

Marketing in the Air: Marketing strategies of the Leadership in the Airline Industry

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The paper analyzes the strategic decisions of the two - player market of the airline manufacturing industry. It looks at the competitive interactions between Airbus and Boeing in organizational and marketing strategies. Due to the lack of focus on marketing wars in the air in previous research papers, the goal of this research is to develop an improved understanding of marketing strategies influenced by the leadership and practices being pursued by Airbus and Boeing. The research takes as its point of departure a review of marketing and organizational strategies and principles. Guided by this review, the research focuses on product recognition, marketing models, brand alignment and employs a questionnaire survey, followed by interviews with representatives and indirect customers. It concludes that Boeing leads the market when it comes to marketing and organizational strategies to sustain itself in the industry. A framework is proposed based on the insights from the triangulation methodology which highlights the challenges, stakeholder perception, marketing strategies and their impact. Because of the dynamics of the aviation industry, disputes often occur between the companies, transcending to an involvement of the government, management and customers. These implications from the stakeholders aggravate the competitive wars between the two leaders.

Introduction

With the onset of the revolutionary decade beginning with 2020, the aviation industry has established itself as one of the most supported industries towards the world's gross domestic product with 3.6%. It provides 65.5 million jobs across the globe (Forbes, 2020)¹. Looking ahead, IBIS market report reviews the revenue to be rising with a CAGR of 3.7% and a 7.8% increase in 2023². The aviation industry has two leading giants globally : Boeing and Airbus. The duopoly owns the sky by making 99% of global plane orders due to lack of other competitors³. Boeing held the first mover advantage in the industry with a leading position due to its advanced innovation entry and no competition in the initial years. With Airbus identifying the gap of the niche market in the aviation sector and technologically improved aircrafts, it has finally been recognized as Boeing's major competitor⁴.

The international duopoly of Boeing and Airbus in the industry of commercial aircrafts including narrow body and wide body, Airbus is at the forefront with \$5B profits in 2022⁵. When a firm has an opportunity to take the lead, it often tries to distinguish itself with a unique strategy. In this close range competition between Airbus and Boeing, there have been various technological advancements and organizational and leadership changes that have resulted in one alpha to sustain their competitive edge in the market. Both the companies have a slight difference in their models and strategies but Airbus may have dethroned Boeing in terms of technology. However, vari-

ous platform promotions make it evident that Boeing takes the number for the marketing.

Despite the usage of the same technology, the different implementation of it has led the companies to choose different paths⁶. In addition, the competitive approach of companies towards the same audience has changed the functioning of the airline industry itself. The race of the manufacturing giants is driving innovations, changing aircraft buying patterns and routes. It is important to study the leadership role and marketing strategy of the aviation industry to identify the consumer and industry behavior. The research contributes to concluding when and where to use certain types of marketing techniques. Boeing and Airbus have changed their management structure from time to time⁷. Strategies need to be updated according to the audience and generation. To understand this, we need to study the importance of strategic positions in a competitive context. This study aims to investigate the changes that helped leading companies to market themselves stable. It is significant to study challenges, improved models and strategies, and the behavior of such industries. The paper will aim at exploring the following research question: How does the leadership of companies in the airline industries market themselves to sustain the competitive edge?

To answer the questions, the paper uses a triangulation methodology of mixed methods approach, leveraging the literature review, content analysis, surveys and interviews. The rich insights drawn externally from society members along with the knowledge drawn internally from the respective com-

panies and interviews of employees help in bringing the factors of framework. This criteria for the study gives the extent of presence of Airbus and Boeing globally. This research employs print media and social media presence for comparative dynamics. Next, we deep dive into the research objectives and questions of the paper. This is followed by a section 2 of the paper which discusses the literature review followed by the methodology in section 3. The analysis is shown in section 4 along with the findings from surveys. Next, the discussions in section 5 resulting from the study. The paper acknowledges the gaps and limitations of this study in section 6 and provides further research directions for the academics, thus, providing conclusions of the paper in section 7.

Research Objective

This research tends to investigate the usage of marketing and organizational techniques in the industry, especially in Europe and the United States of America. The research objective of this study is to determine the impact of difference of strategies in the duopoly that lead to a competitive edge. It aims at exploring the effectiveness of the industry leader and the branding strategy in the aviation industry. When branding is done correctly, businesses can have a better chance of connecting with their target market. Previous literature has focused primarily on technological behavior, supply chain and business models. Now this study aims at exploring the methodological contribution of picture based analysis along with other insights from the interviews and surveys to help draw a better picture of this literature. This study will help to understand the consumer perception towards the aviation industry and explore the challenges faced. The study aims at addressing the following research related questions :

1. How is Airbus marketing itself differently from boeing?
2. What is the role of leadership in developing the marketing strategies in the airline industry?
3. How does the execution of promotional campaigns influence consumers of the airline industry?

This study is of great significance as this research assists in investigating the strategies that can be employed by the company to maintain its competitive advantage and remain profitable in the coming years. The companies which have been perceived as pioneers of the aviation industry will be able to nurture their brand image through various strategies. It will help them to entice new customers for their products. This study catalyzes leadership and marketing as key features to capture dominance in the industry.

Next, we discuss the literature review of marketing and leader airworthiness to deep dive into the insights from external studies.

Literature Review

The extant studies in the sphere of airline manufacturing industry have been progressing with a myopic view of the service sector, primarily focusing on the technical and infrastructural aspects of manufacturing the airplanes. This study reviewed previous research papers published from 1998 till 2023.

First, leadership and branding have become very significant assets for international organizations such as Boeing and Airbus. While several aspects of marketing and leadership have not been discussed in previous literature, themes like technological behavior, supply chain, financial schemes, innovation and competitive dynamics are all influenced by the leader of the industry. Drivers of innovation in the aviation sector help achieve a competitive edge (Renata, 2017)⁸ and can be taken under consideration of marketing different business models. From existing literature, the study will be reviewing different patterns and themes. Furthermore, leaders are responsible for articulating the organization's vision, strategic objective setting, and monitoring the achievement of those objectives (Pollock, Murray et.al 2020)⁹, thus, it is important to explore this aspect.

Second, there has been prime focus on the technological advancements of products and services in the aviation industry. Hawlena (2009)¹⁰ states that both the companies work on the same technological model with a different approach. However, Maaz (2022)¹¹ argues with Airbus and Boeing having a lot of technological operational differences. Airbus entered the market with technologically advanced aircrafts. The technological framework of Airbus's commonality fleet actively influenced the success and business strategy of the company (Ibsen, 2009)¹². It is interesting to note that Airbus was the first mover to introduce the fly - by - wire system, a technology developed by Airbus that substitutes an aircraft's traditional manual flying controls with an electronic interface. While, the technological ethos of Boeing links its technological framework to pilots. Boeing continued with the traditional piloting ways for the beginning few competitive years (Ibsen, 2009)¹³. Despite technological advancements in the aviation industry the approach of new innovations led to major problems¹⁴. Airline firms were hesitant to buy the new planes produced by Airbus and Boeing since their pilots weren't familiar with the technology, which resulted in negative press for the beginning few months. Unskilled pilots and new systems changed the industry in a minute. For a comparative analysis of technological advancements, the 'Queen of the skies' and 'Super Jumbo' respectively are suitable. With a \$351.4 million and \$389.9 million product from Boeing and Airbus respectively, Airbus won the battle. The Airbus superjumbo was proved to be better and preferred by airlines (Davies, 2012)¹⁵. However, the super jumbo's production stopped due to lack of demand

created by the lack of facilities of airports to handle such huge aircraft at the end of term with Tom Enders, CEO. As the organizational structure changed, the product and sales strategies shifted. Airbus discontinued producing the A380 due to lack of sales revenue, and Boeing also stopped manufacturing the 747 for the same reasons. Furthermore, focusing on Boeing's 737, a flight that caused major backlash to the company. The aircraft was launched in March, 2019 with Boeing's decision to use a flight control software known as MCAS¹⁶. The company's competitive nature to take the market lead with investments in the R & D sector for innovations and advancements in turn portrayed to be a weakness (Woo, et. al 2021)¹⁷. The glitch of the new technical system led to many crashes and deaths under President and CEO, Muilenburg who was fired under its allegation due to his poor leadership skills.

Third, several studies have been conducted on the supply chain management of the aviation sector^{18,19}. The aviation industry caters to a customer base including air freight companies, aircraft leasing companies and airlines. Boeing and Airbus have become the largest suppliers to the Asian market apart from the United States of America and Europe. Highlighting the market of China, Airbus with effective and strong strategies has not been able to acquire the Asia - Pacific market as that of Boeing²⁰. The focus of Boeing's actions in China was primarily on education, which was crucial to increasing the number of local jobs and winning over the government and customers, giving it an edge²¹. However, in 2023, Airbus under the leadership of Guillaume Faury took over Boeing in the China Market²². Even though China is in the initial phase of domestic manufacturing of airlines, it might cause a minor deviation in the strategy of the duopoly regarding communication with their suppliers as the leadership will need to emphasize the benefits of continuous engagement with Boeing and Airbus^{23,24}. With the European certification for the aircraft still in processing, both the dominating companies have enough time to formulate an alternative action plan. Wilson in 'The Air War' states that supply chain management and integration is a viable feature to attain greater supply efficiency and customer satisfaction. Despite a focus on this, there has been a lack of understanding of which trend identifies to be the most effective supply chain model for the aviation industry. Campos (2001) noted that Airbus with new advancements acquired a 20% stake with Boeing in the industry. In light of this, Katz and Tangel (2023) highlighted that Boeing has witnessed an increase in the annual orders and deliveries but still lags behind Airbus. Aerospace Marketing Group (2017) puts forward the significance of aerospace branding to differentiate your aerospace/aviation company and make its presence.

Fourth, transnational alliances such as the EU have reviewed the policies for the aviation industry. Greenpeace, an independent global campaign, has demanded that the European Union places a ban on short - haul flights and focus on

an alternative in trains. Greenpeace estimates that implementing such laws will save 3.5 million tonnes of carbon dioxide equivalent each year²⁵. However, various airline companies discuss different views on the ban. With Airbus and Boeing aircrafts that reduce emissions to be introduced in the near future, the ban seems to be unnecessary which would affect the airline companies, tourism and the economy overall. With Airbus aiming to be able to offer a medium range, commercial hydrogen powered aircraft by the middle 2030s and Boeing working with NASA on reducing fuel consumption and emissions up to 30% with a new wing feature, the aviation industry is on a greener path already²⁶.

Finally, there have been reviews on the competitive dynamics of market and segmentation. Airbus and Boeing had their global competition started in the 1990s²⁷. Starting from home countries, the companies have integrated their presence across the globe. In 2018, Airbus controlled more than 50% of the global market for both narrow and wide bodies²⁸. Airbus has slowly taken over the segmented market of the airlines. Boeing captures the market through print media and digital media marketing with a focused differentiation strategy²⁹. Boeing gives key importance to the brand's logo to maintain presence. Through sponsoring various events and displaying products at air shows, Boeing increases their visibility. 'We have strengthened our brand presence and reduced costs by millions of dollars' - Fritz Johnston, Director of Brand Strategy and advertising at Boeing. Contrastingly, Airbus uses the power of personalization and the targeting strategy by granting its customers the freedom to add their own ideas and suggestions to the interiors, colors, leg room, and wifi features³⁰. Airbus markets itself through print media, television advertising, and majorly air shows such as the Paris Air Show and Dubai Air Show. It has a social media presence of million followers on Instagram in comparison to Boeing's. The systematic literature review is shown in Table 1.

Findings and Results

Survey data analysis and results

The analysis of the data from the survey was bifurcated based on the age groups categorized as Baby Boomers, Gen X and Gen Z. It is important to note that the survey required a balance of respondents belonging to all income levels, especially to get the context of traveling in flights and awareness regarding airline manufacturers in order to respond to this survey effectively. In the study and the survey responses, overall 15% of the respondents belonged to the highest household income level of INR 20 lakh and above (31% of the Gen X) which ensures the balance of sample based on the demographic characteristics. It does not imply that the airline manufacturer is associated with rich people or any class of customers traveling

Table 1 Literature Review³¹⁻³⁴

Paper	Theme	Market	Research Objective	Methodology	Findings
<i>Campos (2001)</i>	Organizational Behavior and strategies	USA and Europe	To review the preceding stages of competition between airbus and Boeing	Descriptive	<ol style="list-style-type: none"> 1. With Airbus launching the new A380, for the very first time, the duopoly seems to have a competition between Airbus and Boeing with Boeing having to catch up on the Airbus lead. 2. With a Monopoly in the airline manufacturing business, Airbus has finally acquired a 20% stake with Boeing finally recognizing it as a competitor.
<i>Ibsen (2009)</i>	Technological Behaviour	USA and Europe	To study the large commercial plane technological philosophies through economic and modern sociological approaches	Empirical	<ol style="list-style-type: none"> 1. Boeing's technological philosophy affiliates its technological frame with pilots while Airbus's affiliates its technological frame with airlines. 2. Boeing's frame was described as one of 'accommodation,' and Airbus's was shown as a frame of 'dependence.'
<i>Wilson (2022)</i>	Competitive Dynamics	America	Reviewing the global competition of airbus and Boeing focusing on financial schemes and market shares	Descriptive	<ol style="list-style-type: none"> 1. Financing schemes play an important role when segmenting the market. 2. Airbus in 2018, held more than 50% of both the narrow body and wide body worldwide market.
<i>Horng (2004)</i>	Supply Chain strategies and business model	USA and Europe, China, Japan	Comparative analysis of the supply chain model of the duopoly	Empirical	<ol style="list-style-type: none"> 1. Costs can be reduced through supply chain restructuring of a business 2. With effective and stronger strategies, Airbus has still not able to get hold onto the Asia - Pacific market, focusing on the Chinese and Japanese market
<i>Woo et. al(2021)</i>	Business models and Leadership roles	USA and Europe	Reviewing the competitive dynamics of Airbus and Boeing	Descriptive	<ol style="list-style-type: none"> 1. Direct point to point and Hub - and - spoke models gave Boeing and Airbus different results in the competitive dynamics. 2. With Airbus taking over the industry steadily, Boeing's risk-taking culture helped it sustain its market share in the aerospace industry.

<i>Pisarek (2017)</i>	Product Innovation and technological advancement	Global	Examining technological innovation in the airline industry and its impact on the environment and economy	Empirical	<p>1. Drivers of innovation in the aviation sector: Economic profitability and to achieve a competitive edge with reduction in carbon emissions with a strategy of creating an environmental impact</p> <p>2. Boeing produces smaller aircrafts to avoid refueling while Airbus focuses on comfort of the passenger</p>
<i>Akai et. al (2015)</i>	Game theory, Environmental and resource concern strategy	Japan, USA and Europe	Analyzing the CFRP contract using game theory	Empirical	<p>1. When new technology is innovated, the best response strategy is for the provider firm to establish itself as the largest firm and a leader in that market by producing large amounts of production and reducing the price.</p> <p>2. Leads to higher profits for both material providers and users.</p>
<i>Moceno (2015)</i>	Obstacles in production, organizational structure of the supply chain	USA and Europe	To review the supply chain features before and post innovation in the aviation industry	Descriptive	<p>1. Despite the technological advancement in the aviation industry, the new approach of innovations had cause major problems</p> <p>2. Larger producers use the strategy of joint ventures and strategic alliances from time to time.</p>
<i>Kretschmer (1998)</i>	Developer's dilemma - game theory	USA and Europe	Reviewing the chances of Boeing and airbus in production of a new product in the market	Descriptive	<p>1. Realization of Boeing that if both players of the duopoly manufacture a super - jumbo, both lose.</p> <p>2. 'In game-theory terms, Boeing's payoff for leaving the new market untapped was positive, Airbus's payoff was negative. Boeing's best interest was to slow development of other jets in the 400-plus category, while Airbus's interest was to end Boeing's jumbo monopoly.'</p>
<i>Irwin et. al (2004)</i>	Competition and segmentation	USA and Europe	To review the international competition in unusual market structure of the aviation industry with the influence of a few transnational alliances	Empirical	<p>1. There is market segmentation in products between the leaders to near monopoly</p> <p>2. 1992 - trade civil aircraft agreement between USA and Europe to limit government subsidies for aircraft production</p>

in the aircraft, if so, it is due to the airline company operating it.

The perception about the respective company advertisements is different among three generations, however there is a mutual alignment towards the impact and influence of the advertisements. The demographic details of the participants are shown in Table 2. On the basis of these details, the participants are analyzed on their choice of attraction towards the advertisement. Factors such as age and generation assist in concluding that simple and customer interest advertisements are the key to having a competitive advantage against the competitors.

Majorly, customers had the highest confidence at neutrality in both cases of Airbus and Boeing, with approximately 30%, while, the ratio of a very high confidence level was low for Airbus and decreased further for Boeing. Approximately 39% of the respondents were able to recognise the airline manufacturing industry as the product being advertised in case of Airbus as well Boeing. This shows the lack of alignment between the product advertisements in the airline manufacturing industry since it is not clearly visible to the indirect customers. The indirect customers influence (consumers) the direct customers (airline service industry) of the airline manufacturers. Therefore, product advertisements in the airline manufacturing industry should allow transparency for facile recognition and customer loyalty further.

Interview Verbatims

The questions in the interview revolved around the effectiveness of marketing on different platforms. There were various key insights generated throughout the interviews. First, the understanding of the customer perception regarding the product and the company that affects marketing followed by its influence. One of the respondents mentioned that “even though social media marketing is very effective for the current generation, however, people my age still prefer to look at magazines and newspapers. The new digital advertisements don’t really appeal to us the way old advertisements did” (P1, 46 yrs, Gen X). The customers seem to have a negative approach towards digital marketing, however, a consumer’s approach is influenced by their age as witnessed. Another insight gained from a consumer who had a positive approach towards the company’s digital marketing strategies and stated “Advertisements when scrolling through instagram are memorable which make quite an impression. Regular updates on the accounts of Boeing and Airbus, especially about their new airline buyers, really keep me engaged” (P2, 26 yrs, Gen Z). This showcases a variance in perception, Gen X vs Millennials vs Gen Z.

Second, the employee of the Go Air airline focused on the significance of digital marketing in the aviation industry. The employee stated “we use social media marketing to increase

our reach. The company has witnessed an increase in engagement with a focus on digital marketing.” The influence of platforms such as instagram and twitter can be very useful for permeating the popular culture of scrolling as a habit of the audience. Another response to a question mentioned that “we can update the customer of our newly bought aircrafts.” Different responses from the audience towards marketing, the company uses different marketing strategies for different aircrafts to appeal to the customer.

Overall, the insights from the interviews from the consumers and employees working at an airline company reflect on the perception of the audience, effectiveness of social media marketing in the aviation industry and its impact. The findings from the survey questionnaire and interviews, together with the theoretical foundations from literature, are utilized to create a framework for marketing in the air. To generate pertinent and useful subjects and information for businesses, raw data was gathered, cleaned, categorized, and processed. Then, with the aid of peers and academics, themes are aligned.

Discussion

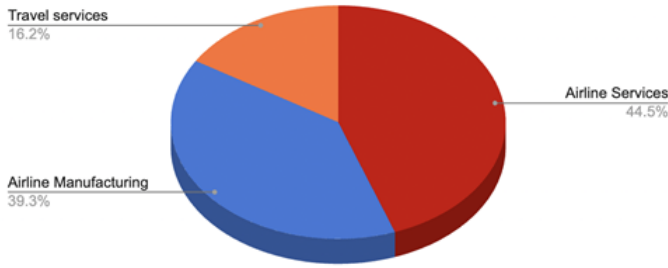
The insights garnered from the triangulation approach of literature review, survey, content analysis and interview lead to the development of the proposed framework for the digital marketing landscape of the airline manufacturing industry (Figure 1).

Stakeholder Perception

CustomersAn interesting perspective to garner focus on both direct and indirect customers through different target advertisements depicts the company’s lack of focus on the brand and product alignment. The aim of customer appeal and brand recognition portrays the company’s weakness in relation to the competitor. The opportunity cost of reaching the aim, deviates the company’s advertisements from the main purpose of its respective customers. Indirect customers have led both the leading companies to present commercials on the basis of luxury and service, therefore, accounting to the needs of indirect customers before fulfilling the needs of the company’s direct customers i.e the airline companies.

Direct customers majorly including airline companies are prone to being neglected by the manufacturers. Even with the technological advancement and product recognition strategies, neither company has a unique strategy in any case, with no specialization in any particular segment of the market, Airbus and Boeing throughout their commercial duel have responded with slightly different alternatives making no separate impact (Ibsen, 2009).

Product identification : Airbus



Product identification : Boeing

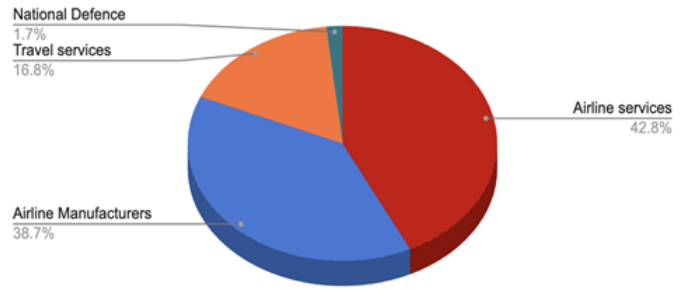


Fig. 1 Product identification by customers from Social Media Advertisement in Airline Industry.

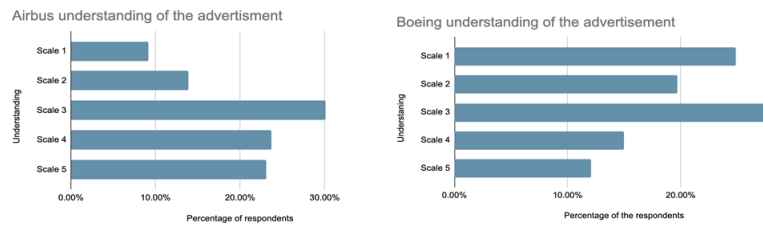


Fig. 2 Customer confidence in product identification.

ManagementThe success of marketing strategies is not only determined by the effectiveness of it in the marketplace but also the stakeholder perception of the management. With somewhat distinct visions and values of Boeing and Airbus, both of them are inclined towards the same belief of customer focus. The aviation manufacturing industry is under strong pressure to reduce carbon emissions. While Boeing has the principle of environment, sustainability and ethics, it remains adaptable on how to market itself. In addition to this, the companies can explore how their leadership from time to time creates a difference in the profitability of the brand.

Leadership

Effective decision making leads to strong strategic decisions of marketing of the firm. In reference to papers, company leaders have focused on technological advancements, marketing models, product recognition and brand alignment for a successful marketing approach. These strategies led to an increase in sales revenue of the firm followed by community engagement and recognition among the customers.

Leadership vision is of utmost importance and shapes the actions and decisions of a company. The vision of the management board and leadership committee in the airline industry will ultimately impact on the decision for the company. Both the companies need visionary leaders who can anticipate and respond to changing market conditions, embrace techno-

logical advancements, and foster a culture of collaboration and innovation.

Marketing Strategies

Technological advancement has become a crucial marketing strategy for airline manufacturing companies like Boeing and Airbus. The airline industry is responsible for nearly 3% of global carbon dioxide emissions global and with an increased focus on sustainability and efficiency, airline manufacturers look forward to advanced and innovative technologies like improved aerodynamics, engine technologies, and materials in their aircraft to address climate change and environmental issues with major changes like greener fuel, carbon offsets and utilizing the power of hydrogen (WEF, 2021)³⁵. Both the manufacturers are looking at replacing jet fuel with SAF (sustainable aviation fuel) which will increase the chances of reaching net zero carbon emission at a faster pace. Airbus and Boeing aircrafts with SAF are already in testing and are being used at various site activities. Boeing’s sustainable chief officer in an interview took a look back at the promise made by the company to supply the first 100% SAF plane in 2030 and its commitment for the mission has also led Boeing to hire specialists from around the globe to join the team (BNN, 2023)³⁶. Moreover, Airbus has also started its involvement in hydrogen power. Airbus states that it will develop the world’s first commercial aircraft fueled by gas by 2035 (WEF, 2021)³⁷. By

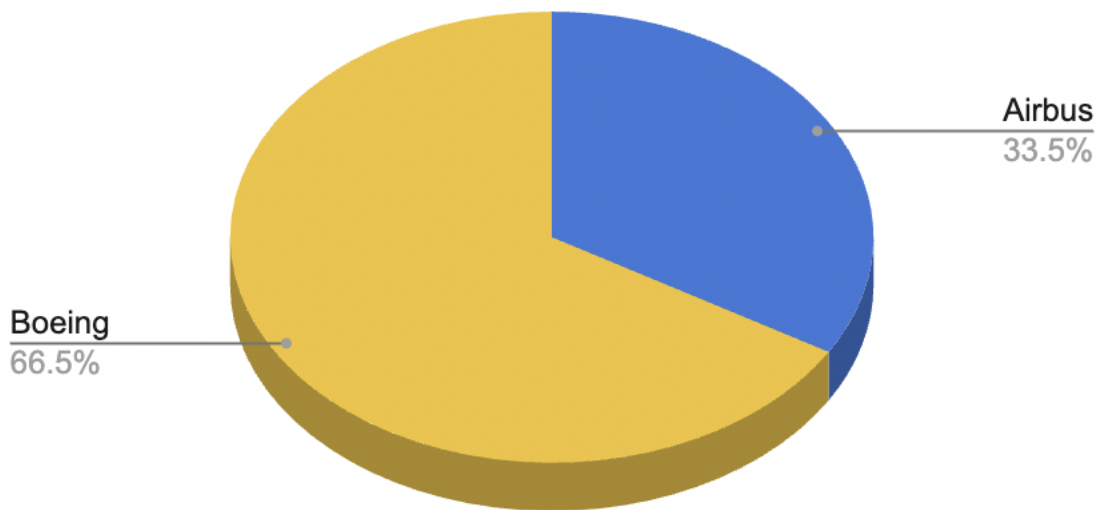


Fig. 3 Percentage distribution of the customer appeal of Airbus and Boeing.

investing in R&D, they are aiming to offer airlines the most advanced and efficient aircraft, while also enhancing the passenger experience. Overall, technological advancement has become a key selling point for Boeing and Airbus as they strive to stay ahead of the competition and meet the changing demands of the airline industry.

Marketing Models offer a framework like the four P's of marketing, customer value proposition, buyer persona, customer journey for marketers to plan, execute and measure their marketing campaigns effectively. Airbus and Boeing use dynamic pricing strategies to remain competitive in the market. Both companies have a strong presence on social media, with active accounts on platforms like Twitter and LinkedIn. Airbus and Boeing can use the model of customer value proposition to differentiate their products and services from their competitors like technological advancements. In order to increase their brand recognition, reputation, and eventually revenue development in the digital marketing environment, two significant players in this sector, Airbus and Boeing, might use product recognition as a marketing technique. By implementing consistent branding, high-quality visuals, influencer marketing, and showcasing awards and accolades, Airbus and Boeing can improve their product recognition and gain a competitive advantage in the market. Social media users such as youtubers who review flights for their luxury, value for money and hospitality often mention the manufacturer when giving a detailed review of their journey. Apart from this, specialized

plane spotter channels and social media pages are a major factor in the company's product recognition.

Airbus and Boeing by aligning their marketing efforts with their brand values and mission, can build a strong brand identity, increase customer loyalty, and drive revenue growth in the digital marketing landscape of the airline manufacturing industry. Consistent messaging, unified visual identity, partnerships and collaborations, and social responsibility are all key components of brand alignment that can help these companies to stand out in a highly competitive industry.

Social media has grown to be a potent instrument for marketing in the aerospace sector. Social media platforms like Facebook, Twitter, and Instagram are used by industry leaders to communicate with their audience, spread brand recognition, and increase engagement. A digital marketing landscape has helped improve the recognition of the aerospace industry.

Methodology

This study analyzes the competitive leadership and marketing dynamics by focusing mainly on the responses of Airbus and Boeing. Due to the duopoly, these two businesses have the majority of the market share in the aerospace sector, so we have restricted the emphasis of our research to Boeing and Airbus. This duopoly has created a series of moves to define their presence in the industry. The paper employs a triangulation methodology of mixed methods approach to address the ques-

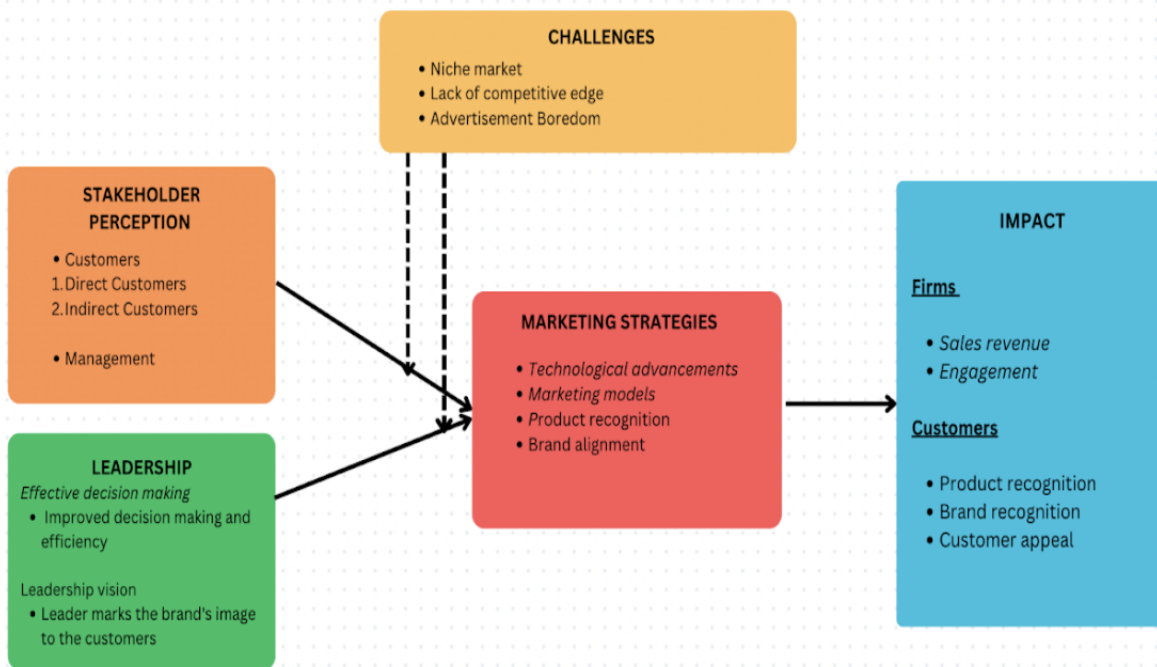


Fig. 4 Marketing landscape of the airline manufacturing industry.

tions, drawing on a literature review, content analysis, questionnaires, and interviews. In this specific case study, we use a descriptive approach that highlights the important areas. To prevent the limitations and study bias that occur with relying on a single research approach, methodological triangulation is helpful.

Adding to the insights from the literature review and content analysis, a mix of employee and customer perspectives was used to gather the quantitative data and qualitative insights regarding the airline manufacturing industry and products. A survey technique was leveraged for the insights from the consumers and society’s perspective while in - depth interviews from a professional’s perspective gave an overall bird’s eye view of the leadership impacting the marketing strategies.

Survey

A survey technique was used to gather the quantitative data and insights from 173 consumers of different age groups with the highest rate of respondents being above 46 years. The author acquired the consent of the participants after sending them an email asking for their participation. It is important

to consider that each participant should receive an informed consent form through email, which they are required to read and accurately fill out. All participants were well acquainted with the medium of language and studied it as an academic medium. Additionally, care is taken to avoid using jargon and obscure language that can confuse respondents when gathering data. Further, the form contained more closed - ended questions. This was used to have higher response rates and to easily statistically analyze the summarized data.

The survey is divided across 4 sections. Section 1 aims at understanding the respondent’s interest in the aviation industry and its knowledge about Airbus and Boeing. It is followed by a section 2 that focuses on the marketing strategies on how well can the customer identify and understand the product from advertisements across various time periods. It focuses on questions like ‘How well can you identify the product being advertised here?’ with scalar data to choose from 1 to 5 to answer. Section 3 further aims at understanding the impact of various marketing strategies developed from content analysis, interviews along with the literature review for the marketing techniques of Boeing and Airbus. It involves questions like ‘How impactful is the advertisement given below influ-

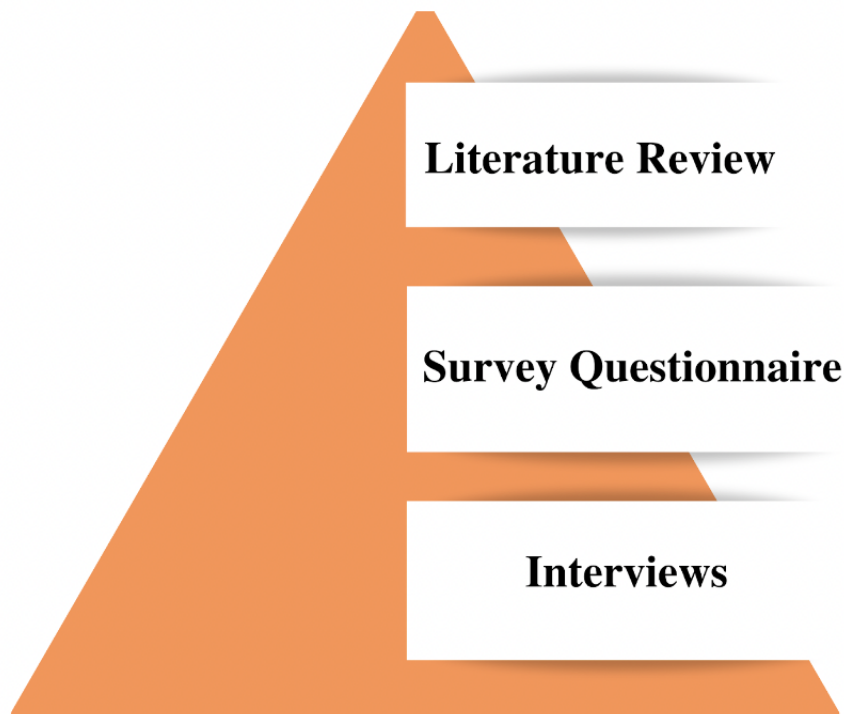


Fig. 5 Triangulation Research Methodology of Mixed Methods for the study.

encing you to know more about it?'. Finally, section 4 works on the demographic and personal details of the respondents. The survey questionnaire was designed for participants of all age groups, gender and backgrounds. The responses from the survey are shown in the Table 2 in the Data analysis section

Interviews

Interviews were conducted with the employees of the airline manufacturing and service industry. Subjective information was further accumulated from interested consumers as well. The interview conducted included the former social media market head of the airline company Go Air. The availability of the employee was checked and a prior appointment was taken before the interview. The interview lasted for 30 minutes and was conducted via zoom video - call on a weekend considering that the employee finds it a safer environment to discuss their opinions away from the working environment. Secondly, the consumer interviews were conducted in- person

with two male consumers above the age of 46. The collated responses were analyzed further to study the marketing objectives and strategies. The interview and survey questions were developed keeping in mind the ethical and privacy concerns. All demographic factors questioned in the survey for the analysis were confidential with the participant's approval to take part and fill out the form. In the next section, we discuss the analysis and findings of the surveys and interviews.

Research Gap and Future Direction

Only a limited number of people were approached for interviews due to time and money constraints, despite the fact that interviews are the greatest way to obtain reliable information³⁸. There was hindrance in reaching out to people from the airline manufacturing industry. Following this, the survey respondents were mostly indirect customers rather than direct customers which may not be the prime focus of the companies. There have been previous literature reviews (Ib-

sen, 2009) (Renata, 2017) focusing on technical and engineering aspects mainly leaving a research gap in understanding the competitive marketing strategies of the two leaders of the aviation industry. There have been several arguments on the leader of the market in terms of innovation of the product. Different implementation models of the technology gave the direction for the basis of a comparative analysis based on marketing strategies. According to the identified research gap from existing research and this paper, future studies could expand on the consumer behavior to the advertisements deeply, marketing strategies with a focus on financing and various leadership visions.

In addition to being a duopoly, the airline industry also tends towards a monopsony with limited buyers for the product offered which has different implications for leadership and marketing. While a monopsony gives various advantages it also raises ethical and social concerns for the leaders such as labor market distortions and potential exploitation. A firm usually dominates the labor market when approaching a monopsony which can influence leadership decisions regarding hiring, firing and overall management strategies. This can also lead to potential exploitation which could have long term effects on the brand's name resulting in negative publicity and marketing. The future researchers can thus explore the consequences of a limited market on the brand and its leadership strategies.

Moreover, there is a scope of indirect and unintended marketing of the airline manufacturers. Airline manufactures are heavy on marketing to airline companies and confirming orders through airshows. However, these brands rarely indulge in direct marketing, for example, Airbus sponsored an all women's parachuting team whereas Boeing hosted a military hiring fair at Lumen field in collaboration with Seattle Seahawks, an American football team. Additionally, when the airline companies (i.e. the clients and buyers of the product) promote their brands through sponsorship and partnership in public and international events like World Cup and Luxury Brands, it caters to the manufacturer's indirect market. It is not the "Airbus" or "Boeing" advertisement done directly, rather it is the promotions by particular airline company such as Qatar Airways painted the Boeing 777 in FIFA World Cup livery and Etihad Airways painted Airbus A330 -200 with a sky blue color for the Manchester City football club livery^{39,40}. It is probably an indirect and unintended promotion of the manufacturers which has not been addressed in the scope of this paper. Future researchers can explore the indirect marketing tactics and promotions that impact the leadership decision of choosing a particular client that might indirectly multiply the benefits of marketing.

Conclusion


Operating in a market that is expanding and competitive, aircraft manufacturers are constantly looking for a competitive edge with effective marketing strategies. Unique leadership and marketing strategies have led to different paths of success for both Airbus and Boeing. However, the challenges remain the same for the companies of the changing era. This paper proposes the framework of strategies for airline manufacturing. The paper summarizes the comparative analysis of Boeing and Airbus marketing with the lead of Boeing on the basis of customer preference from the analysis. It highlights the customers and leadership perspective regarding the organization that defines the strategic actions and impact of the decisions on the firm and the customers. Consumers are becoming more demanding and the intensification of the competition initiates the companies to keep on adapting and innovating with up-to-date strategies under respective leaderships. The research has highlighted the importance of product recognition, marketing models, and brand alignment in sustaining a competitive advantage in the industry. The research has also identified the need for further research to address the challenges faced by the industry. The findings of this research can be used by players in the industry to develop effective marketing and organizational strategies to sustain a competitive advantage.



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Appendix Table - 02 Survey Questionnaire

Table 2 : Survey Questionnaire					
<p>Note for the participants: Hi, I am Kaashvi Arora, a high school student at Jayshree Periwal International School. Through this research, I aim to determine the impact and effectiveness of marketing based on various factors. I request you to fill the survey questionnaire form for academic purposes. I assure the confidentiality and security of your data. Thank you!</p>					
No.	QUESTIONS	Overall response (N = 173)	Gen X (N = 45)	Millennial (N = 79)	Gen Z (N = 49)
Section 1 : Interest and Awareness of the industry					
Q1	Do you have any interest in the aviation industry? Yes No	60.1% 39.3%	53.3% 46.6%	63.2% 36.7%	61.2% 38.7%
Q2	Have you heard about: Airbus or Boeing? Yes No	91.3% 8.7%	93.3% 6.6%	94.9% 5%	83.6% 16.3%
<p>Section 2 : Marketing Strategy This section aims to understand the marketing strategy and identification of certain advertisements regarding different products, companies and scenarios. Please choose the following options for the questions below:</p> <ul style="list-style-type: none"> - Scale 1 : very low - Scale 2 : low - Scale 3 : neutral - Scale 4 : high - Scale 5 : very high 					
Q3	<p>Advertisement 1: How well can you identify the product being advertised here?</p>  <p>Why the company behind it is so ahead of its time.</p> <p>©A300</p> <ul style="list-style-type: none"> - Scale 1 : very low - Scale 2 : low - Scale 3 : neutral - Scale 4 : high - Scale 5 : very high 	<p>11%</p> <p>8.7%</p> <p>23.7%</p> <p>21.4%</p> <p>35.5%</p>	<p>4.4%</p> <p>17.7%</p> <p>31.1%</p> <p>26.6%</p> <p>20%</p>	<p>11.3%</p> <p>11.3%</p> <p>22.7%</p> <p>26.5%</p> <p>27.8%</p>	<p>12.2%</p> <p>12.2%</p> <p>40.8%</p> <p>16.3%</p> <p>18.3%</p>



Q4	Which of the following products or services do you think Advertisement 1 is promoting? <ul style="list-style-type: none"> - Airline Services - Aviation Manufacturing - Tourism and travel services - Employee recruitment services 	44.5%	37.7%	45.5%	48.9%
		39.3%	40%	37.9%	40.8%
		16.2%	22.2%	16.4%	10.2%
		0%	0%	0%	0%
Q5	Advertisement 2: How well can you identify the brand being advertised here?  <ul style="list-style-type: none"> - Scale 1 : very low - Scale 2 : low - Scale 3 : neutral - Scale 4 : high - Scale 5 : very high 	24.9%	17.7%	29.1%	24.4%
		19.7%	20%	18.9%	20.4%
		28.3%	28.8%	24%	34.6%
		15%	17.7%	15.1%	12.2%
		12.1%	15.5%	12.6%	8.1%
Q6	Which of the following products or services do you think Advertisement 2 is promoting? <ul style="list-style-type: none"> - Airline Services - Aviation Manufacturing - Tourism and travel services - National Defence 	42.8%	44.4%	43%	40.8%
		38.7%	35.5%	35.4%	46.9%
		16.8%	20%	18.9%	10.2%
		1.7%	0%	2.5%	2%
Q7	Advertisement 3: How well can you identify the brand being advertised here?  <ul style="list-style-type: none"> - Scale 1 : very low - Scale 2 : low - Scale 3 : neutral - Scale 4 : high - Scale 5 : very high 	11%	11.1%	11.3%	10.2%
		8.7%	6.6%	12.6%	4%
		23.7%	20%	22.7%	28.5%
		21.4%	26.6%	15.1%	26.5%
		35.3%	35.5%	37.9%	30.6%

<p>Q8</p>	<p>Which of the following products or services do you think Advertisement 3 is promoting?</p> <ul style="list-style-type: none"> - Airline Services - Aviation Manufacturing - Tourism and travel services - Cargo and delivery services 	<p>31.1%</p> <p>10.4%</p> <p>5.8%</p> <p>52%</p>	<p>33.3%</p> <p>8.8%</p> <p>4.4%</p> <p>54.3%</p>	<p>30.3%</p> <p>8.8%</p> <p>7.5%</p> <p>53.1%</p>	<p>32.6%</p> <p>14.2%</p> <p>4%</p> <p>48.9%</p>
<p>Q9</p>	<p>Comparing advertisements 2 and 3, which one appealed to you more?</p> <ul style="list-style-type: none"> - Advertisement 2 - Advertisement 3 	<p>48.6%</p> <p>51.4%</p>	<p>48.8%</p> <p>51.1%</p>	<p>39.2%</p> <p>60.7%</p>	<p>63.2%</p> <p>36.7%</p>
<p>Q10</p>	<p>Imagine that you are reading a newspaper in 1958 and you come across these advertisements shown below, which one would have caught your eye?</p> <div data-bbox="306 934 691 1213" style="border: 1px solid black; padding: 5px;">  <p>"Good morning, ladies and gentlemen. On behalf of 42 airlines we would like to welcome you aboard the Airbus."</p> <p>AD 1</p>  </div> <div data-bbox="306 1249 691 1591" style="border: 1px solid black; padding: 5px;">  <p>Only seven hours to bush up on your French</p> <p>AD 2</p> </div> <ul style="list-style-type: none"> - Advertisement 1 - Advertisement 2 	<p>33.5%</p> <p>66.5%</p>	<p>24.4%</p> <p>75.5%</p>	<p>39.2%</p> <p>60.7%</p>	<p>32.6%</p> <p>67.3%</p>

Section 3: Marketing Impact

Note for the participants: This section aims to understand the marketing impact of certain advertisements regarding different products, companies and scenarios. Please choose the following options for the questions below:

- Scale 1 : very low
- Scale 2 : low
- Scale 3 : neutral
- Scale 4 : high
- Scale 5 : very high

<p>Q11</p>	<p>How impactful is the advertisement given below influencing you to know more about it?</p>  <p>- Scale 1 : very low - Scale 2 : low - Scale 3 : neutral - Scale 4 : high - Scale 5 : very high</p>	<p>9.8% 17.3% 29.5% 30.1% 13.3%</p>	<p>13.3% 13.3% 20% 40% 13.3%</p>	<p>11.3% 12.6% 34.1% 26.5% 16.4%</p>	<p>6.1% 28.5% 30.6% 26.5% 8.1%</p>
<p>Q12</p>	<p>How impactful is the advertisement given below influencing you to know more about it?</p>  <p>- Scale 1 : very low - Scale 2 : low - Scale 3 : neutral - Scale 4 : high - Scale 5 : very high</p>	<p>7.5% 15% 31.8% 30.1% 15.6%</p>	<p>2.2% 24.4% 33.3% 17.7% 22.2%</p>	<p>11.3% 6.3% 30.3% 36.7% 15.1%</p>	<p>6.1% 20.4% 32.6% 30.6% 10.2%</p>

Section 4 : Demographic Details					
Q13	Age				
	- Below 18	15%	0%	0%	4%
	- 18 - 25 yrs	13.3%	0%	0%	6.1%
	- 26 - 35 yrs	23.7%	0%	51.8%	0%
	- 36 - 45 yrs	22%	0%	48.1%	0%
	- Above 46 yrs	26%	100%	0%	0%
Q14	Education				
	- 10th Pass and below	15%	2.2%	0%	51%
	- 12th Pass	7.5%	6.6%	0%	20.4%
	- Undergraduation	18.5%	28.8%	16.4%	12.2%
	- Post-Graduation	41%	37.7%	60.7%	12.2%
	- Professional Degree	16.2%	24.4%	20.2%	2%
- Doctoral Degree	1.7%	0%	2.5%	2%	
Q15	Annual Income (in Indian Rupees: INR)				
	- Less than Rupees 5 Lakh	26.6%	26.6%	31.6%	18.3%
	- 5 Lakh - 10 Lakh Rupees	26.6%	28.8%	35.4%	10.2%
	- 10 Lakh- 20 Lakh Rupees	12.1%	13.3%	17.7%	2%
	- Above 20 Lakh Rupees	15%	31.1%	15.1%	0%
	- High school student	19.7%	0%	0%	69.3%
Q16	Gender				
	- Male	51.4%	28.8%	48.1%	44.8%
	- Female	48%	68.8%	51.8%	24.4%
	- Other	0.6%	2.2%	0%	0%
Q17	Will you be interested to receive the findings of this study later?				
	- Yes	61.3%	28.8%	58.2%	67.3%
	- No	16.2%	68.8%	17.7%	8.1%
	- Maybe	22.5%	2.3%	24%	24.4%