

Were Fleet Planning Problems Responsible for the Collapse of Thai Air Carriers? A Preliminary Case Study of One-Two-Go Airlines

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The unprecedented growth of the Thai air transport sector that commenced in the early 2000s attracted at least 30 new air carriers into the country's airline market. However, a substantial number of them went bankrupt even before the COVID-19 pandemic disrupted the world aviation industry. This study hypothesised that flawed fleet planning was behind the collapse of many carriers in Thailand. One-Two-Go Airlines, the "low-fare" carrier owned by Orient Thai Airlines, was used as a case study. The hypothesis was initially tested by evaluating whether the One-Two-Go fleet of aircraft was in line with the low-cost airline business model and aircraft selection principles commonly adopted by many low-cost carriers worldwide. The preliminary findings indicated that the way the airline planned, acquired, and managed its aircraft did not appear to be the key factor behind its collapse. Rather, a negative brand image derived from safety concerns after the crash of Flight 269 was a key factor causing the airline to cease operations.

Keywords: aircraft selection, fleet planning, low-cost carriers, One-Two-Go Airlines, Orient Thai Airlines, public transport

In Asia, air travel has grown at a rapid pace, with dozens of new airlines having been launched in the past two decades. Thailand, in particular, has seen a significant number of new players enter the market since 2003, following the liberalisation of its aviation industry (Kovudhikulrungsri & Pomongsuk, 2020), instigated and accelerated by open-skies agreements under the umbrella of the Association of Southeast Asian Nations (ASEAN) to reduce market access barriers for ASEAN carriers (see Rahman, 2018). In the past two decades or so, Thai air traffic has increased exponentially in terms of aircraft movements, passenger volume, and airfreight. Despite the foregoing development, no less than 30 Thai-registered airline carriers that launched after 2000 collapsed between the years 2000 and 2019 (Darke, 2022; Darke & Vannukul, 2015), even before the COVID-19 pandemic disrupted the country's air transport sector in early 2020.

Given the significant number of failed airlines witnessed within the two decades of the international tourism boom and regardless of the liberalisation of national and regional aviation policies (Lee, 2019), it is worthwhile examining the reasons for these failures. However, comprehensive and comparative analysis of these airlines is difficult because the information needed for such analysis, including balance sheets and registration data, is barely accessible.

Fleet planning—from aircraft selection to aircraft acquisition—has been deemed a decisive factor in the success and failure of airline carriers. Poor fleet planning decisions could

push airline firms into the red and, in the worst-case scenario, compel firms to cease trading. By taking this into account, imprudent fleet planning might explain why a large number of Thai carriers ceased operations even before the COVID-19 pandemic. The aim of this study is to determine whether fundamental flaws in fleet planning played a crucial role in the substantial number of Thai carriers suffering severe financial hardship and eventual bankruptcy. One-Two-Go Airlines (hereafter, “One-Two-Go”), a Thai budget carrier active from 2003 to 2010, is taken as a case study in this regard. Specifically, the present study evaluates One-Two-Go’s air fleet by comparing it with other low-cost business models and aircraft selection principles. The objective here is modest: to determine whether One-Two-Go’s fleet choice was tailor-made for its business in Thailand’s air transport market.

Literature Review

Fleet planning is the process by which an airline acquires and manages appropriate aircraft capacity to serve anticipated markets over a variety of defined periods with a view to maximising corporate profitability. Moreover, it is a continuous plan for at least 15 years into the future (Guzhva et al., 2019). This is unlike route planning, which deals with how and when aeroplanes will fly specific routes. Fleet planning principally focuses on how many aircraft are needed and what types they should be. For this reason, an airline’s fleet usually reflects its structure and business model (Clark, 2017; Koch, 2010). Before proceeding further, it should be noted that the present study focuses narrowly on the low-cost carrier business model. Accordingly, this model is outlined in the following narrative. It is then followed by a summary of aircraft selection principles.

Low-Cost Carrier Business Model

After reviewing the existing literature, the low-cost carrier business model can be explained on the basis of four principles: (a) cost leadership, (b) differentiation, (c) low-cost infrastructure, and (d) control of distribution channels (Alamdari & Fagan, 2005; Budd & Ison, 2014; Cook & Billig, 2017; Gross & Lück, 2013; Koch, 2010; Voigt et al., 2017). The first two principles—cost leadership and differentiation—are more relevant to the present study than the last two.

The first principle—cost leadership—refers to an airline’s efforts to offer lower prices than its competitors by reducing its costs in various ways. They operate more efficiently than traditional airline operators by lowering staff costs (achieved through outsourcing many functions) (Endrizalova et al., 2018). Low-cost airlines tend to operate only one type of aircraft and, more often than not, lease rather than purchase them (Alamdari & Fagan, 2005). For instance, Southwest Airlines operates the Boeing B737 series exclusively (Zou & Dresner, 2015). Typically, aircraft used by low-cost carriers have a single-class, high-density configuration (Brüggen & Klose, 2010). Furthermore, they usually eliminate in-flight amenities and complimentary meals. Passengers have to pay extra charges for things such as overweight carry-on baggage and checked luggage (Koch, 2010).

By contrast, the second principle—differentiation—refers to how an airline tries to differentiate itself from other airlines by offering services that are unique among other airlines (Daft & Albers, 2015). Some low-cost carriers may offer free Wi-Fi access on board their flights, but other airlines charge for it.

The third principle is low-cost infrastructure. This refers to how an airline keeps its operational costs down by operating at secondary airports with lower landing fees and taxes (De

Neufville, 2008), using fewer employees and providing minimal customer service at the airport (Humphreys et al., 2006). Many low-cost carriers do not have their own terminals and instead use smaller airports with limited facilities (Koch, 2010).

The fourth principle is control of distribution channels. Low-cost carriers use a direct sales model, meaning they tend not to rely on travel agents. Instead, they sell directly to customers via the Internet or by telephone (Koch, 2010). This is best exemplified by Southwest Airlines, a US low-cost carrier that does not have reservation centres; instead, it uses a call centre for booking tickets and customer service calls (Smith, 2004; Voigt et al., 2017). This strategy means that low-cost carriers can avoid paying commissions to travel agents for each ticket sold. In addition, because these companies do not pay commissions, they can offer lower prices than their competitors who use travel agents (Cook & Billig, 2017; Koch, 2010).

By selling cheaper airfares, low-cost carriers have successfully gained market shares in their respective air travel markets. Yet, a substantial portion of passengers is concerned about the safety of low-cost airlines. In Southeast Asia, where air transport markets expanded rapidly, the shared perception was that aircraft operated by low-cost carriers tended to be outdated and second-hand (Yeung et al., 2012). Such negative perceptions and safety concerns appeared to be bold due to a series of air crash accidents that happened in the 2000s and 2010s. Those incidents included the crash of One-Two-Go Airlines Flight 269 at Phuket's airport in September 2007 (Lee, 2009).

Principles of Aircraft Selection

In this study, aircraft selection is approached from an airline's perspective, which differs from the standard criteria generally used by aircraft lessors. More precisely, the present study relies preponderantly, albeit not exclusively, on Guzhva et al., (2019) principles of aircraft selection. According to Guzhva et al., (2019), the following determinants are crucial aspects of the aircraft selection process: (a) mission capability, (b) fleet composition, (c) availability, and (d) economic and financial considerations.

Mission Capability

Planned routes are a key part of airline operations. Airline carriers must ensure that their planes can carry the necessary amount of weight and reach the required destination in time with enough fuel. Pre-setting the minimum payload, range, and speed requirements for flight paths precisely dictates what kind of aircraft an airline should be looking for. To give an example, airline firms must evaluate whether jet or turboprop aircraft would be well-matched with services to intended destinations, whereas airport capacity is usually varied.

Fleet Composition

One of the most important decisions an airline carrier has to make is how to structure its fleet. It can choose from two options: either a standardised or diversified fleet. The fleet of an airline tends to reflect its strategy and business model.

A standardised fleet comprises aircraft that are all of the same type. This can be beneficial for low-cost carriers, as fleet commonality is likely to increase overall performance (Brüggen & Klose, 2010; Zou & Dresner, 2015). The advantages of fleet commonality include, inter alia, saving turnaround times at the gate, boosting flight frequencies, and maximising the utilisation of aircraft (Huettinger & Adomavičius, 2011). AirAsia, for example, used to fly only Boeing B737-300s (see Ricart & Wang, 2005). However, this means that any problem rooted in the model design or technical issue with maintenance or repairs would result in the entire fleet

being substantially affected or even grounded. Such a scenario is best exemplified by the grounding of the Boeing B737 MAX family, ordered by civil aviation authorities around the world.

A diversified fleet provides airlines with greater flexibility in managing their operations, as it enables them to use different types of aircraft depending on routes and flight frequency. Airlines might have a mix of Airbus A330 and Boeing B737 families depending on which routes they operate; this would enable them to fly direct flights between certain destinations while still maintaining frequent flights elsewhere by using smaller planes. A diversified fleet is usually adopted by full-service carriers, especially flag airlines (Koch, 2010). Regardless, the general trend is that the larger the carrier, the higher the probability that it will have a diversified fleet (Guzhva et al., 2019).

Availability

Although airlines may know which type of aircraft they want to purchase and have the financial capacity to do so, they might not be able to obtain their preference because a new aircraft takes around five years or more to deliver (Clark, 2017). As such, new aircraft must be ordered in advance of forecasted delivery schedules. Airlines may turn to other choices, such as purchasing used aircraft or leasing from lessors.

Given these factors, airline carriers are often faced with a dilemma: they must either wait five years for a new aircraft or purchase an older model that is immediately available but has less desirable characteristics (such as a lower seating capacity). The airline industry is particularly susceptible to this dilemma because the amount of time it takes for an airline firm to bring an aircraft into service is often critical for the success of the business. For example, if there is a sudden increase in demand for flights between two destinations during one month, then airlines must be able to respond quickly by increasing their capacity on those routes by adding extra flights—or even buying more planes—to reap the profit from such a spike in demand.

In the used aircraft market, smaller and less well-funded airlines are more exposed to this availability problem. This is more evident when they try to find multiple aircraft with similar configurations (Guzhva et al., 2019). Reconfiguration is extremely costly; therefore, only legacy carriers can afford to reconfigure older aircraft, while smaller airlines cannot (Clark, 2017; Niță & Scholz, 2011). Additionally, spare parts for unpopular, ageing aircraft types are hard to acquire because fewer companies order them (Kilpi et al., 2009). This makes it more difficult for smaller carriers with older fleets of unpopular, used aircraft to maintain their revenue generators at optimum operationalizability economically.

Economic and Financial Considerations

When purchasing aircraft, large, full-service airlines have more leverage over aircraft manufacturers than smaller air operators. As a result, relatively small carriers tend to pay more for brand-new planes than their larger counterparts (Guzhva et al., 2019). More often than not, smaller airline firms with limited resources have to consider other ways of acquiring aircraft, such as purchasing used planes or leasing a fleet from lessors.

New aircraft models are released at relatively high prices, thereby flooding the second-hand market with more affordable but ageing planes. Smaller, undercapitalised airlines avail themselves of this to purchase those second-hand aircraft. Notwithstanding, there is a trade-off:

older aircraft types have higher operating costs than newer ones due to disparities in maintenance costs and fuel consumption efficiency (Dixon, 2006; MacLean et al., 2018).

Second-hand aircraft can be leased to smaller air operators who may not have sufficient capital to purchase them outright. Low-cost carriers operating homogeneous aircraft fleets are more likely to lease their entire fleets (Brüggen & Klose, 2010; Magdalena & Bouzaima, 2021). The cost of leasing is determined by supply and demand. Aircraft with high demand tend to have higher leasing rates, while aircraft with low demand—particularly older models—tend to have lower leasing rates (Guzhva et al., 2019).

With environmental standards becoming stricter in recent decades, airlines operating ageing aircraft have to deal with a variety of measures that are intended to reduce carbon dioxide emissions and noise pollution (Malathi, 2012). These measures include surcharges according to the amount of pollution emitted by the planes during takeoff and landing. In Asia, many of these measures have been implemented at international airports for about two decades. This is another trade-off that airlines must consider while purchasing or leasing older aircraft (Lu, 2009).

Hypothesis

Fleet planning—more precisely, the selection and acquisition of aircraft—is a crucial step in airline management and operations (Clark, 2017; Guzhva et al., 2019), especially considering aircraft are almost the sole revenue generator for airline firms. Imprudent decisions regarding aircraft selection and acquisition could have detrimental repercussions on an airline's economic viability. Accordingly, this study proposes the following hypothesis:

H1: Fleet planning problems, particularly flawed aircraft selection (such as aircraft mismatched with the business model), were most likely the major factor causing One-Two-Go Airlines to cease operation.

Method

This study employed the case study method, which is widely used in business and management research (Patton & Appelbaum, 2003). Specifically, the author followed the five-step procedure recommended by Patton and Appelbaum (2003) for case study research: (a) identifying a suitable research area; (b) selecting a case relevant to the research area; (c) developing an initial analytical framework through a review of existing literature; (d) collecting and filtering data; and (e) analysing data, discussing results, and drawing conclusions.

This study relied mainly on secondary sources. These included, *inter alia*, news media outlets, scholarly work, and aviation-related publications. The first comprehensive seminal book on civil aviation in Thailand, written by Darke and Vannukul (2015), was consulted as the key reference.

Results and Discussion

Facts of the Case

The facts concerning One-Two-Go Airlines (IATA: OG; ICAO: OTG) are bewildering and unclear. On the one hand, this is due to the inaccessibility of the government's aircraft registration records; on the other hand, there is a lack of transparency in the way the airline is managed. In light of these issues, the relevant facts of the case outlined in the following narrative relied almost exclusively on Darke and Vannukul's (2015) seminal monograph.

One-Two-Go was a subsidiary budget carrier of Orient Thai Airlines (hereinafter Orient Thai; IATA: OX; ICAO: OEA) that entered the Thai low-cost airline market in late 2003, although not as a separate airline. Rather, during its initial years, One-Two-Go operated under Orient Thai's Air Operator Certification (AOC)—in other words, One-Two-Go was simply a "brand," not an actual "air operator." In December 2003, operating as a low-fare wing of the Orient Thai, One-Two-Go made its inaugural flight from Bangkok to Chiang Mai, the major province in northern Thailand, with a Boeing B757-200. One-Two-Go then expanded its services from the capital city to Chiang Rai, Phuket, Hat Yai, and Udon Thani. In August 2005, it added the Bangkok–Surat Thani route to the service. During these initial years, One-Two-Go mainly used three B757s for its services. Besides the three B757s, it occasionally made use of the parent airline's Boeing B747-100, 200 and 300s for domestic routes (Darke & Vannukul, 2015).

It was not until 2006 that One-Two-Go became a separate carrier with its own AOC and started using the "OG" code for all flights (Darke & Vannukul, 2015). While the firm was entirely owned by its parent, Orient Thai Airlines (Saha & Theingi, 2009), the airline also built a fleet of its own: four McDonnell Douglas MD-82s, formerly owned by Continental Airlines in the United States, were exported to Thailand to form its new fleet. Nevertheless, they were registered in the name of the parent company, Orient Thai Airlines, which wet-leased them out to its subsidiary, One-Two-Go. Together with the four MD-82s, one B757-200 had been leased for operation by One-Two-Go until early 2007 (Darke, 2022). In October of the same year, the low-fare carrier added Krabi as another route from Bangkok (Darke & Vannukul, 2015).

Even though One-Two-Go's main competitors were low-cost carriers (i.e., Nok Air and Thai AirAsia) and its business was running in the low-cost air transport market, the airline's owner repeatedly claimed that One-Two-Go was *not* a low-cost carrier but a "low-fare" airline (Manager Weekly, 2008). In-flight meals, snacks, and beverages were being served on all One-Two-Go flights. Furthermore, unlike its competitors, One-Two-Go's business strategy was to sell all seats for each route at a flat rate (see Saha & Theingi, 2009; Thanasupsin et al., 2010). This, in turn, differentiated the airline from its low-cost peers and attracted a number of passengers (Davies, 2009).

From March to July 2007, One-Two-Go added more aircraft to its MD-80 series fleet, namely: (a) two MD-82s, (b) one McDonnell Douglas MD-83, and (c) one McDonnell Douglas MD-87 (Darke, 2022). Unfortunately, in September of that year, one of its MD-82s (Flight 269) crashed upon landing in a heavy storm at Phuket International Airport. Of the 123 passengers and seven crew members onboard, 90 were killed (Watson, 2007). In December, another MD-87 was acquired for operation by One-Two-Go (Darke & Vannukul, 2015). All the MD-80s, including the one that crashed, had been wet-leased from One-Two-Go's parent company.

The crash of Flight 269 severely damaged the One-Two-Go brand (Darke & Vannukul, 2015) and aggravated the bad reputation of its parent company, Orient Thai Airlines, which already had a poor safety record (Fuller, 2007). The final report of the Aircraft Accident Investigation Committee (AAIC), released in 2009, indicated that Orient Thai, which operated on behalf of its subsidiary low-fare carriers, violated the flight time limitation rules by assigning the pilots of Flight 269 heavy workloads exceeding their flight time and flight duty limits (Aircraft Accident Investigation Committee [AAIC], 2009). The report also pointed out that the training and proficiency checks conducted by Orient Thai did not comply with standard regulations (AAIC, 2009).

In the aftermath of the accident, Thailand's Department of Civil Aviation temporarily suspended One-Two-Go's and Orient Thai's AOCs on July 22, 2008. Nevertheless, these were restored in December. One-Two-Go resumed services using a fleet of five MD-82s (Darke & Vannukul, 2015). Still, the low-fare carrier continued to face repercussions for the Flight 269 accident. In 2009, the European Commission included One-Two-Go Airlines in its airline safety blacklist, thereby banning all One-Two-Go flights from entering European skies (Scott, 2009). In September 2010, One-Two-Go Airlines shut down as both a brand and an air operator. Its AOC was later revoked. All services were transferred to Orient Thai Airlines.

Analysing One-Two-Go Airlines' Fleet Planning

The preceding section demonstrates that analysis of One-Two-Go's fleet planning should be temporally divided into two periods: (a) between 2003 and 2006, when One-Two-Go operated as a brand; and (b) between 2006 and 2010, when One-Two-Go operated as an air operator. The focus of this study is more on the latter, as One-Two-Go Airlines did not officially exist during the former period. Clark describes how fleet planning is "...the process by which an airline acquires and manages appropriate aircraft capacity in order to serve anticipated markets over a variety of defined periods of time with a view to maximising corporate wealth" (2017, p. 2). The following presents an analysis of One-Two-Go's fleet for both periods.

One-Two-Go Airlines as a Brand (2003–2006)

During the period 2003–2006, One-Two-Go virtually operated as a subsidiary brand of Orient Thai Airlines, a Thai-registered air operator whose business model might be best classified as a hybrid carrier. By offering charter flights and wet-leasing services (Darke & Vannukul, 2015), it operated as a wing of the Orient Thai company to compete in Thailand's increasing low-cost air travel market.

Table 1 illustrates aircraft types reported as operated by Orient Thai's One-Two-Go brand and their specifications. Its main vehicles were wet-leased B757-200s with a single-class layout and more than 210 seats. The direct operating cost (DOC) value of the B757-200 was 2,509, which was higher than that of the B737-300s and B737-400s, with DOC values of 1,827 and 1,862, respectively (Rediess, n.d.). However, One-Two-Go's B757-200s could carry more passengers than the B737s operated by Nok Air and Thai AirAsia, where the maximum number of seats was 148. Therefore, Orient Thai's operation with the One-Two-Go brand using wet-leased B757s was deemed reasonable.

Regardless, the use of big jets like the B747s could not accommodate the highly competitive low-cost air travel business environment. Even with a full number of passengers, operating domestic routes with B747s was not economically viable. Therefore, Orient Thai's decision to do so from time to time did not seem to be rational in terms of cost-benefit.

Table 1
One-Two-Go's fleet, 2003–2006

	Aircraft type	
	B757-200	B747-100/200/300
Number of aircraft	3 ^a	5 ^b
Aircraft family	B757 Series	B747 Series
Year of manufacturer	HS-OTA: 1989 XU-123: 1989 HS-OTB: 1984 XU-234: 1986	HS-UTJ: 1979 HS-UTK: 1984 HS-UTL: 1985 HS-UTM: 1986 HS-UTQ: 1986
Total seats	HS-OTA: 216 XU-123: 216 HS-OTB: N/A XU-234: 219	N/A
Range (km)	5,000	N/A
DOC value	2,509	

Note. Compiled from the Civil Aviation Authority of Thailand ([CAAT], 2019), Darke (2022), Darke & Vannukul (2015), Rediess (n.d.), and the United States International Trade Commission ([USITC], 1998): a = HS-OTB acquired in mid-2004, while XU-123 was replaced by XU-234; b = Orient Thai's B747 aircraft painted with One-Two-Go titles.

One-Two-Go Airlines as an Air Operator (2006–2010)

In late 2006, One-Two-Go Airlines officially became a separate airline firm owned by Orient Thai Airlines. The low-fare carrier operated a single-family fleet almost exclusively using MD-80 series aircraft, wet-leased from the parent company (AAIC, 2009), thereby enabling the firm to enhance its operating performance. As the fleet was wet-leased, One-Two-Go's entire flight operation was outsourced to and handled by Orient Thai. Considering that only one B757-200 was returned to the lessor in early 2007, One-Two-Go's fleet planning fit the low-cost airline business model, wherein fleet standardisation is one of the key features.

In terms of direct operating costs, the DOC value of One-Two-Go's MD-80 series aircraft was nearly the same as those of the aircraft types mainly used by other low-cost carriers in Thailand (see Table 3). As for fleet capability, the MD-80 series aircrafts were overall suitable for One-Two-Go's services, which were mostly short domestic flights. The aircraft even had built-in ventral air stairs (Woodley, 2018). This enabled their operator to depend less on ground-handling facilities, especially at smaller airports.

In spite of that, the MD-80s operated by One-Two-Go Airlines were relatively older. In turn, the ageing fleet tended to require more maintenance than its competitors. This tendency seemed to be supported by the fact that, in the years 2008 and 2009 alone, Orient Thai Airlines (the wet lessor of One-Two-Go's aircraft) had to buy no less than six used MD-80s from Japan for spare parts (Darke & Vannukul, 2015). This created a heavier financial burden for both firms, as they were charged more for airport slot fees. Albeit operating older aircraft, fleet planning alone was incapable of closing down One-Two-Go Airlines. The failure lies with something else rather than the company's fleet.

Table 2
One-Two-Go's fleet, 2006–2010

	Aircraft type			
	B757-200	MD-82	MD-83	MD-87
Number of aircraft	1	6 ^a	1	2
Aircraft family	B757 Series	MD-80 Series	MD-80 Series	MD-80 Series
Year of manufacturer	HS-BTA: 1986	HS-OMA: 1986 HS-OMB: 1986 HS-OMC: 1986 HS-OMD: 1986 HS-OMG: 1983 HS-OME: 1983	HS-OMH: 1990	HS-OMI: 1988 HS-OMJ: 1989
Total seats	219	HS-OMA: 141 HS-OMB: 141 HS-OMC: 141 HS-OMD: 141 HS-OMG: N/A HS-OME: N/A	HS-OMH: 157	HS-OMI: 134 HS-OMJ: 134
Range (km)	5,000	3,796	4,633	4,392
DOC value	2,509	1,782 ^b	1,782 ^b	1,782 ^b

Note. Compiled from CAAT (2019), Darke (2022), Darke & Vannukul (2015), Rediess (n.d.), and USITC (1998); a = HS-OMG destroyed in the accident at Phuket; b = no DOC values for certain versions of the MD-80 aircraft available (Rediess, n.d.).

Table 3
DOC values of aircraft operated by Thai budget carriers, 2006–2010

	One-Two-GO Airlines	Nok Air	Thai AirAsia	
Aircraft type	MD-80 Series	B737-400	B737-300	A320-200
DOC value	1,782 ^a	1,862	1,827	1,788

Note. Compiled from CAAT (2019), Darke & Vannukul (2015), and Rediess (n.d.); a = no DOC values for certain versions of the MD-80 aircraft available (Rediess, n.d.).

Conclusion

This study began with the hypothesis that flawed fleet planning was a crucial factor causing many airline carriers to go out of business. To initially test this hypothesis, One-Two-Go Airlines was used as a preliminary case study. It was found that even though the firm's fleet planning was not flawless, it did follow key features of the low-cost business model—most notably, operating a single-family fleet of aircraft. Thus, in the One-Two-Go case, aircraft selection and acquisition were not decisive factors that caused the low-fare carrier to collapse. In a nutshell, the case investigated here did not support the hypothesis.

The bad reputation and safety concerns among local and foreign passengers after the accident of One-Two-Go Flight 269 might play an important role in the firm's decision to close down the One-Two-Go brand. In addition, macro-environmental factors surrounding the firm should probably be taken into consideration. Regardless, those are beyond the narrow scope of this study. Consequently, the results reported here should be deemed tentative. Further analysis of the topic is needed to draw generalised conclusions. Or perhaps, a case-by-case analysis would yield a better understanding than seeking generalisations about market entry and exit among Thai carriers.

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