

# Media Exposure to and Knowledge of the BCG Economic Development Policy Model of the Thai People

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#### **ABSTRACT**

This study investigated the media exposure and knowledge of the BCG economic development policy model among the Thai people. An online questionnaire was used to collect data from 496 Thai respondents. The frequency distribution, percentage, mean and standard deviation were used to analyze the data. It was found that among thirteen channels, the majority of the respondents were exposed to the BCG model information through websites (47.72%), followed by Facebook (45.23%), and the least, to clubhouse and radio (3.73% for both). As for the frequency of exposure, the majority of the respondents were exposed to media for information about the BCG policy model from time to time depending on the occasion, followed by 4-5 times a month, and the least exposed at all times. Regarding the quality of information dissemination, data analysis revealed that the respondents indicated the quality at a moderate level in all aspects. Analysis of the responses of eight questions about the BCG model revealed that the majority of the respondents had a low level of knowledge of the BCG policy model, followed by a moderate level, and a high level of only 2.1%.

*Keywords:* Bio-Circular-Green Economy Model, Bio-Circular-Green Economy Model Knowledge, Media exposure, Thai



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#### **INTRODUCTION**

Nowadays, global society has overgrown. Whether capitalism, socialism, or mixed, the world economy has caused human consumption to use enormous natural resources (Van der Ploeg, 2011), resulting in one-third of the land's degradation. This situation has caused a decrease in forest areas, natural disasters, and climate change (Anderson & Bausch, 2006). The recurring problem has affected socioeconomic instability. This incident reinforces economic outcomes whose development must be changed to be more balanced and sustainable.

In Europe, the European Union (EU) aims to transition to a 'global circular bioeconomy in response to thriving towards sustainable development'. Economic development considers biological resources the center and uses natural resources very efficiently (Wesseler & Von Braun, 2017). The European Union Commission has laid out the European Green Deal policy with a critical goal of decreasing greenhouse gas emissions by 2030 to zero and becoming green energy by 2050 (Claeys, Tagliapietra, & Zachmann 2019; Jaeger, Mielke, Schütze, Teitge, & Wolf, 2021). The EU is preparing a law on social responsibility (Sustainable Corporate Governance or Due Diligence) that will inspect and control imported goods and their manufacturers to meet environmental and human rights standards throughout the supply chain. The policy laid out the guidelines of each business sector, such as the preparation of the EU Strategy on Sustainable Textiles, the planning of the 'Circular Electronics Initiative' law, the management of electronic waste (E-Waste), and the Right to Repair. The world is moving toward the circle; however, the Circular Gap Report indicated that the global economy is only nine percent circular (with Europe twelve percent and China two percent) (Circle Economy, 2019.)

The research community introduced the Bio-Circular-Green Economic Model or BCG which was promoted by the Thai Government as a new economic model for inclusive and sustainable growth. The BCG model capitalizes on the country's biological diversity and cultural richness strengths and employs technology and innovation to transform Thailand into a value-based and innovation-driven economy. The model aligns the principle of Thailand's social and economic development, Sufficiency Economy Philosophy (SEP), and likewise conforms with the UN Sustainable Development Goals (SDGs) (The Office of National Higher Education Science Research and Innovation Policy Council [NXPO], 2021).

Thailand stipulates 'Strategies to drive Thailand through the BCG Economic Model 2021-2026'. It is a national plan and a framework for economic development linked to the Sustainable Development Goals (SDGs) in four key industries: agriculture and food, health and medical industry, energy biomaterials and chemicals, and tourism and creative economy (National Science and Technology Development Agency, 2021). The Thai government plans to apply this BCG economic model to restore all countries' economic and social status and hopes to be free for developing and least developed countries (Singlor, 2021).

The strategy driving the BCG economic model 2021-2026 of the Thai Government consists of four issues: 1) balancing between conservation and utilization for the sustainability of resources and biodiversity, 2) using identity strengths and the potential of the thoughts (biodiversity and cultural diversity) whose creativity and technology could raise the value in the production chain of goods and services to a higher level affecting community and economic development, 3) utilizing knowledge, technology and innovation help to enhance the industry to be competitive and environmentally friendly, and 4) building immunity and the ability to respond to global change (The Government Public Relations Department, 2021).

At the international level, Thailand hosts the BIMSTEC agenda 2021-2022 (cooperation in the Bay of Bengal region that comprises the academic and economic diversity of seven member countries, consisting of Bangladesh, Sri Lanka, India, Myanmar, Nepal, Bhutan, and Thailand) in 2021. In 2022, Thailand plans to host the Asia-Pacific Economic Cooperation Forum. The Government focuses on five key areas: 1) promoting free trade and investment, 2) growing inclusive, sustainable, and responsible economies, 3) securing food and agriculture, 4) promoting well-being, and 5) moving towards a digital society (Chaivaivid, 2021). Thailand is aiming to drive the Asia-Pacific economy based on the BCG economic model as well.

The National Science and Technology Development Agency (NSTDA) states that Thailand's social and economic structure tends to change in the future in terms of technology, aging society, and decreasing labor. The government is trying to push the concept of the BCG economy and, therefore, driving change is a challenge to achieving tangible results. Notably, the government needs to provide knowledge to all

sectors to understand this policy to accomplish this mission (National Science and Technology Development Agency, 2021). Mickoleit (2014) studied social media use in and by OECD governments. The focus is on government institutions, as opposed to personalities, and how they manage to capture the opportunities of new social media platforms to deliver better public services and to create more open policy processes. Major challenges are discussed, notably those related to the uncertainty of institutions on how to best leverage social media beyond "corporate" communications.

BCG's economic movement provides opportunities for all sectors to participate and support information dissemination and transfer to those involved, including those interested in the results of the periodic assessments. As for the policy's success, implementation needs massive collaboration from all stakeholders; therefore, information dissemination through various communication channels was widely used, not only from government or businesses but also from NGOs and the local community. Communication plays a key role in identifying and, if appropriately utilized in the development process, increasing the participation of the people for whom it is meant, even if it is at the grassroots level.

# Knowledge, Attitude, and Behavior Model

The KAB model was used as the theoretical underpinning for developing the hypothesized relationships (Kwol, Eluwole, Avci, & Lasisi, 2019). The KAB model argued that knowledge positively influences an individual's attitude and attitude influences practices or behavior. The KAB model was primarily used to assess communication success for innovation development (Chutavichit, 2005). The KAB model is the communication process with a gap among local, national, and international societies, used widely in mobilizing development projects. In this regard, the development communication concept is about building a good communication plan for knowledge first, followed by a good attitude and behavior.

Communication for development is a broad term used to refer to all the different types of communication that occur in societies if sustainable democratic development occurs (Servaes, 2008). It encompasses access to and exchanges information, dialogue, creation of knowledge, open access to knowledge, development communication, strategic communication, participatory communication, expressive culture, media, information, and communications infrastructure and technologies. These communication processes often reflect power relations and aim to address these by enabling people to understand, negotiate, and participate in decision-making that affects their lives.

Knowledge, attitude, and behavior are the connected process aiming towards the desired behavior. Knowledge occurs within the brain, related to intellectual development, perception, and memorization of facts; accordingly, the processing is decision-making. Knowing means the ability of people to perceive/learn their environment and knowledge about a situation. Therefore, knowledge is the ability to use facts. Attitude means feelings and opinions of a person towards something. It is the mind, emotion, interest, liking, and value process, which affect acting. Behavior is the ability to express/act physically, which comes from knowledge and attitude accordingly. This process from knowledge to behavior takes time and several steps (Bloom, 1964).

Knowledge, attitude, and practice (KAP) study guides the implementation of development campaigns/projects in a different area. They are essential tools for political persuasion (Muleme, Kankya, Ssempebwa, Mazeri, & Muwong, 2017). The World Health Organization (2008) suggested that a KAP survey is the tool for evaluating development projects or campaigns. It is a representative study of a specific population to collect information on what is known, believed, and done about a particular topic. Fan et al. (2018) developed an instrument to test knowledge, attitudes, and practices (KAP) of student tuberculosis (TB) patients in China.

Several studies have, over the years, attempted to use the model to investigate knowledge, attitudes, and practices across various contexts. In health development policy mobilization, policymakers' communication strategies to advocate for a single standard health system policy are the message or content strategy. The proactive approach provides facts and boosts support from opinion and references from different sources. The proactive media strategy uses influencers, policymakers, specialists, or famous people to present the information and use the network to create a viral effect or organize press conferences/seminars (Nipanon, 2016). Ude-Akpeh & Ezeoke (2017) used KAP to evaluate the diffusion of flood alert campaigns in Anambra State of Uganda. Tiongco, Narrod, Kobayashi, Scott, and Nuryartono (2011) assessed unknowledge, attitude, perceptions, and practices for highly pathogenic avian influenza risks and management options among Indonesian small-scale poultry producers. Matinhure

(2013) studied parents' knowledge, attitudes, and practices towards human immuno-deficiency virus (HIV) testing and treatment for children in Addis Ababa, Ethiopia.

### **Media Exposure and Policy Communication**

In development communication, communication is a tool to facilitate the participation of people in developmental activities. Media plays a vital role in development communication through the circulation of knowledge, providing a forum for discussion of issues, teaching ideas, skills for a better life, and creating a base of consensus for the stability of the state (Choudhury, 2011). Communication is used as an empowerment tool in order to facilitate the participation of people in development activities. Various means of communication, all kinds of media, both traditional and new, have been used for communication purposes to transmit knowledge to people efficiently. From paintings to stone writing to a printing press to the modern computer-based technology, media helps people be aware of and develop agreed-upon important national and international development issues. It also helps them understand the various obstacles in the process of development. Mass media can instruct people and educate them (Sharma & Uniyal, 2016). Today, government has different websites and call centers that provide instant information or answers queries to questions of development around the world (Criado, Sandoval-Almazan & Gil-Garcia, 2013) and in China (Zheng & Zheng 2014).

Interpretive approaches to policy analysis introduce a set of questions about how policy meanings are communicated to multiple audiences, and exploring these questions is a useful alternative to more traditional positivist approaches to understanding policy implementation (Yanow, 1993). Studies on media exposure indicate the effect of media exposure and the success of policy communication. Mickoleit (2014) conducted a study to investigate how social media was used by governments. New technologies like mobiles, websites, and the internet are interactive. Interactivity, instant feedback, and persuasion capability are used to rope an ordinary person into the process of development. Social media is a primary soft power tool in raising public awareness and addressing climate change (Mavrodieva, Rachman, Harahap, & Shaw, 2019). Mavrodieva et al. found that at the same time, social media platforms such as Instagram, Twitter, and Facebook have allowed the general public to share opinions and engage with one another. Majmundar, Chou, Cruz, and Unger (2019) found a relationship between social media engagement and e-cigarette policy support. Twitter users engaging in tobacco-related content and harboring negative attitudes toward e-cigarette regulatory policies could be an important audience segment to reach with tailored e-cigarette policy education messages. Likewise, social media has become an influential marketing communication channel in digital space communication, especially during the COVID-19 pandemic. The study of Christensen, Meyer, Dalum, and Krarup (2019) indicated that a mass media campaign was associated with an increase in awareness of alcohol as a risk factor for cancer and alcohol policy support at a population level.

## **KAP and BCG Economic Model**

The circular economy is a much-discussed pathway towards sustainability. Studies focusing on a circular economy's barriers and scrutinizing how policies can accelerate a transition towards a circular economy were carried out (Kris, Ralfvan, & Julian, 2020). An action plan and integrated operational and driving indicators must be appropriate with unity to mobilize the implementation of the BCG economic model. Follow-up guidelines for implementing the BCG economic model include establishing the Sub-Committee for Driving Economic Development BCG Model in Target Sector to monitor the situation regularly and prepare quarterly reports. A monitoring and evaluation system should be established to drive the BCG economic model according to the plan's framework, monitoring, and evaluating operating performance both at the productivity level results and effects.

D'Amato et al. (2017) researched on the green, circular, and biological economy to determine the sustainability of the concept and comprehensively compare diversity within and between such concepts. The results are drawn from a bibliometric review of almost two thousand scientific articles published within the last three decades. In terms of environmental sustainability, this research found that Green Economic acts as an 'umbrella' concept, including elements from circular economic and bioeconomy concepts (e.g., eco-efficiency, renewables). Willis, Maureaud, Wilcox, and Hardesty (2018) conducted a study to check how successful waste abatement campaigns and government policies are at reducing plastic waste in the marine environment. In Thailand, Sereenonchai, Arunrat, and Stewart (2020) suggested strategies for low-carbon city communication in Thailand.

After implementation of the BCG economic model commenced and the policy was adopted in several governments, businesses, and nonprofit organizations using various communication channels, this study investigated the media exposure and knowledge of the BCG model among the Thai people.

#### **METHOD**

This study employed a quantitative method, survey research, detailed as follows:

**Population and Sample.** Population in this study refers to Thai people residing in Thailand during the data collection. In 2019, the number of Thai people was 66,558,935 (The Department of Provincial Administration, 2020). The sample size was determined using the Taro Yamane method at a 95% confidence level and error tolerance of 5% (Yamane, 1973). The estimated sample yielded a 385 sample and 20% unexpected loss applied to this minimum required sample. Therefore, a minimum of 461 respondents was required. Using a convenient sampling technique, 469 respondents answered the questionnaire used in this study in the data analysis.

*Instrument and variables.* An online questionnaire was used to collect data from the respondents. In this study, questions included:

- 1) Demographic data (gender, age, education, working status/occupation, education, and income).
- 2) Media exposure to BCG model information was assessed based on the level of media exposure and frequency of media exposure.

The level of media exposure was calculated on the number of channels used through 13 different channels of mass media, social media, and personal media where the respondents receive information concerning the BCG model. The following calculations were executed: 1-2 channels = 1 score, 3-4 channels = 2 score, 5-6 channels = 3 score, 7-8 channels = 4 score, and 9-13 channels = 5 score.

Frequency of media exposure. Respondents were asked to indicate their time spent updating information about the BCG economic policy model. Five options were available: at all times = 5 score, 4-5 times a week = 4 score, 4-5 times a month = 3 score, from time to time depending on the occasion = 2 score, and never = 0 score.

The level of media exposure to BCG model information was measured on the sum mean score of the level of media exposure and frequency of media exposure. Five levels of media exposure included the following five ranges of the average mean score 1.00-1.60 = lowest, 1.61-2.20 = low, 2.21-2.80 = moderate, 2.81-3.40 = high, and 3.41 - 4.00 = highest. Cronbach's alpha calculation was 0.856.

3) Knowledge of the BCG economic policy model. Respondents evaluated eight questions concerning the Thai Government's economic development policy, which integrated three concepts of bioeconomy, circular economy, and green economy (BCG) to drive economic and social development. Respondents had four options to choose from corresponding to their knowledge towards each statement. There were four options to choose from: correct, not correct, not sure, and don't know. The correct answer gets one score, the possible score ranges from 0 to 8. The sum score was categorized into three groups: low (score 0-3), moderate (score 4-6), and high (score 7-8).

**Data Collection.** Questionnaires were distributed through various online channels from the 7th to the 11th of July 2021. The data collection mode was the only available option due to the nationwide lockdown policy. Before administering questionnaires, respondents have been informed of the purpose, instructions, data collection methods, and research benefits. There was no physical or psychological harm inflicted on the subjects. The participants consented to all the research procedures, and they were free to withdraw at any time if they wanted to. Personal data were kept strictly confidential.

*Data Analysis*. Data analysis employed descriptive statistics, frequencies, percentages, means, and standard deviations. Cross tabulation was performed to describe the relation of the BCG knowledge and the BGG media exposure by demographic profile of the respondents.

## RESULTS AND DISCUSSION

Results

Respondents' profile

The majority of the 469 samples in this study comprised females (64.0%); aged 21-37 years old (43.3%) followed by those aged 38-53 years old (32.8%); bachelor's degree holders (52.7%) followed by master's degree or above holders (30.9%); employed (74.2%) as civil servants/state enterprise employees/government employees (18.3%) followed by the business organization/private sector/company workers (17.7%); had monthly incomes of <15000 baht (34.1%) followed by  $\geq$  45000 baht (25.4%). Details are in Table 1.

Table 1. Demographic Profile of Respondents (n = 496)

Demographic characteristics	N	%
Gender		
Male	169	36.03
Female	300	63.97
Age (Min=18-Max=64, mean=34, S.D=10.81)		
≤ 20	96	20.47
21 - 37	203	43.28
38 - 53	154	32.84
≥ 54	16	3.41
Educational Level		
1. Secondary School or Vocational Certificate (Voc. Cert.)	62	13.22
2. Diploma/High Vocational Certificate (Dip./High Voc. Cert.)	15	3.20
3. Bachelor's Degrees	247	52.67
4. Master's Degrees or above	145	30.92
Occupation		
1. Students/University Students	22	4.69
2. Agriculturist (Agricultural Entrepreneurs, such as Farmers, Gardeners, Fishermen, etc.)	13	2.77
3.Teachers/Academics/Researchers in Institutions of Higher Education	51	10.87
4.Teachers/Instructors/Academics in kindergarten/Primary/Secondary Schools	31	6.61
5. Civil Servant/State Enterprise Employee/Government Employee	86	18.34
6 Business Organization/Private-Sector/Company Workers	83	17.70
7 Merchants/Business Owners	42	8.96
8. Freelancer	20	4.26
9. Unemployed	121	25.80
Income (in baht)		
< 15000	160	34.12
15000-24999	49	10.45
25000-34999	67	14.29
35000-44999	74	15.78
≥ 45000	119	25.37

# Media Exposure to the BCG Policy Model

Media channel and frequency exposure. It was found that among thirteen channels, the majority of the respondents were exposed to the BCG model information through websites (47.72%), followed by Facebook (45.23%), and the least, to clubhouse and radio (3.73%). Details are in Figure 1. As to the frequency of exposure, it was found that the majority of the respondents were exposed to media for information about the BCG policy model from time to time depending on the occasion (56.7%) followed by 4-5 times a month (14.3%) and the least, (only 3.6%) exposed at all times as in Figure 2.

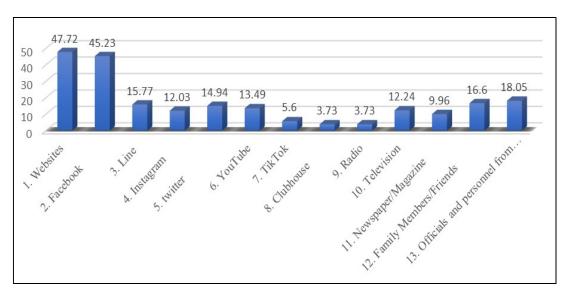


Figure 1. Type of media exposed to information about BCG policy model (n=469)

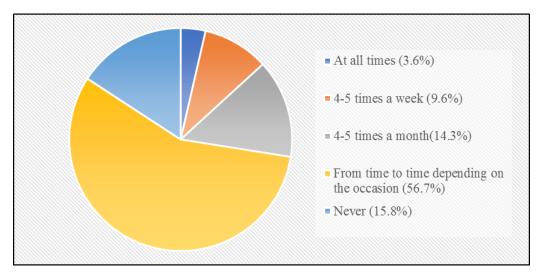


Figure 2. Frequency of exposure to information about BCG policy model (n=469)

Quality of information. Regarding the quality of information dissemination, data analysis revealed that the respondents indicated the quality at a moderate level in all aspects ( $\overline{X}$ =3.16, SD=0.87). The highest average mean score on the quality of information/content is clearly explained and easily understood ( $\overline{X}$ =3.27, SD=1.04) followed by reliable published information/content ( $\overline{X}$ =3.21, SD=1.00), and the least on interesting dissemination of information/content ( $\overline{X}$ =3.05, SD=1.02). All average mean scores were at a moderate level. Details are in Table 2.

Table 2. Opinions on the Quality of the BCG Policy Model Information Dissemination (n=469)

Items	$\mathbf{X}$	SD.	Level
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Overall opinions	3.16	0.87	M
1. Quality of information/content is clearly explained and easily understood.	3.27	1.04	M
2. Interesting dissemination of information/content	3.05	1.02	M
3. Reliable published information/content	3.21	1.00	M
4. Correct and concise received information	3.19	0.95	M
5. Various channels for the public to express their opinions on the "BCG Model" policy	3.09	1.12	M

Note: Level (1.00-1.66 = Low-L, 1.67-3.33 = Moderate-M, 3.34-5.00 = High-H)

## **Knowledge of the BCG Policy Model**

Analysis of the responses of eight questions about the BCG model revealed that the majority of the respondents had a low level of knowledge on the BCG policy model (57.6%), followed by a moderate level (40.3%) and a high level (only 2.1%). Details are in Figure 3.

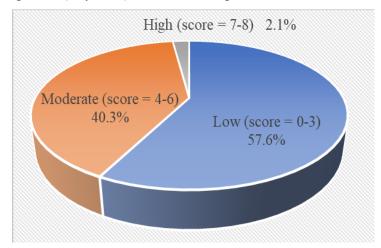


Figure 3. Level of knowledge of the BCG policy model

#### Media Exposure and Knowledge of the BCG Policy Model

Level of BCG model media exposure by demographic distribution.

Data analysis revealed that overall, the respondents' exposure to the BCG model information was moderate (X=2.57, SD=0.49). By gender, it was found that male respondents had a higher average mean score = 2.62 (SD=0.62) than their female counterparts (X=2.62, SD=0.62). Among respondents with different age brackets, it was found that the respondents aged  $\geq 54$  years old had the highest average mean score = 2.75 (SD=0.55), followed by the age group  $\leq 20$  years old (X=2.68 (SD=0.55). The freelancer had the highest average mean score (X=2.68, SD=0.47), followed by the business organization/private-sector/company workers (X=2.63, SD=0.44). By income, the respondents with income per month at  $\leq 15000$  baht had the highest average mean score (X=2.63, SD=0.50) followed by two groups with income between 15000-24999 baht (X=2.63, SD=0.50) and income between 25000-34999 baht (X=2.63, SD=0.50). Based on all averages, the mean score is at a moderate level.

BCG knowledge by demographic distribution.

Among the low knowledge group, data analysis revealed that they were female (65.6%); aged 21-37 years old (42.9%) followed by those aged 38-53 years old (32.2%); had bachelor degrees (57.0%), followed by master's degrees (23.7%). They worked in the business organization/private-sector/company (19.6%)

followed by civil servants/state enterprise/government employees (17.4%), and had incomes < 15000 baht (38.9%) followed by  $\ge 45000$  (23.3%).

As for the respondents who knew the BCG policy model at a moderate level, they were female (61.8%), aged 21-37 years old (45.5%) followed by those aged 38-53 years old (33.3%). By educational level, they had a bachelor's degree (48.7%) followed by a master's degree (48.6%); worked as civil servants/state enterprise/government employees (18.5%), followed by a group of teachers/scholars/researchers in institutions of higher education (16.4%); and had incomes < 15000 baht (28.0%) followed by  $\geq$  45000 (27.0%). Likewise, for those with a high level of BCG knowledge with only ten respondents, the pattern is similar to another two groups. Details are in Table 3.

Table 3. BCG Media Exposure and BCG Knowledge by Demographic Distribution of the Respondents (n=496)

	BCG Media Exposure			BCG Knowledge						
Demographic						ow Moderate			High	
characteristics	n	X	SD.	Level	n	%	n	%	n	%
Gender										
Male	169	2.62	0.52	M	93	34.4	72	38.1	4	40.0
Female	300	2.56	0.48	M	177	65.6	117	61.9	6	60.0
Age										
$\leq 20$	96	2.68	0.44	M	63	23.3	33	17.5	0	0.0
21 - 37	203	2.52	0.53	M	113	41.9	86	45.5	4	40.0
38 - 53	154	2.58	0.48	M	87	32.2	63	33.3	4	40.0
≥ 54	16	2.75	0.55	M	7	2.6	7	3.7	2	20.0
<b>Educational Level</b>										
1. Secondary School or	62	2.61	0.33	M	41	15.2	21	11.1	0	0.0
Vocational Certificate (Voc.										
Cert.)										
2. Diploma/High Vocational	15	2.50	0.53	M	11	4.1	3	1.6	1	10.0
Certificate (Dip./High Voc. Cert.)										
3. Bachelor's Degrees	247	2.52	0.56	M	154	57.0	92	48.7	1	10.0
4. Master's Degrees or above	145	2.67	0.44	M	64	23.7	73	38.6	8	80.0
Occupation										
1. Students/University Students	22	2.59	0.45	M	13	4.8	9	4.8	0	0.0
2. Agriculturist (Agricultural	13	2.38	0.55	L	10	3.7	3	1.6	0	0.0
Entrepreneurs, such as Farmers,										
Gardeners, Fishermen, etc.)										
3.Teachers/Academics/Researche	51	2.57	0.52	M	17	6.3	31	16.4	3	30.0
rs in Institutions of Higher										
Education										
4.Teachers/Instructors/Academic	31	2.34	0.44	L	23	8.5	7	3.7	1	10.0
s in										
kindergarten/Primary/Secondary										
Schools										
5. Civil Servant/State Enterprise	86	2.48	0.57	L	47	17.4	35	18.5	4	40.0
Employee/Government										
Employee										
6. Business Organization/Private-	83	2.63	0.44	M	53	19.6	29	15.3	1	10.0
Sector/Company Workers										
7. Merchants/Business Owners	42	2.61	0.55	M	19	7.0	23	12.2	0	0.0
8. Freelancer	20	2.68	0.47	M	14	5.2	6	3.2	0	0.0
9. Unemployed	121	2.67	0.46	M	74	27.4	46	24.3	1	10.0
Income										
< 15000	160	2.63	0.50	M	105	38.9	53	28.0	2	20.0
15000-24999	49	2.60	0.44	M	25	9.3	23	12.2	1	10.0
25000-34999	67	2.60	0.49	M	37	13.7	28	14.8	2	20.0
35000-44999	74	2.48	0.54	L	40	14.8	34	18.0	0	0.0
≥ 45000	119	2.55	0.49	M	63	23.3	51	27.0	5	50.0
Total	469	2.57	0.49	M	270	100.00	187	100.00	10	100.00

#### **Discussions**

## Media channel and exposure

This study indicates that most of the respondents were exposed to BCG economic model information through websites, followed by Facebook, and the least, to clubhouse and radio. Looking at the demographic profiles of respondents who had a high exposure by gender, it was found that they were male, aged  $\geq 54$  years old, and aged  $\leq 20$  years old. They were freelancers and workers in the business organization/private sector/company and earned less than 34999 baht a month. This is consistent with the media use behavior of the contemporary population. Most Thai people consume social media (Kemp, 2014). Kemp studied the role of new digital media (NDM) in constructing the social values and identity of youth in Thailand. The study showed that NDM influences the youth's social values negatively and positively.

Moreover, NDM plays an indirect role in the socialization of children in Bangkok. Ross and Sebastian (2016) found that company leaders who had recognized the opportunities presented by new digital technologies articulated one of two types of digital strategies: customer engagement or digitized solutions. As a result, policymakers should select the media, website, and Facebook, which most people consume to support the public sector, private sector, and people. Afterward, each stakeholder can apply the policy to their businesses. Regarding the type of media exposure to information about the BCG policy model, personal media is also a channel that plays a vital role in Thai society. Especially in the provincial areas of Thailand, community leaders or thought leaders are considered an important communication channel to convey knowledge and understanding about BCG economic policy to members as well (Sukanya et al., 2020), in line with the development communication guidelines that focus on opinion leaders. This includes the personal media that is the personnel of higher education institutions located within the locality and the integration of comprehensive communication channels and cover access to the content already. This will increase the efficiency of the awareness of the BCG economic policy.

#### **Quality of information**

Regarding the quality of information dissemination, data analysis revealed that the respondents indicated the rate at a moderate level in all aspects. The highest average mean score is the quality of information/content clearly explained and easily understood. According to Phobthaworn (2014), the argument quality is a critical factor that directly affects the perceived information usefulness indirectly through the information usefulness to information adoption on purchasing goods and services. The findings indicated the quality of the message. Zheng and Zheng (2014) conducted a content analysis on the performance of information and interactions in selected Chinese government microblog accounts as innovations in the public sector. They found that most messages in government microblog accounts were posted for self-promotion rather than service delivery. The forms, languages, and timeliness of information posted tend to be monotonous, rigid, and formal. The interactions between governments and the public in government microblog accounts were mostly insufficient and preliminary. Furthermore, a longitudinal comparison between data in two sequential years also indicates that government use of microblogs is improved over time. This finding implies that further content analysis of the messages concerning BCG's issue needs to be conducted.

#### Level of Knowledge towards the BCG Economic Model

The findings of this study confirmed a low level of knowledge towards the BCG economic policy model among the respondents. A moderate level of media exposure may be a reason to explain this phenomenon, not to mention the sophistication of the policy itself. This finding possibly is a result of its novelty or the ignorance of the people. Moreover, considering the BCG economic model details, specific science, technology, and innovation policies seem unrelated to daily life. Even though the findings indicated a COVID-19 pandemic during the data collection period, there was no interest in other policies (Azlan, Hamzah, Sern, Ayub, & Mohamad, 2020). Both government and private sectors communicate to the people continuously; as a result, people receive a lot of information about the epidemic.

The demographic distribution of the media exposure and the respondents' knowledge confirmed the importance of the communication of the BCG model on the knowledge level. The respondents with low media exposure tend to be in the group with insufficient understanding of the BCG model. Hysa, Kruja, Rehman, and Laurenti (2020) explained that the circular economy (CE) is perceived as a crucial model for industrial economics to pursue sustainable development for which the BCG model is specific to an organization such as an industrial plant. Therefore, it did not get the attention of the people. As a result, people are less exposed to information about the BCG policy and have little knowledge of the BCG policy. The BCG model issue revealed that most of the respondents had a low level of knowledge on the BCG policy model maybe because the respondents did not see concrete results. Most of the content is philosophical, and theoretical approaches are challenging to understand. However, most of the respondents were informed about the economic development of the BCG. Therefore, the policy sector must accelerate the creation of results and images of success to be evident (Ghența & Matei, 2018). This finding aligns with the concept of innovation that aims to propose ideas that focus on creating tangible change generating results and substantial effects, resulting in a greater understanding of the content of the BCG economic policy. Wamanon (2018) found that unsuccessful government policies result from a low level of knowledge about those policies from the beginning. It is not about the public interest; only government, politicians, and interest groups engage in and benefit from this policy. However, providing freedom and an engagement platform for people to speak out, support, or give feedback on the policies may resolve this problem gradually. Creating a public forum to share out-of-the-box ideas towards the guidelines is a crucial solution.

#### **CONCLUSIONS**

People's change of demand and opportunities has not been studied due to its limit to get an overall success. Both the strength and weakness of the media and the message and access of people to these mediums should be considered to achieve success in a real sense and not only lip service work. To sum up, first, the government agency responsible for the BCG economic model should select media websites, Facebook, and own government websites to promote the information about the BCG economic model; the media should be planned according to the media consumption of Thai people. Second, the government should develop the quality of the content about the BCG economic model. Although the quality of information/content is clearly explained and easily understood, it is less attractive. This causes more understanding and reliability of the content itself, such as citation accuracy. Third, the government should provide an online public forum platform to share its ideas about the BCG economic model. Last, the government should actively build more awareness about the BCG economic model to get support and achieve the goals of this model. The government can directly communicate to four focused industries in the S-curve policy: agriculture and food industry, energy and materials industry, health and medical industry, and tourism and service industry.

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