in the development of risk management [2]. Over the past 100 years, enterprise risk management issues have been extensively studied by many scholars, such as: The Risk Management Association, formerly known as Robert Morris Associates, established in 1914 by American credit officers. This association focuses on credit risk research for financial institutions [2]; differentiation between the concepts of uncertainty and risk [3]; hard measures of financial risk [4] still in use today; new risk management thinking through insurance [5], designing of accessories to reduce the risk of car accidents [6], risk management in public policy [7], risk management in system administration dedicated to corporate senior management [8], risk management in corporate brand valuation [9], risk management in the global supply chain [10], information security risk management [11], risk management in the banking field [12]. There are some conflicting opinions about the impact of risk management on firm performance. Several studies pointed out that the application of enterprise risk management brought many economic benefits and revenue efficiency [13], but there were also studies from the same time showing that applying enterprise risk management did not make significant changes to the firm's key indicators [14], or the practice of enterprise risk management did not increase the firm [15]. Risk management is both a potential but also a risk if over-quantified [16]. Quantifying and managing risks for tangible assets have been concerned

and proven to be an extremely challenging mission [17] in the past few years but risk management must be not only for tangible but also intangible assets in the organization [18] because intangible assets are the only and sustainable source of competitive advantages of the enterprise [19]. Intangible assets to be listed include specific technologies, copyrights, patents, customer information, trademark, brand, reputation, and corporate culture, as well as software and other intangible computer-based assets [19]. This study focuses on intensively researching risk management for brand, an intangible asset that has great influence on businesses and the market.

In the modern economy context, an enterprise's desire to survive in the market means that it must have a brand strong enough to stand out and position in the hearts of customers [20]. However, the greater the influence of the brand, the more risks it brings to the enterprise [21]. Any crisis related to the brand can affect the trust of customers and lead to many unintended consequences [22]. Brand risk is a factor that can affect an enterprise's brand equity [23]. Since half a decade ago, there have been empirical studies emphasizing the importance of brand risk management activities [24]. In a society with the development of a community empowered to criticize and require transparency by social networks these days, building a brand becomes a brand-protecting mission through brand risk assessment and control [25]. In addition, brand-associated reputation risks threaten revenue and can lead to litigation, financial loss, or customer reduction [26]. Therefore, good risk management will prevent crises and help governance entities ensure the safety of protected objects [27], in this case, it is brand safety [28]. Acknowledging the potential association between brand risk management activities and brand safety, but, there are few theoretical frameworks mentioning this relationship. The following research is conducted with the desire to solve this gap.

In Vietnam, the food & beverage manufacturing and processing industry has a great potential in attracting investments. This industry is in the Top 3 of the largest proportion and main industry groups [29]. The food and beverage industry in Vietnam is projected to have a growth rate of 5-6% in the period 2020-2025. However, during the past thirty years of integration, Vietnam has recorded hundreds of brand crisis stories inside and outside the territory of brands in this industry. Many brands lost in the international market and businesses caught themselves infringing intellectual property rights of their own products when they started exporting products such as Ben Tre coconut candy (1998),

Trung Nguyen coffee, Phu Quoc fish sauce, etc [30] [31]; Some brands completely lost points with consumers when they failed to fulfill their social responsibility to the community such as when Vedan MSG polluted Thi Vai River [32], Tan Hiep Phat with the incident "the fly in the bottle of green tea" [33]. Most recently, the world's best Vietnamese rice brand ST25 was copyrighted and protected by an American enterprise throughout the United States. The same brand risk story from the late 20th century still came back after 30 years, causing damage to the brand in particular and the country's economy in general. Therefore, this study will focus on proposing and examining the impact of brand risk management activities on the brand safety: A case study of F&B enterprises in Vietnam.

II. THEORETICAL BACKGROUND

Enterprise risk management (ERM) is a process of establishing systematic and disciplined activities applied to strategic planning and applied throughout the enterprise. Risks are factors that cannot be completely eliminated, so implementing a model to manage risks is to detect events, assess, and manage events that are likely to affect their business goals in order to minimize negative impacts and help businesses seize better development opportunities. The COSO ERM cube framework [34] is provided as a risk management framework in four risk categories: (1) strategic; (2) operation; (3) reporting; and (4) compliance to achieve business objectives (Fig. 1).

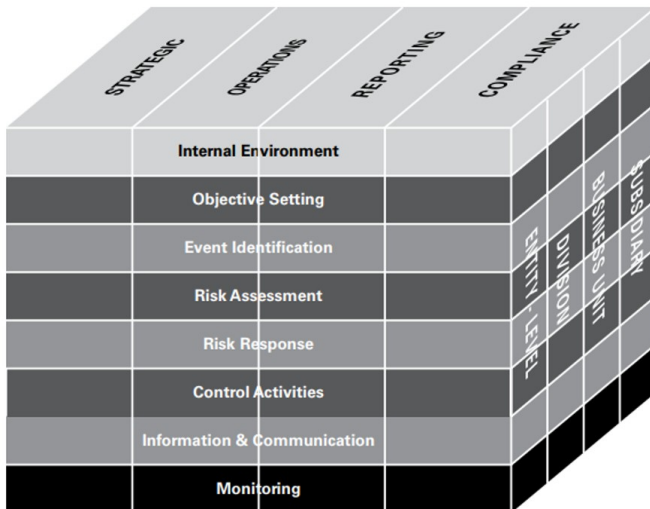


Fig.1 COSO ERM Cube framework

From the above enterprise risk management frameworks, it is found that enterprise risk management focuses on detecting risks and taking initiatives to properly control those risks to help ensure internal business objectives as well as competition with external competitors [35]. Meanwhile, a brand is an essential source of competitive advantages for a business [36], so effective enterprise risk management means good brand risk management. In fact, there are studies suggesting that enterprise risk management and brand risk management are equivalent. [37] [38].

The theory of brand risk management suggests that the primary goals of brand risk management (BRM) [39] are to proactively avoid potential brand risks and eliminate or pre-

vent existing brand risks with the aim of ensuring that the overall brand value is not diminished. The issue of brand risk management has been mentioned in many previous studies because brand risk is a problem associated with the survival of a business. Effective brand risk management activities can help strengthen a business's competitive advantage, enable long-term growth and sustainable profitability, and help enhance strategic decisions, decrease psycho-social risks in the working environment of the business [40]. Brand risk management activities can include practical or strategic activities, training and staff development activities, social responsibility activities, existing risk management processes, and financial investment in risk management.

According to the Resources-Based view, the competitive advantage of a business starts with the resources it holds [41]. In short, business resources and competitive advantages on the market are closely related. Specifically, resources are the root of competitive advantage. To find, allocate, and implement resources effectively is an issue that business leaders need to focus on to avoid wastage. The importance of brand risk management in improving sustainability and safety for the brand of a business [41] [42] [43] was mentioned in many earlier studies. Within this study and based on the RBV theory, the author will analyze 04 brand risk management activities - the observable variables for brand risk management activity variables include: **(1) strategy; (2) personnel; (3) process; and (4) investment.**

First and foremost, the branding **strategy** is a strategy created to strengthen sustainable competitive advantage for the brand in particular and the business in general [44]. The branding strategy ensures the development and maintenance of a product's values and features stay consistent, different, appropriate, and appealing to customers [45]. To complete a brand risk management activity model, the business need an overall strategy [46] covering the factors impacting brand risks, such as: risks from cultural, political, juridical, and social factors; risks from the brand equity management capability; risks in brand promoting activities; risks in brand extension activities as the basis for proper responses to brand risks regardless of the situation. In the classic enterprise risk management ERM model of COSO, the strategic factor is also an important side of the proposed cube [34]. A brand risk management strategy also the best tool to show that the enterprise has been ready to develop in every aspect.

Secondly, after obtaining a strategy, **personnel** – the implementing team is the decisive factor [47] to bring life to the brand risk management programs in the strategy's direction. In the past, brand risk management was not highly prioritized and was not handled by a specialist. Now, however, brand risk management is a top priority and enterprises are aware of the need for a stable team that understands the business, and behaves cleverly to deal with brand risks [48]. Sometimes, the team can work directly at the enterprise or major media companies that take on cases, but they mostly need high-quality human resources this challenging task. When brand risks take place, a series of questions need answers: Who is responsible for identifying brand risks; Whom to report to when there is a problem; Who is responsible for tackling this problem. Personnel is not merely a specialized division but sometimes calls for the participation

of the entire enterprise with the direction and unity from its specialists. The effectiveness of brand risk management (including security for that brand) will be more stable and sustainable if the enterprise has good internal communication with its employees. Besides, employees are one of the crucial parts of the team contributing to improving brand personality [49]. By stabilizing the internal team, the enterprise will help its employees understand, comply, and stay loyal to the brand first; from there, they act to show the brand value to customers in the most natural manners [50]. And last but not least, each of the personnel in the enterprise is a brand ambassador that contributes to the brand’s prosperity. To conclude, the brand risk management activity model cannot be complete without involving a high-quality human resource in implementing, operating, handling, and protecting the brand.

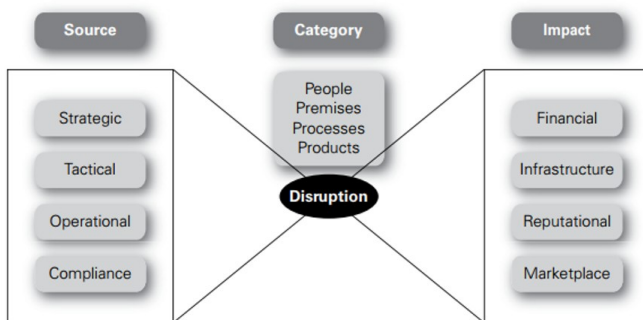


Fig.2 Bow-tie framework in brand risk management

Thirdly, in any brand risk management **processes**, the enterprise always places risk identification and assessment at the top priority [51]. Identifying and assessing risks even when the risks have not taken place is a strategic preparation act. The strategic factor or process in the bow-tie framework (Fig.2) [51] for business risk management indicated its importance in risk management activities. The process explains how to implement brand risk management step by step as proposed [46]. The steps in a brand risk management process are both risk sharing and standardized to bring down the time spent tackling familiar risk issues and identify the core sooner when facing new issues, helping reduce the pressure for the brand of the enterprise to overcome potential crises.

Fourthly, brand risks management activities are ones that require financial **investment**. The enterprise cannot manage risks effectively without finance and positive investment. The level of investment into brand risk management is one of the three advantages affecting a service firm’s operation [52]. Studies also pointed out that developing new services and investing in the brand play an important role in enhancing competitive advantage for enterprises and improving their performance on the market. In brief, investing labor, wealth in brand risk management is equivalent to investing in activities to keep the brand safe. Preparing reserve funds or supporting financial solutions in case of risk happenings is among the smart methods by smart owners.

Brand safety is one of the intrinsic factors of Brand security mentioned in Management of Non-traditional Security (MNS) [53]. Brand security is safety (S1), stability (S2), and sustainability (S3) of a brand through all the activities the

enterprise carry out to protect a brand from risks to respond to crises and manage recovery post crises [54]. A safe brand will offer competitive advantage, helping the enterprise grow more sustainably [55]. Safety and sustainability are closely associated and deeply influence each other [56].

III. HYPOTHESES DEVELOPMENT

From the above literature, this study categorizes four activities in brand risk management that a firm should focus on in order to construct its brand safety, they are strategy, personnel, processes, and investment. Based on the above arguments, we proposed the following hypothesis:

H1: Brand risk management activity – the completion of the strategy in brand risk management positively influences brand safety.

H2: Brand risk management activity – the lack of personnel and quality of personnel in brand risk management negatively influence brand safety.

H3: Brand risk management activity – the completion of the processes in brand risk management positively influences brand safety.

H4: Brand risk management activity – the level of investment in brand risk management positively influences brand safety.

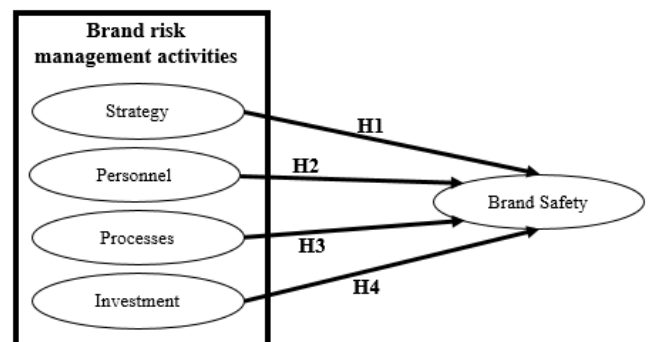


Fig.3 The proposed Research Model

IV. RESEARCH METHODOLOGY

The quantitative survey lasted from May 2022 to September 2022. Through Haiphong Science and Technology Association, New Rural Association, and several other business associations throughout the country, the study reached random 72 food & beverages manufacturing and processing enterprises all over the country. At each business, the research team conducted random survey in the personnel of selected divisions (associated with brand management), such as: CEO, director board, marketing & communication, sales, legal, and customer-service department. Due to the limited survey locations, most of the questionnaires were collected by handing out directly at the enterprise. A minority part of the questionnaires were collected online after confirming the will to cooperate of the enterprise. The questionnaires were collected randomly from above enterprises in the food & beverage field with 426 answers. After leaving out unqualified answers because: (1) the business type is not in the research area; (2) the response quality is not adequate, the rest 401 answers are qualified for inputting and analyzing data.

The survey applied the 05-point Likert-type scales to measure the level of agreement with the statements: 1 means “total disagree”, 2 means “not agree”, 3 means “neutral”, 4 means “agree”, and 5 means “complete agree”. SPSS 26.0 software was utilized to assist data inputting and analyzing.

TABLE I
ITEMS OF THE CURRENT STUDY

Constructs	Number of Items	Sources
Brand risk management activities Strategy Personnel Processes Investment	27	Lai & Samad [57]; Hofman and Keates [1]; and self-developed for this study
Brand Safety	6	Hoàng Đình Phi và Nguyễn Văn Hường [58]

V. DATA ANALYSIS AND RESULTS

After carrying out descriptive statistics of 401 respondents surveyed, Table II below illustrates sample's characteristics. In particular: The gender percentages are almost equal with 189 male respondents, making up 47.1%, while female respondents account for 52.9%. The age in the survey is mostly within the working age, ranging from 25 to 44 (about 82%). The survey samples are all from pointed divisions with associated with brand management like: CEO (51 questionnaires - 12.7%), director board (51 questionnaires - 12.7%), marketing & communication (129 questionnaires - 32.2%), sales (137 questionnaires - 34.2%), customer service (22 questionnaires - 5.5%), and corporate legal department (11 questionnaires - 2.7%). A majority of the respondents have Bachelor's degrees or higher (approximately 96%) and have experience in the current positions of less than 10 years (about 75%). The questionnaires were distributed nearly evenly among business sizes: large-sized enterprises account for 46.1% (185 questionnaires) and small and medium-sized enterprises account for 53.9% (216 questionnaires). The study also collected answers from all three regions in Vietnam, but the number of questionnaires is largely in the North (332 questionnaires - 82.8%) and some in the South and the Central. The questionnaires were also distributed among 06 sectors in the food & beverage manufacturing and processing industry: (1) Milk and dairy products (18.2%); (2) Sugar, confectionery, and other nutritious food (27.7%); (3) Packaged food, seasoning, and cooking oil (19.0%); (4) Fresh and frozen food (11.2%); (5) Alcoholic drink (13.2%); and (6) Non-alcoholic beverages (10.7%). Interestingly, among the answers, only 20% of the respondents said they had never faced brand risks, while the rest had (about 80%); and among them, 7.8% of the respondents thought their enterprises have been facing many brand risks (more than 5 times).

The descriptive statistics (Table III) below show that the surveyed people expressed positive responses towards measurement items in this study. Most of the scale values are higher than 3 (on the 5-point Likert scale) for the independent variable and dependent variable. The study utilized SPSS 26.0 software to analyze factors and examine the reliability and consistency of the scales. During the first EFA analysis process, all the variables found to have Factor Loading under 0.7 had deleted. Factors with accepted Factor Loading will have their reliability examined. The following

TABLE II
DESCRIPTION OF RESPONDENT'S CHARACTERISTICS (N=401)

Variable	Attribute	Frequency	Percentage (%)
Gender	Male	189	47.1
	Female	212	52.9
Age	25-34	169	42.1
	35-44	160	39.9
	45-54	54	13.5
	>=55	18	4.5
Degree	High school Graduation	2	0.5
	Vocational high school	13	3.2
	College's degree	34	8.5
	Bachelor's degree	283	70.6
	Master's degree	69	17.2
Job tenure	<3 years	128	31.9
	3-10 years	170	42.4
	>10 years	103	25.7
Job position	CEO	51	12.7
	Director Board	51	12.7
	Marketing & Communication Department	129	32.2
	Sale Department	137	34.2
	Customer Service	22	5.5
	Legal Department	11	2.7
Firm size	Large size	185	46.1
	Small & Medium size	216	53.9
Product sector	Milk and dairy products	73	18.2
	Sugar, confectionery, and other nutritious food	111	27.7
	Packaged food, seasoning, and cooking oil	76	19.0
	Fresh and frozen food	45	11.2
	Alcoholic drink	53	13.2
	Non-alcoholic beverages (soft drinks, coffee, tea)	43	10.7
Area	Northern of Vietnam	332	82.8
	Center of Vietnam	17	4.2
	Southern of Vietnam	52	13.0
Number of times faced with brand risks	0	83	20.7
	1-2	110	27.4
	3-5	117	44.1
	>5	31	7.8

table indicates that some observable variables were deleted because their Factor Loading were low (under 0.7), including BRS4 and BP9 in brand risk management activities; BS5 and BS6 in brand safety. The other items were remained for further analysis.

TABLE III
DESCRIPTIVE STATISTICS OF THE CURRENT STUDY

Constructs	Items	Description	Mean	Std. Dev.	Deleted in EFA
Strategy (BRS)	BRS1	The enterprise has clear brand development strategies (public with the enterprise's internal: strategy objectives, strategy scale, competitive advantage, strategy activities and the brand's core capabilities)	3.68	.895	
	BRS2	The enterprise has a mission, vision, core values public on its official media sites	3.71	.926	
	BRS3	The enterprise always forecasts and assesses (probability of happening, level of impact, level of seriousness,...) types of brand risks the enterprise may face in each year	3.70	.867	
	BRS4	The enterprise has backup plans to minimize the risks when brand risks occur	2.99	1.091	Deleted
	BRS5	The enterprise has the policy to accept brand risks that those risks have insignificant impact compared with potential communication effectiveness	3.54	.896	
Personnel (BP)	BP1	The enterprise does not have a dedicated division for brand management	3.04	1.223	
	BP2	The enterprise does not hire expert for consulting brand building and managing	2.91	1.125	
	BP3	The enterprise does not hire expert for consulting brand risk management	2.67	1.132	
	BP4	The enterprise lacks a specialist team with the capability of solving brand risk issues (if occur)	2.87	1.122	
	BP5	The enterprise lacks a legal	3.02	1.17	

Constructs	Items	Description	Mean	Std. Dev.	Deleted in EFA
		department with knowledge of the laws directly related to the enterprise's brand		1	
	BP6	The enterprise's employees are not willing to participate in preventing brand risks for the enterprise	3.49	.893	
	BP7	The enterprise lacks personnel training in brand risks the enterprise may face and related action plans	3.15	1.101	
	BP8	The enterprise's core employees lack awareness in proactively protecting the brand of the enterprise	2.98	1.146	
	BP9	<i>The managing director is the key personnel to solve all brand risk issues of the enterprise</i>	3.48	.921	Deleted
Processes (BRP)	BRP1	The enterprise promulgates regulations and processes of handling brand risks for all employees	3.29	.969	
	BRP2	The enterprise has monitoring processes to ensure brand development goes hand in hand with developing the main business of the enterprise	3.34	1.019	
	BRP3	The enterprise has specific plans and action plans (to control risks) for each type of brand risk (when it occurs)	3.42	.962	
	BRP4	The enterprise has plans and communication routes to prevent brand risks	3.04	.939	
	BRP5	The enterprise has monitoring processes for communication activities and monitors communication channels to control brand risks	2.98	.979	
	BRP6	When there are brand risks, the enterprise will hold meetings with the board of director and make tackling decisions depending on the specific situation	3.60	.982	
	BRP7	The enterprise has processes preventing brand risks and applied them effectively before	3.30	.918	
	BRP8	The enterprise have internal professional and tools to identify early risks for the brand	3.00	.979	
	BRP9	The enterprise has the internal professional and tools to analyze and assess types of hidden risks and the consequences it bring for the enterprise	2.91	.980	
	BRP10	The enterprise has processes solving brand risks and applied them effectively before	3.30	.958	
Investment (BRI)	BRI1	The investment budget for brand risk management is prioritized in the enterprise's annual budget	4.40	1.432	
	BRI2	The enterprise has reserve funds to repair damages caused by brand risks	4.20	1.601	
	BRI3	The reserve funds are always sufficient for repairing damages caused by brand risks	3.05	1.130	
Brand Safety (BS)	BS1	The enterprise is not being mistaken for any brand that was/is present on the market	3.70	.867	
	BS2	The enterprise is not in any lawsuits related to trademark disputes	3.29	.969	
	BS3	The enterprise's products are not being counterfeited/faked on the market	3.34	1.019	
	BS4	The enterprise does not get complaints from customers about their product lines on the market	3.42	.962	
	BS5	<i>All brands/trademarks of the enterprise were registered and protected within the territory of Vietnam</i>	3.68	.895	Deleted
	BS6	<i>All brands/trademarks of the enterprise were registered and protected in the exporting country and other countries</i>	3.71	.926	Deleted

After removing variables in the first EFA, the author conducted the second EFA analysis. In this assessment, KMO = 0.47 > 0.5 shows that the correlation coefficient between variables are very good and sig Bartlett's Test = 0.000 < 0.05

indicates that the variables in EFA are correlated, so EFA analysis is appropriate.

TABLE IV
KMO AND BARTLETT'S TEST

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.947
Bartlett's Test of Sphericity	Approx. Chi-Square	7627.562
	df	300
	Sig.	.000

Besides, in this phase, four factors were concluded to build brand risk management activities and name: (1) strategy, (2) personnel, (3) processes, (4) and investment (Table V).

Utilize Cronbach's Alpha to examine the reliability of the scales in this study. The Cronbach's Alpha values in the study are all between 0.762 and 0.956, Eigen values are from 2.075 to 7.165 and Cumulative explained is above 69%. Item to total correlation is above 0.5.

From the Factor Loading result (Table V) and the correlation matrix result (Table VI and Table VII) below, we concluded that the variables in the study have adequate validity and reliability. The Table VI indicates the correlation between variables and the table VII illustrates the result of regression for all the relationships.

TABLE V
RESULTS OF FACTOR ANALYSIS

Construct	Item	Factor loading	Eigen-value	Cumulative explained (%)	Item-to-total correlation	Cronbach's Alpha
Strategy (BRS)	BRS1	.921	3.313	78.262	.844	.905
	BRS2	.918			.832	
	BRS3	.914			.840	
	BRS4	.777			.643	
	BRS5	.777			.643	
Personnel (BP)	BP1	.914	5.973	74.660	.883	.951
	BP2	.861			.815	
	BP3	.903			.868	
	BP4	.908			.875	
	BP5	.888			.849	
	BP6	.736			.672	
	BP7	.860			.814	
	BP8	.829			.776	
	BP9	.829			.776	
	BP10	.875			.839	
Processes (BRP)	BRP1	.793	7.165	71.645	.747	.956
	BRP2	.833			.793	
	BRP3	.839			.800	
	BRP4	.790			.744	
	BRP5	.860			.825	
	BRP6	.834			.794	
	BRP7	.864			.825	
	BRP8	.884			.850	
	BRP9	.885			.851	
	BRP10	.875			.839	
Investment (BRI)	BRI1	.776	2.075	69.180	.534	.762
	BRI2	.854			.630	
	BRI3	.863			.663	
Brand Safety (BS)	BS1	.849	2.825	70.622	.719	.859
	BS2	.878			.753	
	BS3	.709			.543	
	BS4	.911			.814	

TABLE VI
CORRELATION MATRIX

Construct	Mean	S.D.	1	2	3	4	5
BRS - Strategy	3.66	.791	1				
BP - Personnel	3.02	.965	.641**	1			
BRP - Processes	3.22	.819	.792**	.774**	1		
BRI - Investment	3.88	1.154	.295**	.557**	.461**	1	
BS - Brand Safety	3.77	.810	.450**	.244**	.456**	.240**	1

Note: (1) Mean = average scores; S.D.= standard deviation; (2) All coefficients are calculated based on mean centered scores, ** p<.01.

All the proposed hypothesis in the study were examined by applying regression analysis through SPSS software using linear regression analysis technique (Table VIII).

Results show that all the proposed hypothesis (H1, H2, H3, H4) are all right and meaningful. Firstly, BRS strategy influences brand safety positively and significantly with $\beta =$

TABLE VII
THE RESULT OF HYPOTHESIS TESTING

Independent variable	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	VIF
	B	Std. Error				
(Constant)	1.776	.216		8.231	.000	
Strategy (BRS)	.304	.086	.297	3.519	.001	2.776
Personnel (BP)	-.314	.072	-.374	-4.334	.000	2.903
Processes (BRP)	.432	.101	.437	4.295	.000	4.045
Investment (BRI)	.112	.043	.159	2.573	.011	1.497
R Square = 0.280						
Adjusted R Square = 0.270						
Durbin-Watson = 1.592						
P value = 0.000						
Dependent variable: Brand Safety (BS)						

TABLE VIII
THE RESULT OF HYPOTHESIS TESTING

	Hypothesis		Conclusion
H1	Brand risk management activity – the completion of the strategy in brand risk management positively influences brand safety.	BRS → BS (+)	Supported
H2	Brand risk management activity – the lack of personnel and quality of personnel in brand risk management negatively influence brand safety.	BP → BS (-)	Supported
H3	Brand risk management activity – the completion of the processes in brand risk management positively influences brand safety.	BRP → BS (+)	Supported
H4	Brand risk management activity – the level of investment in brand risk management positively influences brand safety.	BRI → BS (+)	Supported

0.297 and $p < 0.001$ supporting H1. The BRP personnel factor is found to impact brand safety with $\beta = -0.374$ and $p < 0.05$ supporting H2. Processes are found to positively and significantly impact brand safety with $\beta = 0.437$ and $p < 0.001$ supporting H3. Investment is found to affect brand safety with $\beta = 0.159$ and $p < 0.05$ supporting H4.

The examination result of multi-collinearity indicates that VIF ranging from 1.497 to 4.045 still guarantees multi-collinearity of independent variables is not considerable.

The analysis result for the regression equation for influential factors are as the following:

$$BS = 1.776 + 0.304 \cdot BRS - 0.314 \cdot BP + 0.432 \cdot BRP + 0.112 \cdot BRI$$

VI. DISCUSSION OF THE RESEARCH RESULTS AND CONCLUSION

This study examines the influence of brand risk management activities on the brand safety of enterprises. Research results show that all four factors of brand risk management activities: strategic, personnel, process, and investment, all of which have direct, significant impacts on brand safety. Among them, the processes factor is the most influential with $\beta = 0.437$. The finding of this study have contributed to brand risk management theory and resource-based-view theory by highlighting the importance and necessity of internal brand risk management activities to ensure brand safety.

A. Theoretical contributions:

First, this study contributes to the history of brand risk management by identifying four factors of brand risk activities, including: strategic, personnel, process, and investment

through hypothesis development, testing reliability, validity, and evaluating the appropriateness of the scales.

Secondly, this result confirms the proposition that brand risk management activities have a significant effect on brand safety. In the history of research, Damodaran (2007) suggested that risk management activities can include identifying, assessing and prioritizing risk reduction. However, it can also include resource allocation to improve the effectiveness of risk reduction, risk monitoring and risk control (Hubbard, 2009). The strategy for brand risk management relies on this, and its focus is that risk management "can limit the organization's ability in achieving the strategic objectives with the ultimate goal being creating and protecting stakeholders' values" (Frigo & Anderson, 2011). The results of this research indicate that, in order to keep the brand safe, the enterprise's manager and stakeholders, which includes not only shareholders but also employees. In other words, personnel quality and the participation of all employees in brand risk management help improve brand safety and serves as the first step in making the enterprise's brand stable and sustainable for the long term. This finding confirms the research results of Hofman & Keates (2013). Apart from that, companies are increasingly interested in brand risk management due to damages in expenses or reputation harm (Hillson, 2010). Therefore, the instability and complexity of the current business environment, as well as the increasingly strict regulatory reviews and severe competitiveness, is the main motive to enhance brand risk management activities.

That means the availability and completion of brand risk management procedure plays an important role in securing companies' brands. Materials about brand building show that procedures in brand risk management activities are not only repetitive but also constantly changes (Langenhan et al, 2013); therefore, needs adjusting constantly in accordance with the requirements of the external environment and the internal capabilities of the enterprise. However, current research also shows that other activities in brand risk management are not enough to guarantee brand safety without the investment factor. Investments may include financial budgets, human resources, and other resources required to carry out brand risk management, then showcase significant influences on brand security. This finding implies that when conducting brand risk management, brand and marketing managers should jointly carefully consider four factors, including strategy completion, company's personnel quality, the availability and completion of procedures, and financial investments, etc. This result complies with the ones in the Hofman and Keates's research (2013).

B. Practical implications

The completion of the **strategy** in brand risk management positively influences brand safety, the more complete the enterprise's brand-related strategies, the greater the brand safety. As for the strategic aspect, the enterprise needs to consider two subjects: inside the enterprise (the enterprise's personnel) and outside the enterprise (customers, partners, competitors, etc.). Regarding subjects inside the enterprise, the business owner needs to spread comprehensive messages to share specific brand strategies, including: the strategy's objectives, activities, and core value of the brand. When the

team understands the strategies correctly and willingly stands the leadership, they will also be important factors in maintaining brand safety for the enterprise. Besides, as for outside subjects, the enterprise needs to position and determine its differences through the mission, vision, and core values public on its official sites such as its website, fanpage, YouTube, LinkedIn, etc. This public information will help the enterprise showcase its values and obtain the right positioning on the market as well as help customers easily acknowledge the enterprise's differences so it will be easier for them to decide to choose the enterprise. Next, to ensure the best brand risk management, the enterprise should have meetings to discuss forecasts about the brand risks the enterprise may face. When brand risks are forecast, strategists of the enterprise should work together to assess the probability of happening, the level of impact of that brand risk, and jointly come up with backup plans to handle brand risks thoroughly as well as response plans when risks become crises in order to minimize damage to the brand. Thorough preparation will help provide the brand with the best protection. Another crucial factor in completing brand risk management strategies is that the enterprise should have policies to accept some risks as its accompanying factors because some risks are tricky to control, the risk of counterfeiting for instance. When accepting risks, the enterprise will have proper communication plans to warn customers and review its internal operation in refining products/services until it completely controls the brand risks it is accepting. Understanding both the pros and cons of dealing with brand risk management is an important factor to help securely protect the brand of the enterprise.

In terms of the lack of **personnel** and quality of personnel in brand risk management negatively influence brand safety, the lack of human resource and increasing low-quality personnel in brand risk management will decrease brand safety. It is an inevitable consequence as human is one of the prominent factors contributing to the process of tackling an issue. The lack of human resource will obviously cause work delay, but low-quality personnel will also lead to catastrophic consequences. Through this study, enterprises should have divisions or specialized departments for brand management. In addition, hiring brand building, managing consultants is essential. Experts with outstanding expertise, experience, and skills and flexible work hours will be the quickest solution to fulfill personnel qualification in brand risk management. Furthermore, it's especially necessary to conduct and promote training specialists with the capability of solving brand risk issues when they become crises. During training, this team will become the first soldiers to support and accompany the enterprise in keeping the brand safe. Moreover, these days, the laws on branding are relatively transparent. Enterprises in the food & beverages manufacturing and processing industry are the ones facing many brand risk domestically and internationally, so improved personnel quality for the legal department will be the first protective and proactive shields in understanding the law, complying with the law, and protecting the brand by the most official tool: the law.

Regarding the completion of the **processes** in brand risk management positively influences brand safety. Completing

processes in brand risk management will help elevate the brand. Among brand risk management models, the process is always an important factor because the process is a factor guaranteeing smoothness in an organization's operation. Good processes will provide a smooth mechanism and a stable system. In brand risks management activities, building processes in managing risks as well as handling risks is the best way to protect the brand.

In terms of the level of **investment** in brand risk management positively influences brand safety. Increasing investments into brand risk management activities also helps enhance brand safety. Therefore, enterprises should set a priority for budgets for brand risk management activities in annual budget. Having a particular budget will boost personnel training, hiring experts, adding more optimal risk monitoring tools. Additionally, because of the policy to accept some risks, the enterprise should have reserve funds to fix the damage caused by the risks. The cost of handling brand crises will be accounted for to make sure it will be more and more optimal and will not influence business profits.

VII. LIMITATIONS AND DIRECTION FOR FUTURE RESEARCH

The author did their best to send the questionnaire throughout the country, but the limited research space is mostly located in the North, not covering much of the Central and the South. More studies are needed in the other parts of Vietnam to guarantee the sample covers regions more evenly.

In addition, this study only works in the food & beverages manufacturing and processing industry. More experiments are needed in other industries in the future.

Finally, this study only focuses on researching the concentration of brand risk management activities on brand safety without considering control variables, such as company size, product field, or the number of times of facing brand risks, etc. More studies are needed to account for control variables to compare results with other variables to create the most comprehensive solutions for all subjects.

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