UKR Journal of Economics, Business and Management (UKRJEBM)
Homepage: https://ukrpublisher.com/ukrjebm/
Email: submit.ukrpublisher@gmail.com
Volume 2, Issue 6, 2026
ISSN: 3049-429X (Online)

Guru's 19 Forces

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DOI: *https://doi.org/10.5281/zenodo.22048015*

Article History

Original Research Article

Received: 05-05-2026

Accepted: 10-06-2026

Published: 30-06-2026

Citation: Guru Dev Teeluckdharry. (2026). Guru's 19 Forces. UKR Journal of Economics, Business and Management (UKRJEBM), 2(6), 185-234.

Abstract

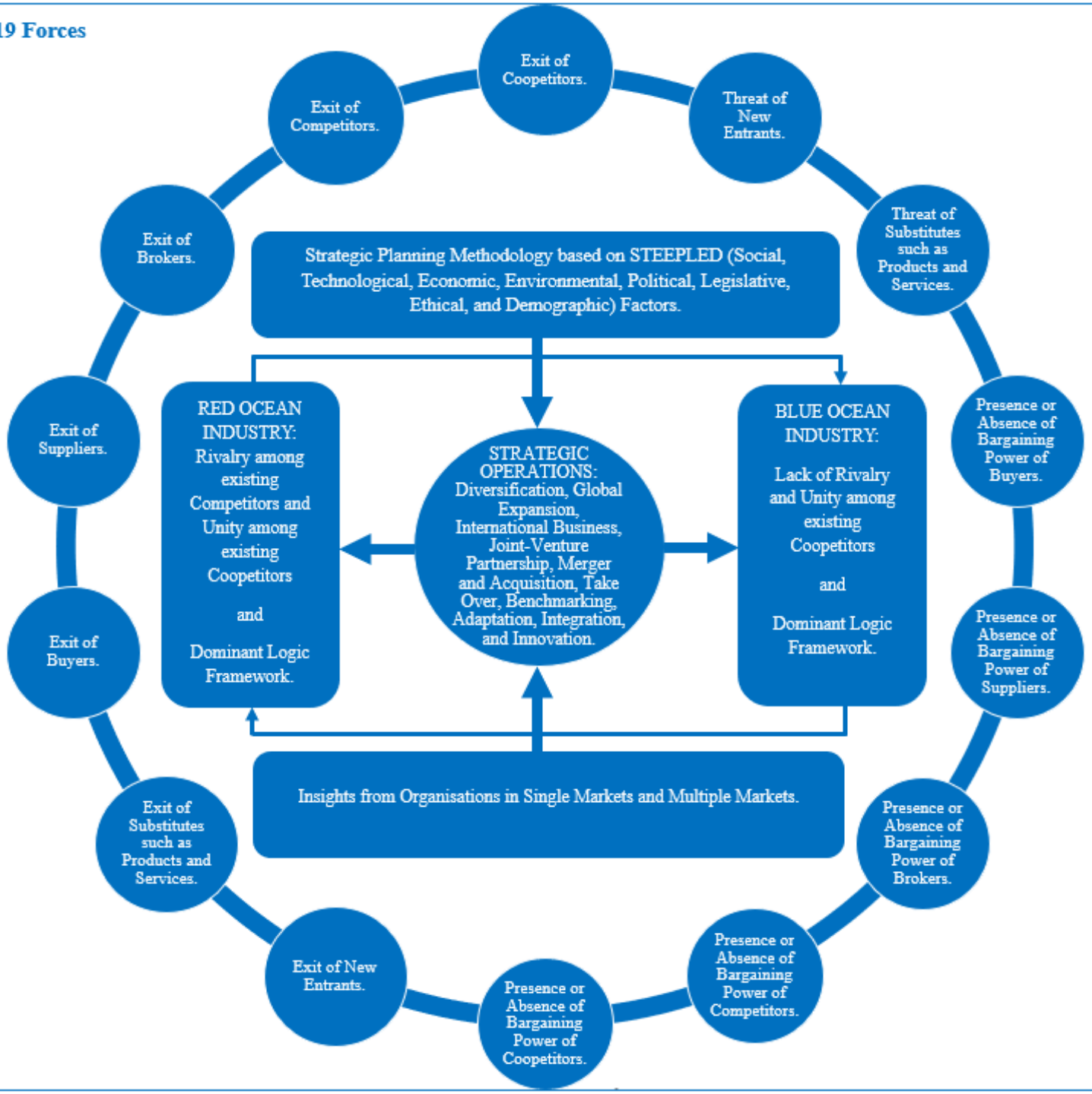
The purpose of this paper is to propose an extension of Porter's 5 Forces, which are used by Strategic Managers to identify and analyze the significant forces that shape the nature of competition between different competitors and the intensity of an industry. Porter's 5 Forces (see Figure A on page 2) are: (1) the threat of new entrants, (2) the threat of substitutes such as products and services, (3) the bargaining power of buyers, (4) the bargaining power of suppliers, and (5) the rivalry among competitors. This model, developed by Professor Michael E. Porter at Harvard Business School in 1979, has unfortunately come under severe scrutiny by PhD researchers, Associate Professors, Professors, Strategic Managers, Analysts, Entrepreneurs, and Policymakers over the past 40 years. To contribute to this vivid debate, this paper investigates the relevance of an extension of Porter's 5 Forces that we will address as 'Guru's 19 Forces' and we will show its significance and relevance in the field of strategic management, business administration, and entrepreneurship by critically analyzing the aviation industry as a comprehensive example for this paper. Capitalizing upon Porter's 5 Forces and viewed through managerial and entrepreneurial lenses, this paper proposes an extended framework augmented by 14 additional forces. These additional forces are depicted in Figure B. These forces were added to exploit the concept of Dominant Logic propounded by C.K Prahalad and Bettis which has been recently revamped by Teeluckdharry (2025) as The Dominant Logic Framework and implement the Red Ocean and Blue Ocean strategies that were developed by Professors W. Chan Kim and Renée Mauborgne at INSEAD (full name: Institut Européen d'Administration des Affaires, which is the French name for "European Institute of Business Administration") who popularized the 2 seminal concepts in their invaluable 2005 book titled 'Blue Ocean Strategy' published by Harvard Business Review. The extension of Porter's 5 Forces, hereby known as 'Guru's 19 Forces' is absolutely significant and relevant for all categories of businesses (Small Enterprises (SEs), Medium Enterprises (MEs), and Large Enterprises (LEs)) which operate in the Red Ocean Industry and Blue Ocean Industry. This paper makes an invaluable contribution to this body of industrial, professional, and academic knowledge by extending a popular model that has unfortunately become obsolete due to its limitations; therefore, applying the extended model to this vital and complex industry is a sine qua non. 'Guru's 19 Forces' will comprehensively allow businesses to monitor their business environments, enhance their business operations, justify their decision-making processes, evaluate their rivalry among existing competitors, strengthen their unity among existing coopetitors, develop their efficient productivity and effective productivity, acquire their comparative advantage and competitive advantage, accomplish their first-mover performance and fast-mover performance, enhance their product perception and service perception, pursue their customer acquisition and customer retention, provide their employee value proposition and customer value proposition, promote their sustainable growth and scalable growth, maintain their long-term profitability and long-term liquidity, and help them better understand where their power lies in their respective industry. Porter's 5 Forces was meant to critique perfectly competitive businesses, but not competitors in real-world industry which aren't only rivals which compete against each other, but also 'coopetitors' which complement each other through cooperation in joint-venture partnerships so that they may to the fullest extent balance their strength, bridge their gap, encourage their growth, and sustain their existence; a scenario that been envisaged by 'Guru's 19 Forces'.

Keywords: *Porter's 5 Forces, Guru's 19 Forces, Dominant Logic, Dominant Logic Framework, STEEPLED (Social, Technological, Economic, Environmental, Political, Legislative, Ethical, and Demographic) Factors, Rivalry among Competitors and Unity among Coopetitors in Red Ocean Industry, Lack of Rivalry and Unity among Coopetitors in Blue Ocean Industry.*

Figure A: Porter's 5 Forces[1]

[1] https://www.business-to-you.com/porters-five-forces/

Figure B: Guru's 19 Forces



A critique of the model: value and limitations
(Grundy, 2006)

"Porter's 5 Forces are depicted in Figure A. Porter's starting point was that he wanted to account for long-term variances in the economic returns of one industry versus another. His genius resided in distilling the complex micro-economic literature into five explanatory or causal variables to explain superior and inferior performance, through:

(1) the threat of new entrants

(2) the threat of substitutes such as products and services

(3) the bargaining power of buyers

(4) the bargaining power of suppliers

(5) the rivalry among competitors

The value of Porter's 5 Forces model was thus that it appeared to offer the following attributes:

- It simplified micro-economic theory into just five major influences.
- It effectively and before its time applied 'systems thinking'.
- It showed how 'competitive rivalry' — the central box of the model — is very much a function of the other four forces.
- It helped to predict the long-run rate of returns in a particular industry.
- It went beyond a more simplistic focus on relative market growth rates in determining industry attractiveness.
- It helped combine input–output analysis of a specific industry with industry boundaries via entry barriers and substitutes.
- It emphasized the importance of searching for imperfect markets, which offer more national opportunities for superior returns.
- It emphasized the importance of negotiating power and bargaining arrangements in determining relative market attractiveness.
- It focused managers on the external environment for more than traditional 'SWOT' analysis.

There are, however, several limitations to Porter's 5 Forces model, such as:

- It tends to over-stress macro analysis, i.e. at the industry level, as opposed to the analysis of more specific product-market segments at a micro level.
- It oversimplifies industry value chains: for example, invariably 'buyers' may need to be both segmented and also differentiated between channels, intermediate buyers and end consumers.
- It fails to link directly to possible management action: for example, where companies have apparently low influence over any of the 5 Forces, how can they set about dealing with them?
- It tends to encourage the mind-set of an 'industry' as a specific entity with ongoing boundaries. This is perhaps less appropriate now where industry boundaries appear to be far more fluid.
- It appears to be self-contained, thus not being specifically related, for example, to 'PEST' factors, or the dynamics of growth in a particular market.
- It is couched in economic terminology, which may be perceived to be too much jargon from a practising manager's perspective and indeed, it could be argued that it is over-branded.
- Another striking weakness in the model is that is a static one. It provides a snapshot of the wider industry at some point in the past (Beattie, 2018) and may be useful for developing short-term strategy, but in the modern-day, that is writhe with dynamism and constant changes, the model does not provide any additional advantage.
- (Merchant, 2012), citing another criticism, calls the modern-day companies 'gazelles' that far outcompete the '800-pound gorillas' who follow the Porter's' five forces model of competitive advantages; stating that in the present world, firms need to be 'fast, fluid, and flexible', use forces of the 'social-era' such as social media, move towards a 'pull' strategy where customers demand the product before the firms produce them, and thus build upon these gaps between markets in the digital age, that ascertain a company's position in the market; these 'gazelles' out-maneuver the '800-pound gorillas' that dominate the 'jungle' and achieve competitive advantage, as was in the case of Netflix(the gazelle) that intervened and

snatched the entire market from Blockbuster (the gorilla). Here the prospect of agility, is given more importance than market dominance, as omitted by Porter.

- Although (Dobbs, M.E., 2014), provides a model that a firm can utilise to develop strategic positioning, Porter himself does not provide a model to follow. Porter rather focuses on the five forces on their own, than how a firm can utilise these forces; and as (Collis, D J., Rukstad, M G, 2008) have stated, 'there is no point doing any work on strategy if workers aren't able to verbalise it and, as a result, act in line with it'.
- Perhaps the most glaring flaw of them all, is that Porter's 5 Forces model is not a model that adheres to the sustainability of competitive advantage. It is a model rooted deep in the industry-based-view of modern-day strategic theory (and some would say even the source of), but like a lot of models of this view, the five forces model only enables a firm to attain competitive advantage, NOT maintain it.
- This flaw, however, is overcome by other models of the Resource-Based-View that provide alternative frameworks. This view encompasses models such as Dynamic Capabilities by (Teece et al., 2000) focusing on the agility of a firm's capabilities in the face of the modern dynamic world(for instance- Alphabet Inc.); The Core Competencies framework developed by (Prahalad and Hamel, 1996) that focused on developing core competencies that are intangible such as organisational culture or patents that sustain competitive advantage over a long time (for example in the case of Xerox - the Japanese firm that invented photocopying machines, and controlled the patent for over 10 years); and perhaps the most influential of all the RBV frameworks is the VRIN introduced by Barney[1991] , that proposed to achieve sustainable competitive advantage a firm must control a resource that is Valuable(V), Rare(R), Inimitable(I), and Non-substitutable(N), (Barney, 1991) also mentions the Barriers to Resource Imitability, Causal ambiguity, Unique Historical Trajectory and Time Compression Diseconomies, that can help attain and maintain sustainable competitive advantage.

Porter's 5 Forces model was thus a valuable and workable concept, but it had some significant practical drawbacks. This paper now argues that Porter's 5 Forces model merely scratches the surface of its full potential. Perhaps the very success of Porter's 5 Forces model originally led to it not being adequately challenged or further developed, and indeed, it could be claimed that this process is now well overdue.

The five competitive forces are interdependent with other strategic analysis tools, which deal with the external environment and with each other, and this can be developed into a more comprehensive and coherent 'system'. Suggestions for further analysis include:

1. The model can be prioritized within a force field analysis format.

2. The individual forces can be broken down at a micro level.

3. The model can be transformed into a more dynamic model, both at the industry level and at a more micro, transactional level.

4. The 5 Forces analysis needs to be applied, segment by segment, across the business.

The following subsections seek to develop Porter's 5 Forces model, both to improve its analytical power and increase its range of applications. This is illustrated in the context of a fast-changing market — the health club industry." - (Grundy, 2006)

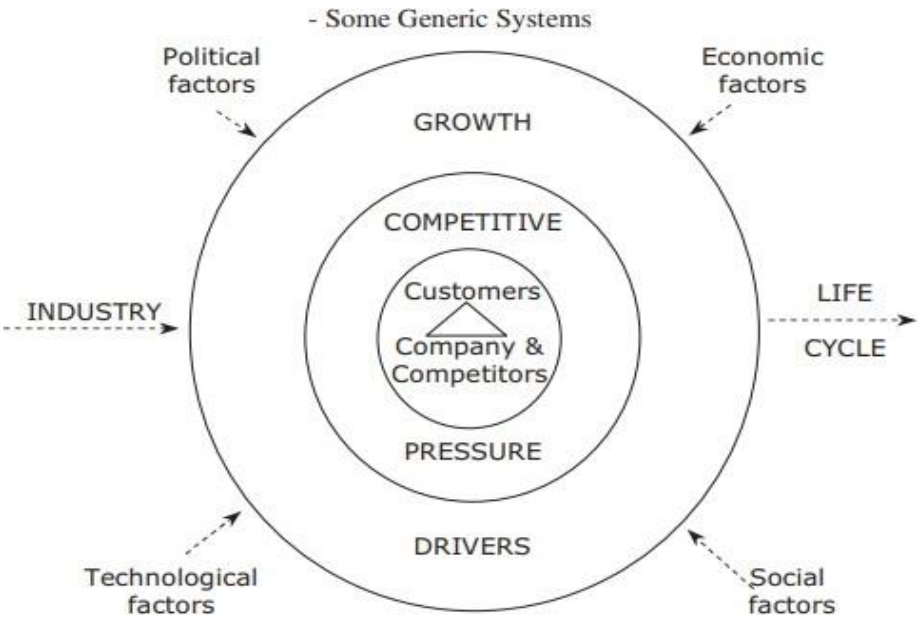
Interdependencies of the model

"The influences on the five competitive forces are examined first. Conventional strategy literature highlights the need to think about factors outside the industry. Indeed, PEST (or political, economic, social and technological factors) is possibly the second most widely known strategy technique after SWOT analysis. However, there is a profound gap between PEST and SWOT analysis, and this is only partly met by Porter's 5 Forces. A linking technique is that of Grundy's 'growth drivers' (Grundy, 2004).

Figure C captures, in an 'onion' model format, the key domains that need to be thought through, within the overall competitive climate, beginning with:

- PEST factors
- Growth drivers
- Porter's 5 Forces
- Competitive position.

Figure C: The Competitive Climate

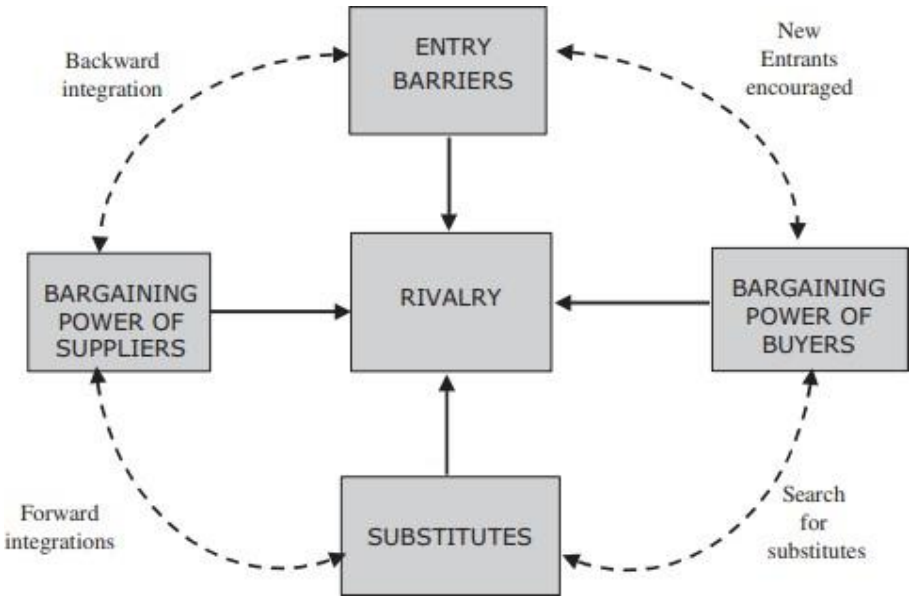


These layers of the onion are highly interdependent, which might be a very useful phenomenon for managers to learn about and to apply. For example, where the PEST factors are generally hospitable, growth is encouraged and the full impact of the five competitive forces may not be felt and may thus be latent. However, where the PEST factors become inhospitable, this will clearly dampen the growth drivers, and if the growth drivers within a particular market are themselves tightening, for example due to life-cycle effects, then this will put a disproportionate and adverse pressure on Porter's five forces, particularly in the bargaining power of buyers, and also upon rivalry. Furthermore, a high growth environment may encourage entrants and a low one will discourage these. The result can lead to a collapse in confidence and in prices unless there are lots of exits, for example, in the health club market in the UK in 2002–3, as will be seen later. Indeed, it may be helpful not to call it 'Porter's five forces model', particularly when introducing it to a team or wider organization. An alternative is to call it 'competitive pressures', which is less jargon-laden but includes the five forces more as a checklist. This relabeling of the model has many attractions, especially as it may seem strange and foreign to everyday management discourse.

This may mean that 'early adopters' will feel self-conscious using it with their colleagues. As probably most intellectual contact with the technique is typically via a management text, an MBA or on a public strategy programme rather than on an in-company event, individual managers may feel reluctant to use it with their more novice peers. Besides these external interdependencies, Porter's 5 Forces are themselves highly interdependent with each other - again something only implicit in Porter's 5 Forces and other texts. Figure D now plots their main interdependencies. Porter's 5 Forces are therefore both highly interdependent with the other subsystems in the external environment, rather than being relatively stand-alone. This figure plots the interdependencies internal to the five competitive forces:

- Between 'bargaining power of buyers' and 'entry barriers': buyers may actively encourage new entrants, thus reducing entry barriers
- Between 'bargaining power of buyers' and 'substitutes': buyers may actively search for substitutes, thereby similarly encouraging them.
- Between 'entry barriers' and 'bargaining power of suppliers': new entrants may seek to enter the market by backward integration, either by acquiring suppliers or via alliances.
- Between 'substitutes' and 'bargaining power of suppliers': suppliers may seek to leapfrog over existing industry competitors by marketing and selling substitutes." - (Grundy, 2006)

Figure D: Porter's 5 Forces: key internal interdependencies



The refined model in Figure D thus illustrates the extent to which each of Porter's 5 Forces needs to be understood as a wider, interacting system as in 'systems thinking' rather than as a self-contained unit. Whilst Porter's original concept explains some of these system interdependencies, these are underdeveloped and implicit. Indeed, the conventional input– output industry boundaries model, which appears to have been the starting point for the five forces, can be put to one side. Indeed, some new and quite interesting opportunities can be developed.

The five forces do need to be prioritized. Porter's teaching methodology (as per his Harvard Business School video cases) involves ticking each force for whether it is favourable, neutral or unfavourable. The scores are:

√√√ Favourable

√ √ Neutral

√ Unfavourable

Unfortunately, because of the original composition of the model, it is defined as being mainly about negative strategic characteristics like buyer power, supplier power, rivalry and substitutes — it is quite difficult to apply the above scoring method. For instance, where buyer power is high, the model's user is encouraged to think this is a bad thing, therefore the score is one tick, or plainly unfavourable. In many instances, especially on initial learning, the model's scores can come out incorrectly. Porter's model, as it is currently framed, thus presents an immediate barrier to its assimilation. Furthermore, the above scoring does not take into account the relative importance and weighting of each score. Whilst two-dimensional grids can do this trade-off, the approach is still a little cumbersome. An alternative approach is to borrow from the vector format, originally applied in force field analysis, for enablers and constraints of organizational change. Not only does this model easily separate out whether a force is favourable or unfavourable, but the length of the arrows can also be used to illustrate its incidence or severity and its importance." - (Grundy, 2006)

Guru's 19 Forces

According to Figure B, this framework has 19 Forces and they will be discussed as follows in the context of the aviation industry:

1. Threat of New Entrants: -
   A good number of PhD researchers, Associate Professors, Professors, Strategic Managers, Analysts, Entrepreneurs, and Policymakers argue that this is potentially the most intimidating of the 5 Forces, especially because the argument is put forward in the context of globalization and human development, where barriers to entry are virtually negligible. New Entrants (airline start-ups), put a lot of pressure on existing competitors (airline companies) to cut prices, and thus decrease their profitability. Hypothetically, these New Entrants can drive out entire competitors (companies) out of the market (Porter, 2008). New Entrants keep downward pressure on fares because if existing competitors (airline companies) maintain their fares high on any particular routes then the former have incentive to enter those routes easily and try to capture market share with lower prices.

   "New Entrants (airline start-ups) that will enter the aviation industry create a production capacity and the danger of reducing the profit share of the

enterprises that already exist in that aviation industry. In other words, the new companies entering the aviation industry increase the competition in the aviation industry and this causes a decrease in the general prices of the products. For example, the continuous increase in the number of low-cost carriers in the aviation industry in the same market increases competition. Each new airline company poses a potential threat to the aviation industry. On the other hand, there are various potential entry barriers for new entrants to the aviation industry, explained below.

a) Economies of Scale: Thanks to the economies of scale, which can be defined as the cost advantage of production in large volumes (Johnston & Ozment, 2011), the new enterprises that will enter the aviation industry are deterred by difficulty. The increasingly competitive environment in the aviation industry of the US after 1978 and today's competitive market structure led aviation companies to make strategic alliances (Budd & Ison, 2020). This situation created a potential barrier to entry for new businesses entering the aviation industry. Thus, businesses could benefit from economies of scale by accessing broader markets with their established alliances.

b) Product Differentiation: With product differentiation, known as highlighting the different and attractive features of a good or service in the eyes of the consumer, existing businesses in the aviation industry ensure customer loyalty and create barriers for potential entries. Businesses in the airline industry differentiate their products with privileges such as in-flight services, catering and additional services, creating an obstacle for new businesses (Hazledine, 2011).

c) Capital Requirements: The total investment and risk, including the infrastructure and working capital required to enter an industry, is a significant threat to new entrants. Since the airline industry is in an important position, especially for countries, there is usually a limitation on the initial capital and the minimum number of aircraft. These figures can pose a threat to new entries.

d) Cost Disadvantages Independent of Size: Cost disadvantages of existing enterprises such as product knowledge and technology, appropriate access to raw materials, advantageous establishment location, trained and experienced workforce and managers, which are independent of scale, constitute an essential barrier to entry for new enterprises. For example, grandparent rights in the aviation industry can create a cost disadvantage independent of scale for new entrants. Grandfather rights can be defined as an air carrier that has used a slot in the last summer or winter period can use their rights in the current summer or winter period (Sieg, 2010). Airlines prevent other businesses from getting their qualifications thanks to grandparent rights by reusing their previously used slots.

e) Access to Distribution Channels: Existing businesses reach the consumer easily with controlled and robust distribution channels, thus posing a threat to potential entries. The airline industry has direct and indirect distribution channels. Direct distribution channels are airline companies' ticket and sales offices, reservation and sales applications via call centers and airline companies' websites. In contrast, travel agencies and other sales offices are usually indirect distribution channels. Today, with the widespread use of the internet, airline companies' influence and control on distribution channels continue to increase, and customers can be easily reached at a point of need. This situation poses a potential risk for businesses that will enter the market.

f) Government Policy: Laws and government practices regulating industries can limit and complicate entry into the industry. Thus, costs increase for businesses entering the aviation industry, creating a difficult obstacle. Today, with the protectionist government policies, the aviation industry has become a market with its unique structure and limitations. Giving an example from airline companies, governments have imposed restrictions on their own airline companies' foreign capital property rights. In addition, governments have developed practices to encourage airline businesses to develop regions in their countries in various aspects. (Uzgör & Şengür, 2021). In addition, governments have taken measures to support their airline businesses, especially flag carrier airlines, economically and to protect them from the adverse effects of the Covid-19 pandemic (Abate, Christidis, & Purwanto, 2020). In the article published in 1979, Michael E. Porter listed six potential entry barriers for businesses that will enter an aviation industry, and then the following barriers were added in his study titled "The Five Competitive Forces that Shape Strategy" (Porter M., 2008) and other academic studies in the literature (Grundy T., 2006).

g) Switching Cost: Switching costs, known as the

sum of monetary and non-monetary costs that a customer incurs to leave the business they have already purchased and move to a new business, create risks for new entrants to the industry (Yang & Peterson, 2004). Airlines offer their customers privileged services through loyalty programs such as the Frequent Flyer Program (FFP) to increase switching costs. Customers can easily use their savings after each flight on their future flights. In this case, customers will prefer other businesses less, and there will be a potential obstacle, especially for a business that will enter the aviation industry.

h) Learning and Experience Curve Effect: With the knowledge and experience of the existing companies in the aviation industry, their certification, qualified personnel, and a certain level of knowledge, the new companies that will enter the aviation industry may perceive the market as uncertain and a potential entry barrier is created. With the power of experience, an element whose presence is felt more especially in times of crisis, aviation enterprises could protect themselves from the negative situations they experience (Grundy & Moxon, 2013). Factors that make a new entry into the aviation industry difficult may vary depending on the aviation industry-specific characteristics. Factors such as the fact that new entries in the aviation industry require long-term investments, the legal requirement to maintain a specific budget, and that existing enterprises can quickly put additional flights on the necessary lines create potential barriers to entry. Each new airline operating in the aviation industry poses a potential risk to other airlines already in the aviation industry, and there is a risk of reducing their market share.

Factors that make a new entry into the aviation industry difficult may vary depending on the aviation industry-specific characteristics. Factors such as the fact that new entries in the aviation industry require long-term investments, the legal requirement to maintain a specific budget, and that existing enterprises can quickly put additional flights on the necessary lines create potential barriers to entry. Each new airline operating in the aviation industry poses a potential risk to other airlines already in the aviation industry, and there is a risk of reducing their market share."[2]

Thus, the Threat of New Entrants (airline start-ups) keeps downward pressure on profits in the aviation industry as in the case of the following defunct airlines of 2024 and 2025 where they no longer had a significant amount of market share in the aviation industry due to New Entrants (airline start-ups):

Ceased Airlines 2025: -

- SmartLynx Airlines - SmartLynx Airlines stopped flying in November 2025. The Latvian carrier specialised in wet-leasing aircraft to other airlines across Europe.
- Calafia Airlines - Calafia Airlines stopped flying in January 2025 after 30 years connecting regional destinations across Mexico, particularly Baja California.
- Skytrans Airlines - Skytrans became SmartLynx Australia in June 2025 following its acquisition. The airline continues flying to remote Queensland destinations under its new name.

Ceased Airlines 2024: -

- Air Malta - Air Malta finished flying on 30 March 2024, after 50 years serving Malta. The Maltese government launched KM Malta Airlines the next day, taking over the same aircraft and routes with a leaner operation.
- FlyEgypt - FlyEgypt stopped flying in October 2024. The Egyptian airline operated Boeing 737-800 aircraft on scheduled and charter flights, connecting Cairo and Sharm El Sheikh to destinations across Europe, the Middle East and Central Asia.
- Lanmei Airlines - Lanmei Airlines ended operations in August 2024. The Cambodian airline flew Airbus A320 aircraft connecting Phnom Penh and Siem Reap to destinations across Southeast Asia and China.
- Zoom Air - Zoom Air stopped flying in June 2024. The Indian regional airline operated Bombardier CRJ-200 aircraft from Delhi, connecting northern Indian cities including routes to Ayodhya after briefly relaunching earlier in the year.

According to IATA, 2024 saw just 28 New Entrants in the aviation industry (a record low), while only 19 existing competitors (companies) ceased operations. Most of the New Entrants (airline start-ups) were low-cost carriers.

"Despite the allure of the aviation industry, many [New Entrants] (airline start-ups) have failed to sustain the capital required to compete against established players.

[2] 'Competitive Strategies in the Airline Industry' by Ferhan K. Sengur, H. Onder Aldemir, and Mert Akınet; www.igi-global.com

The closure of WOW Air and Primera Air stands as a testament to this fact. These New Entrants (airline start-ups) were unable to compete effectively with larger and more established competitors (airline companies) indicating the challenges faced by New Entrants (airline start-ups) to the market."[3]

2. Threat of Substitutes such as Products and Services[4]: -

   "It refers to the competition that is created in the market by substitute products and when the buyer faces a choice between products that can potentially offer the same level of utility. The high-speed train, widely used today, is considered a substitute service for airline companies, concise and medium distances (Socorro & Viecens, 2013). For example, the substitute to a flight between London and Paris is the Eurostar train, it is cheaper and cost-efficient, and therefore a large proportion of the population would tend to prefer the Eurostar over a flight.

   The threat of substitutes is high when there is an attractive price-performance trade-off, or when the buyer has lower switching costs. This may seem fairly easy to remove but are quite complicated, as many-a-times, firms are not aware of all their potential substitutes." (Porter, 2008)

   The threat of substitutes in the aviation industry[5] is "generally low, especially for long-distance travel, because there is no substitute that matches air travel's speed and convenience. However, substitutes like cars, trains, and buses pose a greater threat for shorter distances, where they can be more cost-effective. The rise of remote work also presents a substitute for some business travel, and high-speed rail is emerging as a more environmentally friendly alternative for some routes."

   "Another substitute that is increasingly impacting the aviation industry is advances in communication technologies. High-quality video conferencing, in particular, has become a viable alternative, especially for business travel. This has reduced the need for face-to-face meetings and has made virtual meetings more popular.

   The COVID-19 pandemic has accelerated the adoption of virtual meeting technologies, which has resulted in a significant decline in business travel demand. This has highlighted how quickly and powerfully substitutes can impact the airline industry. It is likely that virtual meetings will continue to be a popular substitute.

   Therefore, the airline industry needs to keep a close eye on these substitutes and come up with innovative ways to remain competitive while providing a superior travel experience to their customers."[6]

3. Presence or Absence of Bargaining Power of Buyers: -

   This refers to the powers exerted by buyers on the firm. In certain industries, buyers exhibit high bargaining power, such as if the industry has a small number of buyers who purchase large volumes, these are particularly powerful in industries with high fixed costs. In certain industries, buyers exhibit low bargaining power, such as if the industry has a high number of buyers who purchase small volumes. Buyers are also powerful in instances where industry products are homogeneous, and when the buyers do not face high switching costs. If vendors portray symptoms of high profitability, the buyer can integrate backwards and produce the industry products themselves (Porter, 2008).

   The power of buyers can be negated by raising the switching costs for the buyer, by inculcating loyalty towards the brand or by differentiating the products, thus increasing the value-added and shifting the purchase decision to a product instead of a price-based decision. (Recklies, 2015)

   "In the aviation industry, the low switching costs increase the bargaining power of buyers. Especially with the widespread use of the internet, customers can see and compare the prices of the airline companies they want. On the other hand, airline companies are trying to reduce the bargaining power of buyers by trying to increase the switching costs with the loyalty programs such as Frequent Flyer Programs (FFP)."[7]

   One pitfall of Porter's 5 Forces, is that it fails to take

[3] 'Analyzing the Aviation Industry through Porter's Five Forces', https://www.linkedin.com/pulse/analyzing-aviation-industry-through-porters-five-forces-leegeo-george-lk57f/, Leegeo George (Aeronautical Engineer), 3rd May 2024.

[4] 'A Critical Analysis of Porter's 5 Forces Model of Competitive Advantage', Journal of Emerging Technologies and Innovative Research (JETIR) [www.jetir.org], July 2020, Volume 7, Issue 7.

[5] AI Overview

[6] 'Analyzing the Aviation Industry through Porter's Five Forces', https://www.linkedin.com/pulse/analyzing-aviation-industry-through-porters-five-forces-leegeo-george-lk57f/, Leegeo George (Aeronautical Engineer), 3rd May 2024.

[7] 'Competitive Strategies in the Airline Industry' by Ferhan K. Sengur, H. Onder Aldemir, and Mert Akınet; www.igi-global.com

into account that there may be the Absence of Bargaining Power of Buyers in certain industries. For instance, in the pharmaceutical industry certain the prices of certain medications for treatment of cancer (blood, uterus, lung, liver, breast etc.) are extremely high if only one pharmaceutical company operating in the Blue Ocean is selling unique medications to the buyers and they can't buy substitutes. In such a scenario, there is the Absence of Bargaining Power of Buyers who have no alternative than to buy the medications even if their prices are extremely high from just one pharmaceutical company that is just one seller in the whole pharmaceutical industry. If tomorrow, a pharmaceutical company comes up with a new and unique medication to cure AIDS completely, then all buyers suffering from AIDS will have to buy it regardless of its price because they will have no other alternative and there will be an Absence of Bargaining Power of Buyers.

In the aviation industry, the buyers travelling via the Concorde which was a supersonic aircraft had no alternative than to buy tickets which were extremely high from airlines such as British Airways, Air France, Singapore Airlines, and Braniff International Airways, and there was an Absence of Bargaining Power of Buyers in the aviation industry with respect to supersonic travel. Concorde was the only company in the aviation industry which was manufacturing supersonic aircrafts which travelled faster than the speed of sound. Even Boeing, Airbus, and Embraer which are manufacturers of commercial aircrafts could not manufacture supersonic aircrafts as Concorde manufactured and sold to airlines such as British Airways, Air France, Singapore Airlines, and Braniff International Airways. "Supersonic flight more than halved travel times, but sonic booms over the ground limited it to transoceanic flights only. On 25 July 2000, Air France Flight 4590 crashed shortly after take-off with all 109 occupants and four on the ground killed. This was the only fatal incident involving Concorde; commercial service was suspended until November 2001. The remaining aircraft were retired in 2003, 27 years after commercial operations had begun. 18 of the 20 aircraft built are preserved and are on display in Europe and North America."[8]

It is to be noted that Boom Overture (Supersonic) which is a US company, is currently manufacturing supersonic aircrafts that will travel faster than the speed of sound and delivery of same will be effected in 2029. Boom Overture is positioning itself as the rightful successor of Concorde. All those buyers who will wish to travel via the state-of-the-art supersonic aircrafts of Boom Overture (Supersonic) which are more sophisticated and advanced than the defunct Concorde aircrafts since they are using Artificial Intelligence (AI) in their design and operational systems, will have no bargaining power at all unless Boeing, Airbus, and Embraer decide to manufacture such state-of-the-art, sophisticated, and advanced supersonic aircrafts.

"Market transparency and choices have increased with the advent of the internet. Buyers can now easily compare prices and services, which gives them greater bargaining power in the aviation industry. Airlines are under pressure to compete on ticket prices and special offers to attract buyers, particularly leisure travelers who are highly price-sensitive.

Corporate travel policies can also impact the bargaining power of buyers. When large organizations mandate travel booking through designated platforms, they can negotiate substantial discounts with airlines. This, in turn, can impact airline pricing strategies and the overall market conditions."[9]

4. Presence or Absence of Bargaining Power of Suppliers: -

"By raising the prices of the products, they offer or reducing the quality, suppliers can gain significant bargaining power over the existing businesses in the sector. This situation may be possible, especially if there are limited suppliers in the sector. In addition, the bargaining power of suppliers increases due to high supplier switching costs and differentiated service delivery (Aldemir, Kuyucak Şengür, & Ulukan, 2021). In the airline industry, the bargaining power of the suppliers is relatively high, as specialized services such as ground handling, catering and air traffic control services are in the hands of one or more companies. Air traffic control service in various countries has a monopoly structure. All airline operators must purchase the

[8] https://en.wikipedia.org/wiki/Concorde

[9] 'Analyzing the Aviation Industry through Porter's Five Forces', https://www.linkedin.com/pulse/analyzing-aviation-industry-through-porters-five-forces-leegeo-george-lk57f/, Leegeo George (Aeronautical Engineer), 3rd May 2024.

minimum services offered to carry out their activities, regardless of the price difference."[10]

In the aviation industry, the bargaining power of the aircraft manufacturers such as Boeing, Airbus, Embraer, ATR, Bombardier, Gulfstream, **Textron Aviation (Cessna & Beechcraft), Dassault Aviation, HondaJet, Pilatus Aircraft, and Boom Overture (Supersonic)** which are suppliers as well because they supply and sell commercial, freight, private jet, and supersonic aircrafts to airlines such as Emirates, Etihad, Qatar Airways, Singapore Airlines, Virgin Atlantic, British Airways, Air France, Air Mauritius, Air India, Lufthansa to name a few is extremely high.

However, it is to be noted that in the field of Dry Leasing, Wet Leasing, and Full Charter aircraft manufacturers which are suppliers as well such as Boeing, Airbus, Embraer, ATR, Bombardier, Gulfstream, **Textron Aviation (Cessna & Beechcraft), Dassault Aviation, HondaJet, Pilatus Aircraft, and Boom Overture (Supersonic)** have no bargaining power at all unlike in the field of sale. Rather these aircraft manufacturers prefer to sell their commercial, freight, private jet, and supersonic aircrafts to third parties known as Lessors such as AerCap, Avolon, SMBC Aviation Capital, BOC Aviation, Air Lease Corporation, and Babcock & Brown Aircraft Management (BBAM) which offer commercial, freight, private jet, and supersonic aircrafts to airlines via Dry Leasing, Wet Leasing, and Full Charter.

5. Presence or Absence of Bargaining Power of Brokers: -

One pitfall of Porter's 5 Forces is that it fails to take brokers into consideration. In the industry of Real Estate, it is well known that there are brokers that act as an intermediary between buyers and sellers. As such they have a high bargaining power in the industry of Real Estate.

In the aviation industry, Full Charter is a one-time, on-demand rental of an aircraft for a specific flight, often through a broker, and is more like a traditional transportation service. Aviation brokers facilitate transactions such as aircraft sales and acquisitions, charter services, and insurance. Below is a list of some brokers in the aviation industry, categorized by their primary services.[11]:

Aircraft Sales and Acquisition Brokers:

These firms specialize in the buying and selling of new and pre-owned aircraft, including private jets, helicopters, and commercial planes. Many are certified by professional bodies like the International Aircraft Dealers Association (IADA).

- ACASS (Montreal, Canada)
- Avpro, Inc. (Annapolis, MD, USA)
- Axiom Aviation, Inc. (Richmond Heights, OH, USA)
- Dallas Jet International (Westlake, TX, USA)
- Duncan Aviation, Inc. (Lincoln, NE, USA)
- Guardian Jet, LLC (Guilford, CT, USA)
- Jetcraft (London, UK)
- Jeteffect, Inc. (Long Beach, CA, USA)
- Mente Group, LLC (Frisco, TX, USA)
- Omni Aircraft Sales
- SOLJETS (Park City, UT, USA)
- The Jet Business (London, UK)

Aircraft Charter Brokers:

Charter brokers arrange on-demand private flights for passengers or cargo using aircraft from various operators.

- Air Charter Service USA (United States)
- Air Partner, Inc. (USA) (United States)
- Chapman Freeborn Airchartering, Inc. (United States)
- Delta World Charter DWC-LLC (United Arab Emirates)
- Eclipse Air Charter (Canada)
- New Flight Charters (United States)

Aviation Insurance Brokers:

These brokers connect clients with insurance providers, offering specialized coverage for aircraft hulls, liability, and war risks.

- Lime Street Brokers
- Starr Insurance Companies

These companies have access to major insurance markets like Lloyd's of London and A-rated domestic aviation underwriters.

Related Services:

Other types of brokers include freight forwarders and

[10] 'Competitive Strategies in the Airline Industry' by Ferhan K. Sengur, H. Onder Aldemir, and Mert Akınet; www.igi-global.com

[11] AI Overview

customs brokers which handle the logistics of moving cargo and aircraft parts internationally.

However, in certain industries, there is an Absence of Bargaining Power of Brokers such as[12]:

- E-commerce/Retail: When you buy a product directly from a company's website (e.g., Amazon, Walmart, or a brand's own online store), you are engaging in a direct-to-consumer transaction without a middleman.
- Real Estate (Specific Models): While traditional real estate is heavily broker-dependent, platforms like India's NoBroker.com facilitate direct connections between property owners and tenants/buyers, removing the need for traditional brokers and their commissions. Similarly, the "For Sale By Owner" (FSBO) approach allows individuals to manage the sale of their property themselves, often with the help of a real estate attorney for legal paperwork.
- Financial Services/Stock Trading (Specific Platforms):
    - Direct Stock Purchase Plans (DSPPs): These plans allow investors to buy shares directly from a company through its transfer agent, bypassing a broker.
    - Zero-Commission Trading Apps: Platforms like Robinhood offer commission-free stock and ETF trading, a model that has become increasingly popular in recent years, though they still have underlying revenue models (like payment for order flow).
- Logistics/Freight: "No broker freight load boards" are online platforms that directly connect shippers with carriers, simplifying the process and potentially reducing costs for both parties by cutting out traditional freight brokers.
- Peer-to-Peer (P2P) Marketplaces: Numerous online marketplaces, such as Craigslist, Facebook Marketplace, and others, enable individuals to buy and sell goods or services directly from one another without a formal broker or agent facilitating the transaction.

6. Presence or Absence of Bargaining Power of Competitors: -[13]

In the aviation industry, the presence of bargaining power of competitors (rivalry) is extremely high, driven by low switching costs for customers, high fixed costs, and commoditized services. Fierce competition—particularly from budget carriers—causes frequent price wars, forcing airlines to differentiate via service, technology, or loyalty programs to maintain profitability.

Key Aspects of Competitive Power (Rivalry):

- High Price Sensitivity: Customers can easily compare and switch airlines using online platforms, enhancing their power and forcing airlines to compete aggressively on price.
- Capacity Management: Airlines often struggle with overcapacity, leading to price-cutting to fill seats, which compresses industry profits.
- Low Differentiation: For many routes, services are seen as nearly identical (commodity-like), which intensifies the focus on ticket price as the primary competitive factor.
- Strategic Alliances: Competitors form alliances (e.g., SkyTeam, Star Alliance) to increase network size and enhance their power against rivals.
- Impact of Technology: Digital tools and online travel agencies allow passengers to access transparent pricing, reducing the power of any single airline to command premium fares.

Contrast with Other Forces:
While rivalry is high, the industry also faces strong bargaining power from suppliers (e.g., Boeing and Airbus) due to a duopoly in aircraft manufacturing and high reliance on fuel suppliers, limiting airline flexibility.

While the aviation industry is notoriously characterized by highly competitive rivalry, an "absence" or low level of bargaining power of specific competitors can occur in specific, localized scenarios or through strategic, non-competitive behaviors.

Based on industry analysis, here are the contexts where the bargaining power of competitors is reduced:

Market Domination and Oligopoly (Route Level):

While global competition is high, on specific routes, one or two airlines may hold near-monopoly or dominant positions.

- Dominated Hubs: In specific airports (e.g., American Airlines at Dallas/Fort Worth), a single carrier may control a vast majority of slots and

[12] AI Overview

[13] AI Overview

gates, reducing the ability of other competitors to compete effectively.

- Reduced Incentive: Without a strong threat of losing passengers to other airlines on certain routes, dominant carriers have less incentive to compete on price, weakening the competitive power of smaller players.

Strategic Alliances and Joint Ventures:

Competitors often join global alliances (e.g., Star Alliance, Oneworld) or form joint ventures that effectively eliminate bargaining power among them on specific routes.

- Anti-Competitive Behavior: Being in the same strategic alliance has a negative effect on price, capacity, and schedule-based competition.
- Coordination over Competition: Joint ventures allow competitors to coordinate schedules and prices, reducing the incentive to compete with each other.

High Barriers to Growth for New Entrants:

While new competitors may enter the market, their bargaining power is low due to high barriers.

- Limited Market Share: Small, low-cost carriers (like Rex or Bonza in Australia) may enter the market, but their small market share means they cannot effectively challenge incumbent airlines.
- Slot Constraints: Incumbent airlines often have "grandfathered" rights to airport slots, making it difficult for new competitors to obtain favorable times, thus neutralizing their competitive power.

Limited Substitution Options:

In certain regional or niche markets, there are few competitors or substitutes, reducing the bargaining power of potential competitors.

- Low-cost Alternatives: While high-speed rail is a substitute, in many regions, there is no viable, fast alternative, giving air carriers high power over customers and reduced competition from alternative modes of transport.

Summary of Competitive Power:

- High Power Areas: Usually on popular, high-density routes (e.g., NYC to London).
- Low Power Areas: Regional routes, hub-dominated airports, and within alliance-controlled networks.

7. Presence or Absence of Bargaining Power of Coopetitors: -

The presence of coopetitors—firms that simultaneously cooperate and compete—in the aviation industry is high, fundamentally driven by strategic alliances, joint ventures, and shared infrastructure. This coopetition creates a complex dynamic where the bargaining power of competitors is often balanced by mutual dependence, though it can fluctuate based on specific operating areas.

Key aspects of the bargaining power of coopetitors in this sector include:

- Strategic Alliances and Joint Ventures: Major alliances (e.g., Oneworld, Star Alliance) compel airlines to cooperate on scheduling, pricing, and marketing on certain routes while competing on others. These alliances allow for cost-sharing and increased collective bargaining power against suppliers, but they reduce the independent bargaining power of individual airlines within that alliance.
- Shared Infrastructure and Services: Airlines frequently act as customers to their competitors for services such as ground handling, maintenance, repair, and overhaul (MRO), and catering. In these cases, a competitor (e.g., a major carrier at a hub airport) may have high bargaining power over a smaller competitor using their ground services.
- Capacity and Route Management: Coopetition often manifests in code-sharing, where airlines sell seats on each other's flights. This limits aggressive price wars, thus reducing the power of one competitor to severely hurt another on specific routes, while maintaining competitive tension overall.
- Impact on Pricing: The presence of competitors within the same alliance tends to have a negative relationship with price-based actions, meaning competitors exert pressure on each other to maintain consistent pricing rather than undercutting, thus lowering their independent bargaining power to dictate market prices.

Key Takeaway: The power of coopetitors is not always about reducing the other party's profitability; it is often about managing interdependency, managing costs, and increasing collective influence over passengers and suppliers.

In the context of the aviation industry, the concept of "coopetition" (cooperation between competitors) often emerges to mitigate the low bargaining power that individual airlines have against suppliers (manufacturers, fuelers) and to manage intense competitive pressures. However, the absence of bargaining power between these coopetitors themselves is rare; instead, the issue is typically an inability to translate that cooperation into power over the

broader market or vertical stakeholders.

Here is an analysis of the "absence" or weakness of bargaining power in coopetitive situations within the aviation industry:

High Rivalry Nullifying Cooperative Gains:

- Intense Price Competition: Despite engaging in alliances (e.g., Star Alliance, Oneworld) or code-sharing, airlines often cannot leverage this "coopetition" to control ticket pricing because the rivalry among them remains intense.
- Perishable Product: Because seats cannot be stored, the pressure to fill them often leads to aggressive pricing, lowering the collective bargaining power of competitors even when they are ostensibly cooperating.

High Supplier and Buyer Power:

- Supplier Dominance: Aircraft manufacturers (Boeing/Airbus) and key fuel suppliers hold high bargaining power, leaving airlines—regardless of their cooperative efforts—with little power to influence costs.
- Customer Empowerment: Due to low switching costs for customers and high information availability (e.g., Skyscanner, Kayak), airlines lack the power to dictate terms to consumers.

Structural Limits to Coopetition:

- Asymmetric Information: Incomplete contracts and asymmetric information make it difficult for cooperating airlines to align incentives fully, resulting in a weak, joint bargaining position.
- Regulatory Constraints: Anti-trust laws and regulations often prevent cooperating competitors from acting as a single entity, effectively limiting their joint bargaining power.

Examples of Weakened Position:

- Airport Dependence: In certain scenarios, despite efforts at cooperation, airports often have the advantage, particularly in hub airports where airlines have low bargaining power against infrastructure providers.
- Capacity Dumping: When a dominant carrier engages in capacity dumping, other competitors lose bargaining power in that market, making cooperation ineffective.

In summary, the absence of bargaining power in coopetitive aviation environments usually arises when intense competition, superior supplier power, and regulatory barriers prevent competitors from forming a strong united front, ensuring they remain "weak" against the industry's structural challenges.

8. Exit of Buyers: -
   The aviation industry is in constant evolution. It is not static, but dynamic. Buyers may exit the aviation industry at any time. As mentioned earlier, the substitute to a flight between London and Paris is the Eurostar train, it is cheaper and cost-efficient, therefore a large proportion of the population would tend to prefer the Eurostar over a flight. It is highly probable that in the next decade, a massive number of buyers may start travelling by Eurostar rather than flight. As such, they may exit the aviation industry completely. This is indeed a pitfall of Porter's 5 Forces which fails to take this factor into consideration.

It is well known that the aviation industry for air travel is divided into 5 categories:

1. Business Jet Class
2. Private Jet Class
3. First Class
4. Business Class
5. Economy Class

It is possible for buyers to exit Economy Class and move into Business Class, First Class, Private Jet Class or Business Jet Class. As such an exit from one category to another can either affect the profitability of a competitor (airline company) or threaten its very existence itself. Such a factor is very important for competitors (airline companies) and for that reason, they need to pursue differentiation rather than pursuing low cost only. Nowadays, a massive number of buyers prefer a high quality of service while taking flights (good quality foods, good quality beverages, good quality wines, beers, and whisky, entertainments, internet connectivity, pleasant attitude of air hostesses, aircraft comfort etc.). They prefer to pay a high price to get value for money.

It is also well known that the competitors (airline companies) in the aviation industry are divided into 3 classes according to "Skytrax (originally known as **Inflight Research Services**) which is a United Kingdom-based consultancy headquartered in London that runs an airline and airport review website

Skytrax conducts research for commercial airlines, as well as taking surveys from international travellers, to rate cabin staff, airports, airlines, airline lounges, in-flight entertainment, on-board catering, and several other elements of air travel. Apart from these evaluations, Skytrax has an airline forum where passengers give potential passengers insights and opinions about airlines. The website also hosts flight reviews, flight checks, and satisfaction surveys. Skytrax holds an annual World Airline

Awards and World Airport Awards, as well as ranking airlines and airports.

Skytrax rates individual airlines between 3 and 5 stars; they describe a 5-star rating as recognising 'airlines providing very high standards of Airport and Onboard Product' and 'consistent and high standards of staff service across both the airport and onboard service environments.' The 11 airlines they deem to be 5-star rated are:

- All Nippon Airways
- Asiana Airlines
- Cathay Pacific*
- EVA Air
- Garuda Indonesia*
- Hainan Airlines
- Japan Airlines*
- Korean Air*
- Qatar Airways*
- Singapore Airlines*
- Starlux Airlines"

In the aviation industry, it is not uncommon for buyers to exit from 3-star or 4-star airlines and move to 5-star airlines. This is a very important aspect of the airline industry that most competitors (airline companies) fail to take into consideration. As a result, they either lose profitability or become defunct.

9. Exit of Suppliers: -
   A good number of aircraft manufacturers (suppliers) have exited the aviation industry either due to bankruptcy or faulty aircraft models.

The list for such aircraft manufacturers (suppliers) is as follows[14]:

UK List: -

A

- Abbott–Baynes Sailplanes
- ABC Motors
- Aeronautical Syndicate
- AgustaWestland
- Air Navigation and Engineering Company
- Airco
- The Airscrew Company
- Airship Industries
- Airspeed Ltd.
- Airwave Gliders
- Armstrong Whitworth Aircraft
- Auster Aircraft
- Austin Motor Company
- Aviation Traders
- Avro
- Avro International Aerospace

B

- Beagle Aircraft
- Boulton & Paul Ltd
- Boulton Paul Aircraft
- British Aerial Transport
- British Aerospace
- British Aircraft Company
- British Aircraft Corporation
- British Aircraft Manufacturing
- British and Colonial Aeroplane Company

C

- Carden Aero Engines
- Central Aircraft Company
- Chilton Aircraft
- Chrislea Aircraft
- Cierva Autogiro Company
- Civilian Aircraft Company
- Comper Aircraft Company
- Cranwell Light Aeroplane Club
- Cunliffe-Owen Aircraft

D

- De Havilland
- De Havilland Aeronautical Technical School
- De Havilland Propellers
- Desoutter Aircraft Company
- The Dunstable Sailplane Company

E

- E. D. Abbott Ltd
- Elliotts of Newbury
- English Electric

F

- Fairey Aviation Company
- Fane Aircraft Company
- Folland Aircraft
- Foster, Wikner Aircraft

G

- Garland Aircraft Company
- General Aircraft Limited
- Gloster Aircraft Company
- Gosport Aircraft Company
- Grahame-White

14

https://en.wikipedia.org/wiki/Category:Defunct_aircraft_manufacturers

H

- Handley Page
- Hants and Sussex Aviation
- Hawker Aircraft
- Hawker Siddeley
- Hawker Siddeley Dynamics
- Heston Aircraft Company
- Hewlett & Blondeau
- Hordern-Richmond
- Hunting Aircraft

K

- Kingsbury Aviation

L

- Layzell Gyroplanes
- Luton Aircraft

M

- M. B. Arpin & Co.
- Mann Egerton
- Martinsyde
- Miles Aircraft
- Moss Brothers Aircraft

N

- D. Napier & Son
- Nash & Thompson
- National Aircraft Factory
- National Aircraft Factory No. 2
- Nieuport & General Aircraft
- Norman Thompson Flight Company

P

- Parnall
- Parnall & Sons
- Phoenix Dynamo Manufacturing Company
- Port Victoria Marine Experimental Aircraft Depot

R

- Rad Aviation
- Reid and Sigrist
- Rollason Aircraft and Engines
- Royal Aircraft Establishment

S

- S. E. Saunders
- Saunders-Roe
- Seaplane Experimental Station
- Siddeley-Deasy
- Sky Science
- Sopwith Aviation Company
- Spartan Aircraft
- Charles Green Spencer
- Sperwill Ltd
- Supermarine

V

- Vickers Limited
- Vickers-Armstrongs

W

- Westland Aircraft
- Westland Helicopters
- J. Samuel White
- Wombat Gyrocopters

USA List: -

B

- Bach aircraft
- Bowlus aircraft

C

- Convair

D

- Detroit Aircraft Corporation aircraft
- Don Mitchell aircraft
- Douglas Aircraft Company

H

- Harland Ross aircraft
- Hughes Aircraft Company

L

- Lockheed Corporation
- Luscombe aircraft

M

- Martin Marietta
- McDonnell Aircraft Corporation
- McDonnell Douglas
- McDonnell Douglas mergers and acquisitions

N

- Nelson aircraft
- North American Aviation

S

- Schreder aircraft
- Stan Hall gliders

W

- Wittman aircraft
- Wright aircraft

France List: -

A

- Aérospatiale

S

- SPCA
- Sud Aviation

W

- Wibault

Anglo-French List: -

C

- Concorde

10. Exit of Brokers[15]: -

The term “exit of brokers from the aviation industry” most likely refers to the departure of brokers who facilitate airline business deals, either because they are selling their brokerage or because the airlines they work with are ceasing operations. Factors such as market volatility, structural challenges, and a slowdown in new airline startups can influence brokers' exits from the airline market.

Causes for brokers' departure:

- Airline failures: When airlines go out of business, the brokers that represent them will also exit the related deals.
- Brokerage business sales: Brokers can also "exit" by selling their own brokerage firms, often after strategic planning and positioning for an optimal sale.
- Industry downturns: Severe downturns, such as the impact of the September 11th attacks or the COVID-19 pandemic, have led to significant airline consolidation and bankruptcy, which forces brokers to exit those deals.
- Market volatility: Periods of high market volatility can force brokers to scrap deals or exit a market, as happened with an initial public offering (IPO) of Wizz Air in 2014.
- Market slowdown: A decrease in new airline startups can reduce the number of potential clients for brokers, leading them to seek business elsewhere or exit the industry.

Challenges and Divestments in the Private Jet Sector:

In the business and private aviation sector, the role of the broker is being redefined by market pressures:

- Margin Pressure: A focus on "cheapest charter" pricing is pushing down margins, which can make the business unsustainable for some brokers and operators, potentially leading to fewer players in the market.
- Strategic Divestment: Major players have strategically exited certain non-core brokerage units. For example, in January 2024, Wheels Up divested its entire aircraft brokerage unit to 5x5 Trading to focus on its core strategic imperatives and streamline operations.
- New Broker Failures: New aircraft brokers often fail due to a lack of experience, a failure to build a robust network, and an inability to provide value beyond simple sales pitches, which highlights the high barriers to success in this niche.

11. Exit of New Entrants: -[16]

“In the aviation industry, every year New Entrants (airline start-ups) cease operations either due to financial difficulties, competition, or other operational challenges.

- Jetlines (Canada): A Canadian low-cost carrier that began operations in 2022 but ceased operations in 2024 due to financial difficulties.
- **Humo Air (Uzbekistan):** A low-cost carrier that launched in December 2023 but ceased operations in 2024.

The Porter’s 5 Forces fail to take this important factor into consideration. And this is its pitfall. This scenario where New Entrants cease their operations is present not only in the aviation industry, but also in other industries.

Why has Porter’s 5 Forces excluded such an important factor from its model is indeed a question to ponder deeply?

12. Exit of Substitutes such as Products and Services: -[17]

“Substitutes such as high-speed trains rarely cease operations and exit the aviation industry. But there are some exceptions to this rule. For example, high-speed train company Hyperloop One has ceased operations and exited the aviation industry. This company with its revolutionary idea had the intention of competing with commercial aircrafts such as Airbus and Boeing in terms of speed. The

[15] AI Overview
[16] AI Overview
[17] https://www.bbc.com/news/technology-67801235

company had promised a new era of high-speed travel, using magnetic levitation (maglev) technology - which is already used in some transport systems - within a vacuum tube.

This would reduce friction and air resistance, allowing the train to travel at speeds of 1,127km/h.

The Airbus A350 XWB 1000 has a maximum speed of approximately 1,099 km/h, while the Boeing 777X has a top speed of around 1,050 km/h. Both aircrafts have similar typical cruising speeds.

Had Hyperloop One been successful, with its high-speed trains it would have challenged the whole aviation industry. Since its high-speed trains travelled faster than Airbus A350 XWB 1000 and Boeing 777x, buyers would have considered this substitute definitely as a faster mode of travel than air travel.

The aim of Hyperloop One, based on an idea by Elon Musk, was to dramatically cut journey times. It has previously received backing from Virgin founder Richard Branson, but he pulled out last year. The firm will lay off its remaining staff by the end of the year, according to Bloomberg. It was also meant to be greener than current high-speed transport.

However, while Hyperloop One did build some prototypes in the Nevada desert, the project stalled with some experts expressing doubts about its engineering challenges.

It would have required the construction of giant tubes across the countryside and within towns.

It also had a problem with corners - so all the tubes would have to be in a straight line.

The original hyperloop was based on a report published by Elon Musk in 2013 which proposed the idea of shooting capsules through a tube at high speed, however the scientific ideas which underpinned it have been around for centuries.

Mr. Musk has his own firm, The Boring Company, which is researching similar technology using underground tunnels.

There are also other similar companies around the world which continue to work on the concept."

13. Exit of Competitors: -

Every year a good number of competitors (airline companies) cease operations and exit from the aviation industry.

The list of competitors (airline companies) that have ceased operations and exited from the aviation industry in 2025 is as follows:

- SKS Airways: Ceased operations on January 16, 2025.
- Calafia Airlines: Stopped flying in January 2025.
- Bees Airlines: Ceased operations on February 1, 2025.
- Air Dilijans: Ceased operations on February 6, 2025.
- Aerolínea Lanhsa: Ceased operations on April 7, 2025.
- Ultimate Jet: Ceased operations on April 8, 2025.
- Loch Lomond Seaplanes: Ceased operations on April 11, 2025.
- Georgian Wings: Ceased operations on April 16, 2025.
- Joy Air: Ceased operations on April 27, 2025.
- OWG: Ceased operations on May 1, 2025.
- Sunwing Airlines: Ceased operations on May 28, 2025.
- Silver Airways: Ceased operations on June 11, 2025.
- Voepass: Ceased operations on June 24, 2025.
- DHL Ecuador: Ceased operations on July 15, 2025.
- Jetstar Asia: Ceased operations on July 31, 2025.
- Ravn Alaska: Ceased operations on August 14, 2025.
- Wizz Air Abu Dhabi: Ceased operations on September 1, 2025.
- Braathens International Airways: Ceased operations on September 26, 2025.
- Fly PLAY: Ceased operations on September 29, 2025.
- SereneAir: Ceased operations on October 2, 2025.
- Lumiwings: Ceased operations on October 15, 2025.
- Eastern Airways: Ceased operations on October 27, 2025.
- Angara Airlines: Ceased operations on November 5, 2025.
- Blue Islands: Ceased operations on November 14, 2025.

- SmartLynx Airlines: Ceased operations on November 24, 2025.
- New Pacific Airlines: Ceased operations on November 26, 2025.

14. Exit of Coopetitors: -

The COVID-19 pandemic caused a good number of coopetitors (joint venture airlines) to fail or enter insolvency proceedings due to a massive drop in travel demand and strict travel restrictions. Joint venture (JV) airlines exit the aviation industry for reasons such as financial underperformance, strategic realignment, and the impact of market conditions like the COVID-19 pandemic.

- SunExpress Deutschland (Germany): A joint venture between Lufthansa and Turkish Airlines, this entity ceased operations and was liquidated in 2020 as part of restructuring efforts.
- NokScoot (Thailand): The joint venture between Thai Airways and Scoot went out of business in June 2020 after failing to recover from the impacts of the COVID-19 pandemic.
- **Fly Arna:** A joint venture between Air Arabia and an Armenian state consortium. It suspended operations in January 2025, citing operational reasons, including intense competition and regional instability.
- **Vistara:** A joint venture between Tata Sons and Singapore Airlines. It ceased operations on November 12, 2024, after a merger with Air India, according to Wikipedia.
- **Smartlynx Airlines:** A joint venture between Netherlands-based owners that formally ceased operations on November 24, 2025, due to financial instability, as reported by this Facebook post from Airways Magazine.

15. STRATEGIC OPERATIONS in the Aviation Industry: -[18]

Diversification, Global Expansion, International Business, Joint-Venture Partnership, Merger and Acquisition, Take Over, Benchmarking, Adaptation, Integration, and Innovation:

A. Diversification: It involves competitors (airlines) expanding beyond basic passenger transport into new revenue streams like cargo, MRO (Maintenance, Repair, Overhaul), catering, travel services, and digital solutions (ancillary services, loyalty programs) to build resilience against downturns, capture different market segments (premium/budget), and leverage core competencies. Strategies include vertical integration (e.g., SATS in catering/logistics) or launching low-cost subsidiaries (e.g., Scoot for SIA) to balance operations and attract diverse customers, enhancing financial stability and strategic value beyond core flight operations.

Key Areas of Diversification:

- Cargo Operations: Leveraging belly space and dedicated freighters to transport goods, a crucial revenue driver, as seen with Emirates.
- Ancillary Services: Selling extras like Wi-Fi, premium seating, baggage, and unique inflight experiences (showers, spas), as exemplified by Emirates on A380s.
- Technical & Support Services: Offering MRO, catering, and logistics to third parties, moving beyond in-house needs (e.g., SATS).
- Subsidiaries & Market Segmentation: Launching low-cost carriers (like Scoot) or regional arms (like SilkAir) to cater to different traveler types (budget vs. premium).
- Digital & Technology: Investing in touchless tech, biometrics, and digital platforms to improve efficiency and passenger experience.
- Loyalty Programs: Monetizing frequent flyer programs and related data for broader engagement.

Strategic Drivers & Benefits:

- Financial Resilience: Reduces dependency on volatile passenger revenue.
- Market Capture: Appeals to different customer segments (budget, premium, cargo shippers).
- Competitor Differentiation: Offers unique products and services (e.g., Emirates' inflight spa).
- Cross-Functional Synergies: Internal units can support each other, creating value.

Examples:

[18] AI Overview

- Emirates Group: Diversifies across cargo, catering, and travel services, often pioneering new inflight products.
- Singapore Airlines (SIA): Uses subsidiaries like Scoot and SilkAir (now integrated) to cover both premium and budget markets, while SATS handles logistics.

Challenges:

- Requires significant investment and managing complexity.
- Not all diversified units are equally profitable; strategic fit is key.

B. Global Expansion: It means rapid expansion, driven by economic growth, tourism, and connectivity needs, with strong recovery post-pandemic and projections for significant fleet growth (nearly doubling by 2044). This expansion, especially in Asia-Pacific, fuels demand for new aircraft, new routes, and investments in technology (biometrics, AI), but also presents challenges like infrastructure strain, sustainability pressures, and geopolitical risks, requiring major investments in capacity, workforce, and sustainable solutions.

Key Drivers of Expansion:

- Economic Growth & Middle Class: Rising disposable incomes, particularly in emerging markets, boost demand for leisure and business travel.
- Globalization & Trade: Air transport is crucial for connecting economies, facilitating trade and tourism.
- Technological Advancements: More efficient aircraft, biometrics, and digital security streamline operations and improve passenger experience, supporting growth.
- Post-Pandemic Recovery: Strong rebound in air traffic, with projections for 2024 to exceed 2019 levels.

Market Growth & Forecasts:

- Fleet Expansion: Global fleet expected to nearly double from ~25,000 to ~49,000 aircraft by 2044, requiring ~43,000 new deliveries, mainly single-aisle planes.
- Services Market: The aviation services sector projected to double in value by 2044, driven by fleet modernization.
- Regional Hotspots: Asia-Pacific leads in growth, while premium travel sees significant increases across Europe, Middle East, and Americas.

Challenges & Investments:

- Infrastructure: Airports and air traffic management need significant upgrades to handle increased traffic.
- Sustainability: Pressure to reduce emissions requires investment in new technologies and sustainable aviation fuels (SAF).
- Human Resources: A growing shortage of skilled personnel (pilots, technicians, etc.).
- Geopolitical Risks: Conflicts and policy shifts create route disruptions and operational complexities.
- Supply Chain: Constraints affect aircraft production and delivery.

Strategic Responses:

- Airlines & Lessors: Focus on fuel-efficient aircraft, route expansion, and capacity building.
- Technology: Adoption of biometrics, AI, and advanced security for efficiency and safety.
- Collaboration: Industry-wide data sharing for improved safety and security.

C. International Business: It involves global trade facilitation (cargo, e-commerce), tourism, innovation, and specialized services like medical transport, spanning major airlines, corporate jets, and air taxis, all while navigating complex regulations and growing demands for sustainability, connecting economies and people worldwide. Key areas include airline/airport management, supply chain, finance, and leveraging technology for efficiency, impacting global GDP and employment significantly.

Key Aspects of International Aviation Business:

- Global Trade & E-commerce: Air transport moves high-value goods quickly, making it crucial for global supply chains, with air cargo representing a significant portion of world trade value.
- Tourism & Connectivity: Airlines connect global tourism, boosting related businesses and enabling international travel for work, leisure, and culture.

- Business Aviation (Corporate/Private Jets): Provides critical connectivity for multinational companies, facilitating foreign direct investment (FDI) and supporting essential services like medical evacuations and VIP transport.
- Innovation & Technology: Drives advancements in aircraft design, materials, data analytics, AI, and sustainable aviation fuels (SAF).
- Economic Impact: Generates trillions in GDP and supports millions of jobs globally, making it a vital economic sector.

Business Areas & Operations:

- Airline & Airport Management: Strategic planning, operations, revenue management, and marketing.
- Cargo Operations: Managing logistics for time-sensitive and high-value goods.
- Finance & Investment: Managing complex financial strategies, firm valuation, and market analysis.
- Sustainability Initiatives: Developing and implementing sustainable aviation fuels (SAF) and CO2 reduction standards (CORSIA).

Key Organizations & Regulations:

- International Civil Aviation Organization (ICAO): Sets international standards for security, environment, and operations.
- International Business Aviation Council (IBAC): Represents business aviation globally, participating in ICAO's environmental and safety efforts.
- National Business Aviation Association (NBAA): Focuses on U.S. and international business aviation operations, standards, and advocacy.

Educational Focus (Degrees):

D. Joint-Venture Partnership: It is a deep partnership where airlines coordinate pricing, schedules, and revenue sharing on specific routes, acting almost as one entity for greater efficiency, cost savings, and seamless customer experience, going far beyond standard codeshares to optimize major markets like transatlantic routes. These partnerships, requiring significant government approval, allow airlines to pool resources for economies of scale, offer integrated travel, and compete better, exemplified by JVs between carriers like American, British Airways, and Japan Airlines.

Key Aspects of Aviation Joint Ventures:

- Deep Integration: Unlike alliances (which are broader networks), JVs are intense collaborations, often requiring antitrust immunity, coordinating sales and operations as a single business unit on specific routes.
- Revenue Sharing: Partners agree on a formula to share revenue generated from all combined flights within the JV, based on factors like market contribution and passenger numbers.
- Network Optimization: JVs facilitate major hub-to-hub connections, optimizing schedules and using larger aircraft to match demand, reducing redundant flights and fixed costs.
- Examples: The Lufthansa Group, United, and Air Canada North America-Europe JV; American's transatlantic JV with British Airways, Iberia, and Japan Airlines.
- Benefits: Increased efficiency, lower costs (shared ground handling, marketing, procurement), expanded network reach, and a seamless customer journey (one booking, unified service).

Types & Variations:

- Intra-Alliance JVs: Deep cooperation *within* existing global alliances (e.g., Star Alliance members forming a JV).
- Cross-Border Airlines: Foreign carriers forming JVs with local partners in new markets (like low-cost carriers in Asia) to navigate regulations and tap local knowledge.

Why Airlines Form JVs

- To achieve economies of scale and efficiencies not possible alone.
- To better compete against other large JVs and alliances.
- To offer a more extensive and integrated product to passengers, especially for business travelers.
- When outright mergers are impractical or regulatory hurdles are too high, JVs provide a deep collaborative solution.

E. Merger and Acquisition: (M&A) in the aviation industry is driven by consolidation, cost-cutting, and expansion, allowing airlines to gain market share, enter new markets (like Delta's Asia push after Northwest), achieve operational synergies (shared fleets/maintenance), and compete with low-cost carriers (LCCs). This process involves complex steps like identifying targets, regulatory approval (a major hurdle), and

integrating systems, often resulting in benefits like increased efficiency but also risks like higher passenger fares due to reduced competition. Key examples include American-US Airways and Southwest-AirTran, transforming market landscapes.

Key Drivers for Aviation M&A:

- Market Consolidation: To reduce intense competition and gain power in fragmented markets.
- Network Expansion: Accessing new routes, regions (e.g., Delta into Asia), and connecting hubs.
- Cost Savings: Achieving economies of scale through shared resources, purchasing, and maintenance.
- Competitive Positioning: Strengthening against rivals and combating LCCs.
- Financial Survival: Responding to economic pressures and industry cyclicality.

Common M&A Examples:

- American Airlines & US Airways: Created a dominant US carrier, better able to compete with Delta and United.
- Delta & Northwest: Expanded Delta's global footprint, especially in Asia.
- Southwest & AirTran: Helped Southwest enter the East Coast market and grow its all-Boeing 737 fleet.

The M&A Process & Challenges:

1. Strategy & Target Identification: Aligning potential partners with strategic goals.
2. Negotiation & Valuation: Agreeing on price, terms, and potential synergies.
3. Regulatory Approval: Securing clearance from aviation authorities (a significant hurdle).
4. Operational Integration: Merging IT, operations, fleets, loyalty programs, and cultures.
5. Challenges: Managing regulatory scrutiny, integrating diverse operations, cultural clashes, and potential fare hikes for consumers.

Impact:

- Positive: Greater efficiency, reduced duplicate services, expanded networks, stronger market presence.
- Negative: Reduced competition, potential for higher ticket prices on overlapping routes, significant integration complexities.

F. Take Over: It refers to major acquisitions (like Air Lease's $7.4B buyout in 2025), hostile takeover attempts (like Trump's failed bid for AMR), and internal procedural handovers (controller shifts), but also increasingly to the future role of AI/automation potentially replacing pilots (single-pilot ops) or even taking over flights, alongside significant industry consolidation and technology driving transformation in operations, safety, and sustainability.

Corporate & Industry Takeovers:

- Consolidation: Recent large deals, like the take-private of lessor Air Lease by investors, show consolidation in the leasing sector, impacting global fleet control, says CNBC.
- Hostile Bids: The industry has seen hostile takeover attempts (like Donald Trump's bid for AMR in the 80s), often facing resistance due to high debt risks and potential instability, notes Medium.

Operational & Technological “Takeovers”:

- Air Traffic Control (ATC): The Handover-Takeover (HOTO) is a critical process for transferring duties between controllers to ensure continuity, details SKYbrary Aviation Safety.
- Automation & AI: There's ongoing debate about AI taking over pilot roles, with manufacturers pushing for single-pilot operations, though current ATC systems and software complexity make full automation challenging, reports Reddit and One Means None.
- Future Tech: The industry is looking towards AI, electric/hydrogen aircraft, and Sustainable Aviation Fuels (SAF) to transform travel, says Top Crew Aviation.

Right-of-Way Rules:

- Overtaking: In air traffic, the aircraft being overtaken has the right-of-way; the overtaking aircraft must alter course to the right to pass safely, according to eCFR (.gov) and CASA.

G. Benchmarking in aviation is the process of comparing an airline's or airport's performance, processes, and practices against industry leaders or peers to identify best practices, set realistic goals (KPIs), and drive continuous improvement in areas like fuel efficiency, safety, finance, and operations, helping them achieve better profitability and

competitive advantage in a dynamic market. It involves analyzing metrics like cost, revenue, passenger load factors, and service levels, while accounting for unique operational factors.

Key Areas of Benchmarking:

- Financial Performance: Comparing unit costs, yields, profitability (EBIT margin), and debt ratios.
- Operational Efficiency: Measuring aircraft productivity, asset utilization, and fuel efficiency (e.g., fuel per passenger).
- Service Quality: Assessing customer satisfaction and service levels, often combined with financial data.
- Safety: Comparing Safety Management Systems (SMS) to identify gaps and improve safety protocols.
- MRO (Maintenance, Repair, Overhaul): Benchmarking parts pricing and repair costs against market averages.

How it Works:

1. Data Collection: Gathering operational, financial, and customer data from internal sources and industry reports.
2. Peer Selection: Identifying comparable airlines or airports (similar size, network, market).
3. Metric Selection: Choosing relevant Key Performance Indicators (KPIs) like load factor, aircraft utilization, or cost per available seat kilometer (CASK).
4. Analysis: Using statistical methods (like Data Envelopment Analysis - DEA) to identify leaders and areas for improvement.
5. Action Planning: Developing strategies to adopt best practices and meet improved targets.

Importance & Benefits:

- Identifies Best Practices: Reveals what top performers do differently.
- Sets Realistic Goals: Grounds KPIs in achievable industry standards, not just arbitrary targets.
- Drives Improvement: Enables continuous improvement by highlighting underperformance.
- Enhances Strategy: Supports decision-making for competitive advantage and profitability.
- Manages Assets: Shows effective management of assets like aircraft and infrastructure.
- The Power of Industry Benchmarking in Aviation - IATA

  26 Oct 2025 — Benchmarking also plays a critical role in setting realistic Key Performance Indicators (KPIs). Too often, airlines set...

H. Adaptation: It involves major shifts to handle climate change (extreme weather, heat affecting performance/infrastructure) and digital/operational changes (post-pandemic tech, flexible booking, new training) to build resilience, improve efficiency, and meet evolving passenger needs, requiring infrastructure upgrades, advanced weather systems, new aircraft designs, and updated skills for professionals. Key areas include climate resilience for airports, operational flexibility, technological integration (biometrics, digital tools), and workforce training for future demands.

Climate Change Adaptation:

- Infrastructure: Reinforcing runways, terminals, and drainage systems for floods, storms, and heat; longer runways for lower air density at high temps; resilient materials.
- Operations: Advanced weather monitoring, optimizing flight paths, continuous descent landings, and better snow/ice removal.
- Aircraft: Improved turbulence resistance, cooling systems, engine performance, and fuel efficiency, plus research into sustainable fuels.

Digital & Operational Adaptation (Post-Pandemic):

- Passenger Experience: Biometrics, self-service kiosks, digital boarding passes for touchless, faster journeys.
- Flexibility: Flexible booking/cancellation policies to build trust.
- Efficiency: Using technology for better Air Traffic Management (ATM).

Workforce & Training Adaptation

- New Skills: Training for new tech (AI, VR) and future jobs.
- Resilience Training: Enhancing flight crew ability to handle disruptions.

Key Challenges & Priorities

- Capacity: Building in-house expertise and financial resources for adaptation.
- Collaboration: Streamlining stakeholder engagement.
- Awareness: Identifying knowledge gaps and raising awareness across the sector.

In essence, aviation is adapting to a changing world by becoming more resilient through tech, infrastructure, and operational changes, guided by organizations like ICAO.

I. Integration: It means connecting various systems, stakeholders, and processes through technology (like AI, data sharing, APIs) for enhanced efficiency, safety, and passenger experience, covering everything from aircraft systems (sensors, flight controls) and ground operations (gate management, maintenance) to the entire air traffic network, aiming for smoother data flow, predictive analytics, and streamlined operations across airlines, airports, and air traffic control. This includes vertical integration (controlling supply chain) and managing complex systems for better route optimization, resource allocation, and personalized services, driving cost savings and sustainability.

Key Areas of Integration:

- Digital & Data Integration: Connecting disparate systems (scheduling, crew, maintenance, booking) using APIs for seamless data flow, enabling real-time decisions and predictive insights (e.g., AI for predictive maintenance).
- Aircraft Systems Integration: Optimizing internal aircraft components for better fuel efficiency, performance, and reliability, often using Model-Based Design (MBD) for complex systems engineering.
- Operations & Stakeholder Integration: Connecting airlines, airports, ATC, and ground handlers digitally for coordinated operations, improving turnaround times, and optimizing resource use (gates, staff).
- Passenger Experience Integration: Using data to offer personalized services, from biometric check-ins at smart airports to tailored in-flight experiences.
- Vertical Integration: Airlines owning multiple supply chain stages (e.g., maintenance, ground handling) to control costs and responsiveness.
- Sustainability Integration: Tying financial support to environmental goals, mandating lower emissions and higher use of Sustainable Aviation Fuels (SAF).

Why It's Crucial:

- Efficiency: Reduces costs, fuel burn, and operational downtime (Aircraft on Ground).
- Safety: Improves situational awareness and accident prevention through interconnected monitoring.
- Passenger Experience: Creates seamless, faster, and more personalized journeys.
- Future-Proofing: Manages increasing air traffic, congestion, and climate change challenges.

In essence, integration transforms the industry from siloed operations to a connected ecosystem, leveraging data and technology for smarter, more sustainable, and profitable aviation.

I. Innovation: It is driven by sustainability (electric/hydrogen planes, green fuel), AI & Digitalization (predictive maintenance, autonomous systems, biometrics, personalized travel), Advanced Aircraft Tech (lighter composites, morphing wings, new designs), and Enhanced Passenger Experience (IoT, AR, seamless airport flows), all aiming for greater efficiency, safety, and reduced environmental impact through technologies like 3D printing, cloud computing, and IoT for smarter operations and maintenance.

Key Areas of Innovation:

- Sustainability: Focus on electric/hybrid aircraft, hydrogen propulsion, sustainable aviation fuels (SAF) to meet net-zero goals, and more aerodynamic designs (blended wings).
- Open Fan Architecture: CFM RISE (Revolutionary Innovation for Sustainable Engines) is a major tech program by CFM International (a GE Aerospace/Safran joint venture) to develop next-gen aircraft engines, aiming for 20% + fuel burn/CO2 reduction, featuring open fan designs, compact cores, hybrid-electric systems, and alternative fuel compatibility for sustainable flight by the 2030s. It's a crucial step towards net-zero aviation goals, pushing boundaries in efficiency, noise, and durability with technologies like Ceramic Matrix Composites (CMCs

- Artificial Intelligence (AI): Used for predictive maintenance (anticipating part failure), optimized flight paths, fuel efficiency, enhanced safety analysis, and personalized customer service via voice booking.
- Digitalization & Data: IoT for real-time monitoring, cloud computing for data analysis, blockchain for secure records, and AR/VR for training and passenger navigation.
- Autonomous Systems: Drones (UAVs) for logistics and operations, with gradual integration into autonomous flight systems.
- Advanced Materials & Manufacturing: Lightweight composites (carbon fiber) for fuel savings and 3D printing for on-demand spare parts, reducing inventory.
- Passenger Experience: Biometrics for seamless security/boarding, AI for voice booking, personalized alerts, and digital tools for streamlined airport navigation.

Impact on Operations:

- Predictive Maintenance: AI reduces downtime and costs by predicting failures before they happen, keeping more planes flying.
- Efficiency: Better routing, lighter materials, and electric systems cut fuel use and emissions.
- Airport Security & Flow: Biometrics and AI streamline identity checks and manage passenger traffic.
- Personalization: AI and data create tailored experiences from booking to in-flight.

These innovations are transforming aviation from aircraft design to the passenger journey, making it safer, greener, and more efficient.

16. Strategic Planning Methodology based on STEEPLED (Social, Technological, Economic, Environmental, Political, Legislative, Ethical, and Demographic) Factors[19]: -

"A STEEPLED analysis for the aviation industry involves examining Social, Technological, Economic, Environmental, Political, Legal, Ethical, and Demographics external factors. These macro-environmental forces present both opportunities and threats that significantly impact the industry's strategic planning and operations.

STEEPLED Analysis for the aviation industry:

- Social:
  - Changing Travel Habits: Post-pandemic shifts include increased reluctance to fly for non-essential reasons and a greater demand for sustainable travel options.
  - Health and Wellness Concerns: The industry must manage public perception regarding airborne diseases and passenger safety measures.
- Technological:
  - Aircraft Innovation: Continuous R&D into more fuel-efficient aircraft, alternative fuels and new technologies (e.g., sustainable aviation fuel, electric/hydrogen propulsion, CFM International RISE: open rotor engine currently under development by CFM International, a 50–50 joint venture between American GE Aerospace and French Safran Aircraft Engines (RISE program is advancing technologies to support a future aircraft engine that aims to be 20% more fuel-efficient, with 20% lower carbon emissions, than current commercial engines, Boom Overture (Supersonic Jet) leverages Artificial Intelligence (AI) in the development and operation of its Overture airliner, primarily through an Augmented Reality (AR) vision system for pilots and computational fluid dynamics for design optimization)) is a major focus to reduce costs and environmental impact and ensure safety, efficiency, and viability.
  - Digital Transformation: The use of online booking platforms, mobile apps, and data analytics enhances operational efficiency, pricing optimization, and customer experience.
  - Automation & AI: New technologies improve air traffic management systems and allow for better security screening and operational management.
- Economic:
  - Fuel Prices: Highly sensitive to global oil prices, which is a major component of airline operating expenses and a significant source of financial instability.
  - Economic Growth & Recession: The industry is heavily influenced by global and regional economic conditions, as disposable incomes and

[19] AI Overview

business travel directly correlates with economic health.

- Exchange Rates: Currency fluctuations impact operational costs (e.g., purchasing fuel or aircraft from international suppliers) and international ticket sales.

- Environmental:

- Climate Change & Emissions: The aviation industry faces intense pressure to reduce its carbon footprint. There are increasing demands for eco-friendly practices and investments in greener technologies.

- Regulations & Taxes: Environmental protection legislation, such as carbon taxes and waste disposal regulations, is becoming stricter and can increase operating costs.

- Natural Disasters: Weather events and climate-related natural disasters can disrupt flight schedules and operations.

- Political:

- Government Regulations: The industry is subject to extensive government policies related to safety, security (e.g., post-9/11 security measures), and market access.

- Geopolitical Stability: Political instability and international relations between countries can lead to flight route disruptions, airspace bans, and changes in trade agreements.

- Subsidies & Tariffs: Government support or restrictive trade policies can significantly affect airline profitability and market competition.

- Legal:

- Labor Laws: Airlines must comply with complex employment laws, working conditions, and safety regulations, which can vary significantly across different countries.

- Consumer Protection: Legislation regarding passenger rights, compensation for delays, and data privacy (e.g., GDPR) requires strict adherence to avoid legal penalties.

- Competition Law: Anti-trust laws and route licensing agreements impact market entry and competitive strategies within the industry.

- Ethical:

- Corporate Social Responsibility (CSR): Consumers and investors increasingly expect airlines to demonstrate transparency and accountability regarding their social and environmental impacts.

- Animal Welfare: Ethical considerations regarding the transport of animals can influence public perception and company policies.

- Bribery & Corruption: Operating in international markets requires navigating different ethical standards and avoiding corrupt practices to maintain reputation and legal compliance.

- Demographics:
  An expanding global middle class in emerging economies (e.g., India) is increasing demand for affordable air travel."

17. Insights from Organisations in Single Markets and Multiple Markets: -
Organisations operating in single markets tend to focus on cost efficiency through standardization (e.g., single-type fleets) while those in multiple markets emphasize diversification and flexibility to manage risk and cater to varied demand across regions.

Insights from Single Market Organisations:

Airlines operating predominantly within a single, often domestic or regional market display distinct characteristics and strategic advantages.

- Operational Efficiency: Single-market carriers, especially low-cost carriers (LCCs) like IndiGo or Southwest, often use a single type of aircraft across their fleet. This drastically reduces costs and complexities associated with maintenance, spare parts inventory, and crew training, leading to high operational efficiency and quick turnaround times.

- Streamlined Strategy: Their business model is typically less complex, focusing on high-frequency, point-to-point routes and a simplified product offering (e.g., single cabin class, unbundled services).

- Market Vulnerability: The main insight is the potential for higher vulnerability to local economic shocks, regulatory changes, or intense competition within that specific geographic area, as they lack the buffer of diversified operations in other regions.

- Clearer Demand/Supply Balance: While still complex, managing the balance of demand and supply is more straightforward than across a vast,

heterogeneous network, allowing for more targeted capacity strategies.

Insights from Multiple Markets Organisations:

Airlines operating across multiple international markets, often full-service network carriers (FSNCs) such as Lufthansa and Emirates, face distinct challenges and leverage different strengths.

- Risk Diversification: Operating in various markets helps mitigate risks from localized economic downturns or political instability in any one region.
- Network Complexity and Scope: These airlines build extensive hub-and-spoke networks, offering a wide range of short, medium, and long-haul connections. The complexity of managing these interconnected routes and varied passenger demands (leisure, business, cargo) requires sophisticated systems and a mixed fleet of aircraft to match capacity to specific route needs.
- Higher Overheads: The need for diverse aircraft types, extensive international regulatory compliance, varied service offerings, and higher staff costs often results in higher operating costs compared to single-market LCCs.
- Strategic Flexibility: They can cross-subsidize routes and leverage their global presence for advantages such as stronger negotiating power with suppliers and partners in different regions.
- Market Share Dynamics: The pursuit of market share in highly competitive international routes often involves complex pricing strategies and competition with different business models, including emerging long-haul LCCs.

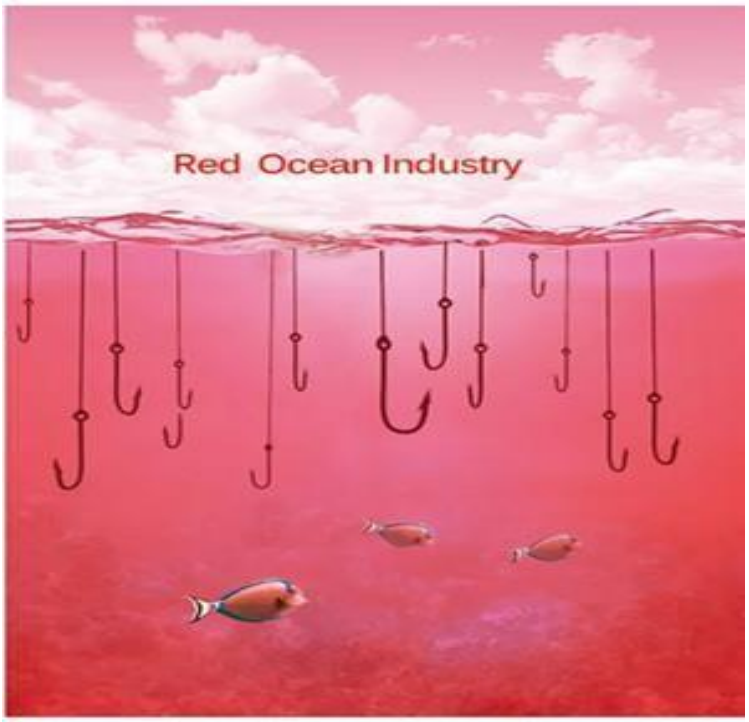
Summary:

The fundamental insight is a trade-off between the cost efficiency and operational simplicity of single-market strategies versus the resilience and market reach of multi-market diversification. An airline's chosen market scope fundamentally dictates its optimal business model, fleet strategy, and vulnerability to external factors.

18. Red Ocean Industry: Rivalry among existing competitors and Unity among existing coopetitors: -

Figure E: Red Ocean Industry

Red Ocean strategy
Compete in existing market space.
Beat the competition.
Exploit existing demand.
Make the value-cost trade-off.
Align the whole system of a firm's activities with its strategic choice of differentiation or low cost.



Rivalry takes place in either Red Ocean Industry or Blue Ocean Industry. Porter's 5 Forces talks about rivalry. But it does not mention in which Ocean Industry does the rivalry takes place. This is definitely a pitfall of Porter's 5 Forces. This concept of Red Ocean and Blue Ocean strategies were developed by Professors W. Chan Kim and Renée Mauborgne at INSEAD (full name: Institut Européen d'Administration des Affaires, which is the French name for "European Institute of Business Administration") who popularized the 2 seminal concepts in their invaluable 2005 book titled '*Blue Ocean Strategy*' published by Harvard Business Review.

"In the Red Ocean Industry, boundaries are defined and accepted, and the competitive rules of the game are known. Here, competitors (companies) try to outperform their rivals to grab a greater share of existing demand. As the market space gets crowded, prospects for profits and growth are reduced. Products become commodities, and cutthroat competition turns the red ocean bloody. Airlines that use the Red Ocean Strategy are those that compete in existing, saturated markets by focusing on outperforming rivals through lower prices or incremental improvements. Examples include legacy carriers that fight for market share by adjusting fares and services, and some low-cost carriers that operate in a highly competitive environment, often fighting over the same customers.

Examples of airlines in Red Ocean Industry:

- Traditional legacy carriers: Airlines like Lufthansa, Air France, and British Airways operate in a highly competitive market, adjusting prices and service levels to compete with one another for existing customers in Red Ocean Industry.
- Some low-cost carriers: While some are considered blue ocean pioneers, many low-cost carriers operate in the Red Ocean Industry. They might focus on a cost-leadership strategy, slashing prices and competing on the same factors as their rivals to gain a larger share of the existing market.
- Indigo and Spice Jet: These airlines are cited as examples of operating in a saturated short-haul market in India, directly competing with one another.
- Ryanair is an airline that operates in an intensive market. It chooses a low-cost model to offer cheap airfares and basic air services in comparison to competitors.

Key characteristics of Red Ocean rivalry in the airline industry:

- Competing for existing demand: Airlines in this strategy focus on capturing existing passengers rather than creating new demand.
- Cutthroat rivalry: The market is often "bloody" with intense rivalry among existing competitors on factors like price, which can squeeze profit margins.
- Incremental improvements: Strategies often involve making incremental improvements to existing products and services rather than creating something entirely new.
- Cost-leadership: A common strategy is to focus on operational efficiency and cost reduction to offer lower prices than competitors."[20]

Coopetition (alliance and joint venture):

Porter's 5 Forces fail to take into account that existing competitors may also cooperate among each other via joint ventures in the Red Ocean Industry and this is known as 'coopetition'.

In the aviation industry a good number of airlines are coopetitors rather than competitors. A list is as follows:

- American Airlines (AA), British Airways (BA), and Iberia (IB): This joint venture operates in transatlantic airfares.
- **Atlantic Joint Business (AJB):** This joint venture includes Air Canada, United Airlines, Lufthansa, SWISS, Austrian Airlines, and others.
- **Delta and LATAM:** This joint venture has led to significant growth in flights and passengers on routes between the U.S. and South America since its inception.
- **Lufthansa Group and Singapore Airlines:** A joint venture that connects European and Asian markets, including feeder routes via bus or train to partner hubs.

Airline Alliance:[21]

[20] AI Overview

[21] AI Overview

"There is also another wider form of coopetition in the aviation industry known as airline alliance which is a partnership between airlines to cooperate on a large scale, which benefits passengers by providing access to a wider network of destinations, seamless booking, and shared loyalty programs.

Benefits for passengers:

- Increased destinations: Access a wider range of flights and destinations by combining the networks of partner airlines.
- Streamlined travel: Enjoy easier booking, check-in, and baggage handling, especially for connections.
- Loyalty program benefits: Earn and redeem miles across different member airlines and get reciprocal frequent flyer benefits, such as lounge access and priority services.

The 3 major global alliances in the aviation industry comprise over 50 airlines, streamlining mileage earning and redemption for frequent flyers. Alliance membership enables elite status recognition across partner airlines, offering perks such as priority treatment and lounge access. They are as follows:

- Star Alliance: The largest alliance, with members like United Airlines, Lufthansa, and Air Canada.
- SkyTeam: Includes airlines such as Delta Air Lines, Air France, and Korean Air.
- Oneworld: Features members like American Airlines, British Airways, and Qatar Airways.

Motivations Leading to Airline Joint Venture Formation[22]:

1. "Overcoming Regulatory Constraints:
   All commercial aspects of international air transport have been governed by bilateral air service agreements since the 1944 Chicago Convention. Each international carrier deals with a complex web of bilateral agreements signed by its home country. The existence of the bilateral agreements has substantially limited the freedom of individual scheduled carriers, and has constrained competition in the international air transport industry. Facing these restrictions, entering into joint ventures is the major means for international airlines to obtain access to new markets, and to offer new services (Wang, 2002). Since the increasing privatization of airlines in Europe and the deregulation of the US airline market, the desire to expand route networks internationally has increased competition between carriers. However, existing regulatory policies that limit the takeover and use of foreign resources pose challenges to international air travel. Although there are examples of firms holding equity stakes in international airlines, most governments do not allow complete foreign ownership of domestic carriers and airport facilities. Therefore, alliances become an essential recourse for carriers to expand internationally. The industry has seen the formation of several alliances between airlines, especially during the 1990s. Estimates show that more than 80 per cent of global airlines conducted some form of alliance in 2000 (Lazzarini, 2007).

2. Customer Benefits:
   Airline strategic alliances can benefit passengers in two ways: (1) through scale effects; and (2) through link effects. Scale effects are related to the size of the network, particularly geographical scope, containing proportion of direct flights and access to new services in the post alliance period. On the other hand, link effects are related to service connectivity, such as the ease for passengers in making connections where multiple members are involved (Wang, 2007). American Airlines (AA), British Airways (BA), and Iberia (IB) joint business enhanced service in non-hub markets. Open skies agreement enables American Airlines (AA) and British Airways (BA) to operate four flights a day between New York City and Paris. Similarly, direct flights are available from Boston, Miami, Chicago and Dallas. Great connections available via London Heathrow and Madrid enable joint business to serve a larger network. In terms of network

[22] 'The effect of joint ventures on airline competition: the case of American airlines, British airways and Iberia joint business', 4th International Conference on Leadership, Technology, Innovation and Business Management, by Temel Caner Ustaömera, Vildan Durmazb, and Zheng Leic.

depth, the joint venture offers more convenient timings for flights to its passengers. As an example, in 2010, there was no schedule coordination between London and New York. Therefore, American Airlines and British Airways were departing at similar times. This created 3-hour gap in the schedule. However, the joint venture enabled carriers to expand their flights more equally across the schedule (Grunow, 2012).

3. Cost Reduction:

   Alliances enable partners to increase efficiency, reducing expenses by cutting back on fixed costs and wedding out redundant operations. By coordinating aircraft and schedules, members can reduce their fleet requirements or take more advantage of the capacity available, as operating a larger aircraft is more suitable for matching the aircraft size with the demand of a particular route. Shared use of ground handling arrangements and airport facilities and staff, joint procurement of fuel and amenities, cooperative advertising and promotional campaigns, mutual handling of baggage transfers and passenger check-in, and combined development of computer systems and software are some of the ways alliances help foster economies of scale. For instance, Oneworld Alliance has 12 members with access to 664 airports in 134 countries and carries annually over 318.5 million passengers. It also employs 275,991 staff members at various offices and airports on its behalf. This range of facilities enables partners to combine usage of airport facilities, including airport terminals, check-in counters, and lounges that provide one-stop check-in, which reduce duplicated activities among partners, hence, decrease cost. Moreover, due to global presence and coordination o f activities, Oneworld Alliance membership enabled members to boost sales by 20% to gain $900 million in 2006. More so, one world also benefited from cost reductions of about $250 million in 2006 through joint purchasing (Amoah, 2011).

4. Reducing Level of the Competition:

   Alliances have allowed carriers to increase their ability to exercise market power and reduce the level of competition. Carriers which previously competed on a route can agree to cooperate and thus obtain competitive advantages over their incumbent. Traffic feed boosts each carrier's dominance at its respective hub, creating network effects that increase entry barriers (Iatrou, 2007).

5. Efficiency Gains form Density Economics:

   Another key reason for airline cooperation is the importance of economies from the density of passenger flows. Although economies of scale in operations seem to be relatively limited, there are very clear economies to be obtained from generating denser flows of passengers, which boosts seat utilization and enables the use of larger and lower unit cost aircraft, (Pearce, 2011)."

19. Blue Ocean Industry: Lack of Rivalry and Unity among existing coopetitors: -

"Blue Ocean Industry, in contrast to Red Ocean Industry, is defined by untapped market space, demand creation, and the opportunity for highly profitable growth. Although some Blue Ocean Industries are created well beyond existing industry boundaries, most are created from within Red Ocean Industries by expanding existing industry boundaries, as Cirque du Soleil did. In Blue Ocean Industry, competition is irrelevant because the rules of the game are waiting to be set.

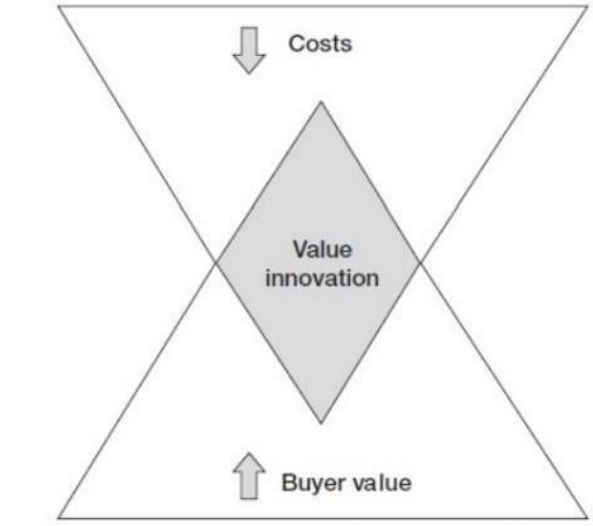
Figure F: Blue Ocean Industry

Blue Ocean strategy
Create uncontested market space.
Make the competition irrelevant.
Create and capture new demand.
Break the value-cost trade-off.
Align the whole system of a firm's activities in pursuit of differentiation and low cost.

The cornerstone of Blue Ocean strategy: Value Innovation

Value innovation is a new way of thinking about and executing strategy that results in the creation of a blue ocean and a break from the competition. Importantly, value innovation defies one of the most commonly accepted dogmas of competition-based strategy: the value-cost trade-off. It is conventionally believed that companies can either create greater value to customers at a higher cost or create reasonable value at a lower cost. Here strategy is seen as making a choice between differentiation and low cost. In contrast, those that seek to create blue oceans pursue differentiation and low cost simultaneously. Value innovation is created in the region where a company's actions favorably affect both its cost structure and its value proposition to buyers. Cost savings are made by eliminating and reducing the factors an industry competes on. Buyer value is lifted by raising and creating elements the industry has never offered. Over time, costs are reduced further as scale economies kick in due to the high sales volumes that superior value generates."[23]

Figure G



The simultaneous pursuit of differentiation and low cost

[23] '*Blue Ocean Strategy*' by Professors W. Chan Kim and Renée Mauborgne at INSEAD (full name: Institut Européen d'Administration des Affaires, which is the French name for "European Institute of Business Administration") published by Harvard Business Review.

Figure H: Principles

The eight principles of blue ocean strategy:

Formulation principles	Risk factor each principle attenuates
Reconstruct market boundaries.	↓ Search risk
Focus on the big picture, not the numbers.	↓ Planning risk
Reach beyond existing demand.	↓ Scale risk
Get the strategic sequence right.	↓ Business model risk

Execution principles	Risk factor each principle attenuates
Overcome key organizational hurdles.	↓ Organizational risk
Build execution into strategy.	↓ Management risk
Align the value, profit, and people propositions.	↓ Sustainability risk
Renew blue oceans.	↓ Renewal risk

Figure I: Value Innovation

The four actions framework

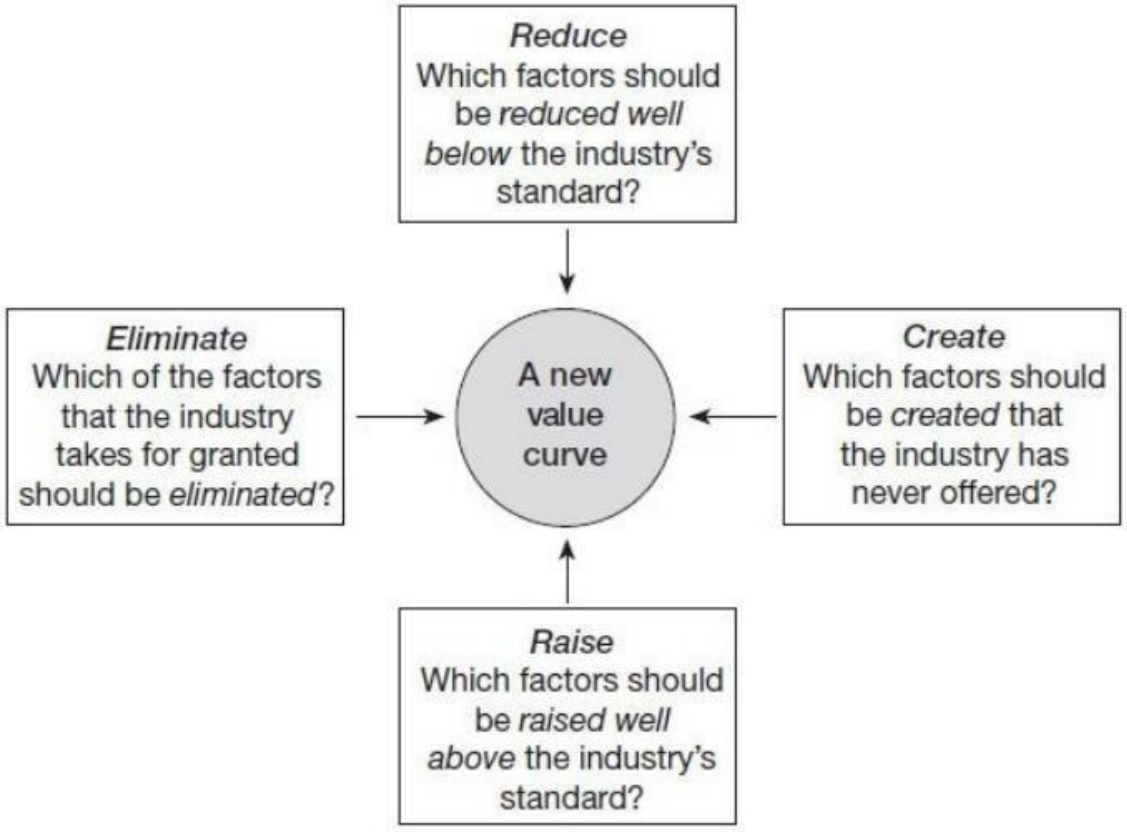
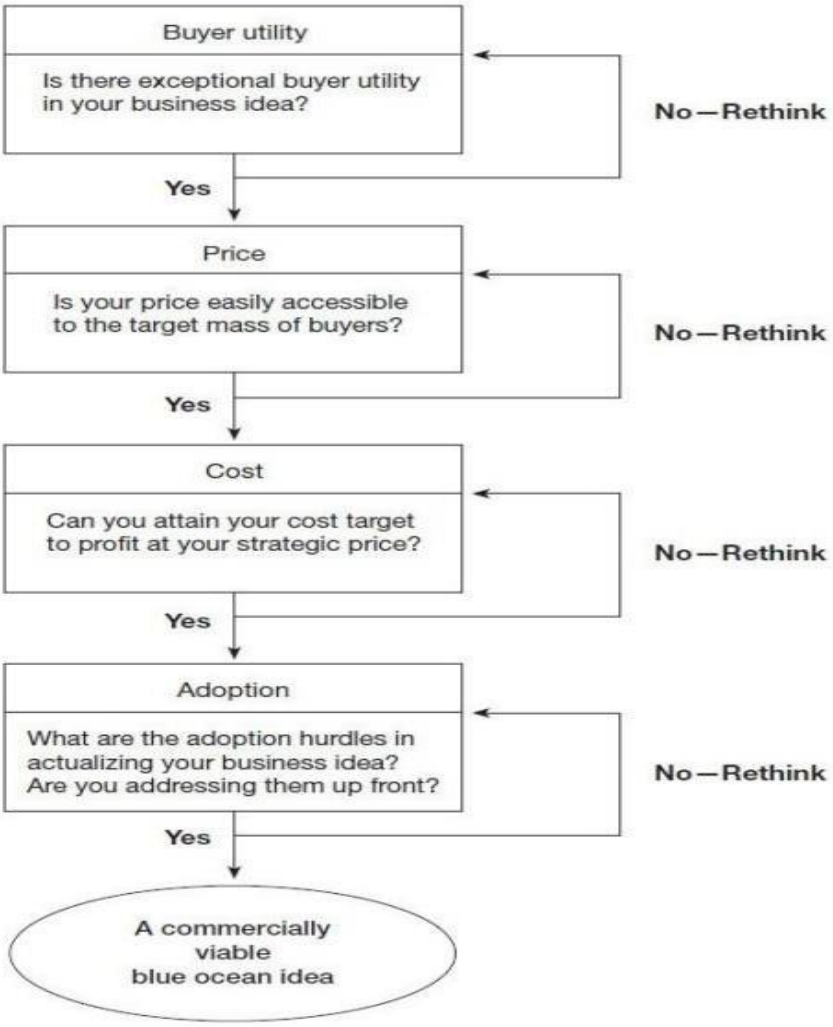


Figure J: Visualizing Strategy

1. Visual awakening	2. Visual exploration	3. Visual strategy fair	4. Visual communication
• Compare your business with your competitors' by drawing your "as is" strategy canvas. • See where your strategy needs to change.	• Go into the field to explore the six paths to creating blue oceans. • Observe the distinctive advantages of alternative products and services. • See which factors you should eliminate, create, or change.	• Draw your "to be" strategy canvas based on insights from field observations. • Get feedback on alternative strategy canvases from customers, competitors' customers, and noncustomers. • Use feedback to build the best "to be" future strategy.	• Distribute your before-and-after strategic profiles on one page for easy comparison. • Support only those projects and operational moves that allow your company to close the gaps to actualize the new strategy.

Figure K: The sequence of Blue Ocean strategy



"Airlines that have used Blue Ocean Strategy include Southwest Airlines, Ryanair, Porter Airlines, JetBlue, and Virgin Atlantic. They created new market space by offering a new value proposition, rather than competing directly with existing airlines in a crowded market. Key to their strategy was offering lower costs by eliminating services like in-flight meals and first-class seating, while also creating new value through factors like operational efficiency or convenience.

Examples of "Blue Ocean" airlines:

- Southwest Airlines: Created a market for budget-conscious travelers who would have otherwise driven or taken a bus.
    - Value innovation: Eliminated premium services like meals and first-class seating.
    - Operational efficiency: Used a single type of aircraft and achieved quick turnaround times.
    - Result: Made air travel accessible to the average traveler and redefined the market.
- Ryanair: Developed a low-cost model that competed on price, attracting customers who previously used other modes of transportation.
    - Value innovation: Focused on a no-frills, low-cost experience.
    - Operational efficiency: Used secondary airports and streamlined operations to keep costs down.
    - Result: Became Europe's leading low-cost carrier by making flying a viable option for short trips and weekend getaways.
- Porter Airlines: Identified a new market in Toronto by offering a new level of convenience for business travelers.
    - Value innovation: Provided a convenient, scheduled service from downtown Toronto to Billy Bishop Toronto City Airport.
    - Operational efficiency: Streamlined operations with quick turnaround times, like Southwest.
    - Result: Offered a unique value proposition based on convenience that was previously unseen in that market.
- JetBlue: Has a DNA rooted in disruption, constantly aiming to create a unique and differentiated customer experience and challenge industry norms.
- **Virgin Atlantic:** Introduced new services and amenities like personalized in-seat entertainment and Premium Economy, and fostered a unique brand culture, challenging the norms of the industry."[24]

In the Blue Ocean Industry, it is possible to find 2 competitors which are coopetitors and operating as a single unit to harness all the benefits in the industry.

The Dominant Logic Framework[25]: -

"Dominant Logic is the prevailing set of beliefs, mental models, and assumptions held by a group of [CEOs, COOs, Directors, and Managers] that shape their understanding of the business and their critical decision-making processes. It helps an organization stay on a consistent path by providing a common way to interpret the world and make decisions."[26]

1. Treatment of Data: Data refers to raw facts and figures. It has to be processed via the Business Analytics Framework, which consists of Data Analytics to produce information after data is processed and Information Analytics to produce actionable information after information is contextualized and interpreted.[27] It mentions Analytics, but there is no in-depth explanation of what is going on with the data. Back in 1986, there was no development in Data Analytics, Information Analytics, and AI Analytics. So, this concept is obsolete today. Actionable information is used in the new Dominant Logic Framework (DLF), whereas Data was used in the original Dominant Logic of Prahalad and Bettis.

2. Decision-making: The potential to stifle innovation, limit adaptability, and create an overly rigid or self-referential approach to decision-making is highly

[24] AI Overview

[25] Guru Dev Teeluckdharry (2026), 'The Dominant Logic Framework' - UKR Journal of Economics, Business and Management (UKRJEBM), Volume 2, Issue 4, 2026, ISSN: 3049-429X (Online).

[26] AI Overview

[27] Guru Dev Teeluckdharry (2025), 'THE DESIGN AND IMPLEMENTATION OF THE BUSINESS ANALYTICS FRAMEWORK' - INTERNATIONAL JOURNAL OF BUSINESS AND DATA ANALYTICS (IJBDA), Volume 2, Issue 2, July-December 2025

problematic. This happens because the Dominant Logic, representing the prevailing mindset of managers and stakeholders, can become so ingrained that it obscures alternative perspectives and prevents the organization from recognizing and responding to new market opportunities or customer needs, eventually leading to decline.

3. Dynamic Metrics: In the proposed framework, Critical Mindset, New Business Ideas, Values and Expectations, Reinforced Behaviour, Flexible Procedures, and Dynamic Capabilities are embedded in the core constitution of the organization so that and such that it runs smoothly. And managers, CEOs, and stakeholders should review these metrics regularly so that the organization becomes dynamic rather than static.

4. Factors of failures and successes in the past and present: Taking decisions on the basis of failures and successes in the past and present should be carried out meticulously and after empirical research has been conducted. The factors are important. However, they should be used just as a hint only to uncover patterns and trends of the markets that the organization is evolving in. Treating them as definite and ultimate factors may lead to failure rather than success if the decision of the organization is repeated rather than reformulated. But, these factors in themselves may reveal certain aspects of the organization that could be helpful. The old Dominant Logic does not mention these factors at all which could indeed be regarded as a drawback.

5. Core Competency: It is a unique capability, skill, or resource that the organisation excels at and that gives it a sustainable comparative advantage and competitive advantage in the market by providing exceptional value to customers.

6. Functional Competency: It is a specific skill, knowledge, or behavior needed to successfully perform tasks and responsibilities within a particular job or functional area of an organization. These competencies are often technical or operational, such as database management, market analysis, or programming, and are distinct from behavioral or core competencies, which are more general and apply across various roles.

7. Behavioural Competency: It is an observable skill, behavior, attitude, or personality trait that indicates a person's ability to perform successfully in a job. These "soft skills" include qualities like communication, teamwork, leadership, and problem-solving. Organizations use behavioral competencies to predict candidate success, assess cultural fit, and guide employee development by defining expected behaviors for specific roles and the overall company.

8. Comparative Strategy: It refers to the analysis of strategies from different entities (such as countries, firms, or policies) by comparing them to identify similarities, differences, and broader trends. This approach helps in creating frameworks for strategic planning and revitalizes thinking about foreign and defense policies by examining strategic interactions and providing benchmarks for performance in diverse contexts. It is also the name of a prominent academic journal that publishes research on critical security issues

9. Competitive Strategy: is a long-term plan for a company to gain a sustainable advantage over rivals by differentiating its products or services, focusing on lower costs, or targeting a niche market. To develop one, businesses analyze their strengths and weaknesses, understand market dynamics, and evaluate competitors to create a unique market position that leads to superior customer value and profitability.

10. Measures of Performance: They are quantifiable indicators used to assess how effectively and efficiently an individual, team, or organization is achieving its goals and objectives. They provide a way to track progress, ensure accountability, identify areas for improvement, and make data-driven decisions. They can be financial, operational, or qualitative, providing insights into aspects like speed, cost, quality, and customer satisfaction. In the Dominant Logic Framework, they act as to and fro between components inside the organization and outside the organization.

11. Comparative Advantage: It is the economic principle that, to gain the most, two organizations should specialize in producing goods or services for which they have a lower opportunity cost and then trade with each other. This allows them to consume beyond their individual production capabilities,

even if one party is more efficient at producing all goods.

12. Competitive Advantage: It is an organization's capacity to outperform its competitors by creating greater value for customers or operating more efficiently, leading to higher sales and profit margins. It is a strategic attribute that can stem from superior product quality, cost leadership, strong brand reputation, unique technology, or exceptional customer service. Achieving a sustainable competitive advantage helps a business secure a long-term foothold in the market and achieve its vision. It is to be noted that the original Dominant Logic of Prahalad and Bettis mentions only Competitive Strategy, but not Competitive Advantage. This is definitely a pitfall.

13. Survival in Red Ocean Industry: It is a market with existing, defined industries where organisations compete intensely for market share. In these "bloody" Red Ocean Industries, rivalry among existing competitors is fierce, demand is limited, and companies focus on outperforming rivals through price cuts or incremental improvements. Organisations tend to focus on either differentiation or low cost (but not both) through minor improvements.

14. Survival in Blue Ocean Industry[28]: Strategists recognize that market boundaries exist only in managers' minds, and they do not let existing market structures limit their thinking. To them, extra demand is out there, largely untapped. The crux of the problem is how to create it. This, in turn, requires a shift of attention from supply to demand, from a focus on competing to a focus on creating innovative value to unlock new demand. This is achieved via the simultaneous pursuit of differentiation and low cost. Under Blue Ocean strategy, there is scarcely an attractive or unattractive industry per se because the level of industry attractiveness can be altered through companies' conscientious efforts. As market structure is changed by breaking the value-cost trade-off, so are the rules of the game. Competition in the old game is therefore rendered irrelevant. By expanding the demand side of the economy new wealth is created. Such a strategy, therefore, allows firms to largely play a non–zero-sum game, with high pay-off possibilities.

15. Future Outcomes: For organizations, they will likely center on greater agility and adaptability, driven by an increased focus on purpose-driven culture, decentralized structures, and robust talent development. Organizations that prioritize employee well-being, foster innovation, leverage technology, and build strong ecosystems of collaborators will be better positioned to navigate the evolving business landscape and achieve sustainable, resilient growth.

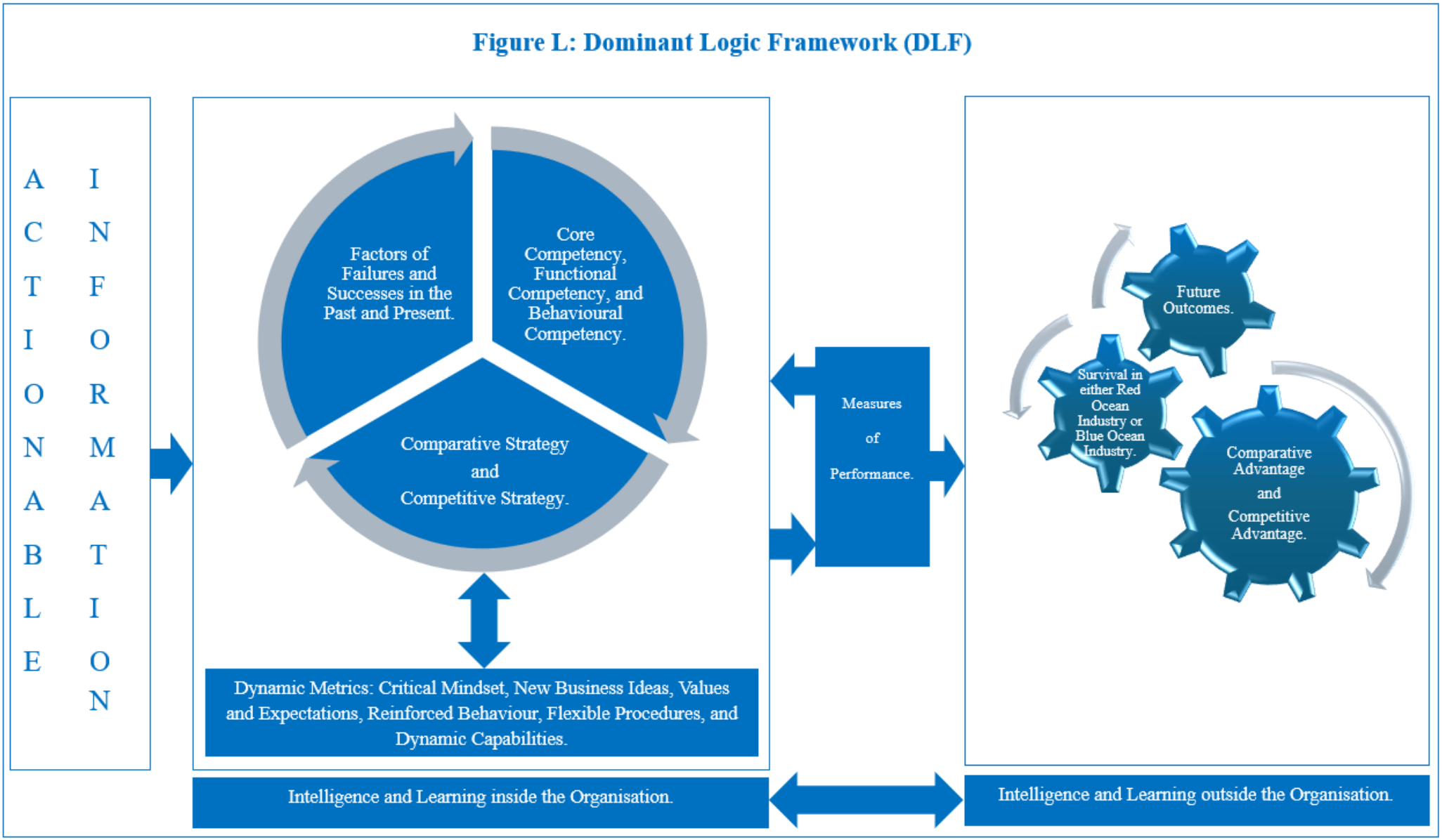
16. Intelligence and Learning inside the Organization: They are interconnected processes where intelligence is the ability to acquire and interpret information to make sound decisions, while learning is the dynamic process of creating, retaining, and transferring knowledge to improve overall capability and competitiveness. Organizations foster intelligence and learning by cultivating a culture of continuous learning, promoting systems thinking, encouraging knowledge sharing and collaboration, and developing a shared vision for the future.

17. Intelligence and Learning outside the Organization: They refer to how businesses acquire and utilize knowledge from external sources to improve their products, services, and operations, fostering continuous improvement and a competitive advantage through a deep understanding of external communities and patterns. This process is essential for learning organisations, which prioritize adaptability and innovation by encouraging employees to seek new skills and knowledge, ultimately enhancing their capabilities and market position.

18. To and fro process: Intelligence and Learning inside and outside the Organization are to and fro process which drives the Dominant Logic and make it dynamic rather than static. As such, there is no need to challenge or change the Dominant Logic completely. Adjustments are just made to keep it up to date unlike that of the original Dominant Logic of Prahalad and Bettis.

[28] Red Ocean Strategy vs Blue Ocean Strategy I Learn the Difference: www.blueoceanstrategy.com

Figure L: Dominant Logic Framework (DLF)



Transition from Red Ocean Industry to Blue Ocean Industry and vice versa:

It is possible for competitors (airlines) in the airline industry to move from the Red Ocean Industry to the Blue Ocean Industry by pursuing both differentiation and low cost with respect to their goods and services.

However, the shift from Blue Ocean Industry to Red Ocean Industry is possible as well.

Why the Blue Ocean becomes Red Ocean?[29]

- "Easy to copy: The low-cost model pioneered by Southwest and Ryanair has been copied by many airlines, leading to intense competition and low profit margins.
- Increased rivalry: As more companies enter the market, the Blue Ocean can become a Red Ocean with increased rivalry as companies fight for market share.
- Need for continuous innovation: competitors (airlines) must continue to innovate to stay ahead of the competition and maintain their Blue Ocean status.
- Focus on value innovation: To succeed, airlines must focus on value innovation, which involves creating new market space by offering greater value at a lower cost."
- Finally, competitors (airlines) that were initially in the Blue Ocean Industry but could not maintain their Blue Ocean status and consequently shifted from the Blue Ocean Industry to the Red Ocean Industry, need to review their Dominant Logic via the Dominant Logic Framework if they wish to shift from the Red Ocean Industry to the Blue Ocean Industry. This can help them to the fullest extent. Competitors (airlines) that wish to maintain their Blue Ocean status and sustain their survival in the Blue Ocean Industry need to review their Dominant Logic via the Dominant Logic Framework constantly as well. Competitors (airlines) and coopetitors (airlines) that wish to maintain their Red Ocean status and sustain their survival in the Red Ocean Industry need to review their Dominant Logic via the Dominant Logic Framework constantly as well.

[29] AI Overview

Checklist for Guru's 19 Forces

How to Use This Checklist:

1. Define the Industry: Clearly state the industry you're analyzing (e.g., aviation industry).
2. Answer Questions: Go through each of the 19 forces and answer the specific questions relevant to your industry (e.g., aviation industry)
3. Assess Strength: Determine if each force is Low, Medium, or High in strength.
4. Analyze Profitability: Use this assessment to understand the industry's overall attractiveness and profit potential.

Threat of New Entrants	Answer to Questions on Industry Analysis
Are there high capital requirements or economies of scale?	Yes or No:
Are switching costs for customers high?	Yes or No:
Are there strong brand loyalties or proprietary technology?	Yes or No:
Does government policy or expected retaliation from incumbents deter new players?	Yes or No:
Are there high capital requirements or economies of scale?	Yes or No:
Are switching costs for customers high?	Yes or No:
Threat of Substitutes such as Products and Services	
What products or services offer a similar function (e.g., video calls vs. phone calls)?	
How attractive are the substitutes' price-performance trade-offs?	
How high are the switching costs to move to a substitute?	
What products or services offer a similar function (e.g., video calls vs. phone calls)?	
Presence or Absence of Bargaining Power of Buyers	
Is there presence or absence of bargaining power?	
Is bargaining power low, medium or high?	
Are buyers price-sensitive?	Yes or No:

How much of the seller's output does a buyer purchase?	
How many buyers are there, and how concentrated are they?	
How much information do buyers have about products and costs?	
Presence or Absence of Bargaining Power of Suppliers	
Is there presence or absence of bargaining power?	
Is bargaining power low, medium or high?	
How many suppliers are there, and how concentrated are they?	
How unique or differentiated are their inputs?	
What is the cost or difficulty for a firm to switch suppliers?	
How important are the supplier's products to the buyer's business?	
Presence or Absence of Bargaining Power of Brokers	
Is there presence or absence of bargaining power?	
Is bargaining power low, medium or high?	
How many brokers are there, and how concentrated are they?	
What is their differentiation?	
What are their switching costs?	
What is their concentration?	
Is there any threat of forward or backward integration from them?	
What is their exclusive information?	
What is their exclusive expertise?	
What is their brand reputation?	
What is their brand loyalty?	

Presence or Absence of Bargaining Power of Competitors	
Is there presence or absence of bargaining power?	
Is bargaining power low, medium or high?	
Are there are many competitors of roughly equal size and market share?	Yes or No:
Is industry growth stagnant or declining?	
Are fixed costs low or high?	
Is service differentiation low or high?	
Is switching cost low or high when buyers switch to another competitor's service?	
Is it costly or difficult to leave the industry due to specialized assets, high termination costs, or emotional attachment?	Yes or No:
Is there a lack of industry leader due to uncoordinated competition?	Yes or No:
Is one clear leader setting the price?	Yes or No:
Are rapidly growing markets allowing all competitors to grow without stealing market share from each other?	Yes or No:
Are brand value, brand popularity, and brand exclusivity of competitors high?	Yes or No:
Are exit barriers for competitors to leave industry low or high?	
Presence or Absence of Bargaining Power of Coopetitors	
Is there presence or absence of bargaining power?	
Is bargaining power low, medium or high?	
Does the coopetitor provide unique technology, IP, or know-how that cannot be easily replaced?	
Does the coopetitor has high attractiveness to other potential coopetitors, reducing its reliance only one coopetitor?	Yes or No:
Would it be extremely expensive or technically difficult to terminate the alliance and switch to a competitor?	

Is the coopetitor a strong competitor that could easily enter a market segment and make other competitors' services irrelevant?	Yes or No:
Is the coopetitor in significantly better financial health than other competitors?	Yes or No:
Are there many other competitors in the industry that could fill the same role in the coopetition?	Yes or No:
Is the service provided by the coopetitor considered to be popular and exclusive?	Yes or No:
Exit of Buyers	
How many buyers are exiting?	
How many buyers are left?	
Exit of Suppliers	
How many suppliers are exiting?	
How many suppliers are left?	
Exit of Brokers	
How many brokers are exiting?	
How many brokers are left?	
Exit of New Entrants	
How many new entrants are exiting?	
How many new entrants are left?	

Exit of Substitutes such as Products and Services	
How many substitutes such as products and services are exiting?	
How many substitutes such as products and services are left?	
Exit of Competitors	
How many competitors are exiting?	
How many competitors are left?	
Exit of Coopetitors	
How many coopetitors are exiting?	
How many coopetitors are left?	
Red Ocean Industry Rivalry among existing Competitors and Unity among existing Coopetitors and Dominant Logic Framework	
What is the number of existing competitors?	
What is the number of existing coopetitors?	
Is the industry growing rate low, medium, or high?	
Is the degree of industry saturation low, medium, or high?	
Is the degree of rivalry among existing competitors low, medium, or high?	
Is the degree of unity among existing coopetitors low, medium, or high?	

Is the degree of product and service differentiation low, medium, or high?	
How easy or costly is it for buyers to switch to an existing competitor's product and service?	
Do existing competitors have low, medium, or high fixed cost?	
Are exit barriers low, medium, or high?	
What is the diversity of existing competitors?	
Are existing competitors competing for high-stakes goals, such as global dominance or achieving specific strategic objectives that go beyond immediate profitability?	Yes or No:
Are existing competitors and coopetitors shifting from Red Ocean Industry to Blue Ocean Industry?	Yes or No:
Are existing competitors and coopetitors in Red Ocean Industry reviewing their Dominant Logic via the Dominant Logic Framework to either sustain their survival in Red Ocean Industry or be able to shift from Red Ocean Industry to Blue Ocean Industry?	Yes or No:
Blue Ocean Industry Lack of Rivalry and Unity among existing Coopetitors and Dominant Logic Framework	
What is the number of existing coopetitors?	
Is the industry growing rate low, medium, or high?	
Is the degree of industry saturation low, medium, or high?	
Is the degree of unity among existing coopetitors low, medium, or high?	
Is the degree of product and service differentiation low, medium, or high?	
What is the diversity of existing competitors?	

Are existing competitors competing for high-stakes goals, such as global dominance or achieving specific strategic objectives that go beyond immediate profitability?	Yes or No:
Are existing coopetitors shifting from Blue Ocean Industry to Red Ocean Industry?	Yes or No:
Are existing coopetitors in Blue Ocean Industry reviewing their Dominant Logic via the Dominant Logic Framework to sustain their survival in Blue Ocean Industry or be able to shift from Red Ocean Industry to Blue Ocean Industry again?	Yes or No:
Strategic Planning Methodology based on STEEPLED (Social, Technological, Economic, Environmental, Political, Legislative, Ethical, and Demographic) Factors.	
Does Social Factor represent a threat or opportunity for your organization?	
Does Technological Factor represent a threat or opportunity for your organization?	
Does Economic Factor represent a threat or opportunity for your organization?	
Does Environmental Factor represent a threat or opportunity for your organization?	
Does Political Factor represent a threat or opportunity for your organization?	
Does Legislative Factor represent a threat or opportunity for your organization?	
Does Ethical Factor represent a threat or opportunity for your organization?	
Does Demographic Factor represent a threat or opportunity for your organization?	

[Tick as appropriate]

Factor	Most Impactful	Most Likely to Materialize
Social	☐	☐
Technological	☐	☐
Economic	☐	☐
Environmental	☐	☐

Political	☐	☐
Legislative	☐	☐
Ethical	☐	☐
Demographic	☐	☐

Insights from Organisations in Single Markets	
How deeply does the organization understand and leverage the unique structure and specific nuances of its single market?	
Is the management and reporting structure simplified due to operating within one consistent regulatory and cultural environment?	Yes or No:
Are resources (financial, personnel, development) concentrated on dominating the single market rather than being spread across multiple regions?	Yes or No:
How exposed is the organization to market-specific risks (e.g., local economic downturns, regulatory changes, or intense competition)?	
Are growth strategies focused on increasing market share, product diversification within that market, or identifying opportunities to scale into new markets in the future?	
Insights from Organisations in Multiple Markets	
How effectively does the organization put “what they are hearing in context,” adapting products, marketing, and communication to different cultural undertones and languages?	
Does the organization effectively manage diverse data privacy regulations, product compliance rules, and legal frameworks across regions?	Yes or No:

Is there a clear balance between centralized governance and regional autonomy, allowing local teams to innovate and release features at their own pace while ensuring overall alignment?	Yes or No:
How does the organization handle data silos across different markets? Is there a strategy for unified reporting and analytics across all operations?	
Are logistics, infrastructure, and supply chains optimized for each region, considering different transportation costs, storage capacities, and local supplier networks?	Yes or No:
How effectively can processes and business models be scaled or replicated when entering a new market?	
Does operation in multiple markets help hedge against market-specific risks in any single location?	Yes or No:
How effectively does the organization put "what they are hearing in context," adapting products, marketing, and communication to different cultural undertones and languages?	
Does the organization effectively manage diverse data privacy regulations, product compliance rules, and legal frameworks across regions?	Yes or No:

Conclusion

The conclusion arising from 'Guru's 19 Forces' aims to incite PhD researchers, Associate Professors, Professors, Strategic Managers, Analysts, Entrepreneurs, and Policymakers to go beyond the traditional methodology of Porter's 5 Forces that was developed from the perspectives of Traditional Management Studies (TMS) and consider the critical methodology of 'Guru's 19 Forces' that has been developed from the perspectives of Critical Management Studies (CMS). 'Guru's 19 Forces' critically analyses the Rivalry among Competitors and Unity among Coopetitors in the Red Ocean Industry, Lack of Rivalry and Unity among Coopetitors in the Blue Ocean Industry, STEEPLED (Social, Technological, Economic, Environmental, Political, Legislative, Ethical, and Demographic) Factors, Strategic Operations (Diversification, Global Expansion, International Business, Joint-Venture Partnership, Merger and Acquisition, Take Over, Benchmarking, Adaptation, Integration, and Innovation), Dominant Logic Framework, and Insights from Organisations in Single and Multiple Markets. 'Guru's 19 Forces' is a powerful model in today's business arena that addresses the pitfalls of Porter's 5 Forces comprehensively. Furthermore, entrepreneurs are strongly encouraged to use 'Guru's 19 Forces' to exploit the Strategic Operations of their businesses (Small Enterprises (SEs), Medium Enterprises (MEs), and Large Enterprises (LEs)). It should also be pointed out that the 'Guru's 19 Forces' model is dynamic rather than static like Porter's 5 Forces. 'Guru's 19 Forces' can be quantified and adapted to the fullest extent via a comprehensive checklist, which has not been provided with respect to Porter's 5 Forces. To sum up, it could be stated without any exaggeration that 'Guru's 19 Forces' is a breakthrough in Strategic Management, Business Administration, and Entrepreneurship.

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