PUBLIC PERCEPTION OF THE STARLINK SATELLITE PROJECT IN A DEVELOPING COUNTRY

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Abstract

Starlink is a long-term project to address disparities in rural broadband Internet access that is led by SpaceX and Elon Musk. The project's goal is to launch thousands of smallsat-class satellites into low Earth orbit (LEO) as part of a mega-constellation to provide continuous, high-speed Internet around the world. SpaceX believes that its technology can outperform the competition by using shallow orbits. When compared to traditional geosynchronous satellite Internet infrastructure, Starlink promises lower latency and higher-quality connections to its customers (Walker & Elliott, 2021). This study aims to investigate the public perception of the Starlink Satellite project in Thailand. A quantitative approach was used and an online questionnaire was conducted to collect data from a convenience sample of 1,258 participants in Thailand. Binary regression analysis was performed to analyse the data. The findings revealed that the public perception of the Starlink Satellite project in Thailand could be described by gender, age, computer, laptop, tablet, wearable device, Internet duration, mobile Internet, Instagram, TikTok and YouTube. Consequently, Starlink should devise an effective strategy to entice users to increase their awareness and use satellite Internet in countries where fibre Internet is more affordable and convenient.

Keywords: Public Perception, Starlink, Developing Country

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1. INTRODUCTION

The growth of information and communication technologies (ICTs), the spread of the Internet, and mobile communications have all contributed to globalisation, thus entering a qualitatively new stage of development. The computer and newly created ICTs are the main technological attributes of the current stages of globalisation, which unite the world into a single communication system, establishing an integrated financial and information space (Limna et al., 2023). When we think of an Internet service, the first things that come to mind are cell towers, broadband, and fibre optics. The chances are that satellites are not the first thing that comes to mind because they are often associated with television programming and the International Space Station, rather than powering your online connection. The Internet is now an integral part of our daily lives. While satellite Internet may appear complicated and extremely technical, it is a simple and completely adequate broadband solution for those who live slightly off the grid. Some parts of the world still do not have

electricity, so imagining the Internet in those places appears to be impossible. This is where satellite-based Internet comes into play. With the help of satellite-based Internet technology, the Internet can be reached in every corner of the world, anywhere and at any time. Satellite Internet works by transmitting a fibre Internet signal from the system server to a satellite in orbit. The Internet signal is then received via a satellite dish. The dish is linked to a modem, which connects all of the devices to the Internet. Most people are currently served by two reputable satellite Internet providers, ViaSat and HughesNet. However, Starlink has entered the market, offering high-speed satellite Internet services and it plans to launch its services all over the world in the near future (Parthasarathy, 2022; Yadav et al., 2022). Starlink is the name of a satellite network that was developed by SpaceX to provide low-cost Internet access to remote locations. In January 2015, SpaceX announced its satellite Internet proposal. Although it had no name at the time, Elon Musk, the owner, stated that the company had filed paperwork with international regulators to place approximately 4,000 satellites in low Earth orbit (LEO) (Pultarova & Howell, 2022).

Several studies on the Starlink Satellite project were conducted. For instance, McDowell (2020) studied the LEO satellite population and the impacts of the SpaceX Starlink constellation. Mróz et al. (2022) explored the impacts of SpaceX Starlink satellites on the Zwicky Transient Facility (ZTF) survey observations. Few studies investigated the public perception of the Starlink Satellite project, especially in Thailand. Hence, this study aims to investigate the public perception of the Starlink Satellite project in Thailand. To collect data from a convenience sample of 1,258 Thai participants, a quantitative approach was used and an online questionnaire was administered. The data were analysed using binary regression. The findings revealed that gender, age, computer, laptop, tablet, wearable device, Internet duration, mobile Internet, Instagram, TikTok, and YouTube could all be used to describe the public perception of the Starlink Satellite project in Thailand. As a result, Starlink should develop an effective strategy to encourage users to become more aware of satellite Internet and use it in countries where fibre Internet is more affordable and convenient.

The article is divided into six major sections. Section 1 is an introduction to the study. The theoretical context for the study is provided in Section 2. Section 3 presents the research methodology, and the results are presented in Section 4. Section 5 presents the study's discussion. In the final Section 6, conclusions, limitations, and recommendations are presented.

2. LITERATURE REVIEW

Satellite communication is critical to the global connectivity ecosystem. It connects rural and remote populations, provides backhaul connectivity to mobile cellular networks, and enables emergency and disaster response communications. Because of their global coverage and suitability for areas not served by fibre optic cable networks, LEO constellations could transform the connectivity landscape (Garrity & Husar, 2021). Starlink is a new satellite Internet service that was developed by SpaceX, which is owned by Elon Musk. Starlink Internet works by beaming data signals between thousands of LEO satellites overhead and ground-based gateway stations (Cooper, 2023; Yasar, 2023).

Starlink Internet broadband is one of the most sophisticated broadband Internet systems in the world and operates by transferring information through the vacuum of space, where it travels much faster than fibre optic cables and can reach far more people and places in far less time. Although most satellite Internet services today work on single geostationary satellites that orbit around the Earth at about 35,000 km, Starlink is a constellation of multiple satellites in LEO. Because Starlink satellites are in low orbit, the round-trip data time between the user and the satellites (which is also known as latency) is much lower when compared to geostationary satellites. In most parts of the world, users can expect download speeds ranging from 100 Mb/s to 200 Mb/s and latency as low as 20 ms. This enables Starlink to provide excellent services, such as online gaming, which are typically unavailable on other satellite broadband systems (Yadav et al., 2022).

Starlink is already the third-largest satellite Internet provider in the United States. Moreover, if you live in the United States, you are most likely to be eligible for the Starlink satellite service. Starlink already has over 1 million active customers in 54 countries. The Starlink coverage map above depicts Starlink's ever-expanding Internet coverage footprint. Currently, 3,425 LEO Starlink satellites orbit the Earth, providing Internet access to a wide range of locations. Starlink currently serves 36 countries in areas with limited coverage. In the United States, the company plans to extend coverage to the rest of the continent by the end of 2023. Starlink achieved its fastest median download speed of 160 Mbps in Lithuania in the first quarter of 2022. Starlink has also achieved speeds of 91 Mbps in the US, 97 Mbps in Canada, and 124 Mbps in Australia. Starlink in Mexico was the fastest satellite Internet provider in North America, with a median download speed of 105.91 Mbps (Cooper, 2023; Yasar, 2023).

The Starlink satellite project has the potential to bring high-speed internet access to remote and underserved areas in developing countries, which could have a significant impact on economic development and social welfare. However, concerns have been raised about the potential negative impact on local Internet service providers and the risk of creating a digital divide between those who can afford the service and those who cannot (Frąckiewicz, 2023a; Shaengchart & Kraiwanit, 2023; Shaengchart, Kraiwanit, & Butcharoen, 2023). Additionally, the potential impact of the Starlink project on education has been discussed. The availability of high-speed Internet could provide students in remote areas with access to educational resources and online learning opportunities. However, concerns have been raised about the potential for students to become overly reliant on technology and the need for proper training and

support for educators and students to effectively utilise the technology (Frąckiewicz, 2023b). The potential environmental impact of the Starlink project has also been discussed. The sheer number of satellites launched by the project raises concerns about space debris and the impact on astronomical observations. Additionally, the potential for interference with wildlife, particularly birds, has been raised, as the satellites could disrupt migratory patterns and cause light pollution (Frąckiewicz, 2023c).

3. METHODOLOGY

Quantitative research is a scientific tradition of social research that is based on the philosophical foundation of positivism, a school of thought that explicitly rejects the metaphysical and theological elements of social reality. Thus, the starting point of this school of thought is the belief that empirical experience and facts that occur in the field determine the validity of knowledge (Ahmadin, 2022). This study used a quantitative approach as a research strategy. Closed-ended questionnaires were employed to collect the data. The questionnaire items were developed based on reliable and valid research data, and the questionnaire was pre-tested on 30 respondents to obtain a dedicated questionnaire, as recommended by Sitthipon et al. (2022) and Jangjarat et al. (2023). In addition, the validity of the measurement instruments was assessed, as well as their dependability and accuracy. The researchers explained the study's goal to the respondents and solicited their participation before distributing online questionnaires. The online survey data were collected between November 2022 and January 2023. According to Obilor (2023), convenience sampling is a technique in which a sample is drawn from the population that is close to hand, easily accessible, or convenient. Convenience sampling is a non-probability sampling technique that is used by researchers in which data is collected from a readily available and easily accessible pool of respondents. The respondents in this study were Thai people over 18 years old, who at that time lived in Thailand. The sample in this study contained 1,258 participants identified through convenience sampling, as recommended by Kraiwanit (2021) and Shaengchart, Kraiwanit, Virunhaphol, et al. (2023). Demographic variables (i.e., gender, age, education, status, and income), user behaviour variables (i.e., computer, laptop, smartphone, tablet, wearable device, time, Internet duration, home Internet, and mobile Internet), and social media variables (i.e., Facebook, Instagram, Twitter, TikTok, and YouTube) were the independent variables. According to Boateng and Abaye (2019), and Gomila (2021), in statistics, and more specifically regression analysis, a binary regression calculates the relationship between one or more explanatory variables and a single binary output variable. Therefore, binary regression was employed to analyse the data.

4. RESULTS

4.1. Demographic variables of public perception of the Starlink Satellite project

Table 1 shows that the chi-square is 78.244, with *df* equal to 5. Thus, a dependent variable can be explained by all independent variables at the significance level of 0.05.

Table 1. Omnibus test of the model's performance using demographic variables

		Chi-square	*Degrees of freedom (df)*	*Sig.*
Step 1	Step	78.244	5	0.000
	Block	78.244	5	0.000
	Model	78.244	5	0.000

As shown in Table 2, the model explained approximately 8.0% of the variation in the result with a significance value of 0.05.

Table 2. Model summary using demographic variables

Step	*-2 log likelihood*	*Cox & Snell R square*	*Nagelkerke R square*
1	1665.257[a]	0.060	0.080

Note: a. Estimation terminated at iteration number 3 because parameter estimates changed by less than 0.001.

As shown in Table 3, the classification indicates that the model with all the independent variables was able to predict the public perception of the Starlink Satellite project in Thailand with an accuracy rate of 56.5% of cases when there was a cut-off value of 0.500 or 50%.

Table 3. Classification table for back-testing (including demographic variables)

	Observed		*Predicted*		
			Perception of Starlink		*Percentage correct*
			No	*Yes*	
Step 1	***Perception of Starlink***	*No*	383	258	59.8%
		Yes	289	328	53.2%
	Overall percentage				56.5%

Note: The cut-off value is 0.500.

The significance level of each independent variable is presented in Table 4. This shows that the dependent variable (the public perception of the Starlink Satellite project in Thailand) could be described by gender, age, and education. Conversely, status and income were not significant. The public perception of the Starlink Satellite project was significant for males. This reduced the possibility of public perception of the Starlink Satellite project from 1 to 0.552 (1 - 0.552 = 0.448). When there was an increase of one unit in age, the public perception of the Starlink Satellite project increased by 1.213. When there was an increase of one unit in education, the public perception of the Starlink Satellite project increased by 1.353.

Table 4. Variables in the model using demographic variables

	Variables	B	Standard error	Wald-test	df	Sig.	Exp(B)
Step 1[a]	*Gender*	-0.594	0.121	24.205	1	0.000	0.552
	Age	0.193	0.048	16.027	1	0.000	1.213
	Education	0.302	0.114	7.048	1	0.008	1.353
	Status	-0.074	0.139	0.283	1	0.595	0.929
	Income	0.080	0.074	1.154	1	0.283	1.083
	Constant	-0.228	0.308	0.551	1	0.458	0.796

Note: a. Variables entered in Step 1: gender, age, education, status, income.

The predictive regression equation of Model 1 using the coefficients from Table 4 can be described by the following equation:

Model 1

$$P = \frac{1}{1 + e^{-z}} \quad (1)$$

where,

- P is the public perception of the Starlink Satellite project in Thailand,
- Z = -0.228 - 0.594(*Gender*) + 0.193(*Age*) + + 0.302(*Education*).

4.2. User behaviour variables of public perception of the Starlink Satellite project

Table 5 shows that the chi-square is 291.800, with *df* equal to 9. Thus, a dependent variable can be explained by all independent variables at the significance level of 0.05.

Table 5. Omnibus test of the model's performance using user behaviour variables

		Chi-square	Degrees of freedom (df)	Sig.
Step 1	Step	291.800	9	0.000
	Block	291.800	9	0.000
	Model	291.800	9	0.000

As shown in Table 6, the model explained approximately 27.6% of the variation in the result with a significance value of 0.05.

Table 6. Model summary using user behaviour variables

Step	-2 log likelihood	Cox & Snell R square	Nagelkerke R square
1	1451.700[a]	0.207	0.276

Note: a. Estimation terminated at iteration number 3 because parameter estimates changed by less than 0.001.

As shown in Table 7, the classification indicates that the model with all of the independent variables was able to predict the public perception of the Starlink Satellite project in Thailand with an accuracy rate of 72.8% of cases when there was a cut-off value of 0.500 or 50%.

Table 7. Classification table for back-testing (including user behaviour variables)

	Observed		Predicted		
			Perception of Starlink		Percentage correct
			No	Yes	
Step 1	Perception of Starlink	No	491	150	76.6%
		Yes	192	425	68.9%
	Overall percentage				72.8%

Note: The cut-off value is 0.500.

The significance level of each independent variable is presented in Table 8. This shows that the dependent variable (the public perception of the Starlink Satellite project in Thailand) could be described by computer, laptop, tablet, wearable device, Internet duration, and mobile Internet. Conversely, smartphone, Internet time, and home Internet were not significant. When there was an increase of one unit in a computer, the public perception of the Starlink Satellite project increased by 2.260. When there was an increase of one unit in a laptop, the public perception of the Starlink Satellite project increased by 2.216. Moreover, when there was an increase of one unit in a tablet, the public perception of the Starlink Satellite project decreased from 1 to 0.691 (1 - 0.691 = 0.309). When there was an increase of one unit in a wearable device, the public perception of the Starlink Satellite project increased by 4.600. Meanwhile, when there was an increase of one unit in Internet duration, the public perception of the Starlink Satellite project decreased from 1 to 0.833 (1 - 0.833 = 0.167). When there was an increase of one unit in mobile Internet, the public perception of the Starlink Satellite project decreased from 1 to 0.665 (1 - 0.665 = 0.335).

Table 8. Variables in the model using user behaviour variables

	Variables	B	Standard error	Wald-test	df	Sig.	Exp(B)
Step 1[a]	*Computer*	0.815	0.135	36.610	1	0.000	2.260
	Laptop	0.796	0.181	19.241	1	0.000	2.216
	Smartphone	-0.195	0.442	0.195	1	0.659	0.823
	Tablet	-0.370	0.171	4.682	1	0.030	0.691
	Wearable device	1.526	0.155	97.290	1	0.000	4.600
	Time	0.078	0.062	1.594	1	0.207	1.081
	Duration	-0.182	0.086	4.452	1	0.035	0.833
	Home Internet	0.061	0.080	0.576	1	0.448	1.062
	Mobile Internet	-0.408	0.077	27.704	1	0.000	0.665
	Constant	-0.228	0.579	0.155	1	0.694	0.796

Note: a. Variables entered in Step 1: computer, laptop, smartphone, wearable device, time, duration, home Internet, mobile Internet.

The predictive regression equation of Model 2 using the coefficients from Table 8 can be described by the following equation:

Model 2

$$P = \frac{1}{1 + e^{-z}} \quad (2)$$

where,

•P is the public perception of the Starlink Satellite project in Thailand,

•Z = -0.228 + 0.815(*Computer*) + 0.796(*Laptop*) - - 0.370(*Tablet*) + 1.526(*Wearable device*) - - 0.182(*Duration*) - 0.408(*Mobile Internet*).

4.3. Social media variables of public perception of the Starlink Satellite project

Table 9 shows that the chi-square is 169.504, with *df* equal to 6. Thus, a dependent variable can be explained by all independent variables at the significance level of 0.05.

Table 9. Omnibus test of the model's performance using social media variables

		Chi-square	*Degrees of freedom (df)*	*Sig.*
Step 1	Step	169.504	6	0.000
	Block	169.504	6	0.000
	Model	169.504	6	0.000

As shown in Table 10, the model explained approximately 17.3% of the variation in the result with a significance value of 0.05.

Table 10. Model summary using social media variables

Step	*-2 log likelihood*	*Cox & Snell R square*	*Nagelkerke R square*
1	1521.722[a]	0.130	0.173

Note: a. Estimation terminated at iteration number 3 because parameter estimates changed by less than 0.001.

As shown in Table 11, the classification indicates that the model with all of the independent variables was able to predict the public perception of the Starlink Satellite project in Thailand with an accuracy rate of 63.0% of cases when there was a cut-off value of 0.500 or 50%.

Table 11. Classification table for back-testing (including social media variables)

	Observed		*Predicted*		
			Perception of Starlink		*Percentage correct*
			No	*Yes*	
Step 1	***Perception of Starlink***	*No*	464	142	76.6%
		Yes	309	305	49.7%
	Overall percentage				63.0%

Note: The cut-off value is 0.500.

The significance level of each independent variable is presented in Table 12. This shows that the dependent variable (the public perception of the Starlink Satellite project in Thailand) could be described by Instagram, TikTok, and YouTube. Conversely, Facebook and Twitter were not significant. When using Instagram, the public perception of the Starlink Satellite project increased by 11.912. When using TikTok, the public perception of the Starlink Satellite project decreased from 1 to 0.288 (1 - 0.288 = 0.712). When using YouTube, the public perception of the Starlink Satellite project decreased from 1 to 0.049 (1 - 0.049 = 0.951).

Table 12. Variables in the model using social media variables

	Variables	*B*	*Standard error*	*Wald-test*	*df*	*Sig.*	*Exp(B)*
Step 1[a]	*Facebook*	0.354	0.263	1.815	1	0.178	1.425
	Instagram	2.478	0.348	50.819	1	0.000	11.912
	Twitter	-0.136	0.160	0.721	1	0.396	0.873
	TikTok	-1.246	0.183	46.542	1	0.000	0.288
	YouTube	-3.025	0.400	57.140	1	0.000	0.049
	Constant	0.105	0.286	0.134	1	0.715	1.110

Note: a. Variables entered in Step 1: Facebook, Instagram, Twitter, TikTok, YouTube.

The predictive regression equation of Model 3 using the coefficients from Table 12 can be described by the following equation:

Model 3

$$P = \frac{1}{1 + e^{-z}} \quad (3)$$

where,

•P is the public perception of the Starlink Satellite project in Thailand,

•Z = 0.105 + 2.478(*Instagram*) - 1.246(*TikTok*) - - 3.025(*YouTube*).

4.4. All of the significant variables of public perception of the Starlink Satellite project

Table 13 shows that the chi-square is 407.391, with *df* equal to 13. Thus, a dependent variable can be explained by all of the independent variables at a significance level of 0.05.

Table 13. Omnibus test of the model's performance using all of the significant variables

		Chi-square	*Degrees of freedom (df)*	*Sig.*
Step 1	Step	407.391	13	0.000
	Block	407.391	13	0.000
	Model	407.391	13	0.000

As shown in Table 14, the model explained approximately 37.9% of the variation in the result with a significance value of 0.05.

Table 14. Model summary using all of the significant variables

Step	-2 log likelihood	Cox & Snell R square	Nagelkerke R square
1	1283.836[a]	0.284	0.379

Note: a. Estimation terminated at iteration number 3 because parameter estimates changed by less than 0.001.

As shown in Table 15, the classification indicates that the model with all of the independent variables was able to predict the public perception of the Starlink Satellite project in Thailand with an accuracy rate of 74.2% of cases when there was a cut-off value of 0.500 or 50%.

Table 15. Classification table for back-testing (including all of the significant variables)

	Observed		Predicted		
			Perception of Starlink		Percentage correct
			No	Yes	
Step 1	Perception of Starlink	No	461	145	76.1%
		Yes	170	444	72.3%
	Overall percentage				74.2%

Note: The cut-off value is 0.500.

The significance level of each independent variable is presented in Table 16. This shows that the dependent variable (the public perception of the Starlink Satellite project in Thailand) could be described by gender, age, computer, laptop, tablet, wearable device, Internet duration, mobile Internet, Instagram, TikTok and YouTube. Conversely, education was not significant. The public perception of the Starlink Satellite project was significant when there was a change in gender to male. This reduced the possibility of public perception of the Starlink Satellite project from 1 to 0.636 (1 - 0.636 = 0.364). When there was an increase of one unit in age, the public perception of the Starlink Satellite project increased by 1.136. Furthermore, when there was an increase of one unit in a computer, the public perception of the Starlink Satellite project increased by 2.493. When there was an increase of one unit in a laptop, the public perception of the Starlink Satellite project increased by 1.630. Moreover, when there was an increase of one unit in a tablet, the public perception of the Starlink Satellite project decreased from 1 to 0.607 (1 - 0.607 = 0.393). When there was an increase of one unit in a wearable device, the public perception of the Starlink Satellite project increased by 2.705. When there was an increase of one unit in Internet duration, the public perception of the Starlink Satellite project decreased from 1 to 0.645 (1 - 0.645 = 0.355). When there was an increase of one unit in mobile Internet, the public perception of the Starlink Satellite project decreased from 1 to 0.697 (1 - 0.697 = 0.303). In addition, when using Instagram, the public perception of the Starlink Satellite project increased by 11.538. When using TikTok, the public perception of the Starlink Satellite project decreased from 1 to 0.470 (1 - 0.470 = 0.530). When using YouTube, the public perception of the Starlink Satellite project decreased from 1 to 0.082 (1 - 0.082 = 0.918).

Table 16. Variables in the model using all of the significant variables

	Variables	B	Standard error	Wald-test	df	Sig.	Exp(B)
Step 1[a]	Gender	-0.452	0.150	9.083	1	0.003	0.636
	Age	0.128	0.056	5.256	1	0.022	1.136
	Education	0.193	0.147	1.732	1	0.188	1.213
	Computer	0.914	0.147	38.503	1	0.000	2.493
	Laptop	0.488	0.195	6.251	1	0.012	1.630
	Tablet	-0.500	0.193	6.717	1	0.010	0.607
	Wearable device	0.995	0.168	35.199	1	0.000	2.705
	Internet duration	-0.438	0.109	16.013	1	0.000	0.645
	Mobile Internet	-0.360	0.081	20.030	1	0.000	0.697
	Instagram	2.446	0.379	41.534	1	0.000	11.538
	TikTok	-0.755	0.213	12.602	1	0.000	0.470
	YouTube	-2.504	0.380	43.379	1	0.000	0.082
	Constant	1.126	0.622	3.277	1	0.070	3.083

Note: a. Variables entered in Step 1: gender, age, education, computer, laptop, tablet, wearable device, duration, mobile Internet, Instagram, TikTok, YouTube.

The predictive regression equation of Model 4 using the coefficients from Table 16 can be described by the following equation:

Model 4

$$P = \frac{1}{1 + e^{-z}} \quad (4)$$

where,

- P is the public perception of the Starlink Satellite project in Thailand,
- Z = 1.126 - 0.452(*Gender*) + 0.128(*Age*) + + 0.914(*Computer*) + 0.488(*Laptop*) - 0.500(*Tablet*) + + 0.995(*Wearable device*) - 0.438(*Duration*) - - 0.360 (*Mobile Internet*) + 2.446(*Instagram*) - - 0.755(*TikTok*) - 2.504(*YouTube*).

5. DISCUSSION

This study investigated the public perception of the Starlink Satellite project in Thailand. The findings revealed that the public perception of the Starlink Satellite project in Thailand could be described by gender, age, computer, laptop, tablet, wearable device, Internet duration, mobile Internet, Instagram, TikTok and YouTube. The results supported the previous research by Benthaus et al. (2016), which concluded that social media management strategies are modelled to influence public perception. Luo et al. (2021) also confirmed that social media is suitable to explore public perception toward the COVID-19 vaccine. Moreover, Fuentes and Peterson (2021) discovered a handful of individual accounts that dominate as central

structuring agents in networks of tens of thousands of tweets and retweets, and millions of views, related to specific COVID-19 keywords. In terms of public exposure to (and thus interaction with) critical elements of public health information in the pandemic, these few individual accounts and the content of their tweets, mentions, and retweets are significantly overrepresented. Furthermore, Walker and Elliott (2021) concluded that societal factors have influenced the emerging Starlink constellation. Under the Social Construction of Technology framework, the conflict between the relevant social groups who are involved with Starlink and their ongoing discourse allows for direct observation of the closure process. This analysis of Starlink combined with the technical project provides important insights into the challenges that spacefaring vessels will face in the twenty-first century and beyond. The Spacecraft Design Capstone team hopes to complete a detailed framework for a CubeSat constellation that can meet the needs of as many stakeholders as possible, while taking into account the potential impact of this constellation on the night sky.

6. CONCLUSION

The Internet can now be accessed from anywhere in the world, at any time, thanks to satellite-based Internet technology. Satellite Internet works by sending a fibre Internet signal from the system server to an orbiting satellite. A satellite dish is then used to receive the Internet signal. The dish is connected to a modem, which connects all devices to the Internet. ViaSat and HughesNet, two reputable satellite Internet providers, currently serve the majority of people. Starlink, on the other hand, has entered the market, offering high-speed satellite Internet services, and it plans to launch its services globally in the near future. There are still limitations that may have an impact on the public perception of the Starlink Satellite project. Therefore, Starlink should devise an effective strategy to entice users to increase their awareness and use satellite Internet in countries where fibre Internet is more affordable and convenient. This study has focused on the factors that have influenced public perception of the Starlink Satellite project in Thailand. Hence, we recommend that the sampling should be expanded to other countries. It is also recommended that future research should investigate other factors, such as the unified theory of acceptance and use of technology (UTAUT), which may lead to a better understanding. Furthermore, this study is based on a self-administered questionnaire. Consequently, qualitative studies, such as interviews or focus group discussions, could provide insight for future research.

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