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Chapter-1: Introduction



Introduction

The internship at Biman gave me a deep dive into the realm of the service sector of the aviation world. I have come across the practices, the rules and the managing styles of a market leader in the field of aviation in Bangladesh. My role as an intern gave me valuable knowledge that are verified from a market leader in the aviation industry

The report will focus on the Directorate of Marketing & Sales where I worked, my learnings and the insights I have gathered and realized. The internship program benefitted me by giving me a unique experience and laying the foundation which was very beneficial for me. I will always use this experience as my stepping stone in my career life.

In this session, we shall delve into the history of the business nature of Biman, its organogram, the SWOT analysis, current fleet and marketing strategy and how to integrate the use of Technology to increase the customer experience.

Due to the presence of great and talented minds, Biman is the market leader in the aviation industry of Bangladesh. Performing as an autonomous organization, Biman is running on their own money and has quite impressively managed to win hearts of millions.

For the internship program, I was able to obtain an excellent experience of how an organization works. Additionally, my presence at the two travel fairs has given me additional and great experience in how to deal with general inquiries and acquire other problem-solving skills.

Additionally, the digitalization of Biman has greatly impacted the overall condition of the organization. The first major milestone has been placed by our Honourable MD & CEO, Shafiul Azim sir with the integration of the Smart Call Center. The digital payment systems integration, the additional digitalization of services are a few of the many to name here!

1.1 Background of the study

Biman Bangladesh Airlines Ltd. consists of 9 directorates of which I was a part of the Directorate of Marketing and Sales. I'll try to discuss my internship experience at Biman Bangladesh Airlines Limited where I tried to find out how to integrate IT solutions across the various sections to improve the marketing strategies and the overall customer experience. As customers are the king and the more a person feels special, the more the company can benefit from it.

1.2 Prigin of the Internship Report

The Islamic University of Technology's internship program is a requirement for students of Business and Technology Management to complete their undergraduate degrees. The main aim of this program is to introduce the first batch of BTM department graduates to the job market and the corporate world. BTM department's goal is to expose its students to the practical and working world. Because the students are already familiar with the theoretical concepts of the business world along with a basic to some medium level of technical knowledge of the engineering concepts, the internship program was designed to allow them to apply the theory to the reality of the world and gain professional experience and draw the attention of everyone to the uniqueness.

2.3 Main Purpose of the Internship Program

The main goal of the internship program is covered in this section. I shall try to outline the primary goals below:

- Acquire experience in a genuine business environment.
- The employment market should be exposed to students.
- Link theory to practical work.
- Arrange the job description's specific details.
- Meeting program criteria for the BBA.

The report was created by the University's requirements for the Business and Technology Department during a three-month internship at Biman Bangladesh Airlines Ltd. which includes details about the business and its offerings as well as details about the sector in which the business works and also showing how a market leader functions.

1.4 Objective of the Internship Report

Generic Objectives:

The major purpose of the three-month internship was to better understand how the company's Directorate of Marketing & Sales operate and how they accomplish their goals. The course may be thought of as a corporate

understudy experience for undergraduate students. My internship-related activities are included in this report. The purpose of this report is to demonstrate my comprehension of the work completed as well as the experience gained during the internship program. It is a comparison of activities and learning to determine my learning yield in the organization.

Specific Objectives:

- Showcase all my duties and responsibilities as an intern.
- To depict the company's overall condition and status in both the international & domestic markets.
- Obtaining information about the overall operational processes of the aviation Industry.

1.5 Methodology and Data Sources

In the process of writing this internship report, I have gathered information and insights from various sources which include both primary and secondary sources.

rimary Sources:

A large portion of the report is devoted to describing the data gathered through primary research. The majority of the major components and insights reported were obtained through face-to-face conversations with the company's officers and higher officials.

Information Sources:

Official employees of the company provided me with various books like the System Performance Report book, tariff manuals and other books. I have maintained notes throughout tmy internship period.

econdary Sources:

While primary research constitutes the majority of this report, a significant amount of the information presented in the report was gathered from secondary sources. Several sources were used as secondary sources of information for my report.

Main sources:

- Company Website.
- Google search engine.
- Reference Books
- Research papers about the aviation industry.

2.6 Significance

This report provides an insightful and concise overview of the organization, the Directorate of Marketing & Sales of Biman and the industry in which Biman operates. It primarily focuses on a new aviation enthusiast's perspective and provides specific statistics about the company's performance in the local and international markets. This report's objective is to enlighten readers on the operational and analytical facets of Bangladesh's aviation market. It is a crucial tool for BTM department students who want to broaden their knowledge and understand the possibilities of industrial experience. This paper acts as a roadmap for comprehending the potential and difficulties facing the sector.

2.7 Limitations

Despite a few limitations, I have done my best to make the most of this experience. But my limitations include:

- Three months was comparatively short for achieving all of the company's knowledge and insight.
- A rush to balance the act of learning and balancing academic life was getting harder.
- Due to agreement, lots of company data and facts could not be shared in this internship report.



Chapter-2: Company Overview



2.1 Introduction to Biman

Biman Bangladesh Airlines Ltd. is a Bangladeshi airline based in Dhaka that began its voyage from the ground up, with no aircraft and no ancillaries. It was put into action soon after the independence struggle ended. Biman has established a reputation as an airline of welcome smiles and an ocean of hospitality against numerous obstacles on its road toward a long and difficult path to success.

Bangladesh's national flag carrier airline is Biman Bangladesh Airlines Ltd. Aside from haka's Shahjalal International Airport, it also operates flights from Chittagong's Shah Amanat International Airport, which generates income via the connecting route to sylhet's Osmani International Airport. The airline codes BG and BBC, as well as the call sign BANGLADESH, are assigned to Biman's operations. The airline flies passengers and cargo to and from Asia and Europe on a variety of international routes.

Bangladeshi national flags are being flown by Biman over South Asia, Southeast Asian countries, and Eastern Europe as well as the Gulf and Middle Eastern region not leaving the Trans-Atlantic routes too. Progress has been made as a result of better services and more passengers. On account of its warmth, friendliness, safety record, traditional hospitality, and comfort, Biman has worked to become an internationally profitable airline in the area. Even higher and more proudly displaying its national flag, Biman is now.

2.2 History

It all started 50 years ago, when the newly emancipated people of our nation peered up into the sky and imagined their dreamboat capable of taking them to other regions. Siman—the wings that would take them beyond the sunset—was born of the people of Bangladesh's goals and desires. The idea became a reality on January 4, 1972, thanks to the patronage and personal assistance of Bangladendhu Sheikh Mujibur Rahman, the Nation's Father. Following Bangladesh's independence on December 31, 1971, 2,500 former Pakistan International Airlines personnel, including 10 Boeing 707 commanders and seven other pilots, proposed the formation of a national airline. Air Bangladesh International was the airline's original name, but it was quickly changed to its current title.

The voyage started on a government-gifted DC-3 aircraft. It was the first flight for the fledgling airline. The first flights to Chatteram and Sylhet took place on March 7, 1972, and Jessore followed on March 9. As a consequence of this, Siman's domestic activities got started. Since then, there has been no going back to the traditional carrier. On March 4th, inree days before domestic operations commenced, the debut aircraft of Biman's international business arrived in Dhaka with 179 passengers on board. India's Fokker F27 joined the fleet on March 3, 1972, and began daily service between Kolkata and Dhaka the following month.

After Thakurgaon was added to Biman's domestic network in 1973, the airline's third overseas international destination became Bangkok. Biman now had a total of six F-27s. Australia gave two of these aircraft, while the Fokker Company acquired two others. To run its Dhaka- London flights, Biman Airways leased a Boeing 707-320C. A second Boeing 707-320C was bought by the airline in 1974. Biman's sixth and last destination on his worldwide tour was Kathmandu, Nepal. Cox's Bazar now has access to residential services. In the international market segment, services were first offered in 1976 to Yangon, Abu Dhabi, Karachi, and Mumbai. The fleet has grown to include a second Boeing 707-320C.

Singapore joined Biman's worldwide network in 1977. The purchase of two Boeing 707- 320C planes, one from Japan, is now complete. Kuala Lumpur, Athens, Muscat, and Tripoli were added to the international network. Biman became the Bangladesh Biman Company, a legal company in its own right. In 1981, Biman started a new era by purchasing three secondhand wide-body DC-10-30s from Singapore Airlines. The airline began operations in Rome and Kuwait in 1983, however, the route to Tokyo was canceled as a result. In 1984, Biman extended its worldwide and local services by opening offices in Paris and Rajshahi. A Boeing 707-320C airliner has been retired from service. Riyadh was added to the network in 1988, replacing the position of Dahran. As a precaution, services in Baghdad have been suspended.

With the restart of service to Baghdad and the purchase of new McDonnell Douglas DC- 10-30s, Birnan Airways has increased its operations in Iraq. With one million passengers, the airline joined an elite club. The Ground Training School and the Apprentice Training School combined and were relocated to a new location. When it came to implementing its Computerized Reservations System, American Airlines employed cutting-edge technology. The Hazrat Shahjalal International Airport's Hangar Complex has been opened. In 1993, Birnan became the first airline to travel from Europe to New York. Birnan transported 1.15 million passengers in the 2005–06 fiscal year, an increase of 70% over the preceding decade. In May of the same year, two further F28 aircraft were acquired.

Two Dash-8 Two 787-8 Biman Stared the Two 737-800 Inducted Online Journey Inducted Inducted Ticketing One New **Public Limited** Two 777-300ER RPC Two 787-8 Dash-8 400 Company Inducted Inducted Inducted 2020 2021 2019 2015 2018 2023 2011 2014 2010 1989 2007 2008 Two 787-9 Confirmation of purchase Resumed Two 777-300FR e-Ticketing Inducted BATC of 10 Airbus A350s Domestic Inducted Operation Purchased one old Purchase Agreement RECC Purchase Dash8-400 for 10 Boeing Agreement Aircraft For 03 Dash-8

Major milestones!

Fig-1: Major Milestones of Biman up till 2023.

With a fleet of two Boeing 737-800s and one Boeing 747-300, Bangladesh Biman Airways commenced operations in 2007 as public limited company. A Boeing 777-200ER aircraft was leased and added to the fleet in 2010. On a three-year lease, the airline got an Airbus 310-300. Biman signed a deal with Boeing Aircraft Company in 2011 to purchase 10 next-generation planes. By 2010, Biman had lost BDT 8.3 billion (US\$120 million), the most in any year since it began keeping records in 2000. (BDT 6.9 billion as of 2010). Biman also owes the Bangladesh Petroleum Corporation millions of dollars in back taxes because of payment delays. When the airline's DC10-30s were replaced by the Boeing 777-300ERs in October and November of 2011, two of the

four aircraft entered service. February 5th saw the arrival of the fleet's third Boeing 777-300ER, and the fourth arrived in the second week of February 2014.

There are four new workhorses for Biman. Boeing 777-300ERs called the Palki (Arun Alo), Aakash Pradeep (Aakash), and Raanga Pravat (Raanga). On February 20, 2014, Biman flew the Dhaka-Birmingham route with the world's last passenger DC10-30, securing its position in aviation history. Planned route development necessitated an increase in the airline's fleet to 16 aircraft. In April 2015, new leased Dash 8-Q400 aircraft were used to resume full service to Cox's Bazar, Saidpur, Rajshahi, and Barisal. Smart Aviation Company provided the airline with five- year dry leases for regional services to Kolkata and Yangon. The airline stated in February 2017 that it will buy three Dash 8 Q400 planes to replace the Smart Aviation company-leased jets that later joined the fleet.

Bangladeshi Prime Minister Sheikh Hasina named the first of four Boeing 787-8 Dreamliners "Akash Beena" in Bengali. This name is engraved in English and Bengali below the cockpit on the Dreamliner's port side; in 2018, it was granted the Bengali name "Hangsa Balaka." After China's Hainan Airlines canceled its 30 Dreamliner bookings, Biman was granted a \$150 million discount per jet. Sonar Tori and Awchin Pakhi, two new aircraft to the fleet, have entered the ranks. For 2020, Biman planned to purchase two more Dash-8 Q400NG short-bodied planes. Domestic and regional flights increased in frequency under this proposal. There's also some disagreement about whether or not to accept four more Boeing 787-9s that Vistara had on hand but that Hainan Airlines had declined to take. The airlines also want to purchase cargo planes in the future. Before the end of 2022, the fleet will include two more ships. For that, Biman got the chance and purchased the 787-9 variants that grabbed the attention of all aviation enthusiasts. This variant was the First choice for Qantas for their ultra long-haul routes at the coast of Australia to Europe and the US east coast. Biman Bangladesh Airlines will no longer fly Boeing 737-800s on domestic routes to make place for this new aircraft. Biman will deploy Dash-8 aircraft for a number of international shorthaul routes.

Over the course of the last half-century, Biman has seen numerous highs and lows. There are many more years ahead for Biman as it celebrates its 50th anniversary and is one of the world's most well-known and trusted aviation companies. The Boeing 787 Dreamliner is the most recent in a long series of aircraft to fly for Biman. To complete its fleet, the airline has placed a large order for the fifth generation Dreamliner. Many of Biman's achievements for the country and for tourists are worthy of praise. A broad range of commercial airliners have graced its fleet, from the vintage DC 3 to the present "People's Preference," the Dreamliner.

Biman Bangladesh Airlines Limited, a prominent player in the country's tourism industry, is promoting the country's natural splendor, cultural legacy, and tourist attractions. Biman is happy to be Bangladesh's most prominent and well-known brand ambassador since he is the country's national flag bearer. The airline's logo on the tail represents the nation's pride, values, and principles. Biman is dedicated to preserving the nation's good name.

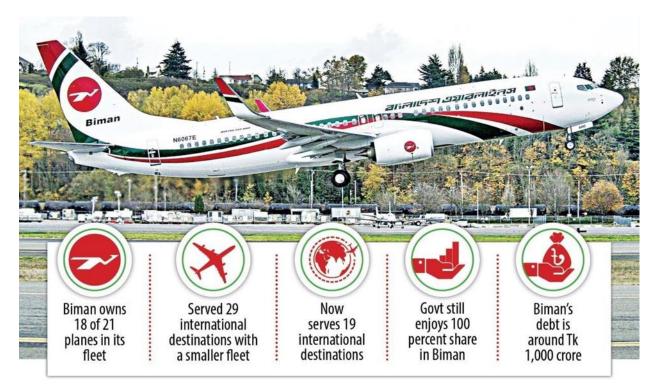


Fig-2: News Report of achievements of Biman up to their 50th Anniversary.

Biman Bangladesh Airlines Limited, a prominent player in the country's tourism industry, is promoting the country's natural splendor, cultural legacy, and tourist attractions. Biman is happy to be Bangladesh's most prominent and well-known brand ambassador, since he is the country's national flag bearer. The airline's logo on the tail represents the nation's pride, values, and principles. Biman is dedicated to preserving the nation's good name.

2.3 Company Profile

Company Name: 23 iman Bangladesh Airlines Limited

Founded: January 4, 1972

Commenced Operations: February 4, 1972

Date of Registration: July 23, 2007(as the country's largest public ltd company)

Registration No:	C67807(358)/07	
Hubs:	Hazrat Shahjalal International Airport	
Secondary Hubs:	Shah Amanat International Airport (Chittagong)	
	Osmani International Airport (Sylhet)	
Company Activity:	Air transport service	
	Support service	
	And another related business.	
Frequent Flyer Program:	Biman Loyalty Club (BLC)	
Subsidiaries:	Biman Flight Catering Centre	
	Biman Poultry Complex	
	Biman Ground Handling	
	Bangladesh Airlines Training Centre	
Fleet Size:	21	
Destinations:	24 International and 7 Domestic.	
Headquarters:	Balaka Bhaban, Kurmitola, Dhaka - 1229, Bangladesh	
Key People:	Mostafa Kamal Uddin (Chairman)	
	Shafiul Azim (MD & CEO)	
	Md. Siddiqur Rahman (Director Admin)	
Website:	www.biman-airlines.com	

Vision:

To achieve world standards by becoming one of the ten best airlines in Asia by 2030.



Safe air travel and secure cargo transport along with quality service.



To provide and develop safe, efficient, adequate, and economical and properly coordinate air transport services both in domestic as well as international aviation services.

Ethics:

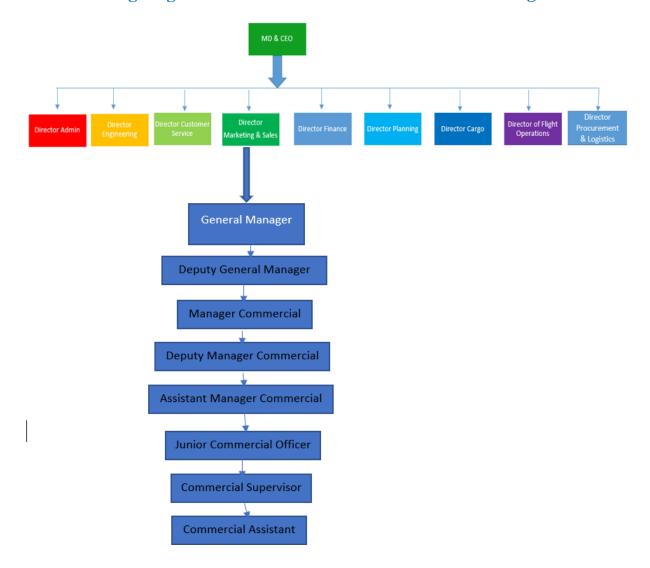
The signature of the collaboration against corruption activities by siman Bangladesh Airlines demonstrated a genuine commitment to the core values of honesty, transparency, and accountability (PACI). Anti-corruption practices have been acknowledged as a corrosive factor in economic growth, and this places Biman in the ranks of companies that are committed to anti-corruption policies.

Corporate Logo & Tagline:



Fig-3: Biman's logo and tagline

2.4 Biman's Organogram and that of the Directorate of Marketing & Sales:



2.5 SWOT Analysis of Biman

Strengths

National flag carrier of Bangladesh

- First and only priority is Safety, which is above all else.
- Modern fleet with state-of-the-art-technologies like Wi-Fi and Entertainment systems
- Youngest fleet in Southeast Asia
- Only establishment in Bangladesh that offers ground service for all international airline carriers
- IATA full member
- IOSA, RA3 and ACC3 approved
- EASA 145 (Engr.) And 147 (BATC) approved new aircraft fleet with state-of-the-art technology
- Own maintenance hangar
- Own Flight Catering Center that also provides service to other airlines
- Excellent hospitability
- Huge Operational Opportunities and Scope
- Energetic and dedicated workforce who are well experienced
- Government works as the Financial grantor for aircraft purchase and loan purposes
- All of the Directorates are housed in Balaka Building which offers smooth connectivity for fast decision making
- Experienced and deserving work-force
- Direct flights to popular destinations without transit and aircraft changing
- Best Fleet of all carriers from Bangladesh

Weakness

- Poor punctuality and schedule changing
- Complex bureaucratic system
- Government influence that slows some decision making
- Less innovation & moder technologies in comparison with other World class airlines
- Mismanagement in baggage handling
- Rebranding issues
- Poor customer experience in som cases
- Weak in clearing Public misconceptions
- Unsatisfactory promotion via TV Channels.
- Weak in public relations

Opportunities

Domestic Carriers have less infrastructure with respect to Biman

- Greater Bureaucratic power
- Economic development of Bangladesh
- Huge Labor market
- Exponentially developing Student Market in Europe and N.American continents
- New Code sharing and interline partnership of passenger and cargo services with more than 22 carriers in both fields.
- Bangladeshi's love for National carrier
- People's sentiment of the fact "The mass people of Bangladesh are the true owners"
- The rise in tourist centric mindset amongst Bangladeshi people

Threats

- The growing rate of private carriers in certain routes
- The rise of Budget Carriers
- Rate of Employee Turnover
- The price of fuel is high for Biman with respect to majority of Middle Eastern carriers
- The change of higher management after a few years
- High pressure regarding leasing of aircraft
- The number of Captains, Cockpit crew, and cabin crew is less with respect to the flight schedule.

2.6 Current Fleet Information and History:

1 ype	Name	Reg.	Business Seating	Premium Economy Seating	Economy Seating
B 787-8 Dreamliner	AKASHBEENA	S2-AJS	24	N/A	247
B 787-8 Dreamliner	HANGSABALAKA	S2-AJT	24	N/A	247
B 787-8 Dreamliner	GAANGCHIL	S2-AJV	24	N/A	247
B 787-8 Dreamliner	RAJHANGSA	S2-AJU	24	N/A	247
B 787-9 Dreamliner	SHONAR TORI	S2-AJY	30	21	247
B 787-9 Dreamliner	AWCHIN PAKHI	S2-AJX	30	21	247
B 777-300ER	PALKI	S2-AFO	35	N/A	384
B 777-300ER	ARUN AALO	S2-AFP	35	N/A	384
B 777-300ER	AAKASH PRADEEP	S2- AHM	35	N/A	384
B 777-300ER	RAANGA PRAVAT	S2-AHN	35	N/A	384
В 737-800	-	S2-AFL	12	N/A	150

В 737-800	-	S2-AFM	12	N/A	150
В 737-800	MEGHDOOT	S2-AHO	12	N/A	150
В 737-800	MAYURPANKHI	S2-AHV	12	NA	150
В 737-800		S2-AEQ	12	N/A	150
В 737-800		S2- AEW	12	N/A	150
DASH-8	DHRUBOTATA	S2-AKD	N/A	N/A	74
DASH-8		S2-AGR	N/A	N/A	74
DASH-8		S2-AJW	N/A	N/A	74
DASH-8	AKASH TORI	S2-AKE	N/A	N/A	74
DASH-8	SHWETBALAKA	S2-AKF	N/A	N/A	74



Fig-4: A part of Biman's fleet at HSIA

2.7 Current Destinations



Fig-5: Biman's current domestic and international destinations



Chapter-3: Industry Overview & Analysis



3.1 - Aircraft Production Market Share and Big Players

The Aviation sector is a booming industry for its ability of faster, quicker and safe traveling. The Aviation Market size is estimated at USD 333.96 billion in 2024 and is expected to reach USD 396.15 billion by 2029, growing at a CAGR of 2.87% during the forecast period (2024-2029). There are huge potentials out there for not only building new and innovative aircrafts that cover more distance but are also fuel efficient.

Currently, apart from the 2 famous Market Leaders of Boeing and Airbus, other major Aircraft production companies are

- Bombardier
- Embraer
- Lockheed Martin
- Textron



Fig-6: Biman Airbus A310 - (S2-ADF) (Left) and Biman Boeing 747-400 (TF-AMY) (Right)

The growth for demand for air traver is driven by various factors such as the ease of reaching destinations without any physical barriers, faster transportation at affordable prices, increased private sector involvement and investments, growing business interactions that results in greater demand for non-scheduled flights, higher levels of exports and imports, and an increase in freight traffic. The market growth for this industry is primarily driven by the efficiency and affordability of air transport compared to other modes of transportation. Most importantly it's the safest mode of transportation now!



Aviation Market Leaders





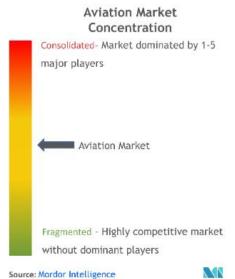


Fig-7: Aviation market players and condition in the 21st *century*

3.2 – Iconic war between Boeing and Airbus

Boeing and Airbus have been competing to hold the top shares of the market. The friendly rivalry was going head-to-head. At the start of 2023, when the world emerged from COVID-19 and despite airfare increasing 30% after the pandemic, the market was growing again with exponential potential. But the problem started with Boeing losing a huge market segment, despite both the giants gaining huge amounts of orders this year. Both giants showcased their increased order amounts and delivery activities, which solidified both of their positions in the aviation market. But this year, as Airbus for the 5th consecutive year, gained a huge market, Boeing faced headwinds for its inability for the 737 MAX grounding and software issues.

Airbus soared to new heights

Airbus had a fantastic year, outperforming their 2022 results. By the end of 2023, it had established three new industry records: the greatest backlog of 8 598 jets, the most gross orders of 2,319 jets, and the highest net new orders of 2,094 aircraft. Strong demand for its A320neo series of narrowbody aircraft, especially the fuel-efficient A320neo and A321neo models, was the main driver of this success. By December 2023, the European manufacturer had delivered 735 aircraft, securing its place as the industry leader in terms of commercial aircraft deliveries that year.

Boeing faced headwinds

Despite having a new company record backlog of 6,216 planes at the end of last year, Boeing continued to encounter delivery delays owing to supply chain interruptions and ramp-up issues for Boeing 737 MAX manufacturing. It did not meet Airbus's delivery targets in 2023 while managing to deliver 528 aircraft. The American company, nevertheless, maintained optimism and expressed belief in its potential to recover in the decades to come.

A look into notable orders

- Air India ordered a whopping 470 jets amongst which 250 were from Airbus and 220 from Boeing.
- Indigo, on the first day of the 2023 Paris Airshow, placed their firm order for 500 of the A320neo variant from Airbus, setting the world record for a single purchase.
- Turkish Airlines has orders for 220 aircraft from Airbus that have freight, single and twin-aisle aircraft variants.
- Riyadh Air ordered 39 Aircrafts from the variant 787-9 from Boeing and has additional opportunity of 33 more.
 - Air France has orders of 90 of the A350 variants.

Aircraft Family	2023 Deliveries	2022 Deliveries
A220	68	53
A320	571	516
A330	32	32
A350	64	60
Total	735	661
Aircraft Family	2023 Deliveries	2022 Deliveries
Boeing 737	396	387
Boeing 737 Boeing 747	396 1	387 5
Boeing 747	1	5
Boeing 747 Boeing 767	1 32	5 33

Table-1: Statistics of deliveries of Airbus and Boeing

The fight of the 2 Icons: A380 vs Boeing 747

The 747 is the world's first Jumbo and 2-storeyed Aircraft, which came into existence with its first flight on February 9, 1969, at the hands of PAN American World Airways. The idea popped up in the mind of Boeing and when they expressed the design in the market, the PAN AM company stated "You build it, We buy it". And that's how the "Queen of the skies" came into existence. The 747 with a lot of variants, is still in the production line and is the most popular Freight version of all the possible choices. Till today, one 747 is rolled out of the Boeing production line into service every 2 months on average. But unfortunately, "The Queen of the Skies" has ceased production and the last one 747-8F named "Empower" rolled out of the Boeing Everette factory of Boeing on 1st February, 2023 to Atlas Air.

The Airbus A380, being the largest Passenger carrier, made its first flight with the hands of Singapore Airlines



on April 27, 2005. Despite having only one variant/model, this type is slowly loosing the market for its extremely high operating costs. Jets now are more fuel efficient than ever, causing Airbus to permanently shut down the production line. Emirates were the first to order the A380 variant and today they are the last carrier who will receive the last A380 which has just finished the production.



Fig-8: The World's first Boeing 747-100 & last 747-8 and the first & last Airbus A380

3.3 The Mythic Concorde

The introduction of supersonic jets, i.e. the Mythic Concorde was a revolution in the industry of aviation. Manufactured by Sud Aviation (later Aérospatiale) and the British Aircraft Corporation (BAC), Concorde was ahead of its time which started its manufacturing in 1954. Finally, after constructing 6 of its prototypes it took off from Toulouse on 2 March 1969. The program cost was estimated at £70 million (£1.39 billion as of 2021).

Due to the intense sound pollution, heating issues and on top, the fatal accident of Air France Flight 4590 in 2000 which killed 109 souls, the Concorde was finally grounded on 2003.

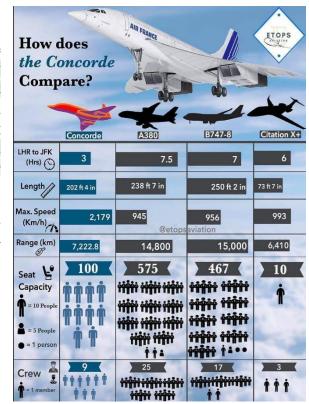
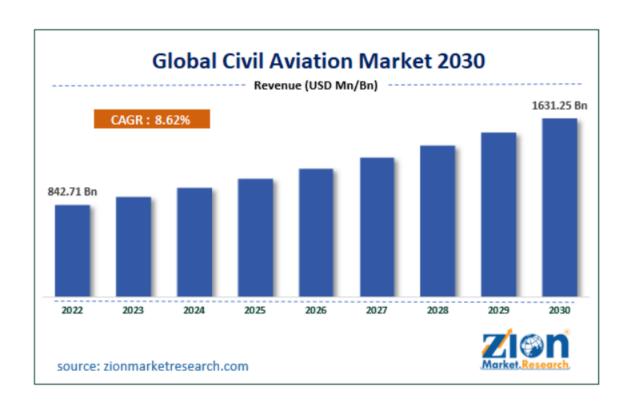
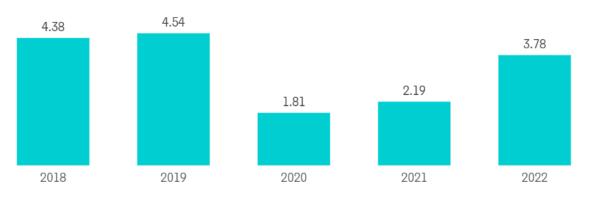


Fig-9: The comparison of Concorde

3.4 Global Civil Aviation Market and its Top Trends:

- The use of Artificial Intelligence has revolutionized the aviation industry by taking Customer Experience and Operational Efficiencies by the integration of Biometric facial recognition that enables faster boarding and enhances security measures.
- Aircraft manufacturers are prioritizing sustainability and eco-friendly practices, such as using fuel-efficient aircraft, and sustainable aviation fuels which reduce single-use plastics onboard to address climate change and environmental impact. The next generations of both Boeing and Airbus series of 787, 777 series and 350, A330neo series respectively. Qantas Airways has declared a commitment to achieve net-zero emissions by 2050.
- Carriers are investing in personalized services, such as virtual windows in first-class where Emirates led the market by installing it in the middle seats of the 1st class suits on their Boeing 777-300ER in 2017, to enhance customer experience and gather customer preferences through data analytics for personalized recommendations.
- The rise of budget carriers is also grabbing the attention of people who only fly as needed and this is consistently giving challenges to major carriers like Ryanair, Scoot, Spice Jet, Indigo, GoAir, Spirit Airlines and others.





Source: Statista

		PASSENGERS	US \$ GDP	JOBS
	2018	7.2 m	\$0.8 bn	128,931 m
	Current Trends	19.3 m	\$2.1 bn	139,945
2038	Upside	30 m	\$3.2 bn	222,340
	Downside	15.6 m	\$1.7 bn	111,743

Figure-10: Recent & future estimations of the industry, their traffic amount and net values.

Under the "current trends" scenario, Bangladesh's air transportation is expected to rise by 168 percent over the next 20 years. An extra 12.1 million passengers will leave by 2038 as a consequence of this change. Approximately \$2.1 billion in GDP and 140,000 employments might be generated if this demand is satisfied.

3.5 Air Travel in Bangladesh

Air travel in Bangladesh is increasing every moment. There is huge competition and the market is constantly being challenged. In the year 2022, air travel was the highest amongst the previous 4 years. Apart from Biman, 30 International carriers and 2 Domestic carriers, US Bangla and Novo Air carry passengers internationally. The list of famous scheduled airline companies in Bangladesh

- 1. Biman Bangladesh Airlines
- 2. U S Bangla
- 3. Air Astra
- 4. Novo Air
- 5. Fly Dhaka

Charter and cargo airlines are also an integral part of the domestic aviation business, in addition to the regularly scheduled ones. The list of dedicated airlines companies are

- 1. R&R Aviation
- 2. Arirang Aviation Ltd.
- 3. South Asian Airlines
- 4. BRB Air Ltd.
- 5. Square Air Ltd.
- 6. Bashundhara Airways
- 7. Impress Aviation Ltd.
- 8. Meghna Aviation Ltd



Fig-10: Carriers operating in Bangladesh

- 9. Bangla International Airlines Ltd.
- 10 BCL Aviation Ltd.
- 11. Bismillah Airlines
- 12. Easy Fly Express
- 13. Hello Airlines
- 14. Sky Air
- 15. Akij Air

Other private airlines followed Air Parabat's lead, beginning operations in the late 1990s: GMG in 1996; United in 2005; a Royal Bengal in 2006; Regent in 2010; and US-Bangla in 2013. Only NovoAir, Regent and US-Bangla are now functioning among private airlines. Since the start of covid, Regent has ceased operations. The industry now has four scheduled airlines, including Biman Bangladesh, with three of them in service.

The airports of Bangladesh have nandled 90.63 lakh international passengers last year, up 133 percent from 38.83 lakh in 2021, according to data from the Civil Aviation Authority of Bangladesh (CAAB).

The latest travel data crossed the 2019 air passenger figure, which was nearly 85.94 lakh -- the year before the pandemic hit the country, wreaking havoc in the aviation industry, crippling everything along with life and livelihoods across the globe.

Apart from those who could not travel in 2020 and 2021 because of the pandemic-related restrictions, they soared in 2022. But according to mass opinion, air travel would increase more if the fares are made a little bit less.



Fig-9: Local Aviation carriers of Bangladesh

3.6 The Comparison of different world-class airlines based on various classifications

There are various criteria upon which carriers are classified and labeled as the best! The Famous criteria include based on revenue, Fleet size and most importantly safety.

Based on fleet size is a popular way of classification. Emirates, despite being the most operator of the Boeing 777 and Airbus A380 variants are still in no position amongst the top 10.

Every Airline aims for something unique and figures out something that will help them to stand out in the market. Emirates for their st and Business class lounges on both the airports and on board services, Singapore Airlines for their Time schedule maintenance, Qatar for their iconic and best in the industry of Business Class suites and Etihad for the most luxurious travel experience, their Resident Suite on the A380.



Fig-10: Position of airlines based on various criteria

3.7 Economic Travel Impact

Before the pandemic, Travel & Tourism (including its direct and indirectly induced impacts) accounted for 1 in 5 new jobs created across the world during 2014-2019, and 10.3% of all jobs (approximately 334 million) and 10.4% of global GDP (US\$ 10 trillion) in 2019. Meanwhile, international visitor spending amounted to US\$ 1.9 trillion in 2019.

World Travel & Tourism Council's (WTTC) latest annual research shows:

- In 2022, the Travel & Tourism sector contributed **7.6% to global GDP**; an **increase of 22%** from 2021 and only **23%** below 2019 levels.
- In 2022, there were **22 million new jobs**, representing a **7.9% increase** on 2021, and only 11.4% below 2019.
- Domestic visitor spending **increased by 20.4%** in 2022, only 14.1% below 2019.
- International visitor spending rose by 81.9% in 2022, but still 40.4% behind 2019 numbers.



Fig-11: Economic impact region wise at 2023

3.8 Porter's Five Forces for Aviation Industry Compliance with Biman

The airline business offers a unique and one-of-a-kind service to its consumers. It carries people witha level of ease and efficiency that no other industry or replacement can match concerning time and money. Airlines take pride in the manner in which they treat their customers during the flight. Although other industries offertransportation services, the airline consistently exceeds them in terms of timeliness. The airline industry operates on a worldwide scale. Biman International and domestic flights are available onBangladesh Airlines. Any corporation in an industry might encounter five categories of challenges, according to Porter. Porter's five forces describe these issues.

The Bargaining Power of Buyers is High:

- Customers have low to zero switching cost.
- Individual customer safety and convenience are prioritized by airlines.
- Customers have loads of options.
- Airlines place a premium on brand development and positioning. Every individual consumer is crucial in the aviation sector.

In the aviation industry, two categories of buyers exist. They book airplane tickets for a range of personal and business purposes. The second kind of buyer is a travel agency or an onlinesite. This purchasing organization serves as a liaison between airlines and passengers, cooperating with a variety of airlines to give customers the greatest travel experiences possible. They seek particular information on the flight's services. Buyers should be familiar with the flight's itinerary and the inherent dangers of flying. Each customer wants to feel unique and special.

Concerns regarding their safety and comfort are widespread. Additionally, significant attention is paid to brand development, consumer loyalty, and market share gain. Numerous airlines, like Emirates, which is famed for its hot meals, and Singapore Airlines, which is renowned for its ontime departures and arrivals and reasonable pricing, have created unique qualities to gain market share and customer loyalty. On the other side, customers have a wealth of alternatives accessible to them through aggregator websites that market a variety of possibilities based on time, cost, and layovers. Customers may search for and book flights with their preferred airlines online. While brand loyalty is low in these cases, brand placement is nevertheless crucial due to purchasers' restricted options. Customers' switching costs are negligible, jeopardizing their bargaining power significantly.

The Bargaining Power of Suppliers is Low:

- Boeing and Airbus are two of the few go-to vendors.
- Contracts over a long period and loan arrangements
- The cost of production is substantial.

Aircraft manufacturers are the primary providers in this case. At the time, Boeing and Airbus are the world's two largest airplane manufacturers. In this industry, the inputs are quite uniform. Airlines tend to distinguish themselves mostly based on their facilities. The airplanes are almost similar in appearance. It's tough for airline companies to switch providers. The vast majority of firms have long-term vendor relationships. Due to the high capital cost of aircraft, firms are more likely to get into long-term loan agreements and achieve favorable credit conditions if they do not transfer their businesses. Entering the aircraft manufacturing business is difficult due to the high capital requirements. Even a single plane is around \$200 million in terms of money and expertise and will vary according to the customization of the carriers and as a consequence, the aviation industry is highly specialized. While airline firms continue to develop globally, consumers face a limited choice. Biman Bangladesh Ltd acquires the whole aircraft from Boeing using proper long-term finance.

The Threat of Entrant is Low:

- Massive financial commitment
- Profitability through economies of scale
- Customers can switch at a low cost because there is a lot of competition.
- Regulations and the requirement for a license and other paperwork.

Two variables lead to an increase in the risk level. To begin, the expenses associated withswitching are quite low. Second, there are no unique products or services involved. Regardless of these two issues, the industry is rather secure. The fear of a new entrant will motivate established players to combine their resources to compete. Emerging market companies like as United States Bangla create a foothold as a new entrant. At the moment, emerging categories such as Economy Class by Biman provide "luxury" services at an attainable price point.

The Threat of Substitutes is Moderate:

- Bangladesh Railways
- Buses and local transit are available.
- The aviation business faces a modest threat from replacements such as car rentals and distributors like Uber, Pathao and InDrive.

Bangladesh Waterways by Ships (Launch and Steamers)

Consumers may sometimes go to their destination using alternate means of transportation, such as trains and buses, for several reasons, including cost and convenience. While flying is more advantageous in terms of convenience, money, and time, people continue to prefer trains for the reasons indicated above. Other obstacles to alternatives include rental vehicles and aggregators. Millennials are driving the growth of this segment, with Pathao and Uber offering outstation transportation. The hazard is now minor due to these tourists' lack of demand for goods.

Customers of Biman Bangladesh may also go to their destination by vehicle, bus, train, or boat. In Bangladesh, they are more affordable than airplane tickets. Switching is more affordable and starts at zero switching costs. Certain forms of transportation are more costly than a round-trip airline ticket. Time is the primary cost. The fastest way of transportation is via plane. which increases the risk. While clients of Biman Bangladesh Airlines pay a premium, they are constantly exposed to subpar service, delayed flights, and safety issues.

Rivalry Among Existing Players is Very High:

- Market saturation
- There are a few long-term rivals.
- Each participant has an equal piece of the market.
- Aviation industry standardization
- Exit costs are high.

Existing players are intensely competitive as a result of several variables. The aviation industry is dominated by a few large companies, and their market share is equally distributed. Each current member is committed to the long term, whether via loan agreements with suppliers or large exit fees. The aviation industry's ticketing, flying, and baggage check-in and check-out processes are all highly standardized. Airline brands are defined by their postures and values. Food, beverage, and wi-fi availability may also be distinguishing features.

Biman Bangladesh's competitors are very similar, except they provide worse customer service and regularly delay flights. This presents an opening for their adversary. As a consequence, rivalry becomes a more significant concern in this case. U.S. Bangla is now the market challenger for Biman, while the other two competitors and a third competitor, Air Astra, has entered the fray with Novoair slowly leaving the market with having much of their fleet sold.

3.9 Future Plan of Biman



Fig-12: News report of future plans of Biman

By the decision to purchase 10 of the brand-new Airbus A350s, Biman is stepping in the future generation of aircrafts. The orders are soon going to be placed for 8 of the passenger variants and 2 for the freighter (cargo) variants. Airbus currently produces the most fuel-efficient and lightweight variants of aircrafts. But Boeing is also offering the 787-10 versions for Biman. Biman now has a lot of decisions to make.

The trade-off arises from the fact of having a mixed or diverse fleet of both companies that will significantly increase the costs with the luxury of the title of "Strong Customer blended Experience", which means passengers of Biman will get to travel both by Boeing and Airbus in their next generation aircrafts.

Nevertheless, Airbus is offering to train the Pilots, Cockpit Crew and Cabin Crew free of cost at their own investment. Biman is definitely a booming organization that can go for fleet diversification once their aircraft number reaches approximately 50. But till then operating same variants will help them to operate with a much lower cost.



Chapter-4: Sectional Overview & Description of Main duties/ Job Activities



4.1 Internship Information

This chapter emphasizes and elaborates on relevant information related to my internship at Biman Bangladesh Airlines Ltd". Here, I tried my best to highlight the Sections I have covered under the Directorate of Marketing & Sales with the sectional overview, what IT tools and Software Biman uses, in future they might use and how they are integrated for enhancing Biman's Marketing Strategy & Customer engagement. I would also like to add the Internship outcome and the exciting extra experiences I have gained.

4.2 Sectional Overview of Directorate of Marketing & Sales

I was fortunate to work in 6 sections that have greatly helped me in building experience and gathering knowledge in the field of Aviation from the Market Leader Biman. The period of my internship was 3 months which started on 17th January, 2024 and will conclude on 16th April, 2024. My office hours were from 9 am to 5 pm. The location was at Head Office, Balaka Building, Kurmitola, Dhaka-1229, Bangladesh.

Here is a description of the sections under which I worked.

1) Call Center

At the heart of the M&S directorate lies a pivotal section, serving as the foremost interface between our esteemed customers and callers with the flag carrier, Biman. Renowned for its unparalleled dedication, this division stands as a beacon of information dissemination and query resolution. Through a myriad of communication channels including telephone calls, social media, SMS, and email, our adept team excels in providing comprehensive assistance. Apart from conveying the information, the process by which this information is distributed is through various channels which include Telephone & phone calls, social media, SMS, Email etc.

Biman Call Center works with providing general information of Biman, ticketing, reservation, ticket change and altering dates, cancellation, Internet Booking Engine, refunds etc to our callers and customers. Besides, call center provides guidelines regarding Live Animals, Dangerous goods, Perishable goods, human remains and other types of transportation.

They process the refund request is generally 28 working days but no less than 21 working days. They sell passenger seat denoted as "PNR" and cargo space as "CAR"

One of the most important aspects in issuing a ticket is the making of PNR (Passenger Name Records). It's a 6-digit alphabetic code that has several mandatory fields like Name, Itenary, Ticket and Contact Number.

Core Activity – Acting as the front row of interaction with the customer and the company

So to summarize, the Key Duties of this section are

- Act as the bridge between Biman and the callers/customers.
- Provide all necessary information.
- Handel queries.
- Sell Passenger seat or Cargo space.
- Adds information of Infants (aged below 2 years) & Child (from 2 years up to 12 years) with that of the travel information of the Parents or respective guardians.
- Works with ticketing, reservation, ticket change, altering and cancellation.
- Works with refund information which takes 21-28 working days to process generally.

Apart from the duties, I have learned and took part in

- ✓ How to attend calls
- ✓ How to deal with customers
- ✓ How to transfer calls via digital boards
- ✓ How to go AFK
- ✓ How to measure KPI
- ✓ How to improve performance
- ✓ How to handle critical situations

2) RMS (Revenue Management System)

Also known as the "Data House of Biman", which works as a crucial section/component responsible for optimizing revenue generation through strategic control of pricing, seat availability, and inventory management. At its core, the RMS utilizes advanced analytics and forecasting echniques to predict future flight demand across different routes and timeframes. By analyzing historical data, market trends, and competitor pricing, the RMS can accurately anticipate passenger demand and adjust pricing and seat availability accordingly. Keeping in mind the type of costs like Total Operating Costs (TOC) and Direct Operating Costs (DOC)

One of the primary functions of the RMS is inventory control, which involves dynamically adjusting the number of seats available at various price points to maximize revenue. This entails allocating seats to different fare classes based on demand forecasts and pricing strategies. Additionally, the RMS employs sophisticated pricing algorithms to develop and implement pricing strategies that consider factors such as seasonality, market demand, customer segmentation, and competitive landscape. Calculating the seasonality and handling data queries from the state level, RMS is the solution for data-related solutions!

Core Activity – Manages the Total Revenue system for the Airline.

So, to summarize, the Key Duties of this section are

- Organizing inventory to ensure optimized revenue for Biman.
- Handles state-level query questions.
- Collects Activity Report.
- Analyzes the sales progress station-wise.
- Analysis of past data (1 year).
- Forecasting of future demand (1 year).
- Prepares the Revise Budget of Marketing & Sales Department.
- Submits 3-month (quarterly) report to the ministry that includes flight details, market share with other airlines and other factors).

Apart from the duties, I have learned and took part in

- ✓ How to check for flight load
- ✓ Studied relevant terms like spillage, spoilage and other terms.
- ✓ How to calculate cabin factor
- ✓ How to determine optimal revenue
- ✓ How seasoning works

3) Market Research

Success in the ever-changing and cutthroat aviation industry depends critically on having a thorough awareness of the demands, interests, and behaviours of passengers. Biman is no different. This is where Biman's market research team comes into play. The market research team is responsible for collecting and evaluating data from several sources. Acting as the airline's compass, the team navigates the intricacies of our business. The market research team employs a multidisciplinary approach to thoroughly examine the subtleties of passenger wants, industry trends, and competition dynamics. From finding patterns that inform strategic route planning to improving the quality of products that passengers get. The team here continuously works with past data for future analysis and trend making and predictive calculations.

Core Activity: Biman's market research team is responsible for collecting and analyzing data in order to understand consumer preferences, market trends, and competition dynamics.

The core activities of Market Research are

- Prepare new route expansion studies
- Perform Plotting
- Continuously monitor DDS (Direct Data Solution Software) for compares
- Perform trend analysis
- Continuously surveying the market
- Fixes target revenue for out-stations based on past trends
- Sets and fixes target sales for foreign stations.

- Selects the price based on load, journey date, seasonality and other factors.

Apart from the duties, I have learned and took part in

- ✓ Studied how new routes are created.
- ✓ Studied the feasibility analysis of newly opened routes like Guangzhou, Narita, Toronto and others.
- ✓ Learnt how the DDS system works.
- ✓ Studied how Kites AVES system works

4) Pricing

In Biman, there are 2 sub-divisions. One is Pricing & E-ticketing and the other is Pricing & IATA Affairs (Tariff). This section is responsible for developing and implementing pricing strategies that aims to maximize revenue keeping in mind to stay competitive in the market and having a competition. They play a crucial role in setting the ticket price, managing the fair structure, and making dynamic decisions for fare adjustment as needed constitute the core activities. Apart from all these, Biman has sub-divided this section allows them to view various aspects of the pricing section

The core activities of Pricing & IATA Affairs (Tariff) are

- Works to organize group fares and special fare for corporate and government requisition.
- Formulates special fare deals for agency.
- Organizes Yearly Productive Incentives and Productivity Linked Bonus.
- Calculates discount in manual ways and the group is assigned in single RBD (Reservation Booking Designator)
- Determines the General Cargo Rate (GCR)
- Declares Yearly Productive Incentives.
- Works with network expansion strategies and Code Share.
- Develops Interline Partnership. Currently Biman has Interline Partnership with 22 Airlines for passenger and 65 airlines for cargo.

The core activities of Pricing & E-Ticketing are

- Determines price based upon Cost, Competition and Customer demand and purchase power.
- Uploads price in the system for distribution across channels like Sales outlet, Website/Mobile App & GDS.

- Maintains the Debit-Credit Balance with IATA Clearing House (ICH).
- Loads flight on Official Airline Guide (OAG).

Apart from the duties, I have learned and took part in

- ✓ Visualizing the costs of a ticket
- ✓ Jaw Itenary formation
- ✓ Conjunct ticket formation
- ✓ Pricing and relevant calculations
- ✓ Practically visualizing Rome route costs

5) Internet Booking Engine (IBE)

In the digital era of air travel, the Internet Booking Engine (IBE) stands as the gateway to a seamless and digitalized passenger experience. Within the framework of Biman's operations, the IBE section plays a crucial role in fetching information from pricing & Central Reservation System facilitating the online booking process, empowering passengers to effortlessly navigate through a myriad of flight options and ancillary services like Online booking, Self-check-in, Seat Selection, Menu planning, ticket refund and date change with just a few clicks. The Internet Booking Engine section of Biman in the Directorate of Marketing & Sales is the technological backbone that powers Biman's online reservation platform, providing passengers with a user-friendly interface to search, select, and book flights according to their preferences and requirements. In today's interconnected world, where travelers crave flexibility, choice, and instant access to information, the IBE section is the go-to solution as a critical touchpoint, bridging the gap between the airline and its customers in the virtual realm. This allows for someone to check-in 24 hours prior to flight takeoff which allows him not to wait in long queues anymore, allowing him to have the feel of priority boarding. With a focus on innovation and usability, the IBE section continuously evolves to meet the ever-changing demands of the modern traveler. From responsive design that adapts seamlessly across devices to advanced features such as dynamic pricing and personalized recommendations, the IBE section strives to enhance the booking experience, drive conversion rates, and foster customer loyalty in a fiercely competitive market landscape.

Core Activity: Serve as the Technology Hub for modern & digital experiences for online services like refund, date change and other facilities.

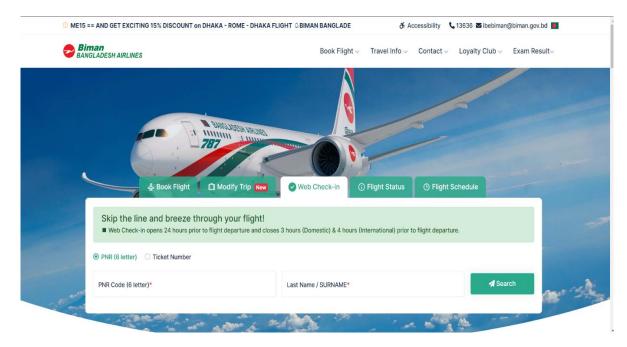


Fig-13: Website of Biman IBE

The core activities of the Internet Booking Engine are

- Online Sales via Biman Website and Mobile App.
- Seat selection and online check-in.
- Help in trip modification.
- Gives idea about the products of Biman.
- Conveys promotional activities.
- Works to convey solution to problems.
- Processes online refund.
- ADM policy is conveyed from here.

Apart from the duties, I have learned and took part in

- ✓ Engaged in ticket refunds
- ✓ Conveying general inquiries via email
- ✓ Changing dates of Tickets

6) Tour Development

Working with corporate agreements, the Tour Development section aims to build strong relations with various corporations to encourage strong bonds and promote traveling via Biman. From promoting promotional activities to signing corporate agreements, Tour

Development is the go-to for solutions. Promotional activities like discounts by paying via bank card is done and processed here.

The core activities of Tour Development section are

- Organize Promotional Activities at corporate level.
- Sign Corporate Memorandum.
- Makes professional discounted agreements and it's primary rules.
- Formulates policy making.
- Takes part in sponsorship agreements

Apart from the duties, I have learned and took part in

- ✓ Studying agreement formation at corporate levels
- ✓ Reviewing agreements for discounts via bank card payments
- ✓ Understanding company policies during agreements

7) Passenger Sales

The Passenger Sales section of an airline serves as the primary point of contact for passengers from the moment they purchase a ticket until they reach their destination. This department is responsible for handling passenger inquiries, complaints and providing necessary assistance throughout the travel journey which only doesn't end at the moment when he reaches his destination. Overall, the Passenger Sales section of Biman plays a vital role in ensuring passenger satisfaction and loyalty by delivering exceptional and agile customer service, resolving issues promptly and providing support throughout the travel journey by attending to those and doing what is needed to be done. Their dedication to passenger care contributes significantly to the overall reputation and success Biman.

Core Activity: Serve the junction point of the Organization with the customers for their complaints.

The core activities of Passenger Sales section are

- Receive the complaints.
- Sort the complaints and send to respective divisional sections.
- Forward the solution to the customer after solving.

Apart from the duties, I have learned and took part in

- ✓ Studied the sponsorship agreement of the Japanese Embassy with Biman regarding ticket sponsoring to the winner.
- ✓ Understood how passenger after-sales queries are dealt.
- ✓ Visualized how to compensate passengers in light of various events.
- ✓ Took part in the handover of winner tickets to the champion of the Japanese Speaking Contest.
- ✓ Understood how lost or damaged baggage claims are processed.

8) Loyalty Club

Biman's Loyalty Club program, also referred to as a frequent flyer program or in short Loyalty Club, is a strategic marketing tool used by Biman to incentivize repeat business from customers. These programs are designed to reward passengers for their loyalty and encourage them to choose Biman for future flights.

The loyalty Management System is a product of Sabre, which is the official software or module that the Loyalty Club uses for its activities. It is still in development stages. From December of 2022, Biman shifted to Sabre's creation Loyalty Management System for Biman according to the rules and regulations set by Biman.

Core Activity: Milage addition and new member creation.

Apart from the duties, I have learned and took part in

- ✓ Creating and enrolling new members
- ✓ Studying how milage system works
- ✓ Adding missed miles for some passengers

9) Revenue Operations - HDQ

HDQ, serving as the operational relay station for the Directorate of Marketing and Sales, has one of the most important roles, in balancing the flight schedules after receiving advice from the Operational Section of the Directorate of Flight Operations. Apart from that, balancing the schedules for the rise of charter flights, VVIP flights and special demands like Hajj operations is an important concern for them.

Core Activity: Manage the Flight schedules of the sudden change in market demand.

The core activities of the Revenue Operations section are

- Uploading schedule process in the CRT System as advised by the Operations Unit.

- Adjusting to changes in flight schedules in case of Hajj Operations, Charter Flights and other cases.
- Managing the issue when a passenger misses his connecting flight for any reason that might be delayed.

Apart from the duties, I have learned and took part in

- ✓ Visualizing the uploading schedule process in the CRT System as advised by the Operations Unit.
- ✓ Learnt how to adjust to changes in flight schedules in case of Hajj Operations, Charter Flights and other cases.
- ✓ Understood how to manage the issue when a passenger misses his connecting flight for any reason that might be delayed.
- ✓ Study the email of request of shifting some flight scheduels.

4.3 What IT tools are being used and will be used

In the ever-evolving realm of Information Technology (IT) and keeping in mind the concept of "Digital Bangladesh", Biman Bangladesh Airlines uses a diverse array of tools to enhance productivity, streamline operations, increase data-driven decision-making accuracy and unlock innovations at every possible step. The tools used here are encompassed by software applications, hardware devices and digital platforms that are designed to address specific needs across various domains. IT tools play a pivotal role in all aspects, from communication to collaboration, from data analysis to decision support systems, the modern digital ecosystem is immensely dependent. Use of IT tools are the drivers for enabling technological advancements and that will help us to build "Digital Bangladesh".

Challenges:

The process of Digitalization of the official activities of Biman, started just a few years ago. The digitalization from manual processes have imposed a great challenge for Biman as we know that for any change, especially whilst transforming from hand-written and manual entry processes that include a huge scope of mistakes, is a lot of hard work that includes

- Resilience to change
- Intensive Training
- Adjusting and parallelly running legacy systems with digital ones
- Huge initial cost
- Integration complexity
- Data security
- Skill Gap
- Cultural shift

- Maintenance and up-keep
- Continuous improvements
- Bugs and Glitches
- User Experience

What Tools and Software are being used and how

1) Sabre:

In 2022 Biman migrated from SITA to Sabre. Both are a part of Global Distribution System (GDS). These systems are essential platforms that allows transactions between travel industry service providers and travel agents.

Sabre is a prominent player in GDS. Biman recently collaborated with Sabre's Passenger Service System (PSS), a prominent Global Distribution System (GDS) player, and other Sabre technology solutions to help in recovery and future development in the competitive aviation market. The services from Sabre include various services among which prominent are

- Airline Reservations
- -Baggage handling
- -Passenger management



Figure-14: Sabre-Sonic PSS with Biman

Backend perspective – We use command for retrieving the relevant data and booking purpose.

- Graphical User Interphase (GUI) is used for ease access

Frontend Perspective – The view from Biman Website (https://www.biman-airlines.com/) is built and maintained by IT department of Biman.

2) Flight Crew Scheduling Software:

A specialized software and helpful tool for Biman to efficiently manage the scheduling and rostering of flight crew members that include Captain/Pilots, Cockpit crew and flight attendants. Based on the uploaded flight schedule, the software automates the process of assigning crew members to flights and generates the most optimum schedule.

3) Biman Mobile App:

The Biman Bangladesh Airlines mobile app was introduced by Prime Minister Sheikh Hasina on December 28th, 2019. Now, people being able to have access to world-class features like

- ✓ Purchase tickets directly
- ✓ Online refund
- ✓ Reissuing
- ✓ Date change
- ✓ Online check-in 24 hours before departure
- ✓ View promotions
- ✓ See our new routes
- ✓ Check our destinations
- ✓ Check flight status and schedule
- ✓ Gather knowledge about our modern and young fleet

4) Kites Aves-AWA licensed for Biman:

A system for data extraction for Biman only. All information obtained from here that are concerned with flight details, fuel, actual & scheduled departure & arrivals, cabin factor, passenger load factor, Pilot, Delays (if any) and all relevant information.

5) Cargo-Spot by Champ:

Well known for its ability to be a renowned Cargo Management System, it is widely used throughout the world for its ability to be sophisticated and comprehensive to work with. It integrates the features of Accounting, Rating and Reporting needs of various carriers in one unified platform. Thus it removes the need of carrier-specific terminals. It works as

- Capacity Planning
- Scheduling flexibility
- Most powerful ability is to rate and price products
- A proactive approach to provide excellent customer service.
- Compliance & Assimilation within the same environment.

6) Loyalty Management

Serving as the host software of Biman for the enrolling and maintenance of the Frequent Flyers program, the loyalty management software is a newly developed one offered by Sabre, custom built for Biman. This software automatically adds miles or points to the accounts of members and also can create new membership.

7) Air-Dime

One of the most handy and useful tools for retrieving data from the past regarding the passenger load, which in turn helps us for making future predictions, that supports our decision to divide the seat classification across the different RBD (Reservation Booking Designator).

8) Direct Data Solution (DDS)

Direct Data Solutions (DDS) is the latest, accurate and most used system that provides Biman with easy access to a single global dataset of airline sales, market and itinerary data. Aggregated from multiple sources, including data contributed by carriers, IATA's available Billing and Settlement Plan (BSP) transactions, and ARC's Area Settlement Plan (ASP) transactions, DDS data is the most comprehensive and accurate of its kind and time.

The facilities Biman gets from DDS

- Accurate statistics from flight.
- Details of flights from period to period.
- Data driven decision making.
- Historical data access.
- Access to data of passenger number and all other relevant information of foreign carriers.
- Basis of route expansion are derived from here.
- All information related queries are solved from here.

What Tools, Software and IT features will be used in near future

Biman has taken necessary steps and are hoping to include the following features in a few months.

1) Voice Search option in App for flight booking

Present Condition: No such feature is available.

Future Condition: Introducing "Speak Now" option to search for flight which will be powered by Artificial Intelligence (AI) and use Dialogueflow. Google's Cloud tool will be used for building.

2) ChatBot with Text & Voice recognition

Present Condition: No chatbot option is available.

Future Condition: Faster mode of booking, rescheduling or cancellation with the ability to answer questions powered by Artificial Intelligence.

3) Automation of refunds

Present Condition: The full process of refunding is done manually which takes 21-28 working days approximately. Even some times, it may take 30 working days

Future Condition: Fully automated process of ticket refund without the need for manual input. The system itself will calculate the collection and process the refund. Then the payment will be sent automatically back to the customer by necessary means. The new system will be agile and easy for not only for the customers but for also those who work in this system as manual human intervention will only be needed if any problem arises then. This increases our automation capabilities.

4) System/Tools for appointment of GSA & PSA

Present Condition: There is no automated process for this process.

Future Condition: Starting from online registration, log-in, Appointment Application Form, questionnaire, Document upload, Verification, Automated scoring system that will allow them to conceive points that will give them incentives based on tickets sold on slab or tier basis, Notification system, Admin dashboard to monitor sales progress and barge in when problem occurs, Reporting & Analytics.

5) Travel Agency Administration Portal

Present Condition: No such digital or automated option.

Future Condition: Showing the Travel agency performance, providing incentives, issuing AD Tickets.

(AD Tickets are tickets that are issued to Aviation Industry personnel)

6) Customer Relationship Management (CRM)

The CRM module is probably the main and most important module in the Directorate of Marketing and Sales. This module allows us to interact more with the customers that will allow us to create a more personalized experience. This in turn will help us to create a unique position in the mind of customers as the ways of a personalized interaction will help customers create a feeling of specialty and uniqueness.

Present Condition: At the phase-1 out of 3 total phases of Digitalization of Biman Call center, the CRM module has been integrated, which allows the agent to see the status of a customer or a caller when he calls and see the past call history and summaries. As a result, the customer feels at home when he is greeted by the warm words "Assalamualikum Mr. Habib". This allows him to feel special and have a unique customer experience. Additionally, all relevant notes, for example "Information about his lost luggage" will pop up and even if there is a solution to the problem and if he wasn't informed, when the call again comes up, with the call, the note including the answer will pop up that will allow agents to deliver the solution or answer to the queries. In the remaining phases, more digitalized and personalized experience will be introduced.

Future Condition: The CRM module will help to create instant metrices on different business aspects, create automated reports based on Client's information, engage in business promotions, automated business email marketing and flight disruption management.

7) Agency Web Portal

Present Condition: There are no digital gateways currently.

Future Condition: Secure user authentication, Personalized user accounts, Secure payment integration, trip planning and Itenary management, access to travel guide & Eamp; resources, Customer support via Live-Chat.

8) Digital Marketing:

Present Condition: Nothing out of the ordinary yet.

Future Condition: AI & IOT will be used in digital marketing for unlocking Customer Data with Artificial Analytics, finding data trends & Data trends, optimizing segmentation, predictive modeling for forecasting, Campaign performance, Personalized message for Individual segments.

9) Developing of International Standard Website

Present Condition: Biman has a decent website that supports a lot of functionalities but it is still in development process.

Future Condition: Updating the website features like that of world-class airlines like Emirates, Qatar and Singapore. The initial aim is to implement desktop download speed <4 sec and mobile site download speed <2 sec.

10) Loyalty Management System

Present Condition: The Loyalty Management System uses automatic

Future Condition: Integrating IOT to offer seamless and instant rewards to passengers which include providing perks, discounts and access to exclusive services on basis of status.

11) Ancillary Services

Future Condition: Lounge access, meals, paid seats and other a-la-carte features.

12) Automated SMS services

Present Condition: Currently there are no automated SMS service.

Future Condition: The automated SMS service will have a lot of additional features, like receiving details of the flight & date as soon as the ticket is purchased, automatic SMS remainder 24 hours prior to the flight departure, estimated travel time, informing about delay, lost luggage wareabouts and other similar features.

13) AI-based Schedule Manager

Present Situation: No such AI-integrated feature is available currently.

Future Situation: Creating robust, accurate & feasible operating schedules across network regardless of fleet size, business model or region.

14) AI based Business Intelligence

Present Situation: There are digital options for the data retrieval process but there is no AI-integrated Business Intelligence

Future Situation: Biman is building its own Business Intelligence that will be used for data analyzing, deliverable actionable information that helps Executives, Managers and others to make informed and informative decisions.

15) Tools for distribution channel for avoiding GDS cost

Present Condition: Around 90 percent of all the sales of Biman occur via the GDS agents, which in turn costs Biman a lot of money to be paid as commission.

Future Condition: To introduce the new tool or software that will reduce GDS cost.

16) Daily Flight Dashboard

Present Situation: No such feature is available currently.

Future Situation: The digital dashboard will help Biman to know flight status and take necessary action like for delay or cancellation for weather purpose, passengers will be informed beforehand.

17) New Distribution Capabilities (NDC)

Present Situation: Services like Amadeus, Galileo are being used by GDS agents who sell Biman's inventory (Seats) who in return gets commission and rewards.

Future Situation: IATA has introduced NDC that works as a unified platform which will reduce the distribution cost. Currently Biman pays approximately 8\$ per PNR but if NDC is implemented, Biman will then have to provide only 50 Cents per PNR to the NDC.

18) Plotting

Past Situation: Biman used to do hand plotting of Flight data on paper which used manual labor and was very ineffective.

Current Situation: Currently Biman uses 2 sources, one is KITES AVES and the other is DDS (Data Decision System) as tools for data storage and retrieval that gives precise and accurate data relevant to particular flights. This data helps and guides us to make decision-driven decisions.

4.4 Internship Outcomes

What experience I have gained

For aviation enthusiasts and aspiring professionals, the opportunity to intern at an esteemed airline like Biman Bangladesh Airlines, the flag carrier of Bangladesh, is a dream come true. Over the past month, I have had the privilege of immersing myself in the dynamic world of aviation, gaining invaluable insights and experiencing firsthand the inner workings of one of the country's leading airlines. Now I shall try to summarize the most important experience which I have gathered during my internship at Biman. These are stated below:

- As an intern in Biman Bangladesh Airlines, I earned some much-needed experience which will be a great treasure for my future life in the corporate life. In Biman I got the chance to aquire some technical, people as well as some personal developments skills.
- As a part of sales experience, I had the opportunity to work with Sabre software which is used for all types of ticket issuing and all other functionalities like reissue, date change, class change, extra baggage allowance and other facilities.
- It's another experience to procure each one of those character measurements and method of talking. As Biman has experienced personnel and a friendly environment where there is no different limit to speak with everybody and the works are generally entwined between divisions, balanced correspondence is done frequently. This improved my relational abilities.
- From a personal experience in Aviation industry, Biman gave me the most important development of my life. Here I got to know about the world-class culture, lifestyle, problems etc.
- One point will always remain fresh in my head is the inspiration from everyone whom I
 have come across during my internship. Everyone is energetic and very well motivated
 along with a positive mentality and strong dedication and passion to their duty. This
 mentality will always help me to stay curious and learn more so that I can give my very
 best to the organization.

4.5 Difficulties faced during Internship

During this internship, I face some difficulties that somehow slowed down my working speed but couldn't take away my enthusiasm. I want my internship report to be among the best ones in my department so a lot of efforts were made but due to my academics, which were also running parallelly, put me in a difficult position to balance both work and studies along with managing the time for completing my report.

Apart from these, my main challenges were

- 1) Adjusting to work environment: This is something completely new for me. Adapting to professional culture & norms was challenging as it was my first time in a professional environment.
- 2) Learning Curve: Till the date of starting, I have studied a lot of technological views but getting adjusted to the use of the various technological tools, software and systems relevant to the organization's processes were challenging.
- 3) Time Management: Balancing my academics and self-study of the new lessons learnt at the organization was difficult.
- 4) Imposter Syndrome: I was feeling inadequate and started having doubts about myself in the beginning in the professional setting as I was surrounded by experienced professionals who were very dedicated and highly energetic.

4.6 My Contribution to the Company

My internship was under the Directorate of Marketing & Sales. Being the directorate of direct interaction with the customers and flyers with the company, I have successfully managed to represent Biman at the Travel Trade Fairs during my tenure here as an Intern. Serving the roles of primary query solver and clearing misconceptions about Biman in the diverse markets. As the flag carrier of Bangladesh, Biman has ultra-level expectations not only from the citizens of Bangladesh but also from people from all around the globe as Bangladesh is growing exponentially as a tourist hub. Providing customers with information, clearing their doubts, and providing a customer-friendly experience in their interaction with Biman was a significant part of my contribution to Biman. As a consequence, I have come across many people who were very pleased with my explanation style and they too in turn had their doubts cleared.

This, I believe has increased the brand image of Biman amongst the general people. I can thus confidently assert that my essential and intricate contribution to the company.

4.7 Additional Experience at Travel Fairs

Biman being the flag carrier of our Dear Motherland Bangladesh, organizes and very actively takes part in travel fairs, that promote and encourage people to travel and visit not only Bangladesh but the whole beautiful world. The fair arrangement is a great way of showcasing Biman's offerings as operating the youngest fleet in South Asia. Biman's relatively young fleet age positions it favorably in terms of operational efficiency, fuel economy, and passenger comfort compared to airlines with older fleets in the South Asian region. This younger fleet age reflects Biman Bangladesh Airlines' commitment to modernizing its operations and providing a more reliable and comfortable travel experience for its passengers. To encourage aviation enthusiasts to fly Biman and draw the attention of new flyers, Biman offered a 10% discount on all International Flights originating from Dhaka, the heart and Hub of Biman.

During my inaugural month as an intern, I had the invaluable opportunity to engage with Biman Bangladesh Airlines at two prominent fairs, the BICC Trade Fair from 1st to 3rd February and Biman Dhaka Travel Mart from 8th to 10th February 2024. These experiences provided me with a platform to seamlessly integrate the skills honed in the call center section of my training, enabling me to adeptly interact with individuals on behalf of Biman. The vivacious and dynamic atmosphere of the fairs facilitated a hands-on application of my training knowledge, allowing me to represent Biman to travelers and aviation enthusiasts alike effectively.

Moreover, my involvement in the Biman loyalty club program afforded me a comprehensive understanding of our loyalty membership initiatives. These experiences collectively enriched my internship journey, offering me firsthand insights into the intricacies of airline operations and customer engagement within the aviation industry.

During the second fair, I was fortunate to meet Shakib Al Hasan, renowned as the world's best all-rounder in cricket, who is also the brand ambassador for Biman. His presence added prestige to the event, and I was among the privileged few who had the chance to interact with him. One highlight of our encounter was showcasing his status as a gold member of our loyalty club program to all attendees. Shakib Al Hasan's visit not only elevated the profile of Biman but also underscored the significance of our loyalty initiatives, reinforcing the airline's commitment to excellence and customer satisfaction.

My interactions with passengers and enthusiasts gave me valuable insights into the importance of customer service and its pivotal role in shaping the overall passenger experience. Whether assisting elderly passengers with digital procedures or addressing concerns and inquiries with professionalism and empathy, I witnessed firsthand the impact that exemplary customer service can have in fostering loyalty and trust among passengers. The teachings from my faculty members also gave me guidelines on how many processes work from the backstage.

As my internship at Biman Bangladesh Airlines progresses, I am filled with a profound sense of gratitude for the opportunity to be a part of this esteemed organization. The knowledge and experiences I have gained over the past month have deepened my passion for aviation and equipped me with invaluable skills and insights that will serve me well as I embark on my journey in the aviation industry. Biman Bangladesh Airlines has been nothing short of transformative. Every experience has left an indelible mark on me, shaping me into a more knowledgeable and capable aviation enthusiast.



Chapter-5: Findings and Analysis



Description

To understand my academic theoretical knowledge in light of my internship experience, I have come across a few points where I have found some interrelations, which are depicted as below:

5.1 Company Level Analysis

During my internship with Biman Bangladesh Airlines within the Marketing and Sales Directorate, I had the invaluable opportunity to immerse myself in various internal procedures and operations. This experience provided me with a firsthand understanding of both the strengths and weaknesses within the department's processes. One particularly effective procedure that stood out to me was the customer segmentation and targeting strategy employed by the marketing team. Biman's majority revenue comes from the Middle Eastern route market, which is mainly comprised of the Remittance market. Other routes like Singapore and Malaysia are also popular Remittance markets. Other routes like Narita and Toronto serve as great destinations for people of the Buddhist community as the majority of them fly from Kathmandu by Biman to Dhaka and from there to Narita or other destinations.

Using sophisticated analytics tools the department meticulously identified distinct customer segments and tailored marketing campaigns accordingly. Biman frequently. This approach not only maximized the effectiveness of marketing efforts but also ensured a more personalized experience for customers, ultimately driving sales and enhancing brand loyalty. For example, Biman offers 40kg baggage allowance for those who fly from Jeddah to Dhaka, whereas all other airlines including the world-class Qatar or Emirates offer 30kg only.

On the contrary, I observed that the process of analyzing market trends and competitor strategies was one of the less effective procedures within the department. Despite the availability of various market intelligence tools like DDS that gives accurate and world-class data, the approach seemed fragmented and lacked a cohesive strategy. This often resulted in delayed responses to market shifts and missed opportunities for competitive advantage. Furthermore, the absence of a centralized platform like a digital dashboard of live data or stream for collecting and analyzing competitor data hindered the team's ability to make informed decisions swiftly. There is no doubt that the Market Research team is very energetic and agile. Additionally, to this point, Biman is severely understaffed. Alongside, many decisions like new route expansion are greatly influenced by bureaucratic decisions.

Recognizing the importance of addressing these inefficiencies, I proposed implementing a comprehensive market intelligence system that integrates real-time data feeds and predictive analytics. By leveraging advanced technologies such as artificial intelligence and machine learning algorithms, the department could gain deeper insights into market dynamics and competitor behaviors. Currently, Biman has adequate tools that contain historical data but Biman can greatly benefit from data analytics and AI-powered Software. Additionally, I recommended investing in ongoing training programs to enhance the team's proficiency in utilizing these tools effectively.

Biman being the flag carrier of our Dear Motherland Bangladesh, organizes and very actively takes part in travel fairs, that promote and encourage people to travel and visit not only Bangladesh but the whole beautiful world. The fair arrangement is a great way of showcasing Biman's offerings as operating the youngest fleet in South Asia. Biman's relatively young fleet age positions it favorably in terms of operational efficiency, fuel economy, and passenger comfort compared to airlines with older fleets in the South Asian region. This younger fleet age reflects Biman Bangladesh Airlines' commitment to modernizing its operations and providing a more reliable and comfortable travel experience for its passengers. To encourage aviation enthusiasts to fly Biman and draw the attention of new flyers, Biman generally offers a 10% discount on all International Flights originating from Dhaka, the heart and Hub of Biman. In most if not all of the travel fairs, Biman always comes out on top and holds the title sponsorship.

My internship experience at Biman Bangladesh Airlines underscored the critical role of efficient internal processes in driving organizational success. While some procedures, like customer segmentation, showcased remarkable efficiency and effectiveness, others, such as market analysis have highlighted areas for improvement. By identifying and addressing these inefficiencies, the Marketing and Sales department can optimize performance, capitalize on opportunities, and achieve strategic objectives in a highly competitive industry.

5.2 Market-Level Analysis

The Directorate of Marketing and Sales is responsible for representing and interacting with customers on behalf of Biman. This puts a lot of weight on the directorate's shoulders as every interaction is crucial for customer satisfaction. Customer satisfaction and safety are our only and main priority. Personally, I was conducting and analyzing at this point and came across a few reasons. Here, I also looked into other close rivals in the market like US Bangla, Air Astra and other airlines to learn their key insights. From a market-level perspective, I go into great detail on the market-level analysis:

- ❖ Digitalization of the Call Center: The gateway to provide digital support to callers and customers is the digitalization of the Biman Call Center into Biman Smart Call Center. Biman has aimed that within 3 phases, will start providing customers with 24-hour call service. Besides the addition of digital features like
- ❖ Customer Relationship Management (CRM) which will deliver more personalized experiences that will make customers feel precious
- ❖ Key Performance Indicator (KPI) for employees which will help to determine their weak areas to emphasize on
- ❖ Automatic Call Distributor (ADC) that will distribute calls to designated agents like if someone wants to speak in English or Bangla, both options are available.
- ❖ All these features are now integrated and are also a part of any airline's modern service feature. This gives Biman a competitive advantage.

- ❖ Prioritizing the cost-effectiveness of the customers: Biman always tries to offer the lowest fare amongst the competitive airlines. As Biman is a service airline (Not a budget airline like Ryan Air or Scoot), with respect to major airlines in the world like Qatar, Emirates and Singapore which also offer food and other services like meals, extra baggage, priority pass and boarding and online check-in.
- ❖ Prioritizing Safety and Security: Biman, being the national carrier of Bangladesh, emphasizes on security and safety of the passengers above all else. It is evident from the incident of April 13, 2024, where a crack in the cockpit windshield of a Biman Bangladesh Airlines Dreamliner was discovered that forced the pilot to bring the Boeing 787-9 plane back to Dhaka two hours after take-off. The 285 passengers and 12 crew members of the flight, bound for Dammam in Saudi Arabia, returned and landed safely after the incident on Saturday afternoon. The flight's captain Tania Reza contacted the control tower after noticing the crack and then decided to return to Shahjalal International Airport. This incident is one of the many that shows Biman is a world-class airline that follows industry standards and who are also committed to their marketing policy that "Safety is above everything else" and their Slogan "Your home in the sky" as home is the safest of all abodes in a person's life.
- ❖ Encouraging Travel: Biman being the flag carrier, apart from just only transporting passengers and cargo only, is also a great promoter of traveling and tourism. The Honorable Prime Minister of Bangladesh has emphasized to convert Bangladesh into a Tourist Hub in South-East Asia. Biman, with alignment of this order actively takes part in the promotion of traveling and tourism. Amongst the brightest examples one is the participation of Travel fairs and holding the Role of Title Sponsors. Apart from that, Biman is also currently working to encourage payments via Bank cards that offer various types of incentives like instant cashback that will not only encourage travel and tourism but also attract foreign travelers along with foreign investments too.
- ❖ Offering direct flights: Biman, being an important and prospect carrier, offers direct flight to all of its routes like from Dhaka to Toronto, London (Heathrow), Manchester, Narita and other cities. If anyone wants to travel via Emirates, Qatar, Etihad or Singapore Airlines he has to go through at least one or more stopovers from Dhaka to those places. For example, By Biman, the flight duration is 20 hours and 20 minutes (Source: Biman App). But if anyone wants to travel by Emirates, it will take anywhere from 24 hours to 45 hours and 20 minutes which includes at least one transit and aircraft change (Source: Emirates App). As traveling is increasing for the people of Bangladesh, many are new and are afraid of the fact of transit in a non-native country. Also Biman offers direct flights to/from their secondary hubs of Sylhet and Chittagong.
- ❖ Integrating Digital Features: To increase the brand image of Biman, the process of digitalization has already started and the integration of various digital processes like payment gateway system, priority pass, online self-check-in along with features that will be integrated in the near future like AI-powered ChatBot, Automated Portals and other features, displays the commitment of Biman to stand out amongst other airlines in the aviation industry of Bangladesh.

Efficient Findings:

- Biman Bangladesh Airlines Ltd.'s compensation policy is to provide workers with the greatest possible benefit and job satisfaction which leads them to work another subsection side by side the daily work progress. It takes them a long time to locate the right person for the appropriate job and who can be the driving force of newly determined opportunities. It is visible from the study that Biman's work function and stability are being satisfied, even if it takes a long time.
- The Chairman of the Board has no direct accountability to anybody else and is not compelled to disclose its activities or performance to anyone.
- There are huge scopes of adding additional manpower who are capable of revolutionizing the company on an industrial level.

Not-so-Efficient Findings:

- Biman isn't always able to provide its employees with the training they need. As an intern, I could personally feel the measurement after being needy and ambitious to learn something new. Because the employees are structured in the way of their own and need to do so without claiming major concern in this area.
- The legislation mandates that Biman is not a solely commercial airliner and that it prioritizes national interests above commercial ones. The ordinance gives the government the authority to carry out its duties. The government uses Biman to provide services for the country, such as official VVIP flights, relief flights, charter flights, and a lower-cost Hajj flight.
- As of right now, it has a Man-Equipment Ratio (MER) of 1:367, although the acceptable worldwide level is 1:200. Although Biman employs a large number of people, their salaries are comparably modest when compared to those at competing airlines across the globe.
- Although Biman Airlines is the country's largest airline, it is barely profitable. By including differentiated services like Emirates being famous for their In-Flight Entertainment System (ICE), Qatar for its luxurious Business-Class Suites (The Q-suite) and Singapore Airlines for their amazing hospitable crew.
- Due to Ministerial pressures, Biman is unable to operate freely in the decision-making process. The complexity of the bureaucracy might make it difficult to respond quickly to an urgent issue. Biman has been politicized in numerous ways as a result of its status as a state-owned enterprise.

5.3 Professional Level Analysis

During my internship period, I was able to correlate my gained knowledge at the university through all the activities, visualizations and managerial tasks. While working with Biman and Smart Call Center development project, I experienced real-life implications of the knowledge and skills where

I utilized my theoretical knowledge and obtained a practical visualization that gave me a complete visualization and shape.

Throughout my internship, I worked using MS Excel and MS PowerPoint to enhance Biman's customer experience. This practical experience has helped me to build my future professional ambitions and has further solidified my understanding of the business.

Additionally, I think the courses I've taken from the BTM department have made it easier for me to pick up these new technical abilities throughout my internship. My technical and data visualization skills were honed in courses like Management, Management Information Systems, Computer Science and Technology II (Database Management), Enterprise Resource Management, Supply Chain and Logistics Management while project management and operations research helped me to visualize and create decision-making scenarios.

Some organizational and behavioral factors make Biman more ambitious among the leading companies in dealing with etiquette and norms. Some of the major industrial and corporate belongings I have gained other than technical knowledge is given below:

- ✓ **Inspiration:** All of the officers and staff members whom I came across are very dedicated and highly energetic which inspires me and will give me guidelines for my future.
- ✓ **Communication:** Biman as a big and national community corporal affair allows me to flourish and present myself to go beyond and become the achiever to influence others through communication.
- ✓ **Adaptability:** Biman has a very dynamic work environment and has proved to me that if one has a passion for something, he can easily adjust to a new environment. Besides, the officials with whom I had an invaluable bonding experience, made me feel like it was my home.
- ✓ **Leadership:** Biman as the greatest leader and decision-maker in Bangladesh gives me attitudes and the impression to feel the hunger to do more. Their ability to challenge the market is out of imagination. For example Biman is now the sole carrier who operates flights from Dhaka to Barishal.
- ✓ **Teamwork:** My active participation in the travel fairs gave me the practical demonstration of how the team works. The organized way of events management, the coordination of various activities, the distribution of duties, and the helping when someone is overburdened with requests will remain forever fresh in my mind.
- ✓ **Time Management:** Biman is very serious about their tasks and tries to complete all of their tasks. Time is money and every bit of opportunity, Biman taught me this valuable functionality. From work to break, from coming office to going back home and balancing everything.

Therefore, I believe that all of this academic information was very closely tied to my internship duties and greatly benefited me. Despite all of this, there were a couple of difficulties I ran across when I was an intern. Despite all that, everything was enjoyable and I had a wonderful journey.



Chapter-6: Conclusion and Recommendations



6.1 Recommendations:

Encountering challenges within any organization is expected and is also not different for Biman as these are integral to its functioning. However, it is imperative to address these concerns vigorously and effectively to ensure the smooth operation of the company. After uncovering significant issues affecting both specific sections and the entire company, it is imperative to take remedial action. For Biman to transition away from its outdated and legacy management style, position itself for future opportunities, and mitigate present crises and risks, it is essential to implement the following actions:

Hiring more Employees:

Biman is understaffed and needs more manpower in various sections. There is no doubt of the fact that all the officers and staff here are dedicated, energetic and agile. But man cannot overcome everything. He is bounded by rationalities. If the number of workforce can be increased, that will bring a lot of new and innovative ideas from a huge pool of people.

Dedicated Market Research & Development Team

The Market Research Section is a core and important aspect of the Directorate of Marketing & Sales. This section apart from researching the market, can also extend its functionalities and add a dedicated team of Market Research & Development under its wings.

Presently the market research team consists of 4 members. Still, the presence of a dedicated research and analytical team would have improved Biman's ability to hold a proactive stance rather than a reactive one. Additionally, suppose a team of dedicated market research and development team was present, whose main and only task is identifying and dealing with aviation trends, their analysis, and figuring out leading stances. In that case, probable future and ways to incorporate those into the environment of Biman will definitely give Biman a competitive advantage for Biman in a new dimension.

Adding AI-Powered Dashboards and Data Mining techniques:

We have to keep in mind the importance of a dedicated Market Research and Development (R&D) team within an airline is a strategic move to enhance competitiveness and adaptability in the dynamic aviation industry. For the team to work properly and exquisitely, they must be equipped with state-of-the-art technologies like Digital Dashboards where data will be viewed and data mining techniques where previous data along with data from available sources (like DDS) will be used to generate insights, take part in predictive analysis and also work for prescriptive analysis.

Presence of a Mascot:

Biman currently has no mascot. Whilst visiting the travel fair, I saw a mascot of TurkishDoc and that made me interrelate to the absence of the Mascot of Biman. Mascots are an invisible hand that attracts customers. If there is a Mascot of Biman, let's say it is like our Balaka (Stork) will definitely create an amusement during the travel fairs. Apart from that, the presence of a mascot at the gates of our flights before the boarding will create excitement, especially amongst the young generations. Mascots are a great way of presenting Brand Recognition, Emotional Connection, Marketing and Promotional Activities, Family-Friendly appeal and Cultural Representation. The example of Air India's Maharaja can be taken into consideration.



Fig –15: Air India's Maharaja (left) and Baseball diamond of Southwest (right)

Introducing a First-Class Cabin

Airlines should keep First Class but they don't realize. In recent years, International First Class is going away and there is no sign of that trend stopping. Airlines from Korean Air to American Airlines, from Etihad to Thai are all planning futures with little to no First-Class seating options. Those who are removing the First-Class option, are focusing on mainly the economy section. The main reason behind this is the insane costs that are involved in operating a First-Class seat which involves providing World-Class amenities, high operating costs with respect to seating space and other premium ancillary services. But having a competitive First-Class can have huge exponential benefits. The example of Singapore Airline's first-class suites has created a halo effect around the whole brand for their jaw-dropping aesthetics. This improves the image of their economic class because of their marketing strategy as the thought "An Airline with such a nice first-class cabin will also be good in their economic class" comes in the mind of the customer.

The key is to continue the innovation and stay in the game that creates the hype and building brand awareness. The First-Class cabin is the game changer. As Biman is now focusing on the purchase of Airbus A350s, which will be deployed in long-haul routes like Manchester, Toronto, Heathrow etc and create huge scope of new ones like New York, Amsterdam, Brussels, Cairo, Bern, Stockholm, and Birmingham. If Biman can incorporate about 3-4 first-class seats per aircraft and

include services like Emirates and Singapore Airlines, Biman will be able to attract an initial market in the European areas.

Biman's First-Class has to be branded on the new Airbus A350s (Biman is planning for this variant till date) because the new variants are a symbol and dedication of Biman and this will definitely boost their Market image. The concept of colour psychology has to be kept in mind. I would personally recommend Royal Silk Red coloured in-flight amenities like blankets, bed-sheets and pillows.

Becoming member of an Alliance

Biman, after increasing the fleet size to about 50, should focus on becoming a member of any alliance where they can have better advantages. Having a big fleet and having a membership of an alliance, let's say Star Alliance or OneWorld will definitely boost the passenger demand for Biman.

Introduction of a Photography Club

Biman can include a logo whilst posting their pictures. This will show their sincerity towards social media post.

Starting of dedicated Internship programs:

Biman has a huge brand image and a blank cheque regarding the information and experience that they currently posses. This knowledge can be shared by starting one or more dedicated internship programs across all directorates over the year. This will be a great way to give back to the youth and student generation.

Improvement of Biman App

The Biman mobile app is a significant upgrade from the past but still has not incorporated the status of a "World Class Airline" app. At present there is Interline Agreement (A mutual agreement of 2 Airlines for development of connectivity that benefit both carrier as they can sell flight tickets of the other airline) of Biman with 22 other carriers like Singapore Airlines, Qantas, Emirates, Air Canada, Air India, Etihad, Gulf Air, Kuwait Air, Malaysian Airlines are few of those.

The lack is in the integration of the interline features. Biman Mobile App and Biman Website (https://www.biman-airlines.com/) have not yet integrated the feature of traveling using the interline benefits. Emirates for example probably has the best implementation of the integration. If anyone wishes to travel to any destination where Emirates doesn't travel, let's take the example Doha (Hamad International Airport) directly. Suppose someone wants to fly there from Dhaka (Hazrat Shahjalal International Airport) via Emirates. In that case, he has to travel to Dubai Intl Airport by Emirates and from there, after a stopover, using the interline agreement, Emirates provides the connection to Doha by another carrier Fly Dubai. The option to fly at any airport opens via this feature. Since Biman has this opportunity, they must incorporate this feature as this will provide the grand opportunity for all to have the ability to fly to more destinations and increase connectivity with other airlines.

Fig-16 Shows one flight operated by other carriers (Fly Dubai) that has an interline partnership and codeshare agreement with Emirates and also operates to destination Emirates currently doesn't go.



Fig-16

Introduction of Cargo Feature on Biman Website and App:

Biman has made a decision that is currently in processing status of the purchase of 2 Freighter aircrafts from Airbus A350 variant. This is a great choice as the trend to shift towards twin-engine aircrafts is an excellent one. The most popular choice of freight version is Boeing's Jumbo 747 which has a maximum capacity of 112-ton. But the A350F is definitely better as it is constituted

with composite aluminum and titanium and has a maximum payload of 109 ton. Apart from this, the operating and maintenance cost of a quad-engine aircraft is very high compared to the efficient and new-generation ones that too of twin engines.

Biman also has a huge Cargo Interline Partnership with 65 carriers among which Atlas Jet Havacilink, Lufthansa Cargo, Cathay Pacific, British Airways, American Airlines, and British Airways are prominent. The app or the website can include a cargo portal which can include a chance to create an ID and people can send cargo to any destination around the world. By integrating the ability to view destination of any station around the world, has become imperative, especially for Biman. The expectation of Biman is high as they are the Flag carrier and the impact

Exclusive Livery Integration:



Japan's All Nippon Airways, JAL and Emirates have the best liveries. The presence of a special livery is a great way of demonstrating an airline's commitment of their aesthetic taste. Japan, famous for Disney theme in Japan Airlines and Flying Honu (The Flying Turtle) in ANA Japan.

Fig-17: Aesthetic liveries

We can include a livery that encourages to travel to beautiful Bangladesh. The example of TAP Portugal can be cited here. "Portugal Stopover, Discover Portugal on the way" is their tagline. Beneath the belly of the aircraft, we can include the word "Bangladesh" written design as we have on the 737, 787 and 777s. Biman is finalizing the



purchase of 10 new aircraft from Airbus of the variant A350 among which 2 will be freighter version. We can cite the example of Emirates here as some of their freight cargo liveries are very well designed. We too can introduce a concept of transporting live animals and include designs of monuments that represent us like Jatiyo Smriti Soudho.

Additionally, Biman has the competitive advantage of acting as the only carrier of Hajj operations from Bangladesh apart from Saudia Airlines, the flag carrier of the Kingdom of Saudia Arabia. Biman can introduce a livery that depicts and encourages the viewers to perform hajj via Biman.



Introducing Cargo Livery



Fig-18: Special livery of Cargolux

The special livery depicting the transportation of live animals, vegetable items and other goods can be used on the freight aircraft like Emirates. The display of special cargo liveries works as an indirect advertisement at wherever Biman flies.

Sponsorship with Bangladesh National Cricket Team:

Biman can become the official partner of Bangladesh Cricket Team and have one of their aircrafts in that livery. Apart from being a significant sponsor of the jerseys and kit items, this will increase Biman's Brand Image.



Fig-19: Football team liveries by Etihad (left) and Emirates (right) that display a great taste of aestheticness.

Social Media Channel

Biman currently has only 2 visible social media accounts, one on Facebook and the other on YouTube. Although the exposure of the YouTube channel is very good but the Facebook page too is not yet a verified Facebook one. Biman has to increase their exposure. Currently, many people are fond of X (Formerly known as Twitter), WhatsApp, Telegram, WeChat and Pinterest.

Biman has a lot of catching up to do. Firstly the Facebook page has to be verified as soon as possible. The acceptance level then increases. The presence of Biman across Youtube is very impressive but the same quality and maintenance has to be done across all social media platforms.

Biman has to increase connectivity and communication and has to offer ticket and cargo sales via Telegram, WhatsApp Channel, Facebook Messenger, WeChat and IMO. As currently many of the young generations are currently interested in faster texting services rather than viewing and booking online.

By using a similar technology like its used in Biman Call Center like the ADC (Automatic Call Distributor) for WhatsaApp Channel, Facebook Messenger and Telegram especially, Biman can showcase their IT dominance and capabilities.

Proper Handling of Promotional Activities

The presence of Biman in YouTube is commendable but if Biman can improve the quality of the videos that are posted on Facebook live and Facebook posts, that will also increase the brand image and showcase the quality of our works. If Biman uses 4k cameras or DSLR cameras, this will help.

AI-ChatBot

The integration of AI ChatBot is a demonstration of the use of Technology of the next generation. ChatBots are a great way to solve the small yet important queries of the clients. Although one of the examples of Australian Qantas reminds us that the use of AI can sometimes fumble up and cause misunderstandings. The AI ChatBot once offered a 600 Dollar Ticket for free to a gentleman. But with proper maintenance and supervision, Biman can integrate this feature and contribute to the building of Digital Bangladesh.

Procurement of Aircrafts

Biman must speed up the procurement of purchase and maintenance of aircrafts. As the age of the aircraft progresses, the maintenance costs increase. Biman must acquire new fuel-efficient both wide-body and narrow-body (single and twin isle) aircrafts. Airbus will be the better choice as security and safety issues have showed up in recent years with Boeing.

6.2 Conclusion

As Biman Bangladesh Airlines continues to be the flag carrier and a cornerstone of the aviation industry in Bangladesh, it faces a critical juncture in maintaining its prominence and relevance amidst evolving consumer preferences and market dynamics. While Biman has historically played an integral role in connecting Bangladesh with the global aviation network, it now confronts challenges in enhancing customer satisfaction and ensuring long-term loyalty.

To address these challenges and secure its position as a trusted airline brand, Biman must prioritize customer-centric strategies and brand-building initiatives within the Directorate of Marketing and Sales. This involves not only delivering exceptional service experiences but also cultivating a strong and enduring brand image that resonates with travelers.

One key aspect for Biman to focus on is enhancing its customer service and engagement efforts. By implementing personalized service offerings, proactive communication channels, and responsive support systems, Biman can elevate the overall passenger experience and foster stronger relationships with its customers. Biman tries to create great momentum by actively becoming the title sponsor of all major travel Fairs.

Furthermore, Biman should leverage its unique position as the national carrier of Bangladesh to showcase the country's cultural heritage, hospitality, and tourism attractions. Through targeted marketing campaigns, partnerships with local tourism authorities, and curated travel experiences, Biman can position itself as a key facilitator of tourism and economic growth in Bangladesh.

Additionally, Biman must remain agile and adaptable to changing market dynamics and competitive pressures by coming out of their legacy management practices and becoming very dynamic in nature by taking proactive stances rather than reactive ones. This includes continuously monitoring industry trends, optimizing route networks, and exploring new market opportunities to stay ahead of the curve and capitalize on emerging growth prospects. Biman has started but the speed has to be increased.

In conclusion, this report provides valuable insights into the strategic imperatives for Biman Bangladesh Airlines within the Directorate of Marketing and Sales. By prioritizing customercentric initiatives, brand-building efforts, and market responsiveness, Biman can reinforce its position as a symbol of national pride and a trusted partner in shaping the future of aviation in Bangladesh.



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