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The Significance of Networking as A Dimension of Entrepreneurial Marketing in The Firm Performance: Tech Capabilities as A Moderator

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Abstract

Networking refers to the actual activity of communicating with contacts within the network; it is about individuals and businesses working together and cooperating through the exchange of ideas, expertise, and technology. Thus, this study emphasizes the significant relationship between Networking as a dimension of Entrepreneurial marketing “EM” and the firm performance of Sudanese SMEs, by utilizing technological capabilities as a moderator. Furthermore, we intend to discover the significant role of technological capabilities in SMEs. To achieve these objectives the study has assumed the following hypothesis: H1: Networking has a significant relationship with firm performance indicators (Profitability, Sustainability, and Customer satisfaction). H2: Technological capabilities have a significant moderation between networking and firm performance. This study adopted a quantitative methodology, and relied on the “*Positivism philosophy*”, a deductive approach to theory development. Accordingly, 255 responses were collected using a questionnaire structure that was sent out to the community of SMEs in Khartoum-Sudan. To analyze the data firstly the following principal component analysis PCA, Correlation, and Rotation matrix were utilized to test the appropriateness of the study model and to verify the validity of the questionnaire structure. Secondly, we used structural equation modeling (SEM) Path analysis to analyze and examine the significant relationships between all variables. Consequently, the analysis of the data revealed that Networking exhibits a strong positive association with profitability ($p = 0.035$), sustainability ($p = 0.000$), and customer satisfaction ($p = 0.021$). these results present a complete significance for the H1. Similarly, the technological capabilities significantly moderate the relationship between networking and profitability ($P = 0.000$), sustainability ($P = 0.000$), and customer satisfaction ($P = 0.000$), leading to the complete acceptance of hypotheses H2.

Keywords: Entrepreneurial marketing, SMEs, Sustainability, Networking, Customer satisfaction.

Online Shopping Motivation, Satisfaction and Purchase Intentions

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Abstract:

The study investigates the nexus between utilitarian and hedonic motivations, online shopping satisfaction, and purchase intentions. More specifically, the study seeks to determine the impact of utilitarian and hedonic motivations on online shopping satisfaction and purchase intentions and assess the mechanism through which online shopping satisfaction mediates the relationship between utilitarian and hedonic motivations and online purchase intentions. The study followed a descriptive research design and a single cross-sectional survey generating quantitative data. Using Survey Monkey, 215 usable responses were obtained and analyzed. The study was conducted in an emerging economy, South Africa. Descriptive statistics, correlation, and regression analysis and mediation analysis were performed. The results of the study indicate that both utilitarian and hedonic motivations are important predictors of online shopping satisfaction, and in turn, online shopping satisfaction is found to be a predictor of online purchase intentions. In terms of effect size, utilitarian motivations have been found to be a stronger predictor of online shopping satisfaction than hedonic motivations. The mediation analysis indicates that online shopping satisfaction does not mediate the link between utilitarian motivations and online purchase intentions while it confirmed a partial mediation between hedonic motivations and online purchase intentions. The research adds to the growing body of knowledge on the modern phenomena of online shopping and has practical implications for e-store retailers. It provides a greater understanding of, and insight into, how online shoppers behave and make decisions in an online environment.

Keywords: utilitarian, hedonic, satisfaction, intention, online shopping

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Exploring Neuropsychological Abilities in Accounting

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Abstract

This paper explores accounting students' neuropsychological abilities that are relevant to the accounting profession. Calls from the IAASB, the profession and academia targets research on auditors' characteristics in general and within the field of neuroaccounting. In general, understanding the abilities of accounting students is important because the profession requires accountants to have a set of capabilities (IESBA, 2014) as do audit firms when recruiting new staff (IAASB, January 2013). To respond to these calls, I explore the abilities of accounting students through research questions that compare the neuropsychological differences between accounting students (N = 14) and history students (N = 18). The study uses history students as a homogeneous comparison group because they may differ from accounting students on the neuropsychological abilities measured. The findings indicate that accounting students have higher levels of perceptual reasoning, working memory, processing speed, executive functions and attention than the history student. However, I find no differences in verbal knowledge and inhibition. This paper provides a step in exploring the field of neuroaccounting and inspires future research to corroborate the results in my paper.

Keywords: Accounting students, neuroaccounting, neuropsychological abilities.

Introduction

Accountants are required to have abilities¹ (IAASB, January 2013) to meet their profession demands (IESBA, 2014); consequently, exploring accountants' abilities is important to researchers, educators and to recruiters in the accounting profession to better understand how accountants process and execute accounting tasks. Neuroaccounting (i.e., including the field of accounting and auditing) is a field including insights or methodologies from neuroscience into accounting research to enhance our understanding on how individuals process accounting information (Tank & Farrell, 2022). This paper explores the accounting students' abilities through an application of neuropsychological tests and explores accounting students' neuropsychological characteristics. Prior research (e.g. Birnberg & Ganguly, 2012; Moser, 2012; Olsen & Gold, 2018; Waymire, 2014) has inspired for applications of neuroscientific methods in accounting topics. As such exploring accounting students' neuropsychological abilities shows how lenses from neuroaccounting can contribute with new research questions (Moser, 2012). In this paper, I explore accounting students' neuropsychological abilities to better understand whether accounting students' innate abilities match the accounting profession's requirements. In fact, accounting firms use ability metrics when recruiting staff and later in evaluating, promoting, and remunerating staff (IAASB, January 2013).

The theoretical background behind using neuropsychological methods in this paper is twofold. First, neuropsychology relies on the important central assumption that in order to understand human behavior it is important to study the human brain (Beaumont, 2008). According to Beaumont (2008), merely studying human behavior without studying the human brain is not sufficient, because it is the physiological brain that directs human behavior. Second, accounting researchers such as Waymire (2014) argue that the use of neuropsychological methods pertains to the brain and the brain is the ultimate machine executing the accounting tasks. This theoretical background implies that getting a better understanding of the neuropsychological characteristics of accounting students adds to our understanding.

¹ Abilities are a subset of capabilities which are defined by the IAASB as "The professional knowledge; professional skills; and professional values, ethics, and attitudes required to demonstrate competence". It notes that "They are sometimes referred to, in other literature, as competencies, capacities, abilities, key skills, core skills, fundamental skills and values, attitudes, distinguishing characteristics, pervasive qualities, and individual attributes" (IAASB, January 2013, p. 28).

To explore what characterizes accounting students from a neuropsychological perspective, this study offers an analysis of the abilities required of accountants and connects them to the neuropsychological measurements used in this paper. The study uses history students as a homogeneous comparison group because they may differ from accounting students in the neuropsychological abilities measured. The research questions proposed in the paper explore cognitive differences between accounting and history students on the following cognitive characteristics: verbal knowledge, perceptual reasoning, working memory, processing speed, inhibition, executive functions, attention and decision-making, and risk-taking behavior.

The results suggest that accounting students differ from history students on some of the explored neuropsychological differences. Accounting students have higher levels of perceptual reasoning, working memory, processing speed, executive functions and attention than history students. However, I do not find differences in accountants' verbal knowledge and inhibition.

The remainder of the paper consists of four sections. The next section presents the accounting professional requirements with respect to abilities and develops research questions. The third section provides an exploration of the proposed research questions with neuropsychological task batteries. The fourth section presents the conclusions. Accounting profession abilities & research questions

Accounting students may choose the accounting profession because they have innate abilities that are congruent with those needed in the accounting profession, facilitating a person-profession fit. According to Kristof (1996) person-organization fit is the "compatibility between people and the organizations in which they work" (Kristof, 1996, p. 1). This implies that it is at least probable that accounting students, and other students such as history students, will make their career choice based on their innate abilities. Consequently, it is reasonable to expect that the innate abilities of accounting students are in line with abilities needed in the accounting profession. In this section, I link the abilities required of the professional accountant to the neuropsychological abilities measured in the students.

The professional requirements incumbent on accountants have concerned both scholars discussing accountants' ethical conduct (Mautz & Sharaf, 1961, p. chap. 9) and regulators (e.g. IESBA, 2013, 2016a, 2016b). Professional accountants are required to follow the Code of Ethics for Professional Accountants in order to best serve the public interest (IESBA, 2013, 2014, 2016a). Code section 100 (IESBA, 2013) obligates professional accountants to follow five fundamental principles: Integrity², Objectivity³, Professional Competence and Due Care⁴, Confidentiality⁵ and Professional Behavior⁶ (IESBA, 2014). Moreover, professional accountants must maintain independence in mind and appearance (IESBA, 2014, p. Sec. 280.282), which demands high integrity. Independence requires maintaining proper conduct (Mautz & Sharaf, 1961, p. chap 8) and refraining from what could be perceived as improper behavior. Consequently, regulators seem to imply that accountants should have mental control and inhibition as desirable innate abilities, because these abilities may facilitate the application of such ethical requirements.

² Integrity is defined as "to be straightforward and honest in all professional and business relationships" (IESBA, 2013, p. 12). Integrity is also related to being fair and truthful in dealing with issues.

³ Objectivity is "to not allow bias, conflict of interest or undue influence of others to override professional or business judgments" (IESBA, 2013, p. 12).

⁴ Professional Competence and Due Care refers to maintaining "professional knowledge and skill at the level required to ensure that a client or employer receives competent professional services based on current developments in practice, legislation and techniques and act diligently and in accordance with applicable technical and professional standards" (IESBA 2013, 12). The maintenance of professional competence requires from professional accountants a continued awareness of relevant and new professional knowledge (IESBA 2013). Diligence refers to the ability to follow the technical or judicial set of requirements relevant to an assignment "carefully, thoroughly and on a timely basis" (IESBA 2013, 19).

⁵ Confidentiality – to respect the confidentiality of information acquired as a result of professional and business relationships and, therefore, not disclose any such information to third parties without proper and specific authority, unless there is a legal or professional right or duty to disclose, nor use the information for the personal advantage of the professional accountant or third parties (IESBA, 2013, p. 12).

⁶ Professional Behavior is "to comply with relevant laws and regulations and avoid any action that discredits the profession" (IESBA, 2013, p. 12).

Further, according to Section 100.7 (IESBA, 2014), accounting professionals are required to exercise professional judgment. Professional judgment encompasses the ability to weigh and assess the facts in an audit. In addition, in exercising professional judgment based on the facts at hand, the accountant shall consider the circumstances surrounding the client engagement and weigh the facts against the principle-based auditing standards requirements. Professional judgment engages many of the accountant's cognitive abilities and his or her higher executive abilities to make an informed professional judgment.

Taken together, the innate abilities of accounting students may be in line with the required abilities of the accounting profession, which may explain why the students have chosen to study accounting and ultimately join the profession, instead of, for instance, studying history and becoming a historian. As an example, the accounting profession requires the accountant to refrain from unethical and unprofessional behavior. While ethics should be a fundamental cornerstone of any vocation and profession it is not stated specifically in a historian code such a specific requirement as done in the accountants' code of ethics. Thus, it is possible that accounting students may have a high level of self-control over their own behavior when dealing with accounts of their clients. The requirement to exercise professional judgment is another example, assuming that accountants have the mental abilities to make an informed judgment. In the following section, I link the abilities that accounting students are presumed to have to the abilities measured in this study.

Research Questions

In this section, I propose research questions comparing accounting to history students' general cognitive abilities based on the abilities required to become a professional accountant. I use history students as a control group in each of the research questions on abilities. I focus on the following abilities: verbal knowledge; perceptual reasoning; working memory abilities and processing speed, and then neuropsychological abilities such as executive functioning, attention, inhibition and risk-taking, and decision-making, and connect them to characteristics within the accounting profession. The table in Appendix 1 offers an overview over the neuropsychological abilities, definition and the link to accountants' abilities.

An important ability in accounting is verbal knowledge as accountants have to comprehend complex financial and non-financial documents to do an audit (e.g. see the role of an accountant (IFAC, 2009a, p. ISA No 200.206)) and they interact in writing with clients in order to get evidence (e.g. getting external written confirmation⁷ from a third party (IFAC, 2009b, p. ISA No. 505.506a). A such, accountants needs to translate their professional knowledge into a more comprehensive language when communicating with their clients. Historians are also likely to be good communicators to communicate history. Therefore, I explore whether these two groups may differ in verbal knowledge, but it is unclear in which direction.

RQ1: Do accounting students' verbal knowledge differ from that of history students?

Second, perceptual reasoning⁸ refers to nonverbal abstract problem solving, inductive reasoning⁹ and spatial reasoning. Reasoning abilities are in general important to judgment and decision making in accounting (Bonner, 2008) because the accounting tasks require abstract, inductive and spatial reasoning. For instance, accountants use their spatial reasoning to make judgments or decisions based on visual inspections of documents, charts (Bonner, 2008) and on site examinations (e.g. material assets). I believe that accounting and history students may differ on perceptual reasoning because accountants have more need for abstract abilities, as they need to arrive at general conclusions based on samples of evidence (IFAC, 2009c, p. ISA 530). Sample-based conclusions require high levels of abstraction.

⁷ "External confirmation – Audit evidence obtained as a direct written response to the accountant from a third party (the confirming party), in paper form, or by electronic or other medium" (IFAC, 2009b).

⁸ "**perception** *n.* the process or result of becoming aware of objects, relationships, and events by means of the senses, which includes such activities as recognizing, observing, and discriminating. These activities enable organisms to organize and interpret the stimuli received into meaningful knowledge" (p. 683). "**reasoning** *n.* 1. thinking in which logical processes of an inductive or deductive character are used to draw conclusions from facts or premises. See DEDUCTIVE REASONING; INDUCTIVE REASONING. 2. the sequence of arguments or proofs used to establish a conclusion in this way" (APA, 2007, p. 774).

⁹ "**inductive reasoning** the form of reasoning in which inferences and general principles are drawn from specific observations and cases. Inductive reasoning is a cornerstone of scientific method /see BACONION METHOD) in that it underlies the process of developing hypotheses from particular facts and observations" (APA, 2007, p. 477).

This type of abstraction may not be necessary to historians, who have a more factually based background and do not need to draw conclusions based on a statistical or non-statistical sample of facts or evidence on a routine basis.

RQ2: Do accounting students' perceptual reasoning differ from that of history students?

Working memory¹⁰ abilities refer to attention, concentration and mental control. Differences in memory recall and attention to facts may impact judgment and decision making quality (Libby & Trotman, 1993). Accountants need to have a good memory and to remember numbers and facts, as it is not possible to go back and forth to all facts and numbers continuously (Libby & Trotman, 1993). Accounting students may possess innately good working memory abilities such as recalling numbers, because they have chosen a study related to financial statements and numbers. Further, Rau et al. (1999) report that accounting standards requirements make accountants dependent on their memory of cues and facts. History students may also have high recall and numerical abilities to memorize dates and sequences of important historical events. Nonetheless, it is unclear to which extend higher working memory abilities may make students more likely to study accounting or history, and the following research question is used to explore:

RQ3: Do accounting students' working memory differ from that of history students?

Information processing speed is specially an important ability to professional accountants because accountants maintain time budgets and will register their work on an hourly basis. This means that a person with a higher processing speed would be able to gather more cues in a fixed time than one with a lower processing speed. Thus, a higher processing ability would be beneficial and expected in accounting students to work under time pressure. It may be a necessary ability to a historian, to be able to memorize the greatest possible number of historic facts and dates, however, this ability maybe more important in accounting due to the time budget limits on an hourly basis. This leads to the following question:

RQ4: Do accounting students' information processing speed differ from that of history students?

Inhibition¹¹ is the ability to refrain from a certain conduct, for instance, improper conduct. Within auditing, the requirement of independence is connected with maintaining proper conduct (Mautz & Sharaf, 1961, p. chap 8), and refraining from what could be perceived as improper behavior. Consequently, regulators seem to imply that accountants need mental control and good inhibition abilities. Such innate abilities are desirable because these abilities may facilitate the application of ethical requirements such as the ability to be independent in fact and in appearance, a rational that lead to the following research question:

RQ5: Do accounting students' inhibition ability differ from that of history students?

Executive functions¹² have many definitions in different neuroscientific streams of literature. I use the following definition of executive functions as the ability to consider cues and respond adaptively and in a flexible manner to

¹⁰ "Working memory a multicomponent model of SHORT TERM MEMORY or ACTIVE MEMORY that has a PHONOLOGICAL LOOP to retain verbal information, and a CENTRAL EXECUTIVE to deploy attention between them [first described by British cognitive psychologist Alan D. Baddeley (1934-)]" (APA, 2007, p. 1003).

¹¹ Inhibition is defined in the APA Dictionary of Psychology as "1. the process of restraining one's impulses or behavior, either consciously or unconsciously, due to such factors as lack of confidence, fear of consequences, or moral qualms... 3. In conditioning, the active blocking or delay of a response to a stimulus" (APA 2007, 481).

¹² "Executive function is a shorthand description of a complex set of processes that have been broadly and variously defined" (Strauss, Sherman, & Spreen, 2006, p. 401). "Executive functions are a collection of processes that are responsible for guiding, directing, and managing cognitive, emotional, and behavioral functions, particularly during active, novel problem-solving (Gioia, Isquith, Guy, & Kenworthy, 2000, p. 1). "Although variously defined, most investigators believe executive processes are part of a system that acts in a supervisory capacity in the overall hierarchy of brain processing (Burgess & Shallice, 1997) and encompasses skills necessary for purposeful, goal-directed behavior (e.g. Baron, 2004, p. ...). Shallice (1990) has fine-tuned the concept further, arguing that executive functions are not maximally used for the execution of routine, well-learned behaviors, but rather they are especially called upon in novel, unfamiliar contexts where no previously established routines exist. That is, when confronted with novel or complex circumstances, the individual must develop new strategies and monitor their effectiveness" (Strauss et al., 2006, p. 401).

serve a common goal (Strauss et al., 2006). “Key executive functions include spatial planning,¹³ rule learning,¹⁴ inhibition¹⁵ of impulsive responding, inhibition of perseverative responding, and establishing and maintaining the instructional set¹⁶” (Delis et al., 2001, p. 20). These abilities are complex, and it is unclear whether higher or lower levels of these abilities are needed in any of the vocations and therefore I pose the following research question:

RQ6: Do accounting students’ executive function differ from that of history students?

Due to the brain’s limited ability to process information in a given amount of time, attention is a key process allowing the individual to filter relevant and irrelevant information (Strauss et al., 2006, p. 546). “Attention can be conceptualized as comprising several processes. These include sensory selection (filtering, focusing, automatic shifting), response selection (response intention, initiation and inhibition, active switching, and executive supervisory control), attentional capacity (structural and energetic capacity, arousal, effort), and sustained performance (fatigability, vigilance; Cohen, 1993)” (Strauss et al., 2006, p. 546).

An accountant is faced with an identification problem because he or she assesses the risks for material misstatements in the client’s financial statements (e.g. IAASB, 2009, p. ISA No. 315). An accountant concentrates his or her audit attention and efforts on areas in the financial statements that may include risks of material misstatement. Therefore, one can expect that accounting students have high levels of attention abilities due to such requirements in their studies. At the same time, it is possible that history students have high attention abilities because they need to encode and memorize a lot of information. The following research question explores whether accounting and history students differ in their level of attention ability.

RQ7: Do accounting students’ level of attention differ from that of history students?

Finally, judgment and decision-making abilities are central in behavioral research in accounting. Often accounting researchers examine the quality of decision-making in the context of an audit task where the accountant is assessing the risk of material misstatement. Innate risk-taking behavior would be important to accountants in such contexts; however, little research has been done in this area (Bonner 2008). One could imagine that if accountants are risk-seeking and accept risky clients (e.g. a client with a fraud history), an accountant may be faced with devastating litigation and huge financial losses. The following question explores the innate decision-making and risk-taking behavior outside the auditing context of accounting students versus history students.

RQ8: Do accounting students’ decision-making style and risk-taking behavior differ from that of history students?

Methodology: Exploring the research questions

Participants

In this section, I explore the research questions by comparing the neuropsychological abilities of two groups: accounting students and history students. The total number of participants is 32. The number of accounting students is 14 and the number of history students is 18.

¹³ “Spatial Planning, or the ability to mentally visualize the outcome of making two or more moves before they are made” (Delis, Kaplan, & Kremer, 2001, p. 195).

¹⁴ “Rule Learning, or acquiring heuristic strategies for building towers using the fewest number of moves possible” (e.g., learning the best method for clearing a small disk off a peg in order to place a larger disk on the peg) (Delis et al., 2001, p. 195).

¹⁵ “Inhibition, or the ability to refrain from impulsive, trial-and-error responding in order to formulate spatial plans and learn effective problem-solving strategies” (Delis et al., 2001, p. 195).

¹⁶ “Establishing and Maintaining Cognitive Set, or the capacity to learn the instructional rules of this task and to apply those rules consistently while solving each problem” (Delis et al., 2001, p. 195).

TABLE 1

Descriptive statistics of the students

	ACCOUNTING	HISTORY	TOTAL
Number of participants	14	18	32
Mean Age	29.14	22.9	
Education			
High School	0	12	12
Bachelor	8	5	13
Master	6	1	7
Sex			
Female	6	10	16
Male	8	8	16
Hand			
Left	1	4	5
Right	13	14	27

The mean age of the accounting and history students is respectively 29 years and 23 years. There are 8 males and 6 females in the accounting students' group while the history students' group consists of 10 females and 8 males. In the 32 participants, 27 are right-handed while 5 are left-handed.

I recruited the 32 participants over two semesters in 2013 from two different institutions in Norway. A psychologist has administered the tests to the volunteering participants. I followed the ethical requirements in Norway when using human subjects in this study.

Neuropsychological Task Batteries to Answer the Research Questions

Appendix 1 explains the methods used in exploring the research questions. The task battery used to explore the research questions are as following: Matrix Reasoning (WAIS IV); Letter-Number Sequencing (WAIS IV); Coding (WAIS IV); Tower Test from Delis-Kaplan Executive Function System (D-KEFS); and Paced Auditory Serial Addition Test (PASAT). Appendix 2 describes the different tasks batteries used in my study.

Below, I report the results based on the exploration of the research questions and Table 2 reports comparisons between accounting and history students.

RQ1 explores whether the verbal knowledge of accounting students and history students will differ. The results show that the two groups of students have the same level of verbal knowledge.

RQ2 asks whether perceptual reasoning of accounting students will differ from that of history students. The results indicates that accounting students have significantly higher scores (only T-scores) on perceptual reasoning (p -value = 0.05) which is an important reasoning ability involved in judgment and decision-making in accounting.

Audit tasks require a high level of working memory ability to effectively remember cues (numbers and letters) and incorporate them into all audit judgments and final audit conclusions. Consequently, RQ3 explores whether the working memory ability of accounting students will be inherently different from that of history students. One subtest (of total seven subtests) suggests that accounting students have higher working memory ability than history students when scoring on a Letter-Number Sequencing subtest, however, the scores are only marginally significant on a 10% level.

RQ4 asks whether information processing speed of accounting students differ from that of history students. The WAIS coding subtest results shows significant differences (p-value = 0.05) suggesting that the information speed ability of accounting students may be higher than in history students.

RQ5 investigates whether inhibition abilities of accounting students will be different than those of history students because accounting professionals should refrain from improper behavior. The results on different tests measuring the inhibition ability show no significant differences.

RQ6 asks whether executive function abilities of accounting students and history students will differ. Recall executive functions are cognitive skills that enable accountants to control, adapt and plan. I use the Tower Test from Delis-Kaplan Executive Function System (D-KEFS) that assesses students' executive function abilities through eleven subtests: (1) TOW test achievement raw score, (2) TOW test achievement scaled score, (3) TOW Mean first-move time ratio score, (4) TOW Mean first-move time ratio scaled score, (5) TOW Time-per-move-ratio score, (6) TOW Time-per-move-ratio scaled score, (7) TOW Move accuracy ratio score, (8) TOW Move accuracy ratio scaled score, (9) TOW Total Rule violation raw test, (10) TOW Rule-violations-per item ratio scaled score, and (11) TOW Rule-violations-per-item ratio scaled score.

The two first subtests show significant differences at a 10% level, in TOW test achievement raw score (p-value = 0.09), and TOW test achievement scaled score (p-value = 0.09).

ABILITIES	VARIABLES	MEASURES	HISTORY		ACCOUNTING		T-TEST		
			Mean	SD	Mean	SD	p-value	sig.	
Verbal knowledge	WASI_VOC_r	Vocabulary score	raw	67.78	5.64	69.21	3.51	0.41	
	WASI_VOC_t	Vocabulary T score		64.28	6.6	63.93	4.27	0.86	
Perceptual Reasoning	WASI_MAT_r	Matrices Reasoning raw score		29.5	2.97	30.64	2.82	0.28	
	WASI_MAT_t	Matrices Reasoning T score		58	5.89	62.14	5.2	0.047	p < 0.05
Working memory	DIG_f_r	Digit span forward raw score		9.89	1.81	9.4	1.98	0.72	
	DIG_b_r	Digit span backward raw score		9.44	2.68	10.14	2.21	0.44	
	DIG_s_r	Digit span sequencing raw score		9.67	2.14	10.21	2.26	0.49	
	DIG_tot	Digit span total		29	5.16	30	5.01	0.59	
	DIG_tot_s	Digit span total standard score		11.56	2.85	12.64	2.5	0.13	
	LetNum_r	Letter-Number sequencing raw score		20.39	2.38	21.36	3.48	0.18	
	LetNum_s	Letter-Number sequencing standard score		10.94	1.95	12.14	3.25	0.10	p ≤ 0.1
Processing speed	Code_r	Coding raw score		68.44	9.96	75.43	8.98	0.049	p < 0.05
	Code_s	Coding standard score		10.22	1.83	11.64	1.98	0.044	p < 0.05

Inhibition	CWIT1_r	CWIT raw score seconds naming	28.17	4.53	27.29	4.3	0.58	
	CWIT1_s	CWIT scaled score	9.78	2.24	10.14	1.96	0.63	
	CWIT2_r	CWIT raw score seconds Word reading	21.22	2.84	25.14	16.42	0.33	
	CWIT2_s	CWIT scaled score	10.44	1.72	10	3.33	0.628	
	CWIT3_r	CWIT raw score seconds Inhibition	49.72	9.65	45.79	7.97	0.227	
	CWIT3_s	CWIT scaled score	10.28	2.44	11.36	2.06	0.195	
	CWIT4_r	CWIT raw score seconds Inhibition/switching	54.61	10.59	50.43	10.46	0.274	
	CWIT4_s	CWIT scaled score	10.39	2.55	11.21	2.33	0.353	
	CWIT_sum	CWIT Completion times sum of scaled scores	20.22	3.67	20.14	4.79	0.958	
	CWIT_scale	CWIT Composite scaled score	10.39	1.94	10.29	2.43	0.895	
	CWIT_i_r	CWIT Inhibition total errors raw score	2	1.57	1.36	1.22	0.216	
	CWIT_i_s	CWIT Inhibition total errors scaled score	9.39	2.4	10.07	1.82	0.384	
	CWIT_is_r	CWIT Inhibition/switching total errors raw score	1.44	1.04	1.07	1.27	0.368	
	CWIT_is_s	CWIT Inhibition/switching total errors scaled score	10.67	0.97	10.93	1.27	0.513	
	SST1	Direction errors on stop and go trials	4.22	3.15	5.21	6.68	0.582	
	SST2	Proportion of successful stops (last half)	0.54	0.12	0.55	0.11	0.98	
	SST3	Median correct RT on GO trials	401.36	78.68	442.96	202.28	0.43	
	SST4	SSD (50%) (last half)	240.13	97.94	261.89	169.99	0.652	
	SST5	SSRT (last half)	161.23	46.66	181.07	58.4	0.2936	
	Executive functions	TOW_r	TOW Total achievement raw score	19	3.4	20.93	4.53	0.089

	TOW_s	TOW achievement score	Total scaled	11.44	2.2	12.71	3.05	0.091	p < 0.1
	TOW_fmt_r	TOW Mean first- move time ratio score		2.58	1.62	7.75	7.67	0.009	p < 0.05
	TOW_fmt_s	TOW Mean first- move time scaled score		11.78	1.77	8.5	4.31	0.006	p < 0.05
	TOW_tpm_r	TOW Time-per- move-ratio ratio score		3.34	1.47	3.53	1.44	0.725	
	TOW_tpm_s	TOW Time-per- move-ratio scaled score		9.61	2.52	9.36	2.47	0.778	
	TOW_mar_r	TOW Move accuracy ratio score		1.67	0.45	1.45	0.31	0.064	p < 0.1
	TOW_mar_s	TOW Move accuracy ratio scaled score		9.44	2.62	10.86	1.7	0.045	p < 0.05
	TOW_trv_r	TOW Total Rule violation raw score		0.67	0.91	1.07	1.33	0.314	
	TOW_rvpi_r	TOW Rule- violations- per-item ratio score		0.067	0.091	0.11	0.13	0.314	
	TOW_rvpi_s	TOW Rule- violations- per-item ratio scaled score		9.83	0.38	9.86	0.95	0.923	
Attention	PAS_r	PASAT right answers Paced Aditory Serial Addition Task		38.72	11.02	49.43	9.33	0.003	p < 0.05
	PAS_w	PASAT wrong answers		4.33	2.99	3.57	3.3	0.750	
	PAS_o	PASAT omitted/ no answers		16.28	10.56	7	8.41	0.006	p < 0.05
Decision- making and risk-taking behaviour outside of the learning context	CGT1	Delay aversion		0.19	0.13	0.098	0.13	0.071	p < 0.1
	CTG2	Deliberation time		2177.73	518.17	2058.42	493.46	0.515	
	CTG3	Overall proportion bet		0.54	0.13	0.53	0.17	0.876	
	CTG4	Quality of decision making		0.97	0.04	0.96	0.07	0.415	

CTG5	Risk adjustment	1.68	0.74	1.52	0.54	0.5
CTG6	Risk taking	0.58	0.14	0.62	0.09	0.35

TOW Mean first-move time ratio score and ratio scaled score show that accounting students have a significantly higher (p-value = 0.01) mean first-move time ratio score than history students. This suggests the ability to pause and to formulate strategies is higher in accounting students. The total number of moves (measured through TOW Time-per-move-ratio score and scaled score) of accounting students was not significantly different from that of history students. TOW Move accuracy ratio score (p value = 0.06) and TOW Move accuracy ratio scaled score (p value = 0.05) measure whether accounting students use more effective strategies than do history students. On the other hand, subtests measuring accounting students' number of rule violations (i.e., TOW Rule violation raw score, per-item ratio score and per-item ratio scaled score) in comparison with the history students do not show significant differences between the two groups.

RQ7 explores the level of attention in the two groups through the subtests in the Paced Auditory Serial Addition Test (PASAT). The subtests measure different aspects of the level of attention in accounting students and in history students. The PASAT right answers Paced Auditory Serial Addition Task shows significant differences between the two groups of students on the 1 % level. The PASAT omitted or no answer subtest shows a significant result, in which accounting students have fewer omitted answers compared to history students on the 1 % level. However, the PSAT wrong answers subtest shows no significant differences between the two groups.

RQ8 explores the decision-making style and risk-taking behavior in accounting students and history students. Only the Delay aversion test shows a significant difference between the accounting and history students, otherwise the rest of the subtests on the Cambridge Gambling Task from Cambridge Neuropsychological Test Automated Battery (CANTAB) do not show significant differences between the groups.

Taken together, I find significant differences between accounting and history students on the following neuropsychological cognitive abilities: perceptual reasoning; partly working memory; processing speed; executive functions; and attention. However, I find no differences on verbal knowledge, inhibition and decision-making and risk-taking behavior outside of the learning context.

Limitations

There are many limitations in such interdisciplinary research. For instance, the sample size is not big. Limitations are to be found in the scaled scores like T-scores are adjusted for age, education and sometimes sex. T-scores will therefore give information about the level of function in the sample; however, the norms are not based on a Norwegian sample. Also, a more balanced sample regarding age and sex because the raw scores give more variability and should be used in future research using neuropsychological methods.

Biography of the author

I work as an Associate Professor in accounting, tax and business administration at Western Norway University of Applied Sciences and an Associate Professor II in Auditing at Inland Norway University of Applied Sciences (INN).

Conclusions

This research examines the neuropsychological differences in abilities between accounting and non-accounting students (i.e., history students in this paper). Based on prior literature, I formulate research questions. The research questions focus on exploring the following abilities: verbal knowledge, perceptual reasoning, working memory, information processing speed, inhibition, executive function, level of attention, decision-making style and risk-taking behavior.

To explore the research questions, a neuropsychologist helped me to test the 32 subjects. A group of 14 accounting students and a group of 18 history students participated in this study. The participants executed a task battery consisting of the following tests: verbal knowledge with Vocabulary from Wechsler Adult Intelligence Scale (WAIS IV), perceptual reasoning with Matrix Reasoning from Wechsler Adult Intelligence Scale (WAIS IV), working memory with Digit Span from Wechsler Adult Intelligence Scale (WAIS IV), working memory with Letter-Number Sequencing (16-69 only) from Wechsler Adult Intelligence Scale (WAIS IV), processing speed with Coding from Wechsler Adult Intelligence Scale (WAIS IV), inhibition with Color-Word Interference Test from Delis-Kaplan Executive Function System (D-KEFS), Paced Auditory Serial Addition Test (PASAT), and decision-making and risk-

taking behavior outside the learning context with Cambridge Gambling Task from Cambridge Neuropsychological Test Automated Battery (CANTAB).

I find significant differences between accounting and history students on the following neuropsychological cognitive abilities: perceptual reasoning, partly working memory, processing speed, executive functions and attention. However, the findings in my interdisciplinary study have many limitations and it was an immense challenge to conduct such study. Nonetheless, I believe that this study is a step toward exploring accountants' abilities through lenses from neuroaccounting.

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Implementing Innovation As A Strategic Tool For Tourism Development. Case Of Southern Albania

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ABSTRACT

The new dynamics of Albanian tourism in the world tourism arena has influenced tourism policy makers to change their decisions and management methods due to the new competitive challenging situation.

The inability to establish normal tourism business, due to difficult mobility of tourists and unfavorable epidemiological situation, has led to finding various innovative solutions that could help improve results in tourism. In addition to improve the current situation, the innovations introduced during the pandemic were aimed at bringing certain changes in the coming period, when the tourism industry is not burdened by the pandemic, which will accelerate the growth of the tourism economy.

The aim of this paper is to present an analysis of innovation implementation and strategies in the tourism sector of Vlore County. The application of a questionnaire to a number of tourism sub-sectors provided information on the extent of innovation activities, characteristics of innovation firms and internal and systemic factors influencing innovation. Key findings of the analysis show that tourism businesses face a number of critical barriers to innovation, including challenging local economic conditions, lack of access to adequate financing, weak customer demand, high cost of undertaking innovation activities, and lack of qualified personnel. Based on these findings and suggestions presented by respondents for encouraging innovation in the tourism sector, recommendations are offered to local and central government. The main recommendation outlined is the integration of an innovation-oriented perspective into current tourism policy.

Key terms: innovation, tourism, development, Albania

INTRODUCTION

Innovation, which is one of the *driving forces of development*, is defined as the introduction of a new product or bringing a different feature of an existing product to fore, the development of new techniques during the production process, and the availability of new resources in the supply chain (Schumpeter, 1911; 1934). Some researchers agree that the size of the enterprises has a negative correlation with the innovative activities (Becheikh et al., 2006) therefore it is accepted as a very important tool especially for small and middle sized enterprises (SMEs) (Massa and Testa, 2008). However, regardless of the size, in the knowledge era, innovation might be assumed as a start off on the right foot to win a seat among the rivals. Despite the fact that, innovation is considered to support the merchandising companies mostly, new developments prove that even the service sector demands the adaptation to innovative practices. Tourism, as being one of the service sector members, faces new technologies, new customers and their changing consumption patterns, new rivals, new environmental expectations (eg. green energy, sustainability tc). In order to meet the continuous changes within the sector, innovation comes up with a valuable opportunity to shape the future. It is evident that tourism is in a close relationship with many other sectors. This encounters many difficulties as well as some opportunities. Any shift in nano technology may affect the housekeeping practices; artificial intelligence may trigger new accommodation types; augmented reality may offer a brand-new experience in museums. Although the developments encourage the practitioners to cope up with the speed of innovation, the interest of the

theorists in the field is comparatively below the desired level which may be just because of the perceived “tactical sense” of the services; touching the experience, touching the soul and touching the needs of the guests.

METHODOLOGY

The study included 51 businesses, which were surveyed regarding the innovative activity since 2015 through one of their representatives with different positions in the business (manager, administrator, worker, owner).

For the qualitative data, descriptive analysis was done through absolute and relative densities. For quantitative data, Average Value, Minimum Value, Maximum Value and Standard Deviation were calculated.

Tables and graphs in the form of circles and graphs with rectangles were used to display the data.

Codification was used to analyze the qualitative variables and to analyze the rating scale of such variables as innovative activity, obstacles to innovation and the evaluation of government support programs for business.

FINDINGS SUMMARY– DESCRIPTIVE ANALYSIS

Characteristics of businesses

The study included 51 businesses in Vlora, represented by different people directly connected to the businesses. The businesses are analyzed according to the main indicators related to the size, the number of employees, the activity they develop, the application of innovation, its importance, obstacles and suggestions.

Table. 1: Distribution of businesses according to the above indicators.

<i>Indicators</i>	<i>Classification</i>	<i>Number (n=51)</i>	<i>% (n=51)</i>
Years of activity	1-5 years	28	54.9
	6-10 years	14	27.5
	Over10 years	9	17.6
Principal activity	Commerce	8	15.7
	Food service	15	29.4
	Accomodation	17	33.2
	Food and accomodation	6	11.8
	Other services	4	7.9
	Crafts	1	2
Number of employees	1-9 employees	37	75.5
	10 -50 employees	12	24.5
Number of female employees	No female employees	8	15.7
	Up to 50% female employees	19	37.3
	Over 50% female employees	24	47.0
Is your business a contractor of another business?	Yes	0	0.0
	No	51	100.0
	Yes	2	3.9

Is your business a subcontractor of another business?	No	49	96.1
The role of the business representative	Manager	28	54.8
	Administrator	4	7.8
	Employed	5	9.9
	Owner	14	27.5
The gender of the business representative	M	15	29.4
	F	36	70.6

Table. 1, shows that most of the businesses, about 55% of them are new businesses with 1-5 years of activity, about 28% are businesses with 6-10 years of activity and about 18% have over 10 years of activity.

Table. 2, presents the mean and standard deviation for each business age classification.

Table 2. Average age of businesses.

Activity timeline	Mean	N	Standard deviation
1-5 years	3.107	28	1.4742
6-10 years	7.286	14	1.2044
Mbi 10	20.333	9	6.1847
Total	7.294	51	6.9348

The average age of business activity is 7.2 years and the standard deviation is 6.9 years. Minimum = 1 year and Maximum = 30 years.

For businesses with "1-5 years" activity, the average age is 3.1 ± 1.47 years.

For businesses with "6-10 years" activity, the average age is 7.2 ± 1.20 years.

For businesses with activity "Over 10 years" the average age is 20.3 ± 6.18 years

From Table.1, it can be seen that businesses are classified into 6 groups according to their activity. Most of them, about 33%, belong to the "Accommodation" activity. About 29% are "Food service", 16% "Trade", about 12% "Accommodation and food" and about 8% "Other services" and 2% "Crafts".

Table 1 shows that, businesses are classified into two groups according to the number of their employees, 75.5% of businesses have "10-50" employees and, 24.5% have a number of "1-9" employees.

From Table. 1, it is observed that according to the participation of female employees in businesses, these are classified into 3 groups: About 47% of businesses have "Over 50%" of female employees, 37% have "Up to 50%" of female employees, and 16% have no employees females.

Table 3 presents the average data of female employees in businesses, the minimum and maximum values and the standard deviation.

Table 3. The average number of female employees in businesses

	N	Minimum	Maximum	Mean	Std. Deviation
Female employees in businesses	51	0.0%	17.0	4.0	3.6
	51	0.0%	100.0%	49.5%	31.7%

Table 3 shows that the average number of female employees in businesses is 4 ± 3.6 (female) or 49.5 ± 31.7 (%).

Table 1 shows that, based on questions on the role of businesses as contractors or subcontractors of another business, All businesses are not contractors of another business and about 4% are subcontractors of another business.

Table 1 shows that the interviewees are classified into 4 groups, according to the role in the business. Most of them, about 55%, are "Managers", about 28% are "Owners", about 10% are "Workers" and about 8% "Administrators".

Table 1 shows that according to the gender of the interviewees, 71% are women and 29% are men.

DATA ON INNOVATIVE BUSINESS ACTIVITY SINCE 2015.

In this part, the interviewees were asked about the innovative business activity since 2015, related to the product, process, organizational management and marketing.

Table 4 presents the distribution of responses to the question: "Has your business undertaken any innovative activity since 2015".

Table 4. Distribution of responses on the innovative activity of businesses since 2015.

Innovative business activity	Responses on the innovative activity of businesses since 2015.		Total
	No	Yes	
Introduced a new product	<i>PRODUCT</i>		
Number	36	15	51
%	70.6	29.4	100
Significantly improved an existing product			
Number	37	14	51
%	72.5	27.5	100
Developed or modified a new product			
Number	42	9	51
%	82.4	17.6	100

Introduced a new process	<i>PROCESS</i>		
Number	38	13	51
%	74.5	25.5	100
Significantly improved an existing process			
Number	37	14	51
%	72.5	27.5	100
Developed or modified new process			
Number	42	9	51
%	82.4	17.6	100
It introduced a new form of organizational management	<i>MANAGEMENT</i>		
Number	42	9	51
%	82.4	17.6	100
Significantly improved an existing form of organizational management			
Number	39	12	51
%	76.5	23.5	100
Developed or modified a new form of organizational management			
Number	43	8	51
%	84.3	15.7	100
Introduced a new marketing technique	<i>MARKETING</i>		
Number	25	26	51
%	49.0	51.0	100
Significantly improved an existing marketing technique			
Number	29	22	51
%	56.9	43.1	100
Developed or modified a new marketing technique			
Number	43	8	51
%	84.3	15.7	100

Table 4 shows that:

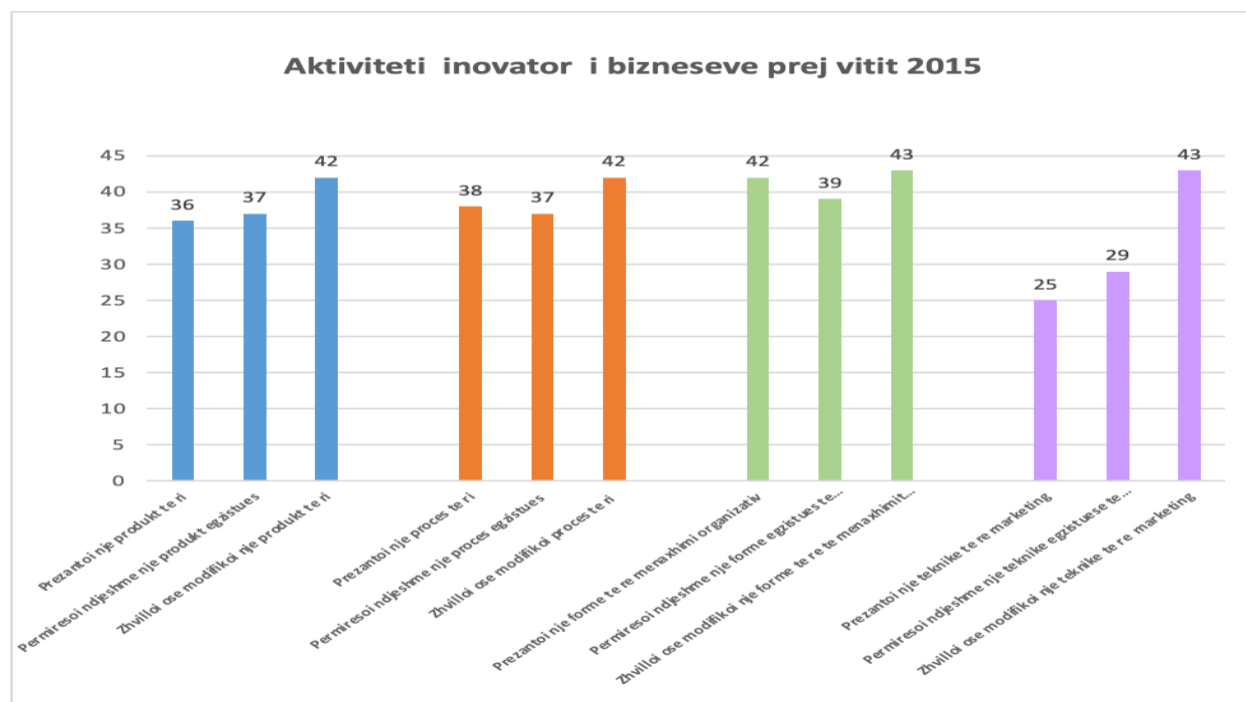
a) 3 questions were asked about the Product and the answers show that: Only 29.4% of businesses have proposed a new product, about 28% have significantly improved an existing product and 18% have developed or modified a new product.

b) 3 questions were asked regarding the Process and the answers show that: Only 26% of businesses have proposed a new process, about 28% have significantly improved an existing process and 18% have developed or modified a new process.

c) 3 questions related to organizational management were asked and the answers show that: Only 18% of businesses have proposed a new form of organizational management, about 24% have significantly improved an existing form and 16% have developed or modified a new form of organizational management.

d) 3 questions related to Marketing were asked and the answers show that: Only 51% of businesses have proposed a new marketing technique, about 43% have significantly improved an existing technique and 16% have developed or modified a new marketing technique.

Graph 8 presents the above mentioned distribution.



Grafiku 8. Innovative activity

Table 5 presents the areas of innovative activity in the businesses under study. It can be seen that most of the innovative activities were devoted to information and communication technology.

About 28% are devoted to another field of technology and 26% to a non-technological field.

Table 5. Distribution of innovative business activity areas.

The field of innovative activity	Number	%
Another technological field	14	27.5

Non-technological	13	25.5
Information and communication technology	32	62.7

OBSTACLES IN UNDERTAKING INNOVATIVE ACTIVITIES BY BUSINESSES.

Table 6 presents the distribution of responses related to the evaluation scale of obstacles that businesses have encountered in innovative activities.

Table 6. Degree of evaluation of business obstacles in innovative activities.

Obstacles	The evaluation rate of of obstacles in innovative business activities					
	No response	Not important	Important	Little more important	Very important	Total
High cost of innovative activity						
Number	4	7	6	3	31	51
%	7.8	13.7	11.8	5.9	60.8	100
Lack of financing						
Number	4	8	21	7	11	51
%	7.8	15.7	41.2	13.7	21.6	100
Lack of skilled and qualified personnel						
Number	5	10	6	12	18	51
%	9.8	19.6	11.8	23.5	35.3	100
Resistance to change within the busines						
Number	4	11	15	12	9	51
%	7.8	21.6	29.4	23.5	17.6	100
Mungese informacioni mbi aktivitetetin inovativ Lack of information on innovative activities						
Number	3	9	14	13	12	51
%	5.9	17.6	27.5	25.5	23.5	100

Lack of market information						
Number	5	8	15	11	12	51
%	9.8	15.7	29.4	21.6	23.5	100
Domestic economic conditions / inflation						
Number	5	10	13	5	18	51
%	9.8	19.6	25.5	9.8	35.3	100
Legislation, legal restrictions, administrative procedures						
Number	4	8	11	12	16	51
%	7.8	15.7	21.6	23.5	31.4	100
Weak customer demand						
Number	7	12	7	15	10	51
%	13.7	23.5	13.7	29.4	19.6	100
Lack of marketing skills						
Number	4	16	9	13	9	51
%	7.8	31.4	17.6	25.5	17.6	100
Lack of technical support from outside						
Number	4	15	9	8	15	51
%	7.8	29.4	17.6	15.7	29.4	100

Among the main obstacles for businesses is the "high cost of innovative activity" which is considered very important by about 61% of businesses. Also, about 35% of businesses consider "Domestic economic conditions and inflation" and "Lack of skilled/qualified personnel" as very important obstacles. About 32% consider the obstacle that comes from "Legislation, legal restrictions and administrative procedures" to be very important. About 29% evaluate "Lack of support from outside", about 24% "Lack of information on the market" as well as "Lack of information on innovative activity". About 22% evaluate "Lack of financing", 20% "Weak customer demand", 18% "Lack of marketing skills" as well as "Resistance to changes within the business".

EVALUATION OF GOVERNMENT SUPPORT PROGRAMS FOR BUSINESS RELATED TO INNOVATION.

In this part, 8 questions were asked regarding the evaluation of government support programs by businesses for innovation.

Table.7, presents data on the use of government support programs by businesses.

Table 7. Distribution of businesses according to the assessment of government support for innovation.

Did your business use government support or assistance in innovation?	Number	%
No response	2	3.9
No	47	92.2
Yes	2	3.9
Total	51	100.0

The table shows that the majority of businesses, about 92% of them, do not use government support for business innovation. Only about 4% use government support for innovation.

Table 8 presents the assessment of the importance of each government support program for business related to innovation.

Table 8. Evaluation of government support programs on business innovation.

Government support program on business innovation	Evaluation of government support programs on business innovation						
	No response	Not applicable	Not important	Little important	Important	Very important	Total
Training							
Number	2	34	4	3	3	5	51
%	3.9	66.7	7.8	5.9	5.9	9.8	100
Subsidies							
Number	4	30	8	1	4	4	51
%	7.8	58.8	15.7	2	7.8	7.8	100
Tax deduction							
Number	3	20	8	8	4	8	51
%	5.9	39.2	15.7	15.7	7.8	15.7	100
Technical advice							

Number	3	24	8	5	7	4	51
%	5.9	47.1	15.7	9.8	13.7	7.8	100
Credits /Grants							
Number	3	25	10	4	3	6	51
%	5.9	49	19.6	7.8	5.9	11.8	100
Support of venture capital							
Number	3	22	11	4	8	3	51
%	5.9	43.1	21.6	7.8	15.7	5.9	100
Funding of research/development							
Number	3	27	8	7	2	4	51
%	5.9	52.9	15.7	13.7	3.9	7.8	100

From Table 8, it can be seen that the assessment of businesses on the government's support programs for innovation is presented as follows:

About 67% of the businesses evaluate as "Impracticable" government support programs related to "Training", 59% programs related to "Subsidies", 53% programs related to "Research/development financing", 49% programs related to "Loans". and grants", 47% programs related to "Technical advice", 43% programs related to "Entrepreneurial capital support", and 39% programs related to "Tax deductions". However, in the evaluation "Very important" it is noted that "Tax deduction" was further evaluated in 16% of cases, "Grants/Grants" in 12% of cases and "Training" in about 19% of cases.

Conclusions

Older businesses have had higher innovative activity.

Among businesses with different types of activity, there are no changes in innovative activity.

Businesses with a larger number of employees have a higher innovative activity.

Businesses with different participation of female employees in them, there are no changes in the innovative activity.

Businesses with a high participation of women in them have a higher rating for innovation support programs

Recommendations

To improve the internal dynamics of innovation: pushing businesses in the tourism sector to adopt a proactive attitude towards innovation, especially thanks to an ambitious shift from simple technology to economic intelligence;

To improve efficiency in the national innovation system;

Improve training of operators, staff;

Development of the role of public and private agents: regionalization of action;

Maintaining the coherence of the tourism industry and its connection with society as a whole. In fact, it is not possible to think about innovation in tourism without acknowledging the need to mobilize the population, which, in particular, must be encouraged to cultivate the basic values of warmth and hospitality;

To develop different tourism products from the experiences of tourists/travelers;

To analyze the sociological and psychological phenomena of visitors/tourists to understand their motives and expectations for a professional management of tourist attractions, museums, exhibitions, excursions, etc.;

To be successful entrepreneurs through the planning and development of innovative tourist services;

To develop electronic forms of communication for business promotion, such as e Tourism, social networks, etc.;

To identify national and international tourism potentials (such as rural, cultural tourism, etc.);

To manage various tourism projects, events as well as the quality of customer services in various tourism projects.

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Conceptual Interface between Sensory Marketing and Impulsive Buying Behaviour of Millennials in South Africa

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Abstract

Millennials in recent times has increase percentage participation in the retail market, which has been informed by diverse factors attributed to their socioeconomic exposures. It is also evident that the pattern of purchasing behaviour of millennials has its own consequences, which include buying out of their budget, making unplanned purchases, and even deviating from their fashion sense. These consequences engineered the objective of this study to systematically reveal the conceptual interface between sensory marketing and impulsive buying behaviour of millennials in South Africa. To achieve this objective, an exploratory literature review approach to research was employed, where information and deliberations on impulsive buying behaviour, millennials, sensory marketing were obtained from journals and publications of previous scholars both local and international. The findings of the study revealed that store environment, floor merchandising, and sales promotions significantly influence the pattern of purchasing behaviour of millennials, which triggers impulsive buying. It was recommended that marketers who focus on millennial goods and services should employ the findings of this study to increase impulse purchases. On the side of the millennials, they should familiarize themselves with different marketing strategies to critically manage their buying pattern.

Keywords: Sensory Marketing, Impulsive Buying Behaviour, Millennials, Mthatha, South Africa

JEL Classification: M3, M30, M31

1 Introduction

Decisions made before and after an individual makes a purchase are within the purview of consumer behaviour. Therefore, it suggests that sensory advertising may have an emotional influence that prompts consumers to seek and decide to purchase a product. Emotional elements play a considerable part in the choice to make a purchase, as seen by the prevalence of customers who afterwards wonder why they made the purchase (Moreira, Fortes & Santiago, 2017). Bratulescu and Vasilache (2014) propose the concept of "sensory marketing" as a method of appealing to the customer's senses. There are a variety of strategies used to manipulate consumers' actions in response to marketing and product presentation. Humans can observe and engage with their environments thanks to their five senses (Ghosh & Sarkar, 2016).

Public relations company 5WPR found that millennial consumers are more likely to make impulse buys in their 2020 Consumer Culture Report (Quicanga & Ogbere, 2022). Due to their preference for sensory marketing, this demographic is more vulnerable to impulse purchases. A person makes an impulsive purchase if they buy anything without giving it much thought, as defined by the research of Redine, Deshpande, Jebarajakirthy and Surachartkumtonkun (2022). It occurs when consumers have an urgent desire to purchase and is often impulsive and thoughtless.

According to The Economic Times (2021), an impulsive buyer is someone who likes to buy things without considering them thoroughly. The store's atmosphere, the shopper's level of life satisfaction, the shopper's sense of self-worth, the shopper's current emotional state, and so on have all been linked to increased likelihood of impulsive purchases (Mbukanma & Rena, 2021; Rodrugues, Lopes & Varela, 2021). Thus, the term "impulsive buying" refers to the practice of making unexpected purchases of products and services triggered by emotional responses to such things.

Ebeling, Dent, and Kempenich (2020) state that despite the generation's reputation for materialism and temperance, millennials are notably fast spenders who prioritise experiences above possessions. People born between the years 1980 and 2004 are considered Millennials. Recent retail market centres have shown that the millennial generation has the greatest spending power, making them a prime marketing target (Heinonen, 2021). In South Africa, millennials make up 27% of the population, or 14 million individuals altogether (Cikes, 2020).

2 Motivation and Objective of the Study

It is no secret that millennials, like other shoppers, are prone to impulse buying. What is less clear is why this is the case. Mittal, Deepak, and Neena (2016) state that impulsive purchasing is another kind of consumption that has become more common in recent years. It is important to use caution while making lifestyle choices on consumption since they might have both positive and negative effects. Millennials are renowned for their tendency towards impulsive buying, which may wreak havoc on their budgets (Swarnalatha & Soundhariya, 2015). Retailers use sensory marketing (Osakwe, 2019) to entice customers to make purchases by appealing to all five senses via in-store design, visual displays, and unique offers.

The opposite is evident, consumers, especially millennials, are influenced by the sensory marketing technique, which may lead to overspending, unplanned purchases, and even a shift in personal style. As a result, millennials who utilise credit cards to make purchases may find themselves in debt and unable to save enough for the future. They might end up remorsefully returning an item they bought on impulse of the moment since their newfound sense of style did not mesh with their old one. Considering this, the objective of this study was to systematically reveal the conceptual interface between sensory marketing and impulsive buying behaviour of millennials in South Africa. The results of this study are expected to provide credibility to claims that sensory marketing may influence the impulsive purchasing habits of today's young consumers.

3 Research Methodology

Kumer (2019) defines research methodology as the procedures and philosophical concepts used when undertaking research. The strategy defines the tools utilised in the investigation (Yang & Tate, 2012; Leedy & Ormrod, 2010). The instruments are the tools used by the researcher for gathering, analysing, and interpreting data (Manganye & Mbukanma, 2021). As mentioned by King and He (2005), conceptual-based research incorporates several research methodologies, including narrative review, vote counting, meta-analysis, exploratory review, and descriptive review. An exploratory literature study was carried out for this study. This necessitated collecting and synthesising easily available research on a certain issue. Bennison, Miller, Summers, Minnis, Sussman, and McGuinness (2017) and Burns (2017) stressed the importance of this sort of literature review in presenting to the reader the findings of earlier research that is directly relevant to the current topic. Therefore, this research undertook a review of the existing literature, conferring with and acknowledging the contributions of both local and international scholars within the ambit of impulsive buying behaviour, millennials, and sensory marketing. Thus, the exploratory literature review technique used in this research helped to establish complete, logical thoughts on the conceptual interface between sensory marketing and impulsive buying behaviour of millennials in South Africa.

4 Theoretical Foundation to the Study

A theoretical foundation is a basic assessment of accepted theories that serves as a guide for developing the arguments you will use in your own study (Watson, 2020). This study will employ two theories (S-O-R Model and Howkins Stern's impulse buying theory) which provides backgrounds to consumer impulse buying behaviour.

4.1 S-O-R Model

The S-O-R model, which Mehrabian and Russell created in 1974, became a popular theoretical framework for analysing consumer behaviour (Jaini, Zulkiffli, Ismail, Mohd, & Hussin, 2022). In this theory, the stimulus (S) is a factor that influences the organism (O), which sometimes causes the behavioural responses (R), in consumers. The S-O-R model was initially created to address the impact of store atmosphere on consumer behaviour and was later refined by Sherman (1997) to adapt to the retail environment by including factors that influence consumers' buying decisions (Chang, 2015). According to the nature of S-O-R framework for customer behaviour Mehrabian and Russell (1974) posit that a stimulus is any environmental indication that causes people to feel a certain way about their surroundings.

Millennials are thought to be the most energetic group and economically engaged within the market hubs (Rodriguez, Boyer, Fleming & Cohen, 2019). This cohort in South Africa has grown as a focus group for marketers and retailers due to their high disposable income and higher discretionary purchasing. They are intensely drawn to clothing items by stimulus factors that influence them as organisms to respond by making a purchase.

4.2 Howkins Stern's Impulse Buying Theory

Hawkins Stern developed this theory and proposed it in 1962. The theory offered a fascinating perspective on customers' purchasing behaviour, in contrast to the majority of contemporary theories of consumer behaviour, such as Maslow's motivation theory of need (1943) and Engel, Kollat and Blackwell's (1968) assertion that consumers always make knowledgeable and deliberate purchasing decisions. Stern supported this point of view and claimed that under the influence of outside circumstances, people make hasty purchases. Theoretically, marketers can influence consumers to buy more items than they had initially planned to (Vishnu & Raheem, 2013).

According to Stern's theory impulse buying occurs in four distinct levels. The primary level is the rapid, genuine impulsive purchase, like anything picked up right before leaving a clothing store, like buying a T-shirt while the customer was at the store to buy a dress. The second level of impulsive purchasing is said to as the "reminded" level and it includes forming relationships between different products like, putting a necktie and formal shirts in the same section to remind you that you might need the other if you are about to buy one. The suggested impulse buying in third level is when a purchaser first sees a product and gets the urge of buying it (Stern, 1962) for an example, the customer is used to buying Nike sneakers but suddenly sees an Adidas sneaker brand then decides to try it. The fourth stage is the scheduled impulse purchase, which is on purpose in that consumers are aware they want to buy a certain type of goods but are unsure of the specifics, for instance customers are more inclined to make impulsive purchases of more than they actually need when a store offers "buy one, get one free" on specific clothing item. The customer had a need, but because of the deal, he bought more than he really needed to. This theory speaks more of the behaviour of Millennials when they are in retail stores.

5 Empirical Literature Review

According to Aragoncillo and Orus (2018), the phrase "impulse buying behaviour" describes a buyer's sudden, intense, and resolute desire to acquire something that he or she had not originally planned to buy. The complicated hedonic predisposition to desire to acquire might lead to anxiety. Similarly, people often make purchases without considering them through, and they often end up spending money that was not planned for. It is possible that certain factors, such as advertising, are what set off this buying habit or activity. Hussain (2019) proposes the term "sensory marketing" to describe the practise of appealing to a customer's five senses (seeing, sound, touch, taste, and smell). To influence consumer behaviour, sensory marketers use an array of sensory-based tactics that appeal to different senses (Wörfel, Frenz & Tautu, 2022). Thus, the three domain variables of shop environment, floor merchandising, and in-store promotions are used to assess the five senses of sensory marketing strategy.

The store environment is essential in determining impulsive buying in the in-store shopping environment. It is made up of micro factors that are limited to a certain geographic area and distinct shopping scenarios (Bhatt, Sarkar & Sarkar, 2020). These factors include but are not limited to store background music, store cleanliness, and employee

behaviour. These factors stimulate the hearing senses of the customer (Wörfel et al., 2022). It is evident that colour and texture are examples of design characteristics and aesthetic components, whereas arrangement, comfort, signage, and accessories are examples of practical design features (Sindhu & Kloep 2020). Indeed, the layout of the store is essential because they promote the good and efficient appearance of product collections. A good arrangement might also increase the enjoyment of shopping by lowering the sense of stress associated with it (Asrinta, 2018).

The layout of the stores, their shelving designs, their divisions, the scent, and the brands they carry are all included in floor merchandising. These factors stimulate the smell and touch sense of the customer (Wörfel et al., 2022). The goal of floor merchandising, according to Widyastuti, (2018) is to inform and direct customers as needed, as shown by signs, graphics, or other media, in place of salespeople, it seeks to introduce products in terms of design and colour, educating consumers so they can make decisions about purchases quickly. It is anticipated that doing so will improve consumer interest in a brand or product on a shelf and persuade them to purchase more, boosting sales and profits for retailers (Widyastuti, 2018).

Since quick coupons likewise offer a windfall profit to the consumer, their impact on impulsive purchases is identical to that of unexpectedly lower price (Akram, Hui, Khan, Hashim & Rasheed, 2016.). When the customer enters the store and sees a discount on some item this stimulates their vision sense and could end up purchasing the promoted item (Kaushik & Gokhale 2021). According to Jhawar and Kushwaha, (2018) when people are receiving vouchers that can be used to make purchases, whether the product is on their shopping list, they are more likely to buy it, these unexpected price reductions cause consumers to be more ready to add extra purchases. Price adjustments have a corresponding spillover impact by either increasing or decreasing the amount budgeted for a shopping excursion.

5.1 Millennials in South Africa and their Buying Behaviour

Millennials are important consumers in the South African market since they are gradually becoming more economically active and are spending more money (Redine et. al, 2022; Mbukanma, Ravinder & Ifeanyichukwu, 2020). They are viewed as impulsive shoppers who strive to keep up with the most recent fashion trends and designs, the saying "hot today, boring tomorrow" (Yarrow & O'Donnell, 2009) perfectly sums up millennials' enthusiasm in fashion merchandise (Kekana, 2020). Arguably, millennials are expressive people who dress as they like, and they often delicately strike a balance between their need to belong to a group and their need to maintain distinct, separate identities (Fielies & Mbukanma, 2022). According to Aruna and Santhi (2015). millennials desire positive feelings from their purchases. In the research she conducted, she discovered that 60% of millennials like purchases that are a representation of their personalities. She went on to suggest that the brand had to connect with them and give them a positive feeling. Moreira *et.al.*, (2017) in their study found that millennials are more attracted to virtual advertising as coupons and discounts.

Despite having a reputation for being a rich market participant, their purchasing habits and reasons are frequently unstable (Mbukanma, 2019; Solka, Jackson & Lee, 2011). According to a 2017 GFK study conducted in South Africa, 65% of millennials felt that experiences are more valuable than belongings and that marketers should provide them an unforgettable experience. According to Rodriguez *et al.* (2019) research, millennials are most likely to tweet about the clothing they admire. He further stated that millennials are motivated by the desire for marketers to reciprocate with them in an atmosphere of engagement, trust, sincerity, and respect, which results in their happiness and patronage.

6 Findings and Managerial Implications

- a. According to the results of a literature analysis, sensory marketing impacts millennials' proclivity for impulsive purchases at most South African chain stores. When there is any planned or incidental connection between the interior and outside settings, customers "feel the freshness" of items through their sense of touch.
- b. According to the literature review, a good layout may also boost the pleasure of shopping by lessening the perception of tension connected with it, and the results of this research confirm the association between store environment and millennial impulsive purchasing behaviour.

c. The association between floor merchandising and millennial impulsive purchasing behaviours is substantial. As a result, it demonstrates the purpose of floor merchandising, which is to educate and steer consumers as required, as shown by signage, graphics, or other media, in lieu of salespeople and inspire customers to purchase impulsively.

d. It has been shown that sales promotions have a beneficial association with millennial impulsive buying behaviours. As a result, the argument centred on the literature study shows that when consumers get vouchers and other promotional discounts that may be used to make purchases, regardless of whether the product is on their shopping list, they are more likely to buy it.

7 Conclusion and Recommendations

The objective of the study was to systematically reveal the conceptual interface between sensory marketing and impulsive buying behaviour of millennials in South Africa. This study was conducted looking at the millennials that purchase out of the budget, changing or deviating from their fashion sense and not meeting their future financial plans. Meaning that the independent concepts as identified from previous literature have positive significant relationship with millennial impulsive buying behaviour. As such, this study has succeeded in achieving the objective of the study by establishing complete, logical thoughts on the conceptual interface between sensory marketing and impulsive buying behaviour of millennials in South Africa. Thus, to manage the consequences resulting from the problem statement of the study, which include purchasing out of the budget, changing, or deviating from their fashion sense and not meet their future financial plans, millennials should familiarise themselves with different marketing strategies to critically manage their buying pattern.

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Green Brand Dimension and Consumer Purchase Intention: A Case of Green Products in Bangkok Hypermarkets

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Abstract

This study was survey research conducted using a quantitative technique. The study focused on analyzing the relationship between the green brand dimension and consumer purchase intention to purchase green products at a hypermarket in Bangkok. The brand dimension included aspects of green brand awareness, green brand trust, and green brand image. Data was collected via a self-administered questionnaire provided to customers of Bangkok Hypermarkets. A convenience sampling method was applied along with a purposive sampling method to choose consumers who were employed and of working age. The study findings demonstrated significant relationship between green brand awareness, green brand trust, green brand image, and consumer purchase intention for green products. The discussion included recommendations for hypermarket entrepreneurs in Bangkok on implementing effective green marketing strategies, as well as for other parties engaged in designing sustainable, consumer sector green marketing campaigns.

Keywords: Green Brand Dimension, Green Brand Product, Consumer purchase intention, Hypermarket

1. Introduction

The Sustainable Development Goals (SDGs) have the support of every United Nations member state as a global call to action to end poverty, safeguard the environment, and foster peace and prosperity. The Sustainable Development Goals (SDGs) are interrelated; that is, they acknowledge that actions taken in one area may have an effect on results in other areas and that development must strike a balance between social, economic, and environmental sustainability (United Nations Development Programme, 2021). According to Alshura and Zabadi (2016), environmental sustainability concerns and environmental difficulties are having an impact on and being a driving force behind changes in how people live their lives and go about their everyday activities. As a result, businesses are forced to modify their marketing and management strategies in order to become more environmentally friendly and align themselves with the rising environmental awareness of customers. Numerous businesses are capitalizing on their efforts to reduce their impact on the environment by using green marketing methods. These strategies include environmental advertising, green labeling, green branding, and other similar practices. According to Rahbar and Wahid (2011), the main goal of such initiatives is to inform consumers about the advantages and disadvantages of green products with the intention of assisting businesses in promoting a favorable green image for their respective brands. According to Ottman (1992), in order for businesses to participate in green marketing efforts, they need to incorporate the green marketing model into every aspect of their day-to-day marketing activities. Green marketing is a broad concept that encompasses the promotion and advertising of environmentally responsible enterprises as well as the promotion and advertising of environmentally conscious products and services. According to Alshura and Zabadi (2016), green marketing encompasses a wide range of practices, including modifications to the manufacturing process, remodels to the product's packaging, modifications to the product's design, and rebranding, in addition to adjustments to marketing and advertising activities and strategies. Also included in this category are

rebranding and alterations to the product's design. In Chen's (2010) and Doszhanov and Ahmad's (2015) research on the relationship between green brand dimensions and the intention to use environmentally friendly products, one of the suggestions that emerged was to apply the three dimensions (green brand awareness, green brand trust, and green brand image) as well as green perceived value to the intention to use environmentally friendly products. This was one of the suggestions that emerged from the research. However, whether there is a strong connection between the desire to utilize environmentally friendly items and green brand characteristics is another possibility. Consumers in Thailand are making progress toward more environmentally friendly behaviors for themselves. One hundred and twenty-two percent of Thais are concerned about the environment. Brands have the ability to take action by launching initiatives that aim to mitigate the adverse impact that distribution has on the environment. The Thai people are prepared to make changes toward a more environmentally friendly way of life, and they look to businesses to serve as a model for them to follow. When it comes to buying goods, consumers will place a greater value on environmentally conscious activities. Green brands have the ability to attract these consumers, who make up the bulk of the market for sustainable goods, by providing a greater variety of environmentally friendly items that are appealing to them. Consumers in Thailand expect businesses to provide evidence that they are committed to environmental responsibility. Consumers in today's market want companies to be more honest about their actions and have greater expectations for the brands they choose to support. In order to demonstrate that they are ecologically sensitive, they are seeking data to support their green brand. According to Jiradechakul (2022), environmentally conscious businesses have the opportunity to earn the confidence of customers by providing them with an accessible means of keeping them informed of their progress toward sustainability and by ensuring that all data can be verified. Although there has been a significant amount of research conducted on the many aspects of green brands from the point of view of Thai consumers, there are not many empirical studies that have been conducted on how to boost customer intention to purchase green goods. This is particularly true in Bangkok hypermarkets, which are one of the major contemporary trades in the nation. Because of this, the subject matter that is being investigated in this research is whether or not the dimensions of green brands have a relationship to the likelihood that consumers would purchase environmentally friendly products from hypermarkets in Bangkok.

2. Literature Review

This study focused on brand dimensions, namely green brand awareness, green brand trust, and green brand image, since the literature on the components of the theoretical model that was recommended in this research addressed these brand dimensions. According to Chen (2012) and Tseng (2013), the term "green brand awareness" refers to the capacity of a customer to recognize and recall that a certain brand is focused on protecting the environment. When a product incorporates ecologically friendly traits, the perceived value of the brand in the marketplace does not immediately change as a result of this combination. Enhanced consumer knowledge of goods, particularly environmentally friendly items, leads to a favorable opinion of such products and lessens the perception of the risks associated with those products, according to Chen (2012). Ottman (2008) discovered that there is a statistically significant positive association between green brand loyalty, green trust, and green brand awareness.

Based on Chen (2010), green brand trust is defined as the faith and confidence in the reliability, generosity, and eco-friendly qualities of a certain appearance, which ultimately results in a willingness to rely on that occurrence. In the words of Rotter (1978), trust may be defined as the conviction that one party can depend on the word, statement, or promise of another party on the basis of the latter's consideration, ability, and integrity. One's degree of confidence in the conduct that another individual is expected to exhibit is referred to as trust. As described by Asgharian (2012), the level of confidence that customers have in a company impacts their intentions to make purchases. According to Lee (2011), the most significant factor that influences customer behavior over the long term is consumer trust. Trust among customers has an effect on their intentions to make a purchase (Harris and Goode, 2010). Buyer trust has been

shown to have an effect on the purchase intentions of customers, according to previous research (Schlosster, 2006). Consumer trust has a significant impact on consumer purchase intentions and influences these decisions, according to research by a number of different researchers (Lee, 2011). The trust of the customer is the major component that fundamentally determines the behavior of consumers over the long term (Lee, 2011). Buyers are more likely to have a strong intention to purchase if they have a positive experience with the trustworthiness of the seller.

In the view of Chen (2010), the term "green brand image" refers to a broad variety of perspectives, ideas, and worries that are associated with the sustainability and eco-friendliness of a company and are retained in the hearts and minds of customers. Having an image that is environmentally friendly is a component of the total brand image. A company's success in drawing new consumers and sustaining loyal customers who make regular purchases begins with the selection of a suitable marketing strategy to develop an effective brand image, as stated by Juwaheer (2012). This is the first stage in achieving success in attracting new customers. According to Namkung (2013), the reputation and image of a brand seem to have an effect on the purchasing decisions, actions, and behaviors of those purchasing brands. Customers' current perceptions of quality may help a brand project an image of being environmentally conscious when it makes a commitment to offering products that are friendly to the environment. As stated by Ko (2013), the impacts of green marketing have a substantial influence on the formation of a favorable brand image for items that are friendly to the environment. Mourad (2012) asserts that consumers are aware of the fact that the reputation of the company has a positive impact on their decision to purchase an ecologically friendly brand. There is a considerable influence that a company's green brand image has on the reputation of the company. Customers are more likely to choose environmentally friendly products when a firm has a strong brand image and a great reputation in the marketplace. The Theory of Reasoned Action (TRA) describes the behavioral process that refers to the purpose of consumers making a purchase. The efficiency of TRA in revealing social behavior in relation to the procurement of environmentally friendly objects has been shown. In order to get a better understanding of how consumers make choices in a variety of circumstances, this concept has been carefully researched. According to the findings of research conducted by Vazifehdoust (2013), the likelihood of consumers purchasing environmentally friendly items is impacted by their positive attitude and their evaluation of the value of green products. Additionally, Han and Hsu (2010) argue that a consumer's attitude toward perceived norms and actual behavior are factors that impact their desire to make a purchase. One of the most accurate indicators of a person's motivation to purchase environmentally friendly products is their attitude toward the perceived value of the behavior. The study investigated the influence that a number of different green marketing strategies have on the attitudes that consumers have toward environmentally friendly products. On the basis of this, the following assumptions are investigated in this study:

H1: Green brand awareness has significant relationship to consumer purchase intention.

H2: Green brand trust has significant relationship to consumer purchase intention.

H3: Green brand image has significant relationship to consumer purchase intention.

3. Research Methodology

In order to determine the size of the sample, a non-probability sampling strategy will be used. This is because the population of hypermarket customers in Bangkok is so massive and hard to identify. Assuming a population with an unknown degree of variability, a maximum variability of 50% ($p = 0.5$), and a confidence level of 95% with a precision of $\pm 5\%$, the optimal number of samples is 384, according to Cochran's research from 1977. Because it satisfies practical conditions such as easy accessibility, geographical connection, availability, and the willingness to

participate on behalf of the target population, convenience sampling is an appropriate method for this study (Dornyei, 2007). The selection of convenience samples is determined by the proximity of the samples to the site where the researcher is collecting data. According to the National Statistical Office (2017), the population of working-age individuals who have the ability to make purchases is regarded as those who are 15 years old or older. In addition to employing convenience sampling, this statistical report indicates that purposive sampling will be used to target customers who are of working age and are now employed. The data collection process will take place in a retail area located in the commercial hub of Bangkok. This region is home to several stores belonging to the three most prominent hypermarket chains in Bangkok, namely Tesco Lotus, Big C, and Makro. An examination of the literature reveals that various approaches to establishing brand characteristics have an effect on the intention of customers to make a purchase. Using questions from Doszhanov and Ahmad (2015), Tseng (2013), and Chen (2012), the self-administered questionnaire for this research focuses on three categories of brand aspects: green brand awareness, green brand trust, and green brand image. These categories were generated from the questions that those authors asked. The findings of the study on consumer behavior that was carried out by Aman (2012) and Suki et al. (2013) have an impact on the customer's inclination to purchase environmentally friendly products. There were three different parts included in the questionnaire. The participants' demographic information was collected in the first stage of the study. The second part dealt with an analysis of the brand characteristics of customers who shop at hypermarkets. The qualities of the brand are accompanied by equivalent degrees of agreement on a Likert scale that ranges from 1 (strongly disagree) to 5 (strongly agree). The last part of the discussion consisted of questions on whether or not customers are interested in purchasing environmentally friendly products from hypermarkets in Bangkok. On a Likert scale that ranges from 1 (strongly disagree) to 5 (strongly agree), each consumer component is offered together with the degree of perception that corresponds to it. In order to assess the self-administered questionnaire's content validity, Rovinelli and Hambleton created the indicator of item-objective congruence (IOC) in 1977. For each item, there are many divergent objectives that have been allocated. According to Zikmund et al. (2013), three specialists assess items depending on how well they correspond with the aims that have been stated. The reliability of the self-administered questionnaire was evaluated with the use of Cronbach's alpha coefficient, which is a statistical tool that analyzes the degree to which a collection of questions included within the questionnaire are consistent with one another.

4. Results

There were 215 female respondents (55.99%) and 169 male respondents (44.01%). Among them, 40.63% are aged 36-45 years and 35.68% are aged 46-55 years. 55.73% of respondents possessed a bachelor's degree, while 35.93% had education levels lower than a bachelors.

4.1 Factor Analysis

Factor analysis was used to confirm the validity and significance of the present variables. An analysis was conducted on both the dependent and independent variables. No items were deleted from green brand awareness and green brand trust. One item was excluded from the green brand image, leading to a KMO measure of sampling adequacy of 0.763 and significant findings for Barlett's Test of Sphericity. Table 1 and 2 display the results of factor analysis for dimensions related to green brands and consumer purchase intention.

Table 1 The results of factor analysis for dimensions related to green brands.

Item	Green brand dimension		
	Green brand awareness	Green brand trust	Green brand image
I acknowledge that the green brand prioritizes environmentally friendly more than other brands.	.933	.359	.423
I am knowledgeable of the environment efforts undertaken by the green brand.	.904	.275	.257
I have seen some environmental labels and slogans for the green brand.	.898	.262	.176
I recognize the significant of the environmental slogans and symbols used by the green brand.	.847	.386	.159
I can recall some of the environmental symbols that the green brand used in their marketing effort.	.824	.299	.168
I have confidence that the green brand's environmental reputation is managed professionally	.121	.900	.355
I have confidence in the green brand's dependable environmental promises.	.011	.832	.225
I trust that the green brand is undoubtedly well-known for its care for the environment.	.231	.829	.499
I believe that the green brand really cares about its environmental commitments.	.282	.744	.349
I believe that the green brand shows remarkable achievement in its environmental performance.	.206	.721	.197
I feel that the green brand consistently follows its commitment to environmental preservation.	.225	.340	.907
I feel the green brand is the best benchmark for environmental promises.	.285	.294	.893
I feel that green brands' environmental performance is consistently reliable.	.384	.212	.828

I feel that the green brand's environment reputation is handled in a professional manner	.227	.287	.794
Eigenvalue	5.368	3.214	2.262
Percentage (77.457%) of variance	38.341	22.960	16.156
KMO 0.763			

Table 2 The results of factor analysis for consumer purchase intention

Item	Consumer purchase intention
The green brand with environmental commitments is the one I would rather choose, even if another brand had the same characteristics.	.920
If I observe an environmental certification on a certain brand, I will choose to use it.	.918
Using a green brand over a different one makes sense due to its environmental concerns.	.860
It seems prudent to choose a green brand if another brand does not raise environmental concerns.	.813
Eigenvalue	3.089
Percentage (77.217%) of variance	77.217
KMO 0.788	

4.2 Reliability analysis

Reliability study was performed to evaluate the data's accuracy. Table 4.3 presents the findings of the reliability analysis in this study, showing that the Cronbach's Alpha values for all components above the commonly recognized criterion of 0.7 (Cronbach, 1951).

Table 3 The reliability analysis

Variables	Number of items	Cronbach's Alpha
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Green brand awareness	5	0.936
Green brand trust	5	0.876
Green brand image.	4	0.894
Consumer purchase intention	4	0.895

4.3 Descriptive Analysis

A Descriptive Analysis was conducted to determine the mean and standard deviation of the variables. Table 4.4 displays the findings of the descriptive analysis conducted in this research. The green brand trust had the highest mean score of 4.6104, followed by green brand image and green brand awareness. Table 4.5 displays the results of a multiple regression analysis.

Table 4 The descriptive analysis

Variables	Mean	Std. Deviation
Green brand awareness	4.8089	.79294
Green brand trust	4.6104	.80488
Green brand image.	4.3652	.72594
Consumer purchase intention	4.3737	.73937

4.4 Multiple Regression Analysis

Multiple regression analysis was used to determine the predictor factors that most effectively account for the dependent variable. The adjusted R² value for the model is 0.740, indicating that 74.00% of the variation in the dependent variable is accounted for by the independent variables. Green brand dimensions have positive significant relationship to consumer purchase intention.

Table 5 Multiple Regression Analysis

	Consumer purchase intention
Independent Variables	

Green brand awareness	0.101
Green brand trust	0.265
Green brand image.	0.539
F value	156.089
R ²	0.743
Adjust R ²	0.740

The multiple regression study showed that there is a significant positive relationship between green brand awareness and customer purchase intention, with a beta value of 0.101. Any one standard deviation improvement in green brand awareness is associated with a 0.101 increase in customer purchase intention. Furthermore, there is a significant positive relationship between consumer purchase intention and trust in green brands, with a beta value of 0.265. The green brand image is positively and significantly related to customer purchase intention, with a beta value of 0.539. All hypotheses were accepted according to the multiple regression findings shown in Table 4.5

Table 6 Hypothesis Test Results

Hypothesis Statement	Sig	Results
H1: Green brand awareness has significant relationship to consumer purchase intention	0.049	accepted
H2: Green brand trust has significant relationship to consumer purchase intention	0.000	accepted
H3: Green brand image has significant relationship to consumer purchase intention	0.000	accepted

5. Conclusion

According to the findings, there is a significant relationship between the green dimensions and the consumer's intention to purchase a green product. The research results of this study are in conformity with the findings of Kwok et al. (2016), who discovered that environmental variables had an impact on the behavioral intentions of customers. Additionally, this study supports the research by Ottman (2008), Chen (2010), and Doszhanov and Ahmad (2015). They discovered that there is a considerable relationship between the desire to use environmentally friendly products and the three aspects of green brands, which are green brand awareness, green brand trust, and green brand image. In response to this research, a green company may earn the confidence of its customers by keeping them informed about the improvements that they are making toward being more environmentally friendly. The results of a study by Jiradechakul (2022) are also consistent with this strategy. In accordance with Lee et al. (2011) and Harris and Goode

(2010), customer trust would lead to consumer purchase intention or behavior over the long term. The findings from the previous study support these beliefs, and the results of this study confirm them. In line with Schlosser et al. (2006) and Lee et al. (2011), who ensured that prior research demonstrates that customer trust influences consumer purchase intentions, this study also found that customer trust influences consumer purchase intentions. The trust of customers has a significant effect on consumers' intents to make purchases, and it is a component that plays a role in deciding such inclinations. Similarly, to the findings of the research conducted by Asgharian (2012), which proved that customer trust comes before consumer intent to utilize products.

Furthermore, with regard to green awareness and green trust, the findings of the study indicate that the brand image of a particular brand and the products that the company produces are related to one another (Cretu, 2007). Customers are more inclined to purchase goods from green brands when they have a positive perception of the products, according to Ko (2013), who also agreed with this statement. In the words of Namkung (2013), this indicates that the reputation and image of a brand seem to have an effect on the consumer decision-making, actions, and behaviors that consumers exhibit when it comes to making purchases. When the evidence leads to the conclusion, there is a considerable relationship between customer purchase intention for environmentally friendly products and green brand awareness, green brand trust, and green brand image. It is of the utmost importance that the business entrepreneurs of hypermarkets in Bangkok, as well as other parties involved in the industry, take into consideration the findings of the study, and initiate themselves to raise awareness of green brands among existing consumers and potential customers. As a consequence of this, consumers will acquire a sense of trust and image in relation to green brands, which will ultimately inspire them to make purchases of green brands or products that are favorable to the environment. In order to participate in the process of building sustainable campaigns for the purpose of ensuring the future sustainability of the eco-friendly business that is already in operation, green marketing strategies would be obligatory.

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An author's biography

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Developing a Personal Carbon Trading (PCT) Model to Promote Individual Adoption of Battery Electric Vehicles (BEVs)

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Abstract

Global warming is widely attributed to increased levels of carbon dioxide, with the transportation sector playing a substantial role in this escalation. Although Battery Electric Vehicles (BEVs) present a promising solution to mitigate the effects of emissions from transportation, their widespread acceptance necessitates effective policy intervention. Recently, the concept of Personal Carbon Trading (PCT) in the realm of transportation choices has gained attention as a strategy to draw individual focus towards reducing carbon emissions and influencing the decision-making process for adopting BEVs. This paper aims to formulate a model for Personal Carbon Trading (PCT) to promote individual adoption of Battery Electric Vehicles (BEVs) in Thailand. Through the utilization of a survey method, the opinions of Thai consumers regarding carbon credits, carbon trading, PCT, and BEVs have been examined. The findings indicate that the PCT policy should prioritize three key instruments: environmental motivation, public awareness of carbon credits, and financial motivation. Furthermore, the public's awareness of carbon credits is particularly crucial in influencing the adoption of BEVs.

Keywords: Personal Carbon Trading (PCT), Battery Electric Vehicles (BEVs), Thailand

Introduction

It is widely-accepted that global warming is primarily driven by the escalating levels of carbon dioxide in the Earth's atmosphere, a phenomenon noted with concern (Kousika & Vennila, 2023). The repercussions of climate change are intricately linked to both global warming and the presence of greenhouse gases (GHGs) in the atmosphere. Notably, 2019 witnessed one of the highest recorded temperatures. Independent analyses conducted by NASA and the National Oceanic and Atmospheric Administration (NOAA) revealed that the Earth's average global surface temperature in 2019 ranked as the second warmest since the commencement of modern record-keeping in 1880 (Letcher, 2021). Addressing these environmental challenges aligns with the objectives of the Paris Agreement, which sets ambitious targets to limit global warming to below 2 °C and achieve emissions equilibrium. However, realizing these goals necessitates substantial investment, a factor perceived as a significant challenge in the pursuit of sustainable climate action (Bajaj, 2022).

Similar to other nations, Thailand is actively exploring effective policies and strategies to reduce greenhouse gas emissions, given that the transport sector accounts for 35% of the country's total energy consumption. Among the key initiatives implemented by the Thai government is the promotion of Battery Electric Vehicle (BEV) adoption within the transport sector, as outlined by (Wattana & Wattana, 2022), which is further explained below.

BEVs policy

On a global scale, addressing carbon emissions from the transport sector has emerged as a paramount goal through sustainable social development (Nie et al., 2022). Consequently, substantial efforts have been directed towards decarbonizing transportation, with a noticeable surge in interest in promoting the adoption of Battery Electric Vehicles (BEVs) in various countries in recent years (Li et al., 2019). BEVs, recognized as low-carbon technological solutions, have been extensively advocated worldwide as part of the collective effort to mitigate global

climate change. Numerous studies have investigated the impact of supporting policies, which are crucial drivers in the widespread adoption of BEVs. Existing supporting policies include financial subsidies, preferential tax structures, free parking privileges, and driving incentives. While prior research has highlighted the positive effects of these policies on consumers' intention to adopt BEVs, some studies have revealed that the actual impact of supporting policies may not be as potent as initially anticipated (Li et al., 2018).

The transportation sector in Thailand accounts for 35% of the country’s total energy consumption. As part of the key initiatives, the Thai government, as outlined by Wattana and Wattana (2022), is actively promoting the adoption of Battery Electric Vehicles (BEVs) within the transportation sector. Aligning with global efforts and aspirations, the government has set ambitious targets, aiming for carbon neutrality and net-zero greenhouse gas (GHG) emissions. This commitment is underscored by the implementation of the 30@30 electrification policy, which aims to achieve a substantial increase in electric vehicle (EV) production. Specifically, the policy targets a minimum of 30% of all automotive production in Thailand to be electric vehicles by the year 2030, a strategy outlined by Achariyaviriya et al. (2023).

Concerning Battery Electric Vehicle (BEV) infrastructure, the Thai government has introduced a national EV roadmap with the aim of positioning itself as the hub for BEVs within the ASEAN region, as outlined by Thananusak et al. (2021). The roadmap presents a vision for the use of 1.2 million BEVs and the establishment of 690 charging stations by the year 2036. To achieve this ambitious target, the EV roadmap is structured into three distinct phases. The initial phase (2016–2017) primarily focused on preparing for BEV adoption, with a specific emphasis on the implementation of electric public buses due to their public benefits and the relatively straightforward development of supporting infrastructure. Simultaneously, groundwork was laid for other preparatory measures to support the widespread use of BEVs (Wattana & Wattana, 2022).

The second phase (2018–2020) extended the preparations, specifically concentrating on personal BEVs. This involved detailed planning for the design and standards of charging infrastructure, along with comprehensive studies on the electricity tariff structure for electric vehicles and service charges for the associated charging stations. The third and final phase (2021–2036) represents a continued and expanded implementation for personal BEVs. The focus shifts towards the development of an electricity demand management system in conjunction with the use of Electric Vehicles (EVs), as outlined in the comprehensive strategy (Wattana & Wattana, 2022). The efficacy of these strategies is reflected in the observable trend of an increasing number of newly registered BEVs in Thailand, as detailed in Table 1.

Table 1: New registered passenger vehicles (units) in Thailand

Year	ICE	% YoY	Electric Vehicles (EVs)						
			HEV & PHEV	% YoY	BEV	% YoY	Total EVs	% YoY	% share of EVs
2016	564,854	4.0	9,576	25.5	2	-85.7	9,578	25.3	1.67
2017	653,429	15.7	11,936	24.6	27	1,250.0	11,963	24.9	1.80
2018	694,036	6.2	19,967	67.3	57	111.1	20,024	67.4	2.80
2019	739,213	6.5	26,424	32.3	650	1,040.4	27,074	35.2	3.53
2020	557,868	-24.5	28,288	7.1	1,268	95.1	29,556	9.2	5.03
2021	511,139	-8.4	41,385	46.3	1,943	53.2	43,328	46.6	7.81
2022	569,491	11.4	74,800	80.7	9,584	393.3	84,384	94.8	12.91

Note: ICE: Internal Combustion Engine
 Electric Vehicles Including HEV (Hybrid Electric Vehicle), PHEV (Plug in Hybrid Electric Vehicle) and BEV (Battery Electric Vehicle)
 Source: Department of Land Transport, compiled by Krungsri Research

Source: Yongpisanphob (2023)

To operationalize the Thai EV roadmap 2036 encompassing both Phase 1 and 2, the Thai government and various EV-promoting agencies recognized the pivotal role of establishing a robust EV charging infrastructure to bolster and expedite the adoption of Electric Vehicles (EVs) throughout the country. Since 2015, concerted efforts by

the Thai government and EV promoters have been directed towards implementing demand-pull and technology-push policies, as described by Thananusak et al. (2021) and Wattana and Wattana (2022). As discussed by a number of authors (e.g. Thananusak et al., 2021; Wattana & Wattana, 2022; Yongpisanphob, 2023), the key strategies employed for the development of charging stations include the following:

Subsidizing the Use of BEVs: A project from 2022 to 2025 aims to incentivize consumers to purchase Battery Electric Vehicles (BEVs), offering subsidies to promote the adoption of environmentally friendly vehicles.

Subsidizing Charging Station Investment: Financial support is provided to encourage the investment in, and establishment of, BEV charging stations, fostering their widespread availability and accessibility.

Setting up a Temporary Electricity Selling Price for Charging Stations and Standard of Chargers: The introduction of a temporary electricity selling price for charging stations, coupled with the establishment of standards for chargers, ensures consistency and fairness in the charging infrastructure.

Tax Incentives for BEV Charging Station Businesses: Tax incentives are offered to businesses engaged in the establishment and operation of EV charging stations, further promoting private sector participation in building charging infrastructure.

Creating a BEV Charging Consortium: The establishment of a BEV Charging Consortium fosters collaboration and coordination among stakeholders, facilitating collective efforts in advancing the BEV charging ecosystem.

These comprehensive policies represent a holistic approach to tackling challenges and incentivizing the development of a robust EV charging infrastructure in Thailand. Another avenue to stimulate the consumer adoption of Battery Electric Vehicles (BEVs) involves the introduction of Personal Carbon Trading (PCT) for transport choices. This method has garnered recent attention as a way to actively involve individuals in reducing carbon emissions and influencing their decisions to embrace BEVs. Although countries like China have already implemented similar strategies, Thailand's PCT policy regarding BEVs is still in its early phases. The particulars of the PCT policy, especially its application in the transport sector with a focus on BEVs in Thailand, will be expounded in the following discussion.

PCT policy

The consideration of PCT for transport choices has recently emerged as a strategy to capture individual attention in regard to reducing carbon emissions and influencing the decision-making process in regard to the adoption of Battery Electric Vehicles (BEVs). In essence, PCT serves as a policy instrument governed by market mechanisms whereby the government assumes the role of a regulator rather than a funder. The initial step involves the establishment of a trading market with carbon credits as the primary commodity, followed by the formulation of trading rules, including aspects such as defining the initial credit line and outlining punitive measures. This regulatory framework ensures that each individual can offset their energy consumption within specified compliance periods (Li et al., 2022). The strategy of Personal Carbon Trading (PCT) presents a potentially potent tool for achieving the desired reductions in personal and household carbon emissions. By actively involving individuals in managing their emission allowances, PCT serves to decrease overall carbon emissions at the individual level (Dally et al., 2020; Xu et al., 2023). Given its close association with other policies like Emissions Trading Systems (ETS) and Carbon Tax (CT), Table 2 provides a comprehensive discussion on the targets, participants, implementation scope, and constraints of PCT, ETS, and CT.

Table 2: Summary of PCT, ETS, and CT.

Mechanism	Targets	Participants	Implementation Scope	Forms of constraint
Personal Carbon Trading (PCT)	Greenhouse gas emission reduction and cultivation of green low-carbon awareness in the society	Micro and small enterprises, communities, households, and individuals (in the case of Carbon Inclusion)	Daily Life/Daily Life + Production	Mandatory Voluntary + Incentive
Emission Trading System (ETS)	Greenhouse Gas Emission Reduction	Enterprise	Production	Mandatory Voluntary
Carbon Tax (CT)	Greenhouse Gas Emission Reduction	Businesses, individuals	Production + Daily Life	Mandatory

Source: Tang et al. (2023)

PCT has been implemented in several sectors, including housing, food, transport, and other consumption. The implementation of the transport sector, which includes but is not limited to cars, buses, trains, and airplanes (Uusitalo et al., 2022), has been discussed by a number of scholars (e.g. Li et al., 2022; Li et al., 2019; Li et al., 2018; Nie et al., 2022; Uusitalo et al., 2022). This is primarily attributed to the fact that the transport sector serves as a principal contributor to greenhouse gas (GHG) emissions (Fan et al., 2016; Li et al., 2018). Notably, GHG emissions from this sector have exhibited a more rapid increase compared to other economic sectors in recent years (Li et al., 2019). The swift advancement of the automotive industry, coupled with the widespread reliance on fuel vehicles within the transport sector, is widely acknowledged as a key factor contributing to both the depletion of fossil fuels and environmental degradation (Nie et al., 2022).

Furthermore, the proposal for implementing Personal Carbon Trading (PCT) to influence transport choices has recently emerged as a strategy for curbing individual carbon emissions, particularly with regard to fostering the adoption of Battery Electric Vehicles (BEVs) (Li et al., 2019; Li et al., 2018). PCT operates as a policy that assigns a fixed credit to personal carbon emissions, allowing individuals to trade their surplus credits. Given that BEV adopters typically have lower carbon emissions, they expend fewer emission credits. Consequently, they can vend the remaining credits to individuals with higher emission needs, resulting in financial benefits. As a behavioral intervention scheme (Fan et al., 2016), PCT has demonstrated greater effectiveness compared to alternative monetary policies such as carbon tax, tax exemption, and charging discounts (Hoang et al., 2022).

PCT policy towards BEVs

Governments globally have initiated programs aimed at curbing industrial pollution and fostering a safe and sustainable future. Companies responsible for substantial greenhouse gas emissions can participate in carbon credit programs to effectively manage their carbon footprints. A carbon credit is a certificate or permit conferring the legal authorization to emit one metric ton of carbon dioxide. In instances where a company generates minimal emissions, they have the option to sell carbon credits to other businesses, particularly those operating in industries such as manufacturing, transportation, or shipping (Bunjongsiri, 2019).

In the case of Thailand, the Thailand Voluntary Emission Reduction Program (T-VER), developed by the Thailand Greenhouse Gas Management Organization (TGO) (Tansuchat & Chang, 2022) aims to promote and support all sectors to participate in reducing greenhouse gas emissions by trading carbon credits based on market demand and market prices (Apinunwattanukul, 2023; Tansuchat & Chang, 2022). Nonetheless, T-VER projects are still in the early stages and have been utilized predominantly by only a few players (Apinunwattanukul, 2023) at the organizational

level, rather than a personal carbon trading level. Furthermore, projects connected to transport management have not yet generated a significant volume of carbon credits in Thailand (Leenoi, 2023), as shown in Figure 1. Clearly, PCT policy measures are necessary to attract more BEV users in Thailand (Manutworakit & Choocharukul, 2022).

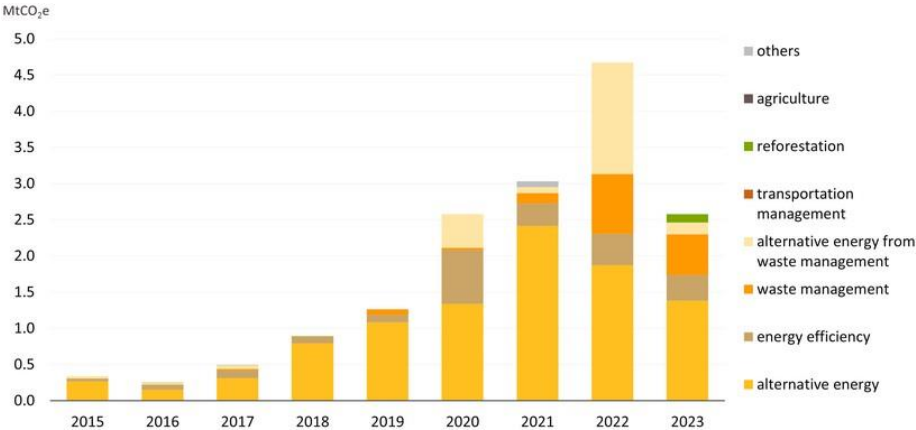


Figure 1: Carbon credit issuance in Thailand Source: Leenoi (2023)

Research gaps

In terms of the academic gaps, there have been a few practical PCT studies with a limited sample of users. Therefore, there is a need for additional research with empirical data describing the real-life behavioral aspects of more general populations (Uusitalo et al., 2022). In Thailand, however, there is insufficient research on the BEV adoption of Thai respondents (Manutworakit & Choocharukul, 2022) and studies on the use of PCT to promote the adoption of BEVs are particularly limited. Inspired by both the academic gaps and the limited use of PCT in Thailand to promote BEVs, this paper aims to develop a Personal Carbon Trading (PCT) model to promote individual adoption of battery electric vehicles (BEVs) in Thailand.

Methodology

The target population are non-BEV consumers in Bangkok, Thailand’s largest city. The samples are Thai non-BEV consumers in Bangkok, Thailand, aged between 18 and 60 years old. In September 2023, online surveys (Google Forms) were distributed to 400 respondents using convenience sampling, a non-probability technique which is less expensive and less time consuming when compared with other sampling techniques, and thus is particularly suitable to this research given its resource limitations. A total of 204 respondents (a 51% response rate) completed the survey. According to Lund (2023), such a response rate and sample size can be considered sufficient for descriptive statistics studies, which generally have a median of a 44.6% response rate and a 106 sample size. By adapting survey attributes from Li et al. (2022)’s study, this paper has conducted a survey by integrating the awareness of carbon credit and carbon market psychological characteristics to explore the mechanisms of personal carbon trading (PCT), as well as consumer preferences for different types of policy instruments. Descriptive statistical methods and content analysis were used for quantitative and qualitative analysis (open-ended questions), respectively.

Findings and discussion

Regarding the demographic profile, most of the respondents were between the ages of 41 and 50 (36.27 percent), most had a bachelor's degree (59.81 percent) and worked as employees of private companies (53.43 percent), with a majority (34.80 percent) with monthly income ranging from 30,001 – 60,000 Thai Baht (approx. 861 – 1,715 USD), followed by 15.69 percent with monthly income ranging from 15,001 – 30,000 Thai Baht (approx. 428 – 860 USD).

Table 3: Demographic profile

Demographic profile	Response	%
1. Age		
20 years old or lower	2	0.98
21-30 years old	29	14.22
31-40 years old	46	22.55
41-50 years old	74	36.27
51 years old or higher	53	25.98
2. Education		
High school or lower	-	-
Bachelor's degree	122	59.81
Master's degree	67	32.84
Doctoral degree	15	7.35
3. Gender		
Male	149	73.04
Female	51	25.00
Not specified	4	1.96
4. Occupation		
Business owner	20	9.8
Employee	109	53.43
Government officer	43	21.08
Student	7	3.43
Freelancer	13	6.37
Other	12	5.89
5. Monthly income		
Less than 15,000 THB	9	4.41
15,001 – 30,000 THB	32	15.69
30,001 – 60,000 THB	71	34.80
60,001 – 90,000 THB	30	14.71
90,001 – 120,000 THB	32	15.68
More than 120,000 THB	30	14.71
Total	204	100.00

Over 75 percent of the respondents are aware of the term 'carbon credits'. Most respondents are aware of the term from social media (37.54 percent), followed by friends of relatives who have had experience with carbon credits (18.02 percent), official websites of government agencies related to carbon credits (16.52 percent).

Although most respondents are aware of the term 'carbon credits', it was found that nearly half of respondents (48 percent) were unsure or did not know that organizations whose greenhouse gas emissions are lower than the criteria set by the state are able to trade for credits. Furthermore, 43.63 percent of the respondents were unsure or did not know that carbon credits obtained from reducing greenhouse gases must be certified by a regulatory certification body that is accepted or comparable to the international level. Such findings support a previous study by Kousika and Vennila (2023) who pointed out that the widespread acceptance of concepts like 'carbon trading' and 'carbon credits' is still

needed. Extensive education is essential to enhance public awareness of the issue, and to ensure a cleaner environment for future generations.

Most respondents (51.47 percent) are aware of the term ‘carbon trading’; however, only 26.96 percent of respondents are aware that carbon trading in Thailand is primarily utilized by corporations with has limited use for the general public. When asked whether the general public should have access to carbon trading, 64.71 percent of the respondents agreed, with most respondents (72.06 percent) agreeing that providing opportunities for the general public to access carbon credit trading through the usage of BEVs will stimulate demand for the use of BEVs.

Nonetheless, only half (50.49 percent) are interested in joining the PCT program for BEVs, as respondents are still unfamiliar with the PCT, particularly the carbon trading process. To motivate people to join the PCT program, the following factors are crucial and should be considered by the government: the public’s knowledge on carbon credits (18.87 percent), clear and easy-to-understand information regarding the program (18.73 percent), a

mobile application that can be used with all BEV brands (17.02 percent), the ability to use carbon credits as a discount for BEV charging (15.70 percent) or discounts for services and products at participating retail stores (14.38 percent).

From the survey, a number of respondents offered suggestions regarding the implementation of a BEV carbon trading program. Firstly, the public’s knowledge on carbon credits is crucial to the adoption of a BEV carbon trading program, as one respondent suggested that *“People have probably heard of carbon credits, but most of them don't know the true meaning. They do not understand why there is a need for action on carbon credits. Therefore, it is necessary to make people understand why it is necessary to reduce carbon dioxide emissions, with EVs as one of the solutions.”*

Secondly, the government’s communication via online channels, particularly social media, is vital to inform the public about this program. One respondent stated that *“Each stakeholder requires different kinds of content and therefore the government needs to employ different message for different stakeholders, such as the public, car manufacturers, BEV charging stations, and more.”* Thirdly, collaboration between different sectors, including both public and private, is required as one respondent stated that *“Whilst the BEV carbon trading program allows BEV users to collect carbon credits from their driving to calculate the rate of reduction of greenhouse gas emissions, and these can be used as credits for certain benefits, such a project requires support from the government and private sector. including cooperation from the general public to make this program successful.”*

Thirdly, the large-scale adoption of BEVs cannot only rely on incentive policies; it must also involve the improvement of BEV performance and infrastructure, particularly in regard to driving range and charging time. One respondent argued that *“PCT alone hasn't driven significant changes. Improving BEV performance is crucial. Limited driving range and long charging times contribute to ‘range anxiety’ and inconvenience, acting as barriers to adoption. Advancements in battery technology and expanding charging infrastructure are essential. Successful examples, like Norway, emphasize the importance of both vehicle performance and charging network development. Therefore, a continued focus on battery tech, infrastructure investments, and public awareness campaigns are key. A collaborative effort involving governments, the private sector, and consumers is crucial for sustainable transportation.”*

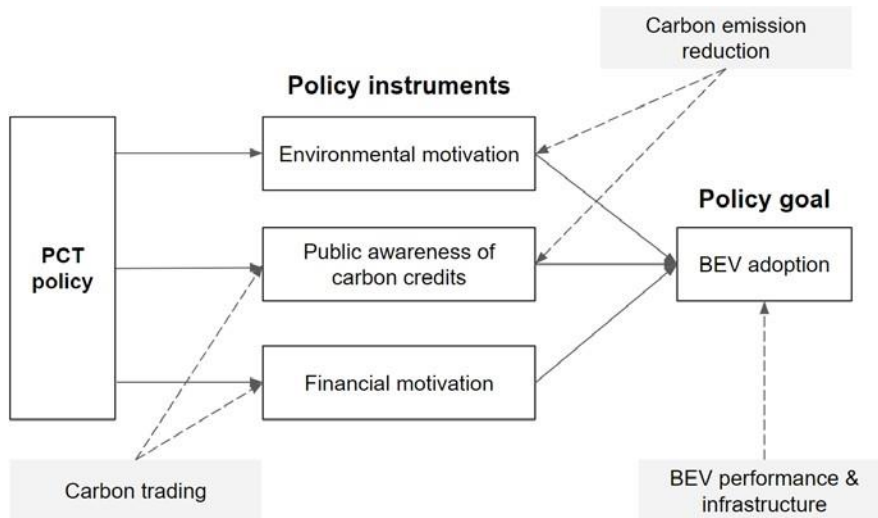


Figure 2: PCT model to promote individual adoption of BEVs Sources: Adapted from Li et al. (2019) and Li et al. (2022)

Based on the findings, and the models adapted from Li et al. (2019) and Li et al. (2022), this paper proposes three PCT policy instruments to promote individual adoption of BEVs. Firstly, the PCT policy should increase public awareness or provide education on the significance of reducing carbon emissions to enhance environmental motivation among the public. As Letcher (2021) highlighted, several factors may contribute to people denying the

existence of climate change. One such factor is that climate change is perceived as a distant and abstract concept, lacking the characteristics typically associated with significant collective efforts. Conversely, when the public possesses an understanding of carbon credits, Dally et al. (2020) added that such knowledge would have a noteworthy and positive impact on environmental sustainability in Thailand.

Secondly, the policy should communicate to the public that if their greenhouse gas emissions fall below the specified criteria due to the adoption of BEVs, they will have the opportunity to engage in credit trading. Tang et al. (2023) recommended that the examination of public attitudes towards Personal Carbon Trading (PCT) holds crucial importance as it serves as a guiding factor for policymakers. Understanding how individuals perceive and respond to PCT is instrumental in tailoring communication approaches that can enhance awareness, acceptance, and participation in PCT initiatives. By delving into public attitudes, policymakers can strategically design outreach efforts, educational campaigns, and advocacy programs that resonate with the target audience, thereby fostering a more informed and receptive society towards the implementation and success of PCT.

Thirdly, in order to establish financial incentives to encourage public engagement in the PCT program, it is essential to simplify the carbon trading process. This can be achieved through a mobile app designed for the use of Battery Electric Vehicle (BEV) brands in Thailand. Additionally, collaboration with charging stations and retailers is necessary to enable consumers to exchange their carbon credits for discounts on BEV charging or product purchases at participating retail outlets. A similar use case is provided by the Government of Guangzhou Municipality (2019) in China, whereby residents of Guangzhou are able to exchange their environmentally-friendly actions for discount coupons for products and services through a unique initiative. This incentive program is applicable to a wide range of activities. In a bid to encourage the adoption of a low-carbon lifestyle, the platform assesses the carbon emissions reduction resulting from an individual's actions and rewards them with 'carbon coins.' These coins can give discounts on over 70 products, including daily essentials, tickets for tourist attractions, and memberships for video streaming

platforms. The redemption options extend to a variety of retailers, service providers, and tourist agencies, providing users with a diverse array of choices to benefit from their sustainable practices.

Lastly, the ongoing enhancement of Battery Electric Vehicle (BEV) performance and the supporting infrastructure, as outlined in Thailand's EV roadmap, is crucial for the effectiveness of all three PCT policy instruments. Without these advancements, relying solely on the PCT incentive would pose challenges in boosting the adoption rate of BEVs. This supports the findings of Li et al. (2018) who found that the large-scale application of BEVs cannot only rely on incentive policies, but must also involve the improvement of BEV performance. Wattana and Wattana (2022) added that while encouraging the adoption of BEVs in Thailand holds the potential to open new avenues for achieving the country's sustainable development goals, the success of this endeavor is contingent upon robust policy support from the Thai government. Essential measures include the development of efficient and sufficient infrastructure to accommodate high levels of BEV penetration, the enactment of crucial regulations, as well as the provision of incentives and subsidies.

Conclusion

Overall, this paper has supported the findings of Gao et al. (2022)'s study that public acceptance of the PCT policy relies on key factors such as PCT knowledge, perceived benefits and costs, policy effectiveness, and environmental awareness. A comprehensive understanding of PCT, coupled with positive perceptions of its benefits and effectiveness, tend to boost acceptance. Conversely, concerns about costs may hinder support. Environmental awareness also plays a pivotal role, with individuals attuned to environmental issues more likely to endorse PCT. Policymakers must recognize and address these factors to formulate effective strategies for widespread support and engagement with PCT initiatives. This paper contributes to the BEV adoption literature by developing a model for Personal Carbon Trading (PCT) to promote individual adoption of Battery Electric Vehicles (BEVs). The findings also provide new insights for policymakers to design novel policy instruments to promote BEV adoption.

This paper has the following limitations and recommendations for future studies. Firstly, a limitation of this study is the reliance on a sample predominantly sourced from a specific region. While the inclusion of Bangkok city is representative, caution must be exercised in generalizing the results to the entire country. To enhance the robustness and applicability of findings, future research should extend the sample to encompass diverse consumer groups in various regions of Thailand. Secondly, although the current sample size of 204 suffices for the scope of this paper, expanding the sample in subsequent studies could yield more nuanced and comprehensive results.

Thirdly, it is essential to note that questionnaire surveys, as employed in this research, have inherent limitations, particularly when compared to interview surveys, which were not conducted in this study. Consequently, future research endeavors could delve into respondent trends concerning Personal Carbon Trading (PCT) and Battery Electric Vehicles (BEVs), examining their impact on environmental sustainability. This could provide a more comprehensive understanding of the subject matter.

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Expectation of Governmental Support Policies to Sustainability Management of Social Enterprises in Thailand

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Abstract:

This research aims to investigate the impact of governmental support policies on the sustainability of social enterprises in Thailand. The study focuses on understanding the expectations of stakeholders within the social enterprise ecosystem, including government agencies, academic experts, and executive staff of registered social enterprises. In-depth interviews were conducted across various regions to gather insights from these key stakeholders. The collected data were then categorized, coded, and analyzed using statistical programs. The findings reveal that certain factors significantly influence the sustainable management of social enterprises. These include the promotion of social enterprise understanding, improvement of business knowledge, targeted funding initiatives in different social enterprise sectors, and the establishment of effective cooperation partnerships. These factors are identified as key drivers for sustainable growth within the social enterprise landscape. Based on the results, it is recommended that the government initiates essential campaigns to support and promote the sustainable development of social enterprises in Thailand. These campaigns should address the identified influential factors, fostering an environment conducive to the long-term success of social enterprises. The research provides valuable insights for policymakers, highlighting areas where targeted interventions can enhance the overall sustainability of social enterprises in the country.

Keywords: Governmental Support Policies, Social Entrepreneurs, Thailand

Introduction

From a survey of research on social enterprise development policies in more than 20 countries, significant information has been gathered regarding policy initiatives that benefit social enterprises. For instance, Bangladesh has promoted the importance of banks and other investors in evaluating the social and environmental impact of projects, beyond financial returns. Additionally, in Pakistan, members of the parliament have played a role in advocating for laws that facilitate the establishment of social enterprises. In Malaysia, the government has actively supported social enterprise development through the establishment of The Malaysian Global Innovation and Creation Centre (MaGIE). Similarly, in Singapore, the government-appointed Committee on Social Enterprise is developing national strategies to foster the growth of social enterprises, accompanied by initiatives like The President's Challenge Social Enterprise Award. (Wipaporn Chairat, 2017)

In the case of Thailand, over the past decade, there has been a limited number of social enterprises established, and there is a lack of clarity on whether businesses are shifting from corporate social responsibility to explicitly operating as social enterprises or non-profit organizations. However, there has been a rise in the registration of cooperatives, community enterprises, and sustainable agriculture community initiatives. Recognizing the need for a comprehensive

approach, the Thai government has established the Office of Social Enterprise Promotion under the Office of Prime Minister since 2019. (Office of Social Enterprise Promotion, 2022a)

As of 2022, there are 214 registered social enterprises and 64 social enterprise groups in Thailand. (Office of Social Enterprise Promotion, 2022b) The government has initiated policies to support social enterprises, emphasizing the development of human resources, financial linkages, support for monetary and non-monetary benefits, public relations, network building, and measuring social impact. The policy landscape is evolving, and efforts are being made to align government support with the changing global landscape.

The concerns and expectations of social enterprise stakeholders were discussed in a mid-2022 meeting, resulting in six key development areas: 1) human resource development for social enterprise participation, 2) linkage to non-monetary funding or resources, 3) advocacy and support for monetary and non-monetary benefits at different levels, 4) public relations and systematic awareness creation for social enterprises, 5) support for creating ethical networks or partnerships, and 6) measuring social impact indicators. However, there is still a need for policy tracking mechanisms to ensure the sustained effectiveness of government support for the long-term sustainability of social enterprises. (Faculty of Business Administration for Society, 2022)

In conclusion, the research aims to explore the current policy landscape for social enterprises in Thailand and how it aligns with the changing global context. It also seeks to understand the aspirations of registered social enterprises and groups and how government policies can effectively support their long-term success in addressing societal, economic, and environmental challenges.

Research Framework

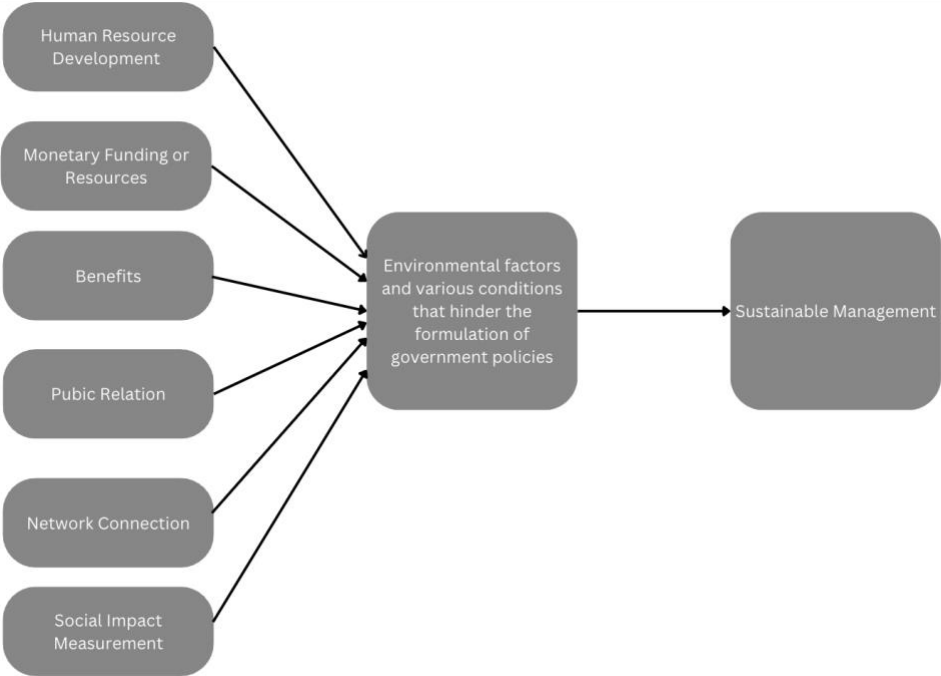


Figure 1 Research framework of Expectation of Governmental Support Policies to Sustainability Management of Social Enterprises in Thailand

Literature Review

Social Enterprise	Definition
Pulse Regeneration Limited, 2010	“A social enterprise is a business with primarily social objectives whose surpluses are principally reinvested for that purpose in the business or in the community, rather than being driven by the need to maximize profit for shareholders and owners.”(Pulse Regeneration Limited, 2010)
The Canadian Social Entrepreneurship Foundation, 2010	“a social entrepreneur is someone who recognizes a social problem and uses entrepreneurial principles to organize, create, and manage a venture to make the social change (a social venture)” (The Canadian Social Entrepreneurship Foundation, 2010)
The Skoll Foundation, 2012	Social entrepreneurs are “ society’ s change agents: creators of innovations that disrupt the status quo and transform our world for the better” (The Skoll Foundation, 2012)
Social Enterprise Promotion Act (SEPA), Article 2.1.	[...] an enterprise for pursuing the social purpose of providingworking opportunities or social services for people who belong to socially and economically vulnerable classes as well as performing business activities such as the production and sale of goods and services.

Theories and Policy Approaches of the State towards Supporting Social Enterprises

The theory and policy directions of the state in supporting businesses for society can be defined as the outcomes of policy systems presented in various forms such as laws or regulations (Knill & Tosun, 2020) It can be categorized into four forms:

1. Policy emphasizing rule-setting: This refers to policies that specify conditions and limitations for individuals or the behavior of groups of people.
2. Resource allocation policy: This involves policies allocating new resources, such as agricultural policies, support policies, and tax policies.
3. Policy for managing existing resources: This pertains to policies aimed at improving the distribution and allocation of existing resources.
4. Policy related to political and governance institutions: This encompasses policies that create or improve political and governance institutions (Lowi, 1972)

According to a survey by the British Council in collaboration with SE UK, several interesting approaches and methods for promoting social enterprises have been summarized for various countries: (British Council, 2022)

- In Bangladesh, there has been a promotion for banks and other investors to prioritize the assessment of the social and environmental impact of projects, in addition to the financial returns.
- In Pakistan, members of the Senate have assisted in promoting legislation to facilitate the establishment of social enterprises in the country.
- The government of Indonesia has acknowledged the role of the state in promoting an environmental system for business operations for society.
- In Ethiopia, there has been increased freedom to allow non-profit organizations to engage in trading goods and services for social purposes.
- The Malaysian government has played a role in promoting social enterprises by establishing The Malaysian Global Innovation and Creation Centre (MaGIE).
- In Singapore, the Social Enterprise Association, appointed by the government, is developing national policies and strategies to foster the growth of social enterprises, along with the establishment of The President's Challenge Social Enterprise Award to recognize outstanding social enterprises that contribute to local communities.

Theory and Guidelines on Sustainable Management

The definition of Sustainable Management is the commitment to delivering value creation and preventing or minimizing long-term value destruction to the maximum extent possible (Beckmann, Schaltegger, & Landrum, 2019). Additionally, Elkington (1998) emphasizes that management must consider the benefits in economic, social, and environmental dimensions, known as the Triple Bottom Lines. Sustainable management is not solely focused on business benefits but aims to address societal and environmental issues to achieve sustainability (Elkington, 1998), aligning with the objectives of the Sustainable Development Goals (SDGs) set by the United Nations to be accomplished by 2030. In the realm of sustainable management in social enterprises, various research works highlight the critical role of sustainability in the longevity of social businesses and as a tool to measure the success of businesses for society (Jayawardhana, Fernando, & Siyambalapatiya, 2022)

Research Methodology

The population used in this research was the stakeholders involving sustainable management of social enterprise. It consisted of the following:-

- The social enterprises registered for business activities specifically for society amount to a total of 214 enterprises (Office of the Promotion of Social Enterprises, 2022b). The selection criteria for respondents to the social enterprise questionnaire are as follows:
 - Must have been engaged in social enterprise for a minimum of 3 years.
 - Must hold a position as an owner or manager exclusively in the social enterprise.
 - Must be a registered enterprise with the Office of the Promotion of Social Enterprises.
 - Must have a sustainable income from selling goods or services within the social enterprise.
 - Must possess capital and assets of the social enterprise not less than 1 million baht.

Figure 2: Linkage Connection of Expectation of Governmental Support Policies to Sustainability Management of Social Enterprises in Thailand

Based on the depicted data, the majority of interviewees underscored the pivotal role of accounting and tax knowledge in effective management within the social enterprise domain. Several respondents articulated that government support, particularly in the form of free training in accounting and tax management, alongside the provision of standardized forms for financial organization, constituted a highly beneficial initiative. Additionally, the establishment of an official call center for account and tax consulting was perceived as a valuable enhancement.

Another notable expectation for governmental support pertained to financial resources, encompassing loans, free grants, bonds, and crowdfunding, deemed as profoundly significant for fostering the sustainable growth of social enterprises. A government executive highlighted the importance of diverse government agencies, such as the Department of Tourism, offering specialized forms of financial support to facilitate the enduring development of social organizations.

Legal benefits, particularly grants from philanthropists, emerged as a crucial aspect. A social entrepreneur suggested that monetary funding from philanthropists should be subject to a double or triple tax deduction, or an increase in the percentage of tax deduction concerning the organization's tax payment. In terms of anticipated public relations initiatives from government agencies, fostering awareness of social enterprises, encouraging positive word of mouth, and promoting the consumption of social enterprise products and services emerged as effective policies for engendering the sustainable management of Thai social enterprises. A recommendation from a social enterprise expert included the establishment of a centralized platform on social media platforms, akin to platforms such as Grab or Shopee, supported by the government. This platform would serve to showcase the products and services of social enterprises, addressing the current absence of a dedicated trading area to facilitate the sale of goods.

Moreover, the suggestion was made that knowledge pertaining to social enterprises should be incorporated into the curriculum at the primary school level. The rationale behind this proposal was that the majority of lectures on social enterprise are currently delivered to undergraduate students, which is perceived as occurring too late in the educational trajectory for optimal learning and impact. Supporting factors conducive to enhancing sustainable management encompassed information technology, human capital management, social impact measurement, networking, addressing a lack of business knowledge, and facilitating business matching. Respondents emphasized the necessity of employing technological communication for both internal and external stakeholders, advocating for efficient accounting programs for internal financial operations among employees, and providing customers with user-friendly digital assessment tools for the procurement of social enterprise (SE) products and services.

The measurement of social impact emerged as a crucial tool for gauging the progress and success of SE initiatives. Social Impact Assessment (SIA) was identified as a foundational step in approaching sustainable management. Government agencies were recommended to offer accessible programs facilitating the teaching and support of measurement operations, ensuring cost-effectiveness for social entrepreneurs engaged in evaluating SE performance.

Furthermore, SE networking played a pivotal role in fostering collaboration among different social enterprises, facilitating knowledge and experience sharing in navigating challenging situations. It was viewed as a potent force for negotiating benefits with the government and suppliers. Effective networking was seen as a catalyst for business matching, human capital training between organizations, and the establishment of robust partnerships that could drive societal change.

Discussion

In-depth interviews with stakeholders within the sphere of sustainable management of social enterprises in Thailand revealed the pivotal role of public relations in cultivating awareness, facilitating word-of-mouth dissemination, and fostering a beneficial understanding regarding the acquisition of products and services from social enterprises. The

study posits that public relations initiatives aimed at promoting sustainability among general customers or organizations necessitate an integral incorporation into the educational framework, utilizing key concepts encompassing individual knowledge, abilities, routines, values, attitudes, capacity, and skills. The absence of a comprehensive understanding and consciousness pertaining to sustainability emerges as a significant deterrent, as the majority of consumers would withhold support for social enterprise management, attributing their reluctance to a perceived lack of importance in the existence of social enterprises and the consequential substantial impact on the environment and society.(Bratton, 2018; Jamali, 2006; Waite, Evans, & Kersh, 2014)

Securing financial resources, both domestically and internationally, in the form of grants, loans, bonds, and crowdfunding, constitutes a pivotal determinant in fostering the sustainable growth of social enterprises. These entities, operating at the intersection of business and social impact, necessitate diverse funding streams to sustain their operations. Notably, alterations in governmental procurement policies and anticipated declines in funding allocations could exert substantial repercussions on the social enterprise sector.(Community Foundation, 2004)

It is imperative to underscore that the prevailing approach towards supporting social enterprises should undergo a strategic shift, transitioning from a reliance on grant-based funding towards a more contract-centric model. This evolution is crucial for aligning financial backing with predefined objectives, thereby enhancing the effectiveness and accountability of social enterprise initiatives. As a consequence, this shift from traditional grant funding to contract funding is posited as a mechanism to incentivize the attainment of predetermined goals within the social enterprise domain.(Chapman, Forbes, & Brown, 2007)

Conclusion and Recommendation

The findings derived from the research delineate five pivotal challenges that impede the sustainable management of social enterprises. These challenges encompass deficiencies in labor market competitiveness, limited understanding of government sector dynamics, inadequate collaboration capabilities with network partners, insufficiency in financial resources, and a dearth of knowledge and proficiency in addressing social business challenges.

In order to establish sustainable management practices for social enterprises in the Thai context, the following prescriptive steps are recommended as viable solutions, contingent upon the formulation of judicious government policies:

1. **Enhancing Labor Market Competitiveness:** Addressing the challenge of insufficient competitiveness in the labor market requires concerted efforts to augment the abilities of social enterprises to effectively engage and navigate within the labor market.
2. **Augmenting Understanding of Government Sectors:** Mitigating the lack of knowledge regarding government sectors necessitates strategic initiatives aimed at fostering comprehensive awareness and understanding of governmental dynamics pertinent to social enterprises.
3. **Facilitating Collaboration with Network Partners:** Overcoming the challenge of limited collaboration capabilities with network partners entails the development of mechanisms and frameworks that facilitate seamless cooperation and synergy among diverse stakeholders within the social enterprise ecosystem.
4. **Alleviating Financial Resource Constraints:** To address the financial resource deficit, targeted interventions such as financial literacy programs, access to funding platforms, and fostering partnerships with financial institutions can be instrumental in bolstering the financial resilience of social enterprises.
5. **Enhancing Problem-Solving Capabilities:** Mitigating the deficiency in knowledge and proficiency to resolve social business challenges necessitates the implementation of educational and capacity-building initiatives focused on equipping social entrepreneurs with the requisite skills to address complex social issues.

These recommended measures, when integrated into pertinent government policies, stand to catalyze the growth and sustainability of social enterprises in the Thai context.

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The Relationship Between Board of Directors' Characteristics and Environmental, Social, and Governance Scores (ESG Scores) to the Market Value of Firm: A Case Study of Companies Listed on the Stock Exchange of Thailand, Sustainable Stock Group

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Abstract

This research aims to study the relationship between the board of directors' characteristics and Environmental, Social, and Governance Scores (ESG Scores) on the market value of firm of companies listed on the Stock Exchange of Thailand, sustainable stocks group by collecting data from secondary data sources from 2020 to 2022, totaling 3 years. 213 samples (71 companies x 3 years) not including companies in the financial business industry and companies with incomplete information throughout the period. The study was the analysis of descriptive statistics and using inferential statistics were Pearson Correlation Coefficient and Multiple Regression Analysis for test hypotheses. Separated by the period of time that may be affected by the pandemic of the Covid-19, the sample is divided into 2 periods: the period during the pandemic (2020-2021) and the period after the pandemic.

The results found that the market value indicator of a business (Tobin's Q) averaged for all 3 years was 1.815-1.935 shows that growth rate of companies listed on the Stock Exchange of Thailand in the sustainable stock group was still a high growth trend and the ESG information disclosure Score has an average of 55.29-58.60 points for all 3 years, meaning that the score shows ESG performance at a good level. There is a sufficient level of transparency in the public reporting of ESG data. Also, this research found that the compensation of board of directors has a positive relationship to market value of the firm, while the proportion of independent directors, ESG Scores and size of company has a negative relationship to market value of the firm.

Keywords: Board of Directors Characteristics, ESG, Tobin's Q, Firm's Value

1. Introduction

After the worldwide outbreak of the Covid-19 virus, which became a pandemic in early 2020, it has become evident that organizations must rely on each other within a business ecosystem. Marketing planning enables organizations to effectively build their brand and adapt to changes in business trends during the Covid-19 outbreak (Sosanuy, Siripipatthanakul, Nurittamont, & Phayaphrom, 2021). Additionally, businesses emphasizing social and environmental responsibility aid the economy in numerous countries and facilitate faster recovery from the Covid-19 epidemic, thereby reducing its impact on businesses. This serves as a guideline for organizations to succeed and grow sustainably in the future. Firms should not only focus on maximizing profit but also prioritize considerations for the environment, society, and corporate governance (Ketsuriyong & Mata, 2022).

The Stock Exchange of Thailand has prepared a sustainability report and ranking of the list of sustainable stocks under the THSI (Thailand Sustainability Investment) index. These stocks belong to listed firms that prioritize environmental, social, and governance (ESG) considerations in their operations. This initiative aims to encourage investors and data users to evaluate business operations beyond just financial metrics. The report provides information to support investment decisions based on responsible investment guidelines, thereby promoting sustainable investment practices. This approach helps businesses manage operations efficiently, enhance competitiveness, and generate sustainable long-term returns (El Ghoul, Guedhami, & Kim, 2016; Stock Exchange of Thailand, 2017a).

Previous studies have indicated a relationship between board of directors' characteristics and the market value of a firm, but the results vary. For instance, Bai, Liu, Lu, Song, and Zhang (2002); Guillet, Seo, Kucukusta, and Lee (2013); Khairani and Harahap (2017); Kiel and Nicholson (2003) found that board of directors' characteristics are positively related to the market value of the firm, as measured by Tobin's Q. However, in some studies, the relationship is found to be in the opposite direction. Chiang and Chia (2005); Henry (2010); Rashid (2018) examined that the characteristics of the board have a negative relationship with the firm's market value, as measured by Tobin's Q. Additionally, some studies did not find a statistical relationship (Doucouliagos, Haman, and Askary, 2007).

In addition, the relationship between environmental, social, and governance (ESG) scores and the market value of a business is evident, although the results are mixed. El Ghoul et al. (2016) found a positive correlation between ESG performance and company value, suggesting that ESG activities can enhance a company's competitive advantage and reduce the likelihood of business operation failures. However, Friedman's (2007) research suggests that fulfilling environmental, social, and corporate governance responsibilities may lead to a decrease in business profits.

This research aims to study the characteristics of company boards and ESG scores in relation to the market value of firms listed on the Stock Exchange of Thailand within the sustainable stock group during the period from 2020 to 2022. The objective is to examine how the characteristics of a company's board of directors and its environmental, social, and governance scores (ESG Scores) relation to the market value of the firm. Understanding which influencer marketing attributes and brand personality traits influence consumer behavior can assist entrepreneurs in devising more effective marketing strategies tailored to their target audience and objectives. The findings of this study provide valuable information to support investment decisions based on responsible investment guidelines, promote sustainable investment practices, and help businesses manage operations efficiently to enhance competitiveness and achieve sustainable growth.

2. Objective Research

1. To study the relationship between the board of directors' characteristics and the market value of firm listed on the Stock Exchange of Thailand, sustainable stock group.
2. To study the relationship of environmental, social, and governance scores (ESG Scores) to the market value of firms listed on the Stock Exchange of Thailand, sustainable stock group.

2. Literature review

- Stakeholder Theory

Freeman (1984) explains the concept of socially responsible stewardship, emphasizing that executives must prioritize both internal and external stakeholders who exert influence on the organization. They must maintain an appropriate balance between the interests of all stakeholders, recognizing shareholders as a significant stakeholder group alongside employees, customers, communities, and suppliers. These stakeholders impact the firm's operations and warrant attention beyond mere pursuit of maximum profit. Focusing solely on shareholders' needs or maximizing profits may detrimentally affect other stakeholders. Hence, executives must conscientiously attend to all stakeholders in a balanced manner.

Moreover, Post, Frederick, Lawrence, and Weber (2002) conducted a study revealing stakeholders as groups or individuals affected by, or influencing, organizational decisions. Consequently, stakeholder theory assumes significance in shaping the notion of corporate social responsibility.

2.1 Corporate Social Responsibility (CSR) and Environmental, Social and Governance (ESG)

The Stock Exchange of Thailand (SET) created the Thailand Sustainability Investment list (THSI) in 2015. This list comprises stocks of companies listed on the SET that demonstrate sustainable business operations, with consideration given to environmental and social responsibilities, as well as adherence to principles of corporate governance, encapsulated by the Environmental, Social, and Governance (ESG) criteria.

In 2018, the Stock Exchange of Thailand created the SET THSI Index as a sustainability index. It is used to demonstrate the level and movement of common stock prices of listed companies that adhere to sustainable development guidelines. This enables investors to compare returns from investing (Benchmark) in sustainable stocks and provides information to investors interested in long-term investing with social responsibility (Stock Exchange of Thailand, 2018).

Today, numerous agencies collect sustainability data from companies worldwide to assess ESG (Environmental, Social, and Governance) performance. This study focuses on the disclosure scores of environmental, social, and governance aspects among listed companies in Thailand. The data is sourced from the Refinitiv database, which assigns scores ranging from 0 to 100 reflecting the extent of ESG disclosure by each company. Moreover, the Refinitiv database is a comprehensive ESG business performance assessment tool covering 12,500 companies globally. Social responsibility is delineated into 10 sub-categories and evaluated annually to ensure consistency with companies' ESG data reporting.

- Agency Theory

Jensen and Meckling (1976) explained Agency Theory, which delineates the structure of a company into two distinct parties: the principal, represented by the shareholders who possess ownership of the company, and the agent, comprising executives (firm's board of directors) who serve as representatives tasked with making management decisions aimed at maximizing the company's return on investment. The agent or executive have the power to make decisions about various information of the company rather than shareholders.

This enables executives to oversee tasks that generate the greatest benefits for themselves. If the goals and interests of the principal and agent are misaligned, it leads to agency problems (Fama & Jensen, 1983), prompting the firm to implement mechanisms for oversight and resolution of such issues. This constitutes good corporate governance, mitigating conflicts of interest (Low & Cowton, 2004). Therefore, this theory is a tool that firm use to control their boards of directors. The characteristics of a good board of directors will help in reducing representative problems.

2.2 Corporate Governance

Good corporate governance, the firm listed on the stock exchange mainly provides information that can be used as a guideline for controlling the corporate. The board of every firm same goal to create high benefits to firm and stakeholder. Moreover, the firm need to take care of their operations appropriately and benefits to all stakeholders. This will lead to firm performance and sustainable business value (Uwuigbe & Fakile, 2012). Therefore, one important mechanism of good corporate governance is that a company must have a board of directors. qualified Both in terms of knowledge, abilities, and skills in each professional field. and work experience that is beneficial to the

company Be responsible for your own duties Independent from management Treat shareholders clearly (Stock Exchange of Thailand, 2017b)

- Firm's Value

Firm value is one tool to indicate the success and efficiency of an organization's operations and reflect the ability of the business organization to create returns for shareholders from investments. It generates profits in return for shareholders and continuously creates business value, leading to the sustainability of the organization.

Calculating the market value of a business, Tobin's Q, follows the concept outlined by Chung and Pruitt (1994), which adjusts the formula for simplification and reflects information from financial statements. This involves incorporating past information and market value, which reflects anticipated investor expectations. regarding the company's future prospects.

A firm with a Tobin's Q value greater than 1 indicates that the firm can efficiently utilize its resources or assets, resulting in an increase in the value of the business, making it a worthwhile investment. Conversely, if the firm's Tobin's Q value is less than 1, it signifies that the firm is unable to fully leverage its resources or assets, thus failing to create firm value. In such cases, investing may not be advisable, as the potential returns may not justify the investment.

$$\text{Tobin's Q} = \frac{\text{Market value of securities} + \text{Book value of debt}}{\text{Book value of total assets}}$$

3. Hypotheses

A study on the relationship between the board of directors and the market value of a firm found that the size of the board of directors is positively correlated with market value. A larger board of directors is associated with increased firm value. Companies with extensive boards comprising knowledgeable and talented individuals with diverse skills and experiences have opportunities to apply various strategies that can be beneficial in decision-making (Kiel and Nicholson, 2003; Kyereboah-Coleman and Biekpe, 2006; Singh, Tabassum, Darwish, and Batsakis, 2018). Also, the study of Bai et al. (2002) and Idris, Buchdadi, Muttaqien, and Hariguna (2020) discovered that as the proportion of independent directors increases, so does the firm's value. This is attributed to the substantial presence of independent committees, which aid in decision-making, enhance oversight capabilities, and consequently improve the company's operational performance, leading to increased efficiency.

Moreover, Chiang and Chia (2005) and Singh et al. (2018) found that the combination of the positions of chairman of the board of directors and CEO is negatively related to the market value of the firm. Having the same individual holding both positions concentrates decision-making power, which may not align with the best interests of the company. Additionally, studies by Idris et al. (2020) and Khairani and Harahap (2017) also found that higher compensation for the Board of Directors can enhance operations and create added value for the company. Therefore, this study has the following hypotheses.

Hypothesis 1: The size of board of directors (BD_SIZE) is positively related to the market value of the firm.

Hypothesis 2: The independent directors (BD_INDE) is positively related to the market value of the firm.

Hypothesis 3: The CEO- Duality (BD_CEOD) is negatively related to the market value of the firm.

Hypothesis 4: the compensation (BD_COMP) is positively related to the market value of the firm.

Moreover, the environmental, social, and governance (ESG) scores that have a relationship with the market value of the business. It has been found that good corporate ESG performance improves financial performance assessed through accounting and market-based measures. This has a practical impact on companies and helps improve sustainable business practices and long-term shareholder prosperity (Dalal & Thaker, 2019). Additionally, El Ghoul

et al. (2016) found that ESG activities increase a company's competitive advantage and reduce the chance of failure in business operations. Thus, this study proposes the following hypothesis.

Hypothesis 5: the environmental, social, and governance scores (ESG Scores) is positively related to the market value of the firm.

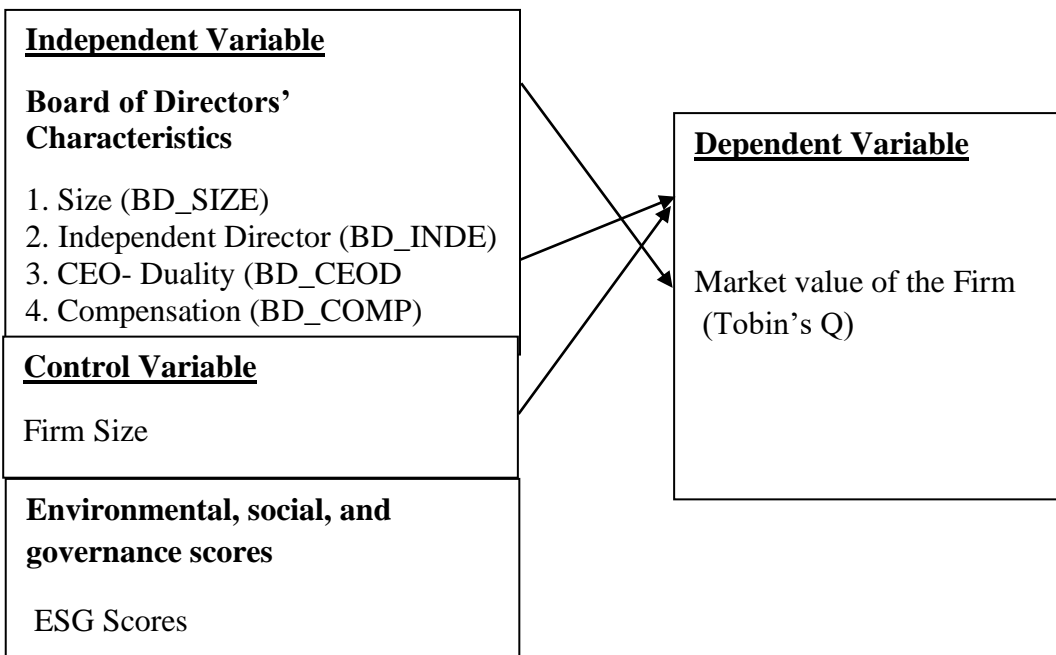


Figure 1: Conceptual Framework

4. Research Methodology

This study collected data from secondary sources (Secondary Data), collected from annual reports, data from annual reports (Form 56-1), annual financial data and other information from the SETSMART database of the Stock Exchange of Thailand and ESG score variables use the database from Refinitiv Eikon Data stream. Data was collected from 2020 to 2022, including 213 samples (71 companies), excluding firm in the financial industry and incomplete data for the 3 years period during 2020 -2022.

The researcher has divided the data analysis into two parts: descriptive statistics analysis and inferential statistics analysis. The latter includes examination of the Pearson correlation coefficient and Multiple Regression Analysis. The multiple regression equation is employed to test the hypothesis. Additionally, to account for the potential impact of the Covid-19 pandemic, the sample is split into two periods: the period during the outbreak and the period after the outbreak.

Model 1: Market value of the firm during the epidemic period (2020)

$$\text{Tobin's } Q_{\text{covid}_{i,t}} = \beta_0 + \beta_1 \text{BD}_{\text{SIZE}_{i,t}} + \beta_2 \text{BD}_{\text{INDE}_{i,t}} + \beta_3 \text{BD}_{\text{CEOD}_{i,t}} + \beta_4 \text{BD}_{\text{COMP}_{i,t}} + \beta_5 \text{ESG}_{i,t} + \beta_6 \text{SIZE}_{i,t} + \sum_{y=1}^3 \beta_y \text{YEAR}_{i,t} + \varepsilon_{i,t}$$

Model 2: Market value of the firm during the period epidemic (2021)

$$\text{Tobin's } Q_{\text{covid}_{i,t}} = \beta_0 + \beta_1 \text{BD}_{\text{SIZE}_{i,t}} + \beta_2 \text{BD}_{\text{INDE}_{i,t}} + \beta_3 \text{BD}_{\text{CEOD}_{i,t}} +$$

$$\beta_4 BD_{COMP_{i,t}} + \beta_5 ESG_{i,t} + \beta_6 SIZE_{i,t} + \sum_{y=1}^3 \beta_y YEAR_{i,t} + \varepsilon_{i,t}$$

Model 1: Market value of the firm during the period after epidemic (2022)

$$\text{Tobin's } Q_{\text{After}_{i,t}} = \beta_0 + \beta_1 BD_{SIZE_{i,t}} + \beta_2 BD_{INDE_{i,t}} + \beta_3 BD_{CEOD_{i,t}} + \beta_4 BD_{COMP_{i,t}} + \beta_5 ESG_{i,t} + \beta_6 SIZE_{i,t} + \sum_{y=1}^3 \beta_y YEAR_{i,t} + \varepsilon_{i,t}$$

Tobin's $Q_{i,t}$	=	A measure of the market value of firm i in year t
$BD_{SIZE_{i,t}}$	=	Size of board of direction of firm i in year t
$BD_{INDE_{i,t}}$	=	Independent board of direction of firm i in year t
$BD_{CEOD_{i,t}}$	=	CEO- Duality of board of direction of firm i in year t
$BD_{COMP_{i,t}}$	=	Compensation of board of direction of firm i in year t
$ESG_{i,t}$	=	Environmental, social, and governance scores of firm i in year t
$SIZE_{i,t}$	=	Size of firm i in year t
$\varepsilon_{i,t}$	=	Error

6. Results

The study focuses on a sample of firms listed on the Stock Exchange of Thailand. A total of 213 sustainable stocks were examined, employing the Winsorized method to address outliers at the 5% and 95% levels. Data analysis entailed descriptive statistics. Across the three years, it was observed that the market value indicator of the businesses (Tobin's Q) ranged from 0.823 to 4.878. A Tobin's Q value below 1 indicates slower market value growth, whereas a value above 1 signifies rapid growth. The average Tobin's Q ratio in 2020 stood at 1.815, the lowest among the pandemic years. However, the average Tobin's Q ratio across all three years, ranging from 1.815 to 1.935, indicates a sustained high growth potential for companies within the sustainable stock group listed on the Stock Exchange of Thailand.

Independent variables include the size of the company's board of directors (BD_SIZE) across all three years, ranging from 8 to 16 members, with an average of approximately 11 members. Additionally, the proportion of independent directors on the company's board of directors (BD_INDE) over the same period ranges from a minimum of 33.33 percent to a maximum of 65.50 percent. The average proportion of independent directors on the board of directors over the three years is 43.60-45.00%. The combination of the positions of Chairman of the Executive Committee and Chairman of the Board of Directors (BD_CEOD) from 2020 to 2021 averages 23.00%. The results indicate that 23% of the sample had a merger of the positions of chairman of the executive committee and chairman of the Board of Directors during that period. In 2022, the average rises to 27.10%, suggesting that 27% of the sample had a merger of the positions of Chairman of the Executive Committee and Chairman of the Board of Directors.

Board of Directors' compensation (BD_COMP), which is calculated using logarithms. In 2020, there was an average of 7.179 or a value of 15.10 million baht per year. In 2021, there was an average of 7.068 or a value of 11.69 million baht per year. Finally, in 2022, there was an average of 7.069 or equivalent to 11.72 million baht per year.

As for the Environmental, Social, and Governance Information Disclosure Score (ESG Scores), out of a full score of 100, the lowest score was 27.09 points, and the highest score was 83.33 points, with an average over the three years ranging from 55.29 to 58.60 points. This indicates that the displayed ESG performance is at a commendable level, demonstrating a sufficient degree of transparency in the public reporting of ESG data.

Control variables include company size (SIZE), which averaged 7.850 in 2020, corresponding to 70.79 million baht. In 2021, the average decreased to 7.825, equivalent to 66.83 million baht, and in 2022, the average further decreased to 7.774, corresponding to 59.43 million baht.

Table 1 Pearson Correlation Coefficients during the epidemic period (2020)

Variable	Tobin's Q	BD_ SIZE	BD_ INDE	BD_ CEOD	BD_ COMP	ESG	SIZE	** p < 0.05, ** p < 0.01
Tobin's Q	1.000							
BD_SIZE	-0.168	1.000						
BD_INDE	-0.296**	0.089	1.000					
BD_CEOD	-0.003	-0.075	-0.067	1.000				
BD_COMP	-0.242**	0.586***	0.325***	-0.068	1.000			
ESG	-0.366***	0.183	0.079	0.049	0.312***	1.000		
SIZE	-0.414***	0.571***	0.263**	0.016	0.759***	0.414***	1.000	

**Table
2**

Pearson Correlation Coefficients during the epidemic period (2021)

** p < 0.05, ** p < 0.01	Variable	Tobin's Q	BD_ SIZE	BD_ INDE	BD_ CEOD	BD_ COMP	ESG	SIZE
	Tobin's Q	1.000						
	BD_SIZE	-0.230	1.000					
	BD_INDE	-0.351***	0.041	1.000				
	BD_CEOD	-0.038	-0.035	-0.008	1.000			
	BD_COMP	-0.175	0.457***	0.136	0.046	1.000		
	ESG	-0.342***	0.131	0.175	0.043	0.286**	1.000	
	SIZE	-0.501***	0.545***	0.200	0.016	0.707***	0.508 ***	1.000

Pearson Correlation Coefficients after the epidemic period (2022)

Variable	Tobin's Q	BD_ SIZE	BD_ INDE	BD_ CEOD	BD_ COMP	ESG	SIZE
Tobin's Q	1.000						

BD_SIZE	-0.323***	1.000						**
BD_INDE	-0.280**	0.159	1.000					p < 0.05, ** p < 0.01
BD_CEO	-0.078	-0.079	-0.042	1.000				
BD_COMP	-0.159	0.475***	0.139	-0.190	1.000			
ESG	-0.383***	0.274**	0.094	0.075	0.424***	1.000		
SIZE	-0.493***	0.581***	0.217	0.068	0.710***	0.591***	1.000	

Pearson Correlation analysis in table 1, 2, and 3 found that between every pair of variables The correlation coefficient should not exceed 0.8 (Eastman & Ferguson, 1981). It was found that for all 3 years, all variables had low correlations, there is no problem. Multicollinearity This is because the correlation coefficient of every pair of variables is less than 0.8, which does not affect the interpretation of the results obtained from the multiple regression analysis. Also, the lowest Tolerance value is 0.328, which is greater than 0.2, and the highest VIF value is 3.046, which is not more than 10, indicating that all variables are not related to each other. There is no Multicollinearity problem. and test the problem of linear relationship between Auto correlation error values. It was found that from testing Durbin-Watson value is between 2.192-2.340, acceptable because it is still between 1.5 - 2.5 (Wanichbancha and Wanichbancha, 2020), indicating that the error values are independent, there is no auto correlation problem.

Table 4 Regression Coefficients

	Sign	Tobin's Q 2020		Tobin's Q 2021		Tobin's Q 2022	
		b	P-value	b	P-value	b	P-value
Constant		4.661	0.105	5.257	0.044	3.785	0.135
BD_SIZE	+	0.004	0.946	-0.007	0.907	-0.058	0.363
BD_INDE	+	-2.530	0.039**	-3.034	0.013**	-2.147	0.083
BD_CEO	-	0.046	0.875	-0.126	0.660	-0.092	0.730
BD_COMP	+	0.798	0.176	1.245	0.015**	1.287	0.008***
ESG	+	-0.019	0.041**	-0.004	0.621	-0.011	0.192
SIZE		-0.815	0.016**	-1.328	0.000***	-1.128	0.002***
Prob > F		<0.001		<0.001		<0.001	
Adjusted R ²		0.215		0.326		0.308	
Durbin-Watson		2.192		2.340		2.227	

** p < 0.05, *** p < 0.01

Model 1: Market value of the business During the period during the epidemic (2020), it was found that the independent variables in the study were able to explain the market value of the business (Tobin's Q). Adjusted R-square is equal to 21.50 percent, has a negative relationship with the proportion of independent directors on the company's board of directors (BD_INDE). The regression coefficient (Beta) is equal to -2.530 at the statistical significance level of 0.05 and it is found that the market value of Business (Tobin's Q) has a negative relationship with environmental, social, and corporate governance disclosure scores (ESG Scores). The regression coefficient (Beta) is -0.041 at the statistical significance level of 0.05.

Model 2: Market value of the business During the period during the epidemic (2021), it was found that the independent variables in the study were able to explain the market value of the business (Tobin's Q). Adjusted R-square is equal to 32.60 percent, has a negative relationship with the proportion of independent directors on the company's board of directors (BD_INDE). The regression coefficient (Beta) is equal to -3.034 at the statistical significance level of 0.05. Also, market value of the business (Tobin's Q) positive relationship on compensation of board of directions (BD_COMP). The regression coefficient (Beta) is equal to 1.245 at the statistical significance level of 0.05.

Model 3: Market value of the business During the period during the epidemic (2022), it was found that the independent variables in the study were able to explain the market value of the business (Tobin's Q). Adjusted R-square is equal to 30.80 percent, has a positive relationship with the proportion of independent directors on the company's board of directors (BD_INDE). The regression coefficient (Beta) is equal to 1.287 at the statistical significance level of 0.05.

7. Discussion

This study aims to the relationship between board characteristics and environmental, social, and governance scores (ESG Scores) to the market value of companies listed on the Stock Exchange of Thailand. Sustainable stock group. It can be summarized as follows:

Model 1 and Model 2 for the period during the pandemic (2020-2021) found that the proportion of independent directors on the board of directors (BD_INDE) is negatively related to the marketing value of the firm. Therefore, when the proportion of independent directors increases, the market value of the firm will decrease.

Previous studies have found that an independent committee is not truly independent. This is because executives are involved in the selection and appointment to positions or that the independent directors do not have a vested interest in the company's operating results. Therefore, there is no motivation to perform duties. Moreover, the independent committee, being outsiders, may not fully comprehend the company's work processes as well as the board of directors. Consequently, the independent committee may still be limited in its decision-making scope and may not possess sufficient authority to carry out its work effectively. Thus, the value of the business may not increase (Brennan, 2006; McNulty & Pettigrew, 1996; Rashid, De Zoysa, Lodh, & Rudkin, 2010; Prongwittayakorn, Henswang, and Siriwatthanakul, 2017).

Moreover, **Model 1:** During the epidemic period (2020), environmental, social, and governance scores exhibit a negative relationship with the market value of businesses. This implies that as environmental, social, and governance scores increase, the market value of businesses tends to decrease. Previous research has indicated that environmental, social, and corporate governance responsibilities can lead to reduced business profits. High compliance with ESG principles may negatively impact firm profits due to increased operating costs.

Therefore, the primary objective of a business is to enhance the wealth of its shareholders. Furthermore, companies engaged in environmentally friendly activities or those recognized with environmental awards often encounter negative returns. When a company engages in highly responsible environmental, social, and corporate governance activities, it incurs increased expenses and costs, thereby impacting operating results and decreasing profits. Consequently, this can also diminish the overall value of the business (Fatemi, Glaum, & Kaiser, 2018; Fisher-Vanden & Thorburn, 2011; Friedman, 2007).

Finally, Model 2 during the epidemic (2021) and Model 3 in the post-epidemic period (2022) found that board compensation of directors is positively related to the market value of the firm. When the board of directors receives higher compensation, it causes the market value of the business, as measured by Tobin's Q, to increase. This is consistent with past studies that have shown high compensation for the board of directors can improve operations and create added value for the firm. Therefore, it is important for the firm to provide equal remuneration to the board of directors to ensure they feel well-appreciated, thereby potentially increasing their performance. Moreover, company directors who receive different levels of compensation may have varying incentives. For firms with complex operating processes or high operational risks, it is crucial to have a skilled committee with significant work experience, and their compensation should reflect this. This is essential for achieving maximum efficiency in management (Brick, Palmon, & Wald, 2006; Idris et al., 2020; Khairani & Harahap, 2017).

A diverse board of directors within a firm facilitates the development and marketing of new products and services, as well as the mobilization of skills. A variety of ideas stemming from the expertise of the board of directors can be utilized to meet customer needs, improve existing products, services, or develop new ones. Enhancing customer satisfaction ultimately contributes to the success and value creation for the organization as well (Khanthanon & Nuritmon, 2019).

The results of this study are expected to benefit the regulatory agencies overseeing companies listed on the Stock Exchange of Thailand. It will serve as a guideline for determining committee remuneration in accordance with regulations or various practices, ensuring fair compensation rates without excessive payouts. Additionally, it will provide guidance on defining the characteristics and emphasizing the roles of the Board of Directors to ensure appropriateness.

8. Contributions

1. The study period should be extended to ensure more comprehensive data collection. With an increasing number of companies being evaluated for Environmental, Social, and Governance scores (ESG Scores) each year, extending the study period will allow for a more accurate reflection of the market value of businesses.

2. Future studies may use environmental, social, and governance scores (ESG Scores) from databases from other assessors, such as Bloomberg assessors, to examine differences. They can then compare these ESG scores to determine whether the test results align or diverge.

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Evaluating the Impact of Influencer Marketing Attributes and Brand Personality on Brand Switching Intentions in Beverage of New Generation Consumers

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Abstract

The objectives of this research were: 1) To study the influence of influencer marketing attributes on intention to change beverage brands. 2) To examine the effect of brand personality on intention to change beverage brands. And 3) To investigate the influence of influencer marketing attributes and brand personality on the intention to change beverage brands among the new generation of consumers in Bangkok, Thailand. The sample consisted of 385 consumers of beverage brands in Bangkok, aged 18-26 years (Gen Z) and 27-44 years (Gen Y). The sampling method employed was non-probability sampling, specifically purposive sampling, and the research tool used was a questionnaire. The statistical analysis utilized in the research was multiple regression analysis, with a significance level at 0.05.

The results revealed that influencer marketing attributes, including trustworthiness, expertise, and similarity positively influenced the intention to change beverage brands. Additionally, brand personality traits such as competence and ruggedness positively affected the intention to change beverage brands among the new generation of consumers. Furthermore, both influencer marketing attributes and brand personality had a positive influence on consumers' intentions to switch beverage brands. This study provides valuable insights that can serve as a guideline for enhancing consumers' attitudes towards changing beverage brands.

Keywords: influencer marketing Attributes, Brand personality, Brand switching intention

1. Introduction

In recent years, influencer marketing and brand personality have steadily increased in popularity as marketing strategies. Due to their potential to effectively reach target audiences and foster strong consumer relationships (Kotler & Keller, 2016), influencer marketing relies on the credibility and popularity of influencers to convey a brand's message to the target group (Aaker, 1997). Consumers are more inclined to trust and act upon the recommendations of their favorite marketing influencers. Therefore, there is a high likelihood that consumers will alter their purchasing decisions in favor of brands recommended by influencers rather than those they have previously patronized (Shankar & Balasubramanian, 2009). Additionally, brand personality involves crafting an image for a brand, which consumers remember and favor (Batra & Homer, 2006)

Brand personality should reflect the brand's values and goals, enabling consumers to connect with the brand (Gupta & Lord, 2012). Therefore, marketing influencers and brand personalities can effectively collaborate. Marketing influencers can assist in creating brand awareness and generating interest, while the brand's personality helps foster positive relationships with consumers (Kotler & Keller, 2016). Product brands may choose to partner with well-known marketing influencers to develop marketing campaigns (Aaker, 1997). Such campaigns aid in raising awareness and interest in the brand and in reinforcing its personality traits, such as friendliness and warmth. Brands with a friendly

and warm personality may collaborate with reputable marketing influencers in entertainment or lifestyle sectors to create campaigns that emphasize fun and enjoyment. This approach helps in building brand awareness, generating interest, and reinforcing the brand's personality (Gupta & Lord, 2012). Furthermore, marketing influencers and brand personalities can also assist in reaching new target groups. For instance, if a brand embodies a modern personality, it may collaborate with popular marketing influencers among teenagers or working professionals to develop a marketing campaign that highlights modernity and style. Such campaigns facilitate reaching new audiences and expanding the brand's customer base.

For entrepreneurs launching new brands aiming to gain market share from existing competitors, it is essential to implement a robust marketing strategy. This strategy should focus on capturing consumer attention and persuading them to switch to the new beverage brands. Utilizing attributes such as market influencers and brand personalities can significantly enhance the likelihood of success for these new brands. Influencer marketing attributes contribute to raising awareness and generating interest, while brand personality fosters a strong connection with consumers. Considering these factors, researchers are interested in exploring the impact of influencer marketing attributes and brand personality on consumers' intentions to switch beverage brands, particularly among the new generation in Bangkok, Thailand. Understanding which influencer marketing attributes and brand personality traits influence consumer behavior can assist entrepreneurs in devising more effective marketing strategies tailored to their target audience and objectives.

2. Literature review

- Marketing influencer attributes

Influencer marketing is a marketing strategy that leverages individuals who possess influence over a particular target audience to promote products or services. Marketing influencers wield significant power in generating awareness and interest in products or services efficiently, owing to their large and trusting follower base. Consequently, when an influential individual endorses a product, there's a heightened likelihood that their followers will express interest and make purchasing decisions. Moreover, influencer marketing enables brands to reach more precisely defined audiences, as influencers typically attract followers with similar interests or lifestyles. Therefore, brands should select influencers whose follower demographics align with their target audience (Wang, Pacho, Liu & Kajungiro, 2019). Marketers often categorize these influencers as opinion leaders, capable of significantly enhancing a product's popularity and acceptance within a short timeframe. Marketers actively seek out such influencers within relevant product categories and devise strategies to ensure their endorsement and recommendation of the brand to others.

A marketing influencer is a figure often associated with celebrity or high society circles. Nowadays, marketers are blending social media with influencer marketing strategies to cultivate awareness and establish trustworthiness in the usage of products and services, rather than relying solely on traditional advertising methods featuring famous individuals like actors or singers. Particularly, influencers within the realm of online media play a crucial role in disseminating product information to a broader audience. This can take various forms, including endorsements by notable personalities. Influencers wield the ability to attract, engage, and persuade consumers to adopt product usage, leveraging figures such as athletes, celebrities, and societal luminaries (Shiffman & Kanuk, 2004). However, it's noteworthy that influencer marketing is not merely a contemporary trend; its roots trace back to ancient societal structures. Throughout history, individuals such as politicians, religious leaders, and even personal acquaintances like friends and family have served as influential marketing figures in people's daily lives (Zietex, 2016).

Shimp (2003) stated that the process of selecting individuals to represent brands for products and services falls under the umbrella of celebrity marketing, which extends beyond traditional celebrities. Notably, renowned figures are recognized by the general public and can be categorized into two groups: 1) celebrities or celebrity endorsers and 2) individuals with appealing appearances and charming personalities, referred to as typical-person endorsers. However, the decision to utilize both categories of individuals as brand representatives hinges on the Tears Model principle (Shimp, 2003; Shimp, 2010; McCracken, 1989), which comprises five essential elements of influencer attributes in marketing: 1) Trustworthiness (T) represents the level of trust placed in the individual, 2) Expertise (E) denotes the individual's knowledge and proficiency, often directly related to the product, 3) Attractiveness (A) pertains to the ability to captivate attention through physical appearance and personality, which may not necessarily be linked to the product but could be associated with lifestyle, 4) Respect (R) signifies the admiration or approval of the target audience towards the individual's achievements, and 5) Similarity (S) to the target audience reflects the resemblance between the presenter and the brand's target demographic.

Therefore, it can be concluded that marketing influencer features are an effective form of marketing strategy to reach your target audience, capable of creating awareness and interest in products or services among consumers quickly through various channels by leveraging the credibility and confidence of marketing influencers who have a large number of followers. Previous studies have found a positive relationship between marketing influencers and consumers' purchase intentions (Shankar & Balasubramanian, 2009; Malhotra & McCort, 2001). The attributes of market influencers include trustworthiness, expertise, attractiveness, respect, and similarity to the target group. Therefore, the hypotheses are as follows:

H1: Market influencer attributes have a positive influence on beverage brand switching intentions of new consumers generation.

H 1.1: Trustworthiness of market influencer attributes has a positive influence on the intention to change beverage brands of new consumers generation.

H 1.2: Expertise of market influencer attributes has a positive influence on the intention to change beverage brands of new consumers generation.

H 1.3: Attractiveness of market attributes influencer has a positive influence on the intention to change beverage brands of new consumers generation.

H 1.4: Respect of market influencer attributes has a positive influence on the intention to change beverage brands of new consumers generation.

H 1.5: Similarity of market influencer attributes has a positive influence on the intention to change beverage brands of new consumers generation.

- **Brand personality**

Brand personality is a fundamental concept in branding, playing a significant role in consumer perception and engagement. Conceptualized as akin to human personality traits, it facilitates a connection between consumers and the brand. Recognizing and distinguishing between various brands allows individuals to associate the personality of a brand with their own identity. Within the framework of anthropomorphism theory, brand personality encompasses human-like qualities that cater to material desires, enabling interaction with intangible concepts. Brand personality enhances brand memorability through character portrayal, language usage, and descriptions employed in brand communication. It fosters direct and indirect relationships between consumers and the brand, shaping consumer

perception and attitudes. Unique brand personality traits enable consumers to express their own identities through brand affiliation, often viewing brands as extensions of themselves. Audience perceptions of brand relationships are influenced by the perceived distance between themselves and the brand. The previous study such as those by Plummer (2000), Azoulay and Kapferer (2003), Sirgy (1982), and Keller (1993), brand personality integrates human traits into brand identity, fulfilling consumer desires for self-expression and individuality rather than solely focusing on product attributes and benefits.

Moreover, Aaker (1997) defined brand personality as a set of human characteristics associated with a brand. The study aimed to develop the Brand Personality Scale (BPS), employing the Big Five Theory to comprehend brand usage. The research highlighted that consumers' perceptions of brand personality stem from both direct and indirect interactions with the brand. Directly linked personalities include the brand's user imagery, reflecting the traits of brand users such as executives, employees, or leaders, as well as demographic characteristics.

As for personality, it is indirectly linked to the brand, often through product-related attributes such as brand names, symbols, logos, advertising, prices, and distribution channels. Brand personality consists of five dimensions as follows: 1) Sincerity personality: honest, useful, fun, cheerful, family-oriented, sincere, with a tangible identity. It is traditional, sensitive, and friendly. 2) Excitement personality: courageous, determined, imaginative, modern, exciting, brilliant, youthful, with a unique identity, authentic, and contemporary. 3) competence personality: Trustworthy, intelligent, successful, diligent, stable, skilled, organizational, with leadership qualities, and self-confident. 4) Sophisticated personality: classy, charming, elegant, good-looking, graceful, and refined. And 5) Ruggedness personality: enjoys exciting activities, strong, adventurous, and bold.

In conclusion, a brand's personality can be defined by considering various factors such as its products or services, goals, target audience, and culture. Brand personality should remain consistent across all communication channels to ensure that consumers accurately perceive the brand's identity. The personalities identified for beverage brands in this research are: Sincerity, Excitement, Competence, Sophistication, and Ruggedness. Brand personality is considered a crucial factor in the success of a brand, as it influences consumers' liking and purchase intentions (Hermanto & Rodhiah, 2019). Previous research has consistently shown a positive relationship between brand personality and consumers' purchase intentions (Batra & Homer, 2006; Rindfleisch & Burroughs, 2002). Therefore, the hypotheses are as follows:

H1: market influencer attributes have a positive influence on beverage brand switching intentions of new consumers generation.

H 1.1: Sincerity of brand personality has a positive influence on the intention to change beverage brands of new consumers generation.

H 1.2: Excitement of brand personality has a positive influence on the intention to change beverage brands of new consumers generation.

H 1.3: Competence of brand personality has a positive influence on the intention to change beverage brands of new consumers generation.

H 1.4: Sophistication of brand personality has a positive influence on the intention to change beverage brands of new consumers generation.

H 1.5: Ruggedness of brand personality has a positive influence on the intention to change beverage brands of new consumers generation.

- **Brand switching Intention**

Intention to brand switching refers to the consumer's decision to cease or reduce consumption of a previously purchased brand and instead opt for similar or closely related brands (Keller, 2008; Rajkumar & Charlas, 2012). However, changing brands does not necessarily imply a shift in loyalty from one brand to another. Various researchers have expressed their viewpoints on this matter. In reality, even though consumers may use a particular brand consistently over an extended period, satisfaction and continued loyalty cannot be guaranteed indefinitely. The concept of brand switching intention elucidates the willingness of consumers to switch brands, taking into account factors such as satisfaction with the current brand, awareness of competing brands, trustworthiness of alternative options, and pricing considerations. High levels of brand switching intention can impact a brand's sales and market share, reflecting shifts in consumer purchasing behavior rather than alterations in brand loyalty (Kahlon & Vaidya, 2018; Hanifawati et al., 2019; Astuti & Santoso, 2020).

Factors influencing brand switching intention include satisfaction with the original brand. Consumers who have a high level of satisfaction with the original brand often exhibit a tendency not to switch to another brand. This is because they perceive that the original brand can fully satisfy their needs (Oliver, 1997; Oliver, 1980). Awareness of competing brands also plays a significant role. Consumers who are more aware of competing brands tend to compare different brands and consider switching to another brand. This is because they believe that other brands may better meet their needs (Aaker, 1991; Keller, 1993). Trustworthiness of competing brands is another crucial factor. Consumers perceive competing brands as highly trustworthy, leading to a tendency to switch to another brand. This is because they believe that competing brands can offer benefits to them (Fombrun & Shanley, 1990; Rindova, Williamson, Petkova & Sever, 2005). Moreover, the prices of competing brands influence consumers' decisions. Consumers who view competing brands as having competitive prices often tend to switch to another brand as they consider other brands to offer more value for money (Blattberg & Neslin, 1990; Kahneman & Tversky, 1979). In conclusion, consumers' brand switching intention is the level of willingness of consumers to change brands, considering various factors such as satisfaction, awareness of competing brands, trustworthiness of competing brands, response to needs, and value for money.

However, the intention to switch brands is an important concept because it indicates the trend that consumers will switch to purchasing new beverage brands. High brand switching intentions may affect the sales and market share of new food and beverage brands. Therefore, the hypothesis is as follows:

H3: Market influencer attributes and brand personality have a positive influence on beverage brand switching intentions of new consumers generation.

3. Conceptual Framework

This conceptual framework aims to examine the influence of various factors on the brand switching intentions of the new consumer generation. Through a comprehensive literature review and analysis of related research, the researcher identified key study variables. These variables are instrumental in enhancing entrepreneurs' strategies to stimulate brand switching intentions among consumers of beverage brands. Specifically, the study focuses on Attributes Influencer Marketing, which comprises trustworthiness, expertise, attractiveness, respect, and similarity to the target audience (Shimp, 2003; Shimp, 2010; McCracken, 1989). Additionally, brand personality traits such as sincerity, excitement, competence, sophistication, and ruggedness are considered (Aaker, 1997; Avis, 2015). Furthermore, market influencers play a significant role in shaping consumers' perceptions of food and beverage brands. They contribute to increased attention, enhanced memorability, and positive word-of-mouth, consequently

leading to heightened intentions to purchase new beverage brands (Shankar & Balasubramanian, 2009; Batra & Homer, 2006; Gupta & Lord, 2012; Rindfleisch & Burroughs, 2002; Malhotra & McCort, 2001; Kim, & Park, 2022).

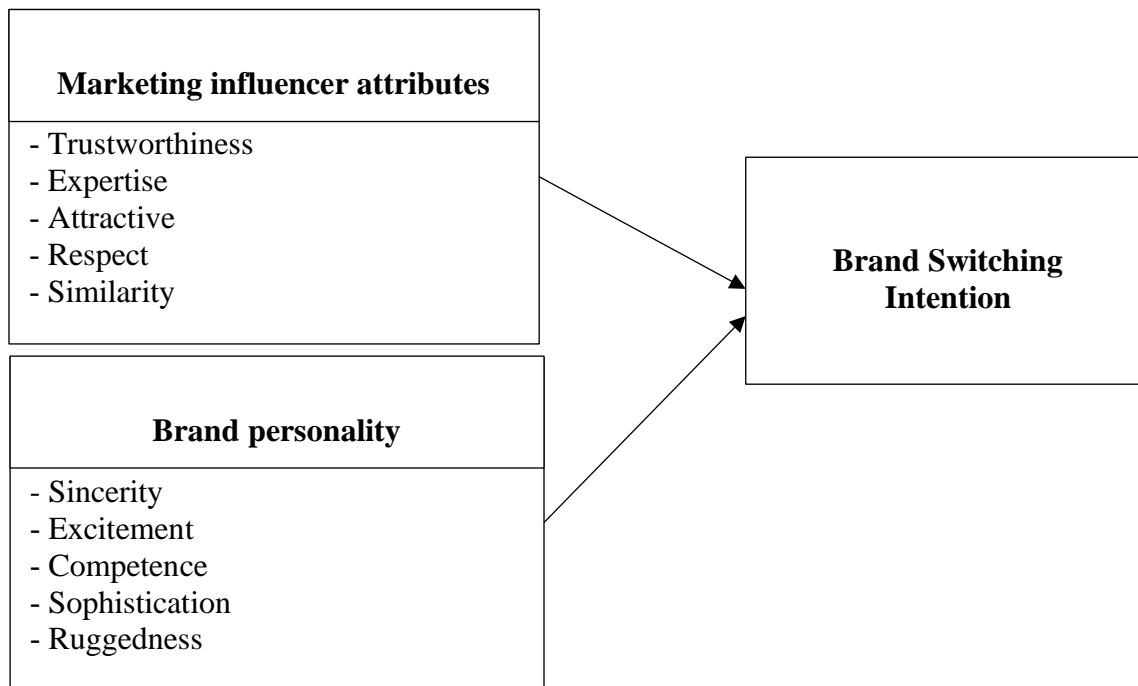


Figure 1: Research Conceptual Framework

4. Research Methodology

4.1 Population and sample

The population and sample used in this research consist of consumers of beverage brands in Bangkok aged between 18 and 26 years (Gen Z) and 27 to 44 years of age (Gen Y). Due to an inability to determine the exact population size, the sample size was determined using W.G. Cochran's sample size calculation formula for an unknown population (Cochran, 1953), resulting in a sample of 385 people. The instrument utilized was a questionnaire divided into 5 parts. Part 1: General information of the respondents, which comprised closed-ended, multiple-choice questions (Checklist). Parts 2 to 4 consisted of questionnaires concerning opinions on the characteristics of marketing influencers, brand personality, and the intention to change beverage brands among the new generation of consumers in Bangkok. These parts utilized a rating scale divided into 5 levels: "Strongly agree" to "Strongly disagree." The final part encompassed 5 questions, suggestions, and additional opinions.

4.2 Inspection of tool quality

The researcher checked the quality of the tools used in the research by testing them for content validity. The questionnaire was then submitted to experts for consideration. The results of each expert's assessment were used to calculate the Index of Item - Objective Congruence (IOC). The congruence number for each question should be at a

value of 0.50 or higher. For reliability testing, the questionnaire was administered to 30 samples with characteristics similar to the intended research sample group. Reliability was assessed using Cronbach's alpha coefficient analysis method. In each factor, the coefficient for each variable ranged between 0.82 and 0.92, all exceeding the threshold of 0.70. Thus, it can be concluded that the questionnaire is reliable and suitable for use in the study.

4.3 Data collection

This research collected data using a questionnaire from the sample group. The researcher prepared an online questionnaire using the Google Forms system and distributed it to the sample group interested in participating (Nunnally, 1978).

4.4 Statistics used in data analysis

Statistics used in the research include frequency and percentage, mean, standard deviation (S.D.), and hypothesis testing using multiple regression analysis to predict a dependent variable affected by two or more independent variables.

5. Results

The results of the general information study indicate that there were 385 respondents, the majority of whom were female (291 people, representing 75.60 percent). Among them, 285 (74.00 percent) were aged between 18 and 26 years (Gen Z), 260 (67.50 percent) held a bachelor's degree, 268 (69.60 percent) were students, and 229 (59.50 percent) had an income of less than or equal to 10,000 baht.

Regarding the opinions on the characteristics of market influencers, the overall consensus was at the highest level. As for the results of the study, the level of opinions on the marketing influencers attributes, the overall there were opinions at the highest level ($\bar{x} = 4.21$, S.D. = 0.68). Order the average values from highest to lowest as follows. Trustworthiness ($\bar{x} = 4.28$, S.D. = 0.57), Attractiveness ($\bar{x} = 4.24$, S.D. = 0.58), Expertise ($\bar{x} = 4.23$, S.D. = 0.60, S.D. = 0.62) and similarity ($\bar{x} = 4.10$, S.D. = 0.68), respectively.

The brand personality rating in particular had the highest sentiment rating ($\bar{x} = 4.22$, S.D. = 0.55), audio in descending order of effectiveness, followed by sophistication ($\bar{x} = 4.25$, S.D. = 0.61), competence $\bar{x} = 4.24$, S.D. = 0.59), sincerity ($\bar{x} = 4.21$, S.D. = 0.59), excitement ($\bar{x} = 4.20$, S.D. = 0.63) and ruggedness ($\bar{x} = 4.17$, S.D. = 0.65), respectively.

To test the hypothesis, the researcher examined the properties of the variables to assess their suitability for the Multiple Regression Analysis technique by calculating Pearson's Correlation Coefficient. This step aims to mitigate issues stemming from high interrelationships among independent variables, known as multicollinearity. Hence, it is crucial to consider the correlation coefficient, which ideally should not exceed 0.80. Additionally, the examination involved assessing the Variance Inflation Factors (VIF), where values should not surpass 10. Moreover, the Tolerance value should range between 0.10 and 1.00. Furthermore, the Durbin-Watson statistic was considered within the range of 1.50 to 2.50.

Table 1 Mean, Standard Deviation, and Correlation Coefficient of Influencer Marketing Attributes on Brand Switching Intentions

Variables	TR	EX	AT	RE	SI	SW	VIF	Tolerance	Durbin – Watson
\bar{X}	4.28	4.23	4.24	4.23	4.10	4.09	-	-	-
S.D.	0.57	0.60	0.58	0.62	0.68	0.65	-	-	-
TR	1.00	0.79**	0.78**	0.72**	0.60**	0.62**			
EX		1.00	0.76**	0.78**	0.65**	0.64**	3.43	0.29	
AT			1.00	0.78**	0.71**	0.64**	3.80	0.26	1.95
RE				1.00	0.71**	0.63**	3.86	0.25	
SI					1.00	0.66**	3.68	0.27	
BSI							2.38	0.41	

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 1 shows the mean, standard deviation, VIF, Tolerance, Durbin–Watson, and correlation coefficient between the marketing influencer attribute and the intention to change beverage brands of new generations of consumers in Bangkok. It was found that the correlation coefficient was between 0.60 - 0.79, which was not more than 0.80. The VIF value was between 2.38 - 3.86, which was not more than 10. The Tolerance value was between 0.25 - 0.41 which is in the range of 0 - 1.00 and the Durbin - Watson value is 1.95 which is in the range of 1.50 - 2.50 (Hair, et al. 2011). Therefore, the results of checking the independence of the independent variables show that the relationship of the independent variables does not cause a problem of Multicollinearity. The hypothesis can be tested using multiple regression analysis.

Table 2 Results of Influence of Influencer Marketing Attributes on Brand Switching Intentions in Beverage of New Generation Consumers

Influencer Marketing Attributes	Brand Switching Intentions			
	coefficients (β)	Std. Error	t	p – Value
Constant (a)	0.47	0.18		
1. Trustworthiness	0.18	0.07	2.56	0.01*
2. Expertise	0.18	0.07	2.49	0.01*
3. Attractive	0.09	0.07	2.48	0.21
4. Respect	0.07	0.07	1.23	0.30
5. Similarity	0.32	0.05	1.03	0.00**
R = 0.73	R² = 0.53	Adjusted R² = 0.52	SEE = 0.45	F = 86.99

* $p < 0.05$, ** $p < 0.01$

Table 2 indicated that the marketing influencers attributes included Trustworthiness ($\beta = 0.18$, $P < 0.05$), expertise ($\beta = 0.18$, $P < 0.05$), and similarity to the target group ($\beta = 0.32$, $P < 0.01$), it has a positive influence on the intention to change beverage brands of new generation consumers. Also, the marketing influencers attributes can able to examined influence on the intention to change beverage brands of new generation consumers 52 % (Adjusted $R^2 = 0.52$). But the attractiveness and respect have no influence on the intention to change beverage brands of young consumers.

Table 3 Mean, Standard Deviation, and Correlation Coefficient of Brand Personality on Brand Switching Intention

Variables	SN	EC	CO	SO	RU	SW	VIF	Tolerance	Durbin – Watson
\bar{X}	4.21								
S.D.	0.59	0.63	0.59	0.61	0.65	0.65	-	-	-
SN	1.00	0.73**	0.76**	0.69**	0.71**	0.64**			
EC		1.00	0.78**	0.74**	0.70**	0.65**	2.97	0.33	
CO			1.00	0.77**	0.72**	0.69**	3.25	0.30	2.10
SO				1.00	0.74**	0.66**	3.90	0.25	
RU					1.00	0.70**	3.28	0.30	
BSI							2.77	0.36	

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 3 shows the VIF, Tolerance, Durbin–Watson, and correlation coefficient between the brand personality and the intention to change beverage brands of new generations of consumers in Bangkok. It was found that the correlation coefficient was between 0.64 - 0.78, which was not more than 0.80. The VIF value was between 2.77 - 3.90, which was not more than 10. The Tolerance value was between 0.25. – 0.36 which is in the range of 0 – 1.00 and the Durbin – Watson value is 2.10 which is in the range of 1.50 – 2.50 (Hair, et al. 2011). Therefore, the results of checking the independence of the independent variables show that the relationship of the independent variables does not cause a problem of Multicollinearity. The hypothesis can be tested using multiple regression analysis.

Table 4 Results of Influence of Brand Personality on Brand Switching Intentions in Beverage of New Generation Consumers

Brand Personality	Brand Switching Intentions			
	coefficients (β)	Std. Error	t	p – Value
Constan (a)	0.34	0.17		
1. Sincerity	0.10	0.06	1.62	0.10
2. Excitement	0.10	0.06	1.77	0.07
3. Competence	0.24	0.07	3.41	0.00**
4. Sophistication	0.11	0.06	1.81	0.07
5. Ruggedness	0.31	0.05	5.77	0.00**
R = 0.76	R² = 0.58	Adjusted R² = 0.57	SEE = 0.42	F = 105.47

* $p < 0.05$, ** $p < 0.01$

Table 2 indicated that the brand personality included competence ($\beta = 0.18$, $P < 0.05$), and ruggedness ($\beta = 0.31$, $P < 0.01$), it has a positive influence on the intention to change beverage brands of new generation consumers. Also, the brand personality can able to examined influence on the intention to change beverage brands of new generation consumers 57 % (Adjusted $R^2 = 0.57$). However, the Sincerity, excitement, and sophistication have no influence on the intention to change beverage brands of new generation consumers in Bangkok, Thailand.

Table 5 Results of Influence of Brand Personality on Brand Switching Intentions in Beverage of New Generation Consumers

Variable	Brand Switching Intentions		t	p – Value
	coefficients (β)	Std. Error		
Constant (a)	-0.02	0.17		
1. Influencer Marketing Attributes	0.38	0.06	5.92	0.00**
2. Brand Personality	0.59	0.06	9.15	0.00**
R = 0.78	R² = 0.60	Adjusted R² = 0.60	SEE = 0.41	F = 297.19

* p < 0.05, ** p < 0.01

Table 5 showed that the market influencers attributes ($\beta = 0.60$, $P < 0.01$) and brand personality ($\beta = 0.59$, $P < 0.01$) have a positive influence on the intention to change beverage brands of new generation consumers in Bangkok, Thailand. Also, the both independent variables market influencers attributes and brand personality) can able to examined influence on the intention to change beverage brands of new generation consumers 60 % (Adjusted $R^2 = 0.60$).

6. Discussion

This study attempts to examine the influence of market influencers' attributes and brand personality on the intention to change beverage brands among young consumers in Bangkok, Thailand. The results of this research indicate that attributes of marketing influencers, including trustworthiness, expertise, and similarity, have a positive influence on the intention to change beverage brands among the new generation of consumers. Saimaa & Altaf (2020) found that consumer intentions are directly influenced by the characteristics of famous people on social media. Expressing opinions and guaranteeing product quality will result in consumer trust, positive attitudes, and desire to purchase products or use services (Panichamon Traksom, 2018; Pornpoj, Wasutida & Pathom, 2021). Therefore, the trustworthiness of marketing influencers is crucial and can be built through various marketing activities, such as Facebook and live streaming. Hence, hypotheses 1.1, 1.2, and 1.5 are accepted. However, this research does not indicate that attractiveness and respect, as dimensions of market influencers' attributes, have no influence on the intention to change beverage brands among young consumers in Bangkok, Thailand. Thus, hypotheses 1.3 and 1.4 are not accepted.

For brand personality, both dimensions were competence and ruggedness, which have a positive influence on the intention to change beverage brands among new generation consumers. The new generation of consumers perceives that the new brand can compete with others, both in terms of quality and meeting price demands, facilitated by effective communication through various social media platforms such as Instagram and TikTok. Consequently, consumers are more inclined to purchase such brands. Brand personality comprises commitment characteristics and the value of the product or service. If a brand is developed to possess a unique identity distinct from competitors and offers distinctive value in terms of style, appearance, and service, consumers will develop positive feelings towards the product, thereby stimulating purchase intentions (Wang et al., 2009; Guido et al., 2010). Therefore, hypotheses 2.3 and 2.5 are accepted. For the other dimensions of brand personality, namely sincerity, excitement, and ruggedness, it was found that they do not influence the intention to change beverage brands among new generation consumers. Thus, hypotheses 1.1, 1.2, and 1.4 are not accepted.

Finally, this research shows that the attributes of market influencers and brand personality influence the intention to change beverage brands among young consumers in Bangkok, Thailand. Influencer marketing is a strategy that utilizes individuals who hold sway over the target audience to disseminate information about a product, thereby creating awareness and interest among consumers quickly and efficiently. The attributes of market influencers assist brands in reaching specific target consumers, as influential individuals typically attract followers who share similar interests or lifestyles. Consequently, brands can choose influential individuals whose follower bases align with the desired target audience (Wang, Pacho, Liu & Kajungiro, 2019). On the other hand, brand personality is a form of self-expression, as the closer the consumer's image aligns with the product's image, the stronger the consumer's intention to purchase (Graeff, 1997; Sirgy, 1982). Therefore, the attributes of market influencers and brand personality influence the intention to change beverage brands among young consumers. Thus, Hypothesis 3 is accepted.

7. Contributions

This study enhances businesses' understanding of the influence of market influencers' attributes and brand personality on the intention to change beverage brands among new-generation consumers in Bangkok, Thailand. Social media plays a significant role in driving changes in communication methods, making it increasingly challenging to respond to customer needs and achieve business goals. Many businesses are striving to find effective marketing communication practices. Therefore, entrepreneurs should carefully select market influencers that resonate with their target audience. The more consumers favor a marketing influencer, the more likely they are to engage with the promoted product, thereby increasing its usage. Specifically, businesses need to comprehend the characteristics of influencers that impact consumer attitudes and behaviors, emphasizing the importance of aligning market influencers with the target demographic.

Furthermore, this study also identifies brand personality as a critical factor in brand-switching intentions. Hence, businesses should strategize to develop and maintain a strong brand personality to enhance customer perceptions of their products and services. This research contributes to the development of solutions for capitalizing on business opportunities and achieving success. Service providers should empower businesses to enhance communication effectiveness through social media channels and cultivate a distinct brand personality in the market.

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Entering the Environmentally Friendly Green Industry for Businesses

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Abstract

The aim of this study was to explore the business sector's approaches to entering the green industry, which is environmentally friendly. Through a literature review and document analysis, the study determined the business sector's approaches to entering the environmentally friendly green industry. The study summarized the environmentally friendly way to enter the green industry in the business sector as follows: First, establish a policy to enter a green industry that is friendly to the environment; second, develop personnel; third, get innovation and technology; fourth, allot financial and investment resources; fifth, have an environmental management system; sixth, have government and social policies; seventh, comply with the green industry entry requirements at each level; and finally, create products that take into account the impact on the environment. These eight guidelines will help entrepreneurs effectively bring their businesses into the green industry, which is environmentally friendly. Entrepreneurs can apply these guidelines to enter the green industry of the business sector and achieve further success.

Keywords: Green industry, business sector, environmentally friendly

Introduction

In the past few years as natural environmental issues become more serious (Hwang & Choi, 2017), there is an urgent need for businesses to adopt sustainable and green practices. awareness of the limitations of nature and the harmful effects of traditional industrial activities on the global ecosystem. and has driven a paradigm shift in the business landscape. As a result, there is great interest in the transition to a greener economy. It is an economy that combines economic growth with environmental protection. The green industry is one of the objectives of running a business in a green economy. A green industry is an industry in which the production process prioritizes efforts to use resources efficiently and effectively in a sustainable way. In order to be able to combine industrial development with the preservation of environmental functions and benefit communities. (Soltmann, Stucki & Woerter, 2015; Indrayani & Triwiswara 2020)

Government policy: the Ministry of Industry has established a master plan for Thai industrial development for 2012–2031 by laying out a framework for sustainable industrial development. By setting the direction of the future development of the Thai industry under the concept of green industry (The Office of Industrial Economics, 2023), Thailand moves towards sustainable development as it has ratified the Johann Declaration. Nesberg on Sustainable Development (Johannesburg Declaration on Sustainable Development, JDSD) in 2002 and the Malila Declaration on Green Industry in 2009, including the adoption of the Paris Agreement (Paris Agreement) at the COP 21 meeting in Bangkok. In Paris, France, in 2015, a legal instrument was adopted under the most recent version of the UNFCCC Framework Convention, agreeing to keep the increase in global average temperature below 2 degrees Celsius relative to global warming levels. Average before the industrial era and will try to maintain the temperature increase target not to exceed 1.5 degrees Celsius to reduce the risk of severe impacts due to climate change (Department of Industrial Works, 2023). Ministry of Industry Set strategies for industrial development that protect the environment and society. By taking proactive action and focusing on promoting and developing the industrial sector for sustainable growth and

development. The Ministry of Industry's drive for green industry is based on the voluntary concept of enterprises wanting to conduct business in a friendly manner to the community and environment in order to aim for sustainable development. In late 2010, the Ministry of Industry began to pursue green industry projects more seriously. To encourage establishments across the country to pay attention to environmentally friendly business operations. There is continuous development towards becoming a green industry at five levels: Level 1: Green Commitment is the expression of commitment in the form of policies, goals, and plans that will reduce environmental impacts. And there is communication within the organization for everyone to know. Level 2: Green operations or green activity is carrying out activities according to policy. Goals and plans are set to reduce environmental impacts in a concrete way and achieve the set commitments. Level 3: Green system is systematic environmental management. There is monitoring, evaluation, and review for continuous development or receiving recognized environmental awards. or has been certified with standards related to the conservation of resources and the environment. Level 4: Green culture is when everyone in the organization has a common conscience about preserving and maintaining a good environment and cooperates in every aspect of business operations to be environmentally friendly and carry out various activities. Until it becomes part of the organization's culture. Level 5: Green network is expanding the scope of being a green industry from within the organization itself to the outside throughout the supply chain by supporting partners and alliances. It is also a green industry (Department of Industrial Works, 2023).

However, the green industry project is based on the voluntary concept of enterprises wanting to conduct business in a friendly manner to the community and environment in order to strive for sustainable development. Therefore, only a handful of businesses are interested in and able to enter the green industry. And there are many industries that have not yet entered the green industry. Therefore, it is interesting to see how successful the business sector is in entering a green industry that is friendly to the environment. This knowledge will help the business sector apply it to enter the green industry efficiently. Create a good and trustworthy image that will be trusted by the public. creating a happy society This will cause the country's green GDP to have a higher value as well. and to benefit the government's policy formulation and effective development of business organizations towards a sustainable green industry in the future.

1. Concept of the green industry

The "green industry" is an industry that is committed to continuous improvement of production processes and environmental management for business operations that are environmentally friendly, along with adhering to conducting business with social responsibility both inside and outside the organization throughout the supply chain for sustainable development. (Department of Industrial Works, 2019) In the past, industrial development in Thailand focused on creating economic growth. Especially the development of manufacturing industries that use resources fully. However, throughout the past period, Thai society has still faced various problems. from continuous industrial development, such as the deterioration of natural resources Environmental issues, social inequality, and the participation of all sectors are still limited. These problems reflect the country's uneven development. can be said Focusing on only one-dimensional economic growth in the industrial sector cannot create sustainable development. Therefore, it is necessary to create a balance. By accelerating the development and upgrading of industrial development in other dimensions, including industries in the environmental conservation dimension. Industry in the social development dimension and the industry in terms of creating participation from all sectors because the development of these 4 dimensions of industry is related, linked, and supportive. Therefore, industrial development must be integrated to benefit the industry as a whole. as well as linking it with development in other dimensions of the country, which will lead to sustainable industrial development in the country.

The Ministry of Industry's drive for green industry is based on the voluntary concept of enterprises that want to conduct business in a friendly manner to the community and the environment in order to aim for sustainable development by operating systematically at five levels, from easy to difficult. Level in late 2010, the Ministry of Industry began implementing the green industry project more seriously by entering into a collective agreement (MOU) between various agencies under the Ministry of Industry. To jointly promote the industrial sector in Thailand to have environmentally and socially friendly operations. This will result in the industrial sector having a good image and being trustworthy and trusted by the public, which is the starting point for developing the industrial sector towards creating a green economy (Green economy), which will increase the value of the country's green GDP (Green GDP). The Ministry of Industry has joined forces with all departments of the Ministry of Industry and network institutions. Especially the provincial industrial offices and industrial estates throughout the country. Encourage business establishments across the country to pay attention to environmentally friendly business operations. And there is continuous development towards becoming a green industry at five levels (Department of Industrial Works, 2019): the Level 1 Green Commitment is an expression of commitment in the form of policies, goals, and plans that will

reduce environmental impacts. and there is communication within the organization for everyone to know. the Level 2 Green Activity is carrying out activities according to policy. Targets and plans are set to reduce environmental impacts in a concrete way and achieve the set commitments. the Level 3 Green System is systematic environmental management. There is monitoring, evaluation, and review for continuous development or receiving recognized environmental awards. or have received certification of standards related to the conservation of resources and the environment. the Level 4 Green Culture is when everyone in the organization has a common conscience about preserving and maintaining a good environment and cooperates in every aspect of business operations to be environmentally friendly and operate. various activities until they become part of the organization's culture. the Level 5 Green Network is expanding the scope of being a green industry from within the organization to the outside. Throughout the supply chain, we encourage business partners and allies to become green industries as well. The benefits that enterprises will receive from entering the green industry will be Can be shown in Table 1.

Table 1. Green Industry Benefits.

Benefits	Green industrial level				
	1	2	3	4	5
Received green industry certification	✓	✓	✓	✓	✓
Received a green industry shield				✓	✓
Request to use the green industry logo		✓	✓	✓	✓
Request the Thailand Trust Mark from the Ministry of Commerce		✓	✓	✓	✓
Products can be published and advertised in the Green Industry booklet	✓	✓	✓	✓	✓
Received procurement of products from government agencies and local authorities. Equivalent to environmentally friendly products				✓	✓
Sewage treatment and disposal operators are allowed to take out sewage. Automated factory area			✓	✓	✓

Source: Department of Industrial Works, (2019)

2. Guidelines for entering a green industry that is friendly to the environment of the business sector

Important practices for entering the green industry (Department of Industrial Works, 2019) can be summarized as follows:

Level 1: "Committed to Green" has guidelines for industrial operators as follows:

1) Set environmental policy by officially announcing the commitment of senior executives. High-level executives must ensure that the environmental policy established (1) is appropriate to the nature, size, and environmental impacts of product and service activities; (2) strives to continuously improve and prevent pollution; and (3) aims to ensure compliance with laws and other regulations related to environmental issues. (4) Provide a framework for setting and reviewing environmental objectives and goals. (5) Put them in writing. Implement and maintain. (6) Communicate with everyone who works for the organization or works on behalf of the organization. (7) can be disclosed to the public. 2) The organization's top executives set environmental policies, prepare them in writing, and sign environmental policy announcements. For setting environmental policy, the focus is on reducing environmental impacts. Prevention of environmental impacts Sustainable use of resources, reducing impacts on climate change, and protecting and restoring natural resources. 3) Top executives of the organization must disseminate and explain environmental policies to everyone who works for the organization or works on behalf of the organization. In order to implement the policy seriously and consistently. One method may be used as appropriate, such as posting announcements, holding clarification meetings, training, publishing through electronic media. 4) The top management of the organization must establish methods for monitoring to ensure that everyone working for the organization understands and effectively implements the policy. 5) The organization discloses and communicates environmental policies to the general public. and disseminate it to the surrounding community to demonstrate its commitment to the environment. You may use any method as appropriate.

Level 2: "Green Operations" There are guidelines for industrial entrepreneurs, as follows: 1) Follow all Level 1 guidelines. 2) The organization must review its activities to see if any have an impact on the environment. and

implement prioritization based on significant environmental impacts. 3) Proceed to select at least one activity that has a significant impact. Set objectives and goals to reduce the environmental impact. 4) The organization must set objectives and goals in line with policies, laws, and environmental issues. significant environment, make it in writing. The objectives are specific and clear, while the goals should be set as overall goals. And is distributed as sub-goals in each department. Related goals should have the following elements: (1) Specific (2) Measurable (3) Achievable (4) Relevant (5) Time. 5) The organization shall develop an environmental plan to achieve its objectives and targets by (1) collecting details and information on relevant issues that will affect the objectives and targets, such as what causes the problem and whether there are any agencies involved. (2) Determine detailed action methods to achieve the objectives and targets. (3) Determine the completion time of the work plan and the duration of each step of the operation. (4) Specify the person responsible for the plan and the person responsible for each step of the plan. (5) Prepare necessary resources such as tools, equipment, personnel, and expenses. authorized person to approve. 6) The organization must implement an effective environmental plan. as well as determine methods for monitoring and recording the performance according to the environmental plan. 7) High-level executives review and improve environmental policies. to be appropriate for changing circumstances as well.

Level 3: "Green System" has guidelines for industrial operators as follows: 1) Follow all Level 1 guidelines. 2) Senior management reviews and improves environmental policies to be appropriate for changing circumstances as well. 3) The organization has planned an environmental management system to obtain a systematic and effective approach to environmental management. To solve problems of pollution and environmental conservation, we should focus on the principle of prevention rather than fixing the root cause. 4) The organization has procedures in place to identify environmental issues from activities, products, and services. Under the scope of the environmental management system and assessing issues that cause significant impacts. 5) The organization establishes procedures for identifying, monitoring, and understanding all other environmental laws and regulations relating to the environmental aspects of the activities. The products and services of the organization should be registered with relevant laws and regulations and communicated to relevant agencies to be able to follow the laws and other regulations that are newly issued or changed related to the environmental issues of the organization. 6) The organization implements the environmental work plan to be effective, which should be distributed and clarified to the relevant parties for their acknowledgment and the same understanding in order to carry out the work according to the plan set out. 7) The organization determines methods for monitoring performance. and recording the results of operations according to the plan on the environment by monitoring the progress of the work plan and summarizing the progress of the performance compared to the plan. 8) High-level executives review and improve environmental objectives, targets, and plans. to be suitable for changing circumstances, including (1) when the performance does not go according to plan, such as delays, and the results are not as specified. No operations went according to plan. Analyze the cause and determine corrective measures. to review and improve the work plan (2) future work plans, if developed, or changes to product activities or new services The environmental plan must be reviewed. Always be consistent with changing events. 9) The organization allocates sufficient resources for all aspects of environmental management by identifying the resource requirements needed for the environmental management system. Consider (1) infrastructure such as buildings, premises, utilities, tools, equipment, and communication systems. (2) information systems; (3) training and specialized skills; (4) technology; (5) finances, personnel, and other resources suitable for carrying out. 10) The organization has established procedures for the monitoring and measurement of values to cover those values of operations that have a significant impact on the environment. Records of monitoring and measurement data Including measuring tools and equipment used in monitoring and measurements, must be calibrated, verified, and maintained. and can store records. 11) The organization has established a procedure that specifies the frequency and method for assessing compliance with applicable legislation and other requirements. Conduct an assessment of compliance with the law and other requirements according to the time period and methods specified. Record the results of the conformity assessment and report the results of the conformity assessment to relevant parties. 12) The organization establishes procedures for dealing with defects that have occurred. Or it may happen and require corrective and preventive action. It must include steps to notify corrections and prevent defects. Preliminary actions against defects Finding the real cause actions taken to prevent the recurrence of defects Reviewing and improving related matters and recording results. 13) The organization establishes procedures for identifying, storing, protecting, retrieving, aging, storing, and destroying records. Records must be legible, indicate, and respond. 14) The organization shall establish procedures for internal audits to verify that the environmental management system is consistent with the plan for environmental management. It is properly implemented and maintained. The main steps include preparing internal evaluators. Internal audit planning Carrying out internal audits Reporting the results of internal audit monitoring Results of correction and prevention and summarizing the results for review by the management team. 15) Senior management reviews the environmental management system at specified intervals to ensure that the system remains appropriate, adequate, and

effective. 16) Opportunities for improvement and the need for changes to the environmental management system are assessed. environmental policy Environmental objectives and goals. And 17) A review record is kept.

Level 4: "Green Culture" There are guidelines for industrial entrepreneurs, as follows: 1) The organization establishes an environmental management system according to TIS/ISO 14001 standards or other equivalent standards. 2) The organization has a process for creating an organizational culture that is put into practice for effectiveness. Examples of culture-building steps include: (1) There is a process for people within the organization to build common beliefs about the organization's ability to take action to reduce environmental impacts. (2) There is a process to create values and environmental consciousness. (3) There is an activity that promotes personnel participation that reflects the expression of the values. (4) There is a set of guidelines for practice in order to maintain sustainable behavior until it becomes an organizational culture of giving importance and care to the environment. (5) A method for assessing the persistence of the organizational culture is established. The environment is suitable for changing situations. 3) The organization has established methods for evaluating the impact of its decisions and actions on society and the environment, especially significant negative impacts. 4) The organization assesses the significant negative impacts on society and the environment of decisions regarding the development and/or improvement of products and services. Production process, machinery and equipment, establishment, and business strategy. 5) The organization prepares plans or measures to support and prevent significant negative impacts. 6) The organization periodically reviews measures to prevent significant impacts, to ensure that it remains suitable for changing situations. 7) If a work error occurs, the organization shall take appropriate measures to correct the error, and take preventive actions to avoid recurring errors and record the results of various operations. 8) The organization clearly identifies stakeholders in each sector, along with the impact that will occur with stakeholders in each sector. Examples of stakeholders are employees and their families, shareholders, suppliers, and subcontractors, distributors, customers, government agencies, and communities. 9) The organization classifies information about impacts and shall provide it to stakeholders in each sector. 10) Information is provided directly to those affected and is easily understood. In addition, the information is timely. It is a fact, presented in a clear manner, and reliable. To enable each stakeholder to accurately assess the impact of the decisions and actions of the organization. 11) The organization has procedures in place to ensure that information is updated and accurate. 12) Organizational behavior is based on values relating to integrity. Equality and justice These values also include concerns for the community and the environment, and a commitment to deal with the impact of the organization's decisions and actions on the interests of its stakeholders. 13) The organization identifies and sets values and principles regarding the organization's environment. 14) The organization has a management structure that promotes ethical conduct in its internal environment. This includes both the decision-making process and interactions with other agencies. 15) The organization establishes and maintains governance mechanisms and various controls to monitor support and enforce ethical conduct. 16) The organization establishes and maintains mechanisms for stimulating and promoting compliance with standards of ethical conduct related to the environment on a regular basis. 17) The organization establishes and maintains a mechanism to prevent or resolve any conflicts of interest that can lead to unethical practices throughout the organization. 18) The organization establishes and maintains a mechanism to assist in reporting on compliance ethically. And there is no ethics without the fear of being intimidated. 19) The organization respects, considers, and responds to the interests of the organization's stakeholders. Although the organization's purpose may be limited to serving the interests of its owners, members, customers, or associations, the rights, claims, and interests of other individuals or groups must also be considered. This is because these individuals or groups of individuals are considered stakeholders in the organization. 20) The organization has identified its stakeholders. 21) The organization places importance on and is careful about benefits as well as the legal rights of stakeholders and responds to concerns. 22) The organization gives importance to certain groups of stakeholders that have a significant impact on the organization's various operations. 23) The organization evaluates and considers building relationships with stakeholders for tracking, building relationships, and influencing the organization. 24) The organization considers the relationship between the interests of stakeholders and the expectations of society and communities for sustainable development. 25) The organization identifies and collects environmental laws and regulations. 26) The organization complies with all legal requirements covering its operations. Even if those laws and regulations are not properly enforced. 27) The organization has a mechanism in place to ensure that the entities with which it has relations operate in accordance with the relevant legal framework. 28) The organization establishes and maintains a mechanism to monitor all legal obligations. 29) The organization establishes and maintains a mechanism to review compliance with applicable laws and regulations at specified intervals. 30) The organization respects compliance with international guidelines while remaining committed to the principles of respect for laws. 31) In situations where legislation or legislative action is insufficient to protect the environment or society, the organization encourages respect for compliance with at least international guidelines. 32) If laws or legal proceedings are found to conflict with international guidelines Organizations must push for compliance with

international guidelines as much as possible. 33) The organization considers various opportunities and channels in the law to persuade organizations and regulatory agencies to take advantage of relevant laws to resolve disputes. 34) The organization avoids joining other organizations in conducting activities that do not comply with international guidelines. 35) The organization identifies and compiles human rights-related laws related to environmental issues. 36) The organization establishes and maintains mechanisms for the implementation of respect for human rights, and recognize the importance and universality of human rights. 37) The organization establishes and maintains mechanisms for the implementation of respect for and promotion of the rights stipulated by human rights law, particularly in relation to environmental issues. 38) In situations where human rights are not protected. The organization must work towards respecting human rights, and avoid gaining benefits from such situations. 39) In situations where the law or law enforcement is not yet appropriate to protect human rights, organizations must uphold the principles of respect and comply with international guidelines. 40) The organization identifies and collects information on the results of environmental activities. 41) Does the organization have a process for deciding what information about the results of environmental activities is available? that must be disclosed to the public? 42) The organization prepares reports on the results of environmental activities for disclosure to the public. This may be in the organization's annual report or use electronic media channels. 43) The organization determines channels or methods for disseminating reports on the results of environmental activities to stakeholders who are informed and easily accessible.

Level 5: "Green Network" has guidelines for industrial operators as follows: 1) The organization received level 4 green industry certification from the green industry promotion and development board. 2) The organization has identified stakeholders in the organization's business operations. 3) The organization has established and maintained a mechanism to promote and conduct environmental activities with stakeholders. 4) The organization has prepared projects or plans related to environmental activities together with stakeholders. According to the potential and readiness of stakeholders to participate in environmental activities with the organization. 5) The organization defines and maintains a mechanism for promoting the organization's supply chain toward a green industry. It must at least cover the direct producers of raw materials for the organization (the supplier) and subcontractors of the organization's work. (subcontractor) who delivers services directly to the organization (service provider). 6) The organization has created related projects or plans to promote, create, and build relationships with environmental activities within the organization's supply chain. It must at least cover the direct producers of raw materials for the organization (the supplier) and subcontractors of the organization's work (subcontractor) who delivers services directly to the organization (service provider). 7) The organization should have a plan to promote those in the supply chain who deliver raw materials or services that are not directly delivered to the organization but are the next deliverers, including wholesalers and retailers. Participate in environmental activities to achieve continuous improvement and sustainable development. 8) The organization has created related projects or plans to promote, create, and build relationships through activities. Environment and communities that are likely to be affected by the environment from various operations of the organization in order to create environmental awareness and an understanding of sustainable consumption. 9) The organization has activities or methods for creating knowledge and understanding, and create awareness among consumers, who are customers of the organization's distributors (trade agencies) or users of the organization's products, to be aware of sustainable consumption. 10) The organization collects information on the results of various operations related to promoting, creating, and building relationships with environmental activities. Stakeholders, supply chains, communities, and consumers. 11) The organization prepares a summary report on the results of various operations to demonstrate the success of the operations. 12) The organization determines methods for publishing reports on various operations.

According to Thungtrakoonsombat (2011) studied the adjustment of the Thai industry to green industry projects. The results of the study found that entrepreneurs want the government to support them in publicizing their projects. To increase knowledge, training should be organized for consultation and advice. Action plan for entrepreneurs to focus on actual implementation and see concrete results. On the other point of view from Khumhome (2014) study of the factors affecting the decision to join the green industry project of entrepreneurs in Ubon Ratchathani province. It was found that the factors that had a high level of influence on the decision to join the green industry project of the entrepreneurs Is there a need to promote the image of the organization? The process of joining the project is simple and easy, and commitment to reducing the organization's environmental impact The factor that has a moderate effect on entrepreneurs' decisions to participate in green industry projects is the support of government agencies, shareholder needs community needs, laws, and regulations The factor that has the least influence on entrepreneurs' decisions to join green industry projects is customer demand. Barriers to participation in green industry projects include insufficient

support from government agencies. Personnel lack knowledge and experience in applying for green industry-standard certification. The process of obtaining certification is complicated. There is a lack of information and difficulty accessing information sources. Obstacles that entrepreneurs see as being at a low level include a lack of funds for the implementation of the project. Project implementation requires additional expenses. Carrying out the project increases the burden of work, and the fact that the executives do not see the benefits of the project or lack the motivation to carry out the work.

According to Yongvongphaiboon (2021) A study on the development of the steel industry management system to become a sustainable green industry found that dimension 1 has a financial perspective. Affects the management of the Thai steel industry to become a green industry. Transforming the steel industry into a green industry requires investment in machinery. The investment to change the machine must be analyzed to determine whether the product is worth the investment. But if you are unable to change that machine, Due to investment factors The steel industry can also be environmentally friendly. By maintaining the condition of the machine and taking care of the maintenance of the machine, it can be kept clean and can be used consistently and efficiently, including dealing with waste that occurs.

Dimension 2: Perspectives on internal management processes driving the organization to be successful as a green organization depends on the following factors: Setting clear policies and there is continuous follow-up and evaluation. Dimension 3: Customer and social perspectives influence being a green industry. To drive your organization to adapt and develop into a sustainable green industry. The surrounding neighborhood and society accept it, which is considered important Because if the organization is not accepted, doing business will be difficult. Moreover, the company's Being a green organization will benefit society, the communities around the organization, and the 4th dimension's perspective on learning and growth. Found that at present, market trends are still in the direction of production. Using products that are environmentally friendly Customers want products that are more environmentally friendly. Organizational change Including the production process as being green will help build trust, confidence, and value for customers as well.

Conclusion

Based on a review of relevant literature, the following guidelines for entering environmentally friendly green industries for businesses (Kasim & Ismail, 2012; Soltmann, Stucki, & Woerter, 2015; Indrayani & Triwiswara, 2020; Hwang & Choi, 2017; Thungtrakoonsombat, 2011; Khumhome, 2014; Yongvongphaiboon, 2021) are summarized:

- 1) Establish a policy for entering a green industry that is environmentally friendly. Businesses must have a clear intention that they want to enter a green industry that is environmentally friendly. This is because policy is an important compass. To guide and set the framework for various operations, which will help businesses carry out activities that are in line with green industry certification criteria.
- 2) Personnel development: businesses must develop personnel to have knowledge and experience in applying for green industry-standard certification. Including training employees to understand the importance of entering a green industry that is friendly to the environment. The role of sustainability and environmental friendliness
- 3) Innovation and technology: embrace innovative technology that promotes sustainability. Reduce environmental impact, prevent pollution, and protect and restore nature.
- 4) financial resources and investment: allocate the budget to develop personnel and invest in ways to reduce environmental impacts. Prevention of environmental impacts Sustainable use of resources Reducing impacts on climate change and the protection and restoration of natural resources.
- 5) Have an environmental management system: Businesses must have an environmental management system. By setting plans, reviewing, monitoring, and improving the environmental management system. Continuously,
- 6) government and social policy: the government promotes and supports entry into a green industry that is environmentally friendly by publicizing the steps, methods, and benefits received from entering a green industry that is environmentally friendly. Including campaigning for the social sector to create values, support, and buy products from businesses that have been certified in the green industry.
- 7) meet the green industry entry requirements for each level: for each level of green industry entry requirements, there are requirements starting from easy level 1 to hard level 5, so businesses should study the requirements. and assessing the readiness of businesses to enter the green industry. Then plan to implement the criteria for entering the green industry at that level according to the readiness of the business. And when there is a greater level of readiness, it can continue to enter the green industry at a higher level.
- 8) Create products that consider the environmental impact: efficient use of technology, raw materials, energy, and natural resources. Including giving importance to a green corporate culture or encouraging personnel to be aware of the importance of the environment.

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