

Company Internationalization Strategy Evaluation-Take Boeing as an Example

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Abstract: *Boeing is the largest export manufacturer in the United States and has been the world's leading aerospace company since 2012, with overseas sales accounting for more than half of its revenues. Boeing's successful internationalization strategy, studying and learning its management strategy is of tremendous practical significance.*

What kind of company is Boeing? What are the significant milestones in Boeing's international journey? What is Boeing's value-creating strategy? What are the positive and negative elements of these strategies, and what are their preconditions? What should Boeing do to strengthen its value creation over the next five years? This report will use theoretical models in International Business Management, such as Robinson's six-stage theory, SWOT analysis, Boston matrix, Michael Porter's value chain model, and RBV model, to answer these five questions.

Keywords: *Boeing, Value-creation Strategy, Internationalization*

1. Boeing in Brief

Boeing was founded on July 15, 1916, by William Edward Boeing. It is the world's largest aerospace company and leading manufacturer of commercial jetliners, defense, space, security systems, and aftermarket support service providers. Boeing products and tailored services include commercial and military aircraft, satellites, weapons, electronic and defense systems, launch systems, advanced information and communication systems, and performance-based logistics and training.

Boeing is organized into three business units: Commercial Airplanes; Defense, Space & Security; and Boeing Global Services, which began operations July 1, 2017. Supporting these units is Boeing Capital Corporation, a global provider of financing solutions.

Besides, functional organizations working across the company focus on engineering and program management; technology and development-program execution; advanced design and manufacturing systems; safety, finance, quality, productivity improvement and information technology.

With corporate offices in Chicago, Boeing employs more than 153,000 people across the United States and more than 65 countries. Boeing also leverages the talents of hundreds of thousands more skilled people working for Boeing suppliers worldwide.

Boeing focuses on innovating and operating to make the world better for future generations through environmental stewardship, social progress, and values-driven governance. Boeing's strategic objectives are to create value, and help build better communities worldwide through purposeful investments, employee engagement and thoughtful advocacy efforts.

Today, more than 70 percent of Boeing's total backlog is from outside the US Boeing's global reach includes customers in approximately 150 countries and employees and operations in more than 65 countries. The company has manufacturing, service, and technology partnerships with companies and governments worldwide and contracts with more than 20,000 diverse suppliers and partners.

2. Key Milestones in Boeing's Internationalization

According to the six-stage theory put forward by American economist Robinson, Boeing's internationalization development process mainly goes through six stages, namely the Initial Stage; Export Stage; International Business Stage; Multinational Stage; Transnational Operation Stage and Super International Stage. Next, the paper will be introduced in phases Boeing's internationalization

process and the Boeing company in each critical milestone phase.

2.1 Initial Stage (1916—1933)

Boeing was in its infancy, producing mainly military aircraft and commercial transport aircraft.

★ Mar. 3, 1919, Boeing brought the first batch of international airmail from Vancouver to Seattle, marking international development.

★ Jan. 1, 1928, Boeing Air Transport acquires 73 percent of Pacific Air Transport's stock, expanded its postal coverage, and began operating west Coast routes, genuinely entering the international air cargo market.

★ Mar. 28, 1931, Boeing Air Transport, National Air Transport, Varney Air Lines, and Pacific Air Transport combine as United Air Lines, providing coast-to-coast passenger service and mail service.

2.2 Export Stage (1934—1945)

In the mid-1930s, Boeing began developing large bombers. Boeing made a fortune during World War II. At this stage, Boeing explored the international market employing government diplomacy, participation in aviation research, and delivery of products and services, expanded the international region from peripheral countries to Europe and developing countries such as the Middle East, and Southeast Asia.

★ 1934, Boeing delivered the first Boeing 247 to Lufthansa, marking the opening of Boeing's door to the European market.

★ Dec. 7, 1941, Japan bombs Pearl Harbor, Hawaii, and the United States enters World War II. US airplane manufacturers step up to play an essential role in supporting airpower's strategic use in the war effort.

2.3 International Business Stage (1946—1969)

Since the mid-1940s, Boeing has further established cooperation with Israel, Indonesia, Italy, North Korea, Japan, France, and other countries. Moreover, it expands international territory by opening offices in Canada, Japan, and other key countries. By 1965, Boeing had a 36.2 percent share of the global civil aircraft market.

★ Mar. 31, 1960, Boeing buys Vertol Aircraft Corp., formerly Piasecki Helicopter, of Philadelphia and its subsidiaries and forms the Vertol Division of Boeing.

2.4 Multinational Stage (1970—1989)

After the 1960s, Boeing's main business shifted from military aircraft to commercial aircraft. In the 1970s and 1980s, Boeing set up subsidiaries in the Middle East, Russia, China, South Korea, and other countries and regions. At the same time, it established many compensation trade enterprises, and carried out aviation industry cooperation projects, education and training programs with local universities, and initially formed an international customer network.

★ 1972, Boeing aircraft were introduced to the Chinese market during President Richard Nixon's historic visit to China.

2.5 Transnational Operation Stage (1990—1999)

In the 1990s, Boeing integrated its aviation technology and international market through merger and acquisition and became the world's largest military and civil aircraft manufacturer. Boeing also continues to push forward the global localization operation by establishing the Boeing technology research center, easy access to the local advantages of the local resources, achieving the test objectives, and reducing cost consumption.

★ Dec. 6, 1996, Boeing acquired the Rockwell Aerospace and Defense Unit, making Boeing the world's most potent aerospace company.

★ Aug. 1, 1997, Boeing and its North American subsidiary merged with McDonnell Douglas. This process greatly enhanced Boeing's productivity and research and development capabilities, especially for military aircraft.

2.6 Super International Stage (2000—present)

In the 21st century, Boeing has accelerated globalization and cooperated with governments or airlines of more than 70 countries and regions, such as Japan, Europe, Korea, the Middle East, and Malaysia. At the same time, Boeing has established joint research centers in South Korea, the Middle East, Spain, China, and other countries to develop new aviation technologies jointly.

★ Aug. 15, 2000, Boeing announces the acquisition of Jeppesen Sanderson Inc., the world's leading provider of flight information services, for \$1.5 billion in cash.

★ Sept. 4, 2001, Boeing begins operations at its new world headquarters building in downtown Chicago. The move is conducive to Boeing's set global long-term planning.

★ July. 15, 2016, Boeing marks the company's centennial with employee-focused celebrations worldwide — the culmination of years of planning.

3. Boeing's Value-creation Strategies

Boeing can be recognized in the international market because of its diversification strategy, merger and acquisition strategy, strategic alliance, and differentiation strategy. Next, the paper will combine the four strategies to analyze Boeing's specific situation, the premise of strategic implementation, the advantages and disadvantages of the strategy, and the comprehensive evaluation.

3.1 Boeing's Strategic Applications

Boeing has adopted a related diversification strategy to become the world's largest commercial and military aircraft manufacturer by offering a full range of products in the aerospace sector. Boeing's products and customized services include commercial and military aircraft, satellites, weapons, electronics and defense systems, launch systems, advanced information, communications systems, and performance-based logistics and training.

In the late 1990s, Boeing expanded its operations mainly through acquisitions. Those deals included a horizontal acquisition of rival McDonnell Douglas and a vertical acquisition of Jeppesen Sanderson Inc, the world's leading provider of flight information services.

Boeing has entered into strategic alliances in different business areas, such as a strategic alliance with Japan's Mitsubishi Electric (MELCO) to expand cooperation in the global satellite business. Boeing has struck a strategic alliance with Japan's Mitsubishi Electric to work together in space. The 787 program marks a complete shift from subcontracting to strategic alliances between Boeing and its major suppliers. Boeing has signed contracts with more than 30 major suppliers for the 787 program to design and integrate entire subsystems and critical components under the strategic alliance.

"Leading the aviation industry, be the pioneer of the aviation industry," has always been the core concept of Boeing Company. Therefore, the company invested a lot of research and development funds to carry out revolutionary innovation. To provide differentiated products for consumers, Boeing 707, Boeing 727, and Boeing 747, Boeing also focuses on the design, production, marketing, and after-sales links to provide customers with differentiated services. In short, Boeing offers its customers unique attributes that are valuable and distinctive by offering a differentiation strategy.

3.2 The Assumptions of Strategies

3.2.1 The Assumptions of Diversification Strategy

First of all, the enterprise itself has a professional operation foundation. It has a relatively stable base area, which can provide necessary capital and management support for the enterprise's new operation behavior.

Secondly, enterprises should have sufficient capital or strong financing capacity.

Finally, the enterprise should have a relatively full understanding of the new field to enter and have the ability to create characteristics after entering the field.

3.2.2 The Assumptions of Merger and Acquisition Strategy

First, there is a clear enterprise development strategy.

Second, the enterprise is in the stage of growth or maturity.

Thirdly, it has a reasonable and perfect corporate governance structure.

Fourth, the external environment of the enterprise is suitable for M&A;

Fifth, enterprises have strong financing capacity.

3.2.3 The Assumptions of Strategic Alliance

A successful strategic alliance should have the following conditions.

First, create "win-win" business results.

Second, enterprises adapt to global resource management through restructuring to avoid conflicts of interest.

Third, we should share the same values and solve problems through consultation on an equal footing.

Fourth, establish different decision-making systems, divide the boundaries of exercising power, and promote mutual relations among members.

3.2.4 The Assumptions of Differentiation Strategy

Generally speaking, to achieve a differentiation strategy's success, the following necessary conditions should be met.

First, there is a differentiated approach, and the enterprise has research and development capabilities.

Second, consumers have diverse demands for products.

Third, few competitors are adopting similar differentiation.

Fourth, the enterprise has enough strong marketing ability.

Fifth, the enterprise has a leading reputation in the product or service.

4. Positive Elements of Boeing's Strategies

Boeing has made full use of its diversification strategy, M&A strategy, strategic alliance, and differentiation strategy.

4.1 Boost Boeing Revenue

On the one hand, Boeing's diversification strategy, especially merger and acquisition, reduces the risk of entering new fields and broadens Boeing's business scope, thus significantly increasing Boeing's revenue. On the other hand, by establishing strategic alliances with target companies in foreign markets, Boeing can quickly enter foreign markets, expand its market share, and increase its revenue.

4.2 Help Reduce Risk

For example, Boeing switched to developing military aircraft when the world economy was in recession and received large orders during the second world war. From this, we can see that Boeing's diversification strategy has dispersed business risks and increased its resistance to external environmental impact. Also, enterprises jointly develop through strategic alliances and share R&D costs, reducing Boeing's investment risk.

4.3 Relate Business Synergies

Boeing can share technologies, talents, production facilities, and other resources among various businesses through merger and acquisition and diversification strategy. It improves the utilization efficiency of resources by giving play to the synergies in operation and enhancing the company's overall competitive strength through mutual promotion among various businesses. The synergetic effect can reflect the synergetic effect of management, marketing, production, and technology.

4.4 Enhance Boeing's Competitiveness

Boeing builds strategic alliances in the fierce international competition environment, strengthens cooperation, and gives full play to its overall advantages to jointly deal with other competitors or potential competitors. At the same time, Boeing uses its differentiated products and services to enhance its irreplaceability and achieve the purpose of improving competitiveness.

4.5 Build Customer Loyalty and Create Barriers to Entry

Boeing uses a differentiation strategy to give customers unique feelings and increase their sense of dependence and loyalty to Boeing, which to some extent, reduces customer sensitivity to price and objectively forms barriers to competitors, making Boeing in a comparative advantage position.

5. Negative Elements of Boeing's Strategies

5.1 Conflict Management

Boeing 737MAX was responsible for two plane crashes. Why? Boeing employees commented that the 737 MAX was designed by a clown, who was supervised by a monkey. It is not hard to see that Boeing's management is at fault, with strict production schedules set by management causing some safety checks to be skipped. This problem reflects the management conflicts in the expansion process of Boeing. With Boeing's business areas' diversification, many problems such as cultural conflicts among internal staff, increased difficulty in communication and coordination, and increased management costs have emerged.

5.2 Not Conducive to Quality Control

Through strategic alliances, Boeing has delivered the aircraft manufacturing process to multinational professional manufacturers worldwide. For Boeing, this "global coordination" approach, on the one hand, effectively controlled the cost. However, due to different technical standards in different regions, a series of problems inevitably occurred, which significantly reduced Boeing products' quality.

5.3 Easy to Cause Unfair Competition

Boeing has gained a comparative advantage through differentiation strategy, and because the civil transport market is a duopoly market, Boeing and Airbus have fierce competition in the world. Airbus's advantage is open to retaliation, which has sparked a trade dispute between the US and EU governments by accusing Boeing and its contractors of unfair competition from substantial government subsidies. Both top management and use of various occasions spat.

5.4 The high Cost of Product Differentiation

Implementing a differentiation strategy is very risky, and enterprises need to invest in many research and development costs to develop new products. In Boeing's experience, a new model would require an investment of \$12 billion to \$15 billion to build from scratch, such as more than \$3 billion to develop the 777. The high cost of products, which consists of product design, research and development expenses, and after-sales service, makes it difficult for enterprises to make profits.

6. Strategic Evaluation

Through SWOT analysis, Boeing has apparent advantages in the aerospace field, but the external threats are also severe. Adopting a diversification strategy can help Boeing to use its advantages to mitigate the impact of external threats, which should be maintained.

Boeing's business is analyzed in the Boston matrix, and its BCA is the Star product. It will continue to adopt a differentiation strategy, increase R&D investment, and expand advantages. Boeing's BDS is a Cash-cow product. It can selectively increase its market share through merger and acquisition strategy. At the same time, it can consider strategic alliances and enhance its competitiveness by strengthening cooperation. The newly established BGS of the company is a Question-mark product. Although it starts relatively late, it is in line with Boeing's long-term development goals to focus on investment. In order to expand its market share, it can adopt the form of merger and acquisition. Finally, the BCC, which serves Boeing's business, is the Dog-product, folded into other divisions for unified management.

7. Actions and Reasons

Using Michael Porter's Value Chain Model and the RBV Model, the measures that can be implemented in five years are put forward for the business activities to create value for Boeing. The research and development links, production links, sales links, and service links of Boeing formulate actions and give the corresponding reasons to support.

7.1 Increase in R&D Investment

The core competitiveness of Boeing lies in its innovation ability. According to the figure, Boeing invested 17.19 billion US dollars in civil R&D from 2013 to 2019, while Airbus (Boeing's only competitor at present) invested 23.73 billion US dollars. Boeing's R&D cost is nearly 30% less than Airbus. Boeing needs to increase investment in research and development, improve its ability to innovate, maintain its leading position in the industry with its technological advantages, and consolidate its market share.

7.2 Financing and Cost Cutting

Affected by COVID-19, Boeing is now facing a great crisis in operation. As one of the largest exporters of the United States, Boeing not only makes a great contribution to the export trade of the United States, but also directly or indirectly supports 170 million suppliers and provides 2.5 million jobs for the United States. Boeing could seek help from the US government and apply to Washington for the necessary bail-out funds. Boeing could also cut costs by laying off workers and cutting production lines to cope with plummeting demand for aviation during the outbreak.

7.3 Improve Product Quality and Safety Management

Boeing has not yet come out of the dilemma of frequent plane crashes, especially the two horrible Boeing 737MAX crashes. A significant reason for the tragedy was that Boeing omitted safety checks from the assembly process to reduce lead times, speed turnaround, and reduce quality management requirements. This reason goes against Boeing's slogan of "integrity, quality, and safety." Therefore, Boeing must strengthen product quality and safety management, return to the original intention, pursue short-term profits, and pay attention to the enterprise's long-term development. This approach is conducive to restore the corporate image, rebuild customers' trust in Boeing, and is conducive to the recovery of Boeing's stock price.

7.4 Focus on Developing the Chinese Market

In terms of market potential, China is still the overseas market with Boeing's most substantial growth, especially the second and third-tier cities in China. China has an ample development space and a high growth rate, and the potential demand for passenger aircraft in the future is very high. Due to the rapid growth of E-commerce in China, the future demand for cargo will also increase so that Boeing can invest in China. With Chinese parts suppliers and each significant airline cooperation, it is beneficial to reduce the production cost, increase customer confidence in Boeing's purchase in China, win the broader market in China, get more income.

7.5 Focus on Developing Boeing Global Service Group

Boeing 2017 forecast in the next ten years the global aerospace services market scale for \$2.6 trillion and announced the Boeing global services group (BGS). This process makes it the following commercial, defense, and space, the third-largest business units. In the second plan in one hundred, Boeing's sustainability services growth will be the core of Boeing's strategy, future business growth opportunities. Boeing focuses its services business on four areas: supply chain management, engineering modification and maintenance, digital aviation and analysis, and training and expert services. By focusing on the development of service business, Boeing can expand its business scope and cultivate new economic growth points to increase profits.

8. Conclusion

With its diversification strategy and acquisition strategy, Boeing has expanded its market and increased its revenue sources. By means of strategic alliance, outsourcing other businesses to companies around the world effectively optimizes the company's resource allocation and saves the company's cost; Boeing adopts a differentiation strategy to focus its core competitiveness on design and research and development. Boeing through the implementation of these strategies to make the enterprise bigger and stronger, gradually become the head of the global aviation industry enterprises. The history of Boeing's development is of great reference value to China's aerospace enterprises.

However, Boeing is now facing a serious crisis in its operation. From the demand side, due to the impact of the global COVID-19, the demand for civil aircraft will be greatly reduced in the short term. On the supply side, Boeing's production schedule is slow due to the rapid spread of COVID-19 in the United States. Boeing must do something to tide it over. In addition to necessary financing and cost cutting, the focus is on generating revenue. Boeing must strengthen quality management and restore the confidence of airlines and the public; China's economy is recovering quickly, so Boeing should focus on tapping China's potential demand market to win orders. Finally, Boeing can seek new profit growth points by increasing investment in research and development and expanding new business.

The global outbreak in 2020 will hit the aviation industry harder than the "9.11" incident and the 2008 global financial crisis. We hope Boeing can recover from the uncertain future development of Boeing.

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