Business Strategies Analysis of Qantas

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Abstract: This report provides an introduction of Qantas in terms of its business components, business goals and competitive strategies. It also examines the challenging business environments faced by Qantas using Porter's five forces model. The Business Model Canvas is then use to develop Qantas' business model. Last but not the least, after addressing three most pressing areas that may require further attentions from Qantas, the report provides several recommendations in relation to specific technologies or technological solutions that could help Qantas tackle these issues.

Keywords: Qantas, Porter's five forces model, Business Model Canvas, pressing areas, technological solutions.

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1. INTRODUCTION

Qantas Airways, as the flag carrier of Australia, combined with its subsidiary Jet star, has achieved its second highest performance during their 97 years' history in the 2017 financial year. It means that the significant advantage of Qantas Group in relation to the sales margin spans both local and international markets. In the domestic market, the outperformance of Qantas and Jet star has achieved over 60 per cent of total market share, which maintained a strong position in the Australia domestic market. Internationally, it is expected to improve market growth potential in the future especially Asia, with the fastest growing aviation market in the world, which deserves more attention compared to Qantas Domestic. In order to response to the strong demand, the Group has allocated more than 50 per cent of its capacity directed towards Asia market (Qantas 2017, p.4).

The company is Australia largest local and global airline group which provides regional, domestic and international serviced. There are six business segments in Qantas Group including Qantas domestic, Qantas international, Jet star group, Qantas loyalty, Qantas freight and corporate/unallocated. However, the most important business component is Qantas domestic. This segment pays more attention to Australia capital cities, large metropolitan areas and various regional hubs throughout Australia. Qantas. There are 53 metropolitan and regional destinations servicing for regular passengers, as well as 13 dedicated fly-in-fly-out charter destinations (Market Line 2016, p.26).

The overarching business goals of Qantas focus on three aspects including maintaining an optimal capital structure, distributing more shareholder returns in the group and achieving return in invested capital (ROIC) over 10 per cent (Qantas 2017, p.5). Moreover, the forward strategy based on four global forces influencing Qantas' operating environment into the future emphasizes the growth of Asia, big data, shifting customer expectations as well as the implications of resource constraints like energy (Qantas 2017, p.7).

There are three competitive strategies should not be ignored in Qantas Group. The most important strategy is maximizing leading domestic market. Secondly, Qantas international should be built resiliently and sustainably. Through business transformation and leveraging opportunities with key partners including Emirates, China Eastern and American Airlines, Qantas has redesigned to high-growth Asia market. At the same time, Qantas international provides substantial cost efficiency and well customer experience achieving a sustainable long-term advantage. Jester has played a major role in maintaining these advantages because it is the preferred low-cost carrier in Australia and one of the safest low-carriers all over the world. Therefore, this group has a real price advantage in the international market. Finally, investing in new technology is an innovation competitive strategy in order to deliver more personalized experiences for customers. For example, Facebook Messenger bot called Qantas Concierge has a responsibility to response immediately to customers. Furthermore, fast inflight Wi-Fi would be put into use in 80 domestic aircraft in 2018 (Qantas 2017, p.8).

2. ORGANIZATION OF THE TEXT

2.1 Porter's five forces model

2.1.1 Bargaining power of buyers

Bargaining power of buyers is assessed as medium. Switching costs are low when other airlines can fly the same route, buyers' power in the Australian airlines market can be seen as moderate. Passengers have many choices in the transportation way, so buyers may have a high bargaining power. As mentioned above, since Qantas already has a high market share in Australia, most of the Australian may choose Qantas when they need to fly. In addition, high price sensitivity of customers and consider the existing low-cost carrier such as Jet star and Tiger airways, but Qantas also has Jet star airway to produce low price service to reduce the bargaining power of buyers. Therefore, the bargaining power of buyers is medium.

2.1.2 Bargaining power of suppliers

Bargaining power of suppliers is assessed to be medium to high. There are only two aircraft manufacturers worldwide for large wide-body aircrafts, Boeing and Airbus, hence Qantas has relatively limited choices. Besides, whether Qantas buys or just leases their airplanes will also affect the bargaining power of suppliers. If Qantas buys those airplanes, the price may be set by Boeing and Airbus so suppliers may have higher bargaining power. However, the financial report of Qantas shows that some airplanes are financial leased, which means that Qantas leases those aircrafts from some financial organization. In this situation, suppliers may have lower bargaining power because Qantas has more choices (e.g. enter into the lease agreements

with financial institution or purchase aircrafts with manufacturers). Therefore, the bargaining power of suppliers is medium to high.

2.1.3 Threat of new entrant moderate

Threat of new entrant is low to medium because the entering cost of Aviation Industry is considerably high. An airlines company need aircrafts to operate first. Although a new company can buy second-hand planes, the cost of airplanes is not low, which can be a barrier to the new entrant. For Australian airline market, Qantas takes a large market share for business-travel customers by providing high quality services. At the same time, Jetstar plays an important role in the low-price airline market. Therefore, the threat of new entrants in the airlines market can be seen as low to moderate.

2.1.4 Threat of substitute

The threat of substitute seems to be medium for Qantas and Jetstar is likely to be replaced by other transportation with lower cost because this substitute risk level exists in short distances travel (The Evolution of the Airline Business Model 2013). Typically, low-cost carriers like Jetstar is easier to be compared with train, express bus and rental car, which depends on customers' preferences. Similarly, in Europe airline industry such as Ryanair and Easyjet have faced serious threat of substitute with Eurostar in the market because of their similar price levels (Eric & Christian 2011). On the other hand, it is less possible to for long-distance trains and ships to compete with domestic airline in Australia (Market Line 2016, p.22). Therefore, the threat of substitute is medium.

2.1.5 Rivalry among industry competitors

The level of rivalry for Qantas Group is moderate due to the different performances between the domestic market and Qantas international. The low-price advantage is significant in Australia market because by grouping Jetstar with a low-cost carrier, Qantas could achieve profit maximization and diversified development. It is a great challenge for other domestic airline industries (e.g. Virgin Australia, Tigerair) to compete Qantas and Jetstar. Moreover, Qantas has achieved top one on-time performance over all routes operated by Australia airlines at 87.7% followed by Virgin at 86.8%, Jet star was third at 81.3% and Tiger air was at the bottom only 72.3% (Table 1).

Table 1. Total Industry on Time Performance for February 2018 (Australian Government Department of Infrastructure, Regional Development and Cities 2018)

	Sectors		Arrivals On Time		Departures On Time		Cancellations	
	Scheduled	Flown	No.	%	No.	%	No.	%
Jetstar	6164	6094	4957	81.3	4814	79.0	70	1.1
Qantas	8208	8129	7127	87.7	7223	88.9	79	1.0
QantasLink	9049	8858	7427	83.8	7522	84.9	191	2.1
Regional Express	5423	5397	4506	83.5	4696	87.0	26	0.5
Tigerair Australia	2212	2162	1564	72.3	1599	74.0	50	2.3
Virgin Australia	10627	10495	9106	86.8	9302	88.6	132	1.2
Virgin Australia Regional Airlines	753	729	613	84.1	634	87.0	24	3.2
All Airlines	42436	41864	35300	84.3	35790	85.5	572	1.3
Qantas - all QF designated services	17257	16987	14554	85.7	14745	86.8	270	1.6
Virgin Australia - all VA designated services	11380	11224	9719	86.6	9936	88.5	156	1.4

Therefore, the competitiveness in the domestic market is weak. However, internationally, Qantas would face more serious competition compared to Emirates and Singapore Airline which have more experience and reputation in terms of international passengers carried. Consequently, Qantas meets moderate threat of rivalry among industry competitors.

2.2 Business model canvas

KEY PARTNERS	KEY ACTIVITIES	VALUE PROPOSITIONS	CUSTOMER RELATIONSHIPS	CUSTOMER SEGMENTS
• Shareholder* • Analyst/ investor • Brands (Qantas, JetStar, the Qantas Club) • Qantas is member of the Oneworld airline alliance • JetStar • Aircraft manufacturers • Airports • Authorities • Fuel providers • Travel agencies • Hotels and car rentals	• Operations • Passenger transport • Cargo transport • Engineering • Maintenance • Customer service • Safety and security • Capacity negotiation • Training • Agreements • Management • Corporate affairs • Financials • Planning • Management • Coordination	• Its main businesses are passenger transportation • Cargo transportation and aeronautical maintenance • The leading group in terms or intercontinental traffic on departure from Australia • Coverage • Safety • Quality service • Low-price service	• Sustainability in the customer experience • Convenience • Rewards* • Trust • Low-price (JetStar) • Catering policy focuses on responsible products	• Massive • Business travelers • Tourists • Students • Logistic companies
	KEY RESOURCES • Fleet • Routes • Brand • Shared-code agreements* • Partnerships • Internet of things • Big data • Robotics		**CHANNELS** • Website • Group sites • Travel agencies • Social media • Touristic operators • Mobile apps • News • Publications	

COST STRUCTURE	REVENUE STREAMS
• Aircrafts • Employees • Facilities • Hubs • Maintenance • Fuel • Airport charges • Leasing payments • Taxes • Auxiliary services • Help center • Innovation trends	• Ticketing • Advertising • Commissions in cross-selling • Qantas cargo

Most of the content in the Qantas's business model canvas are easy to understand and some words with "*" will be explained here.

In the key partners segment, there are 20 largest shareholders owns up to 83.25% of Qantas's issued shares according to Qantas's annual report in 2017 (Qantas 2017, p.107).

In the customer relationship segment, rewards are linked to the brands and one world airline alliance in the key partners segment. For Qantas it, on its official website members can exchange for gifts or travel products as a reward. As a member of one world airline alliance, members can use their mileage to exchange for other airline company flight in the one world airline alliance.

In the key resources segment, the shared-code agreement means two different airline companies share the same flight in order to increase the seat occupancy rate of the flights. The agreement includes some flights shared with China Southern Airlines, China Eastern Airlines, WestJet, Jet Airways, and so on.

2.3 Three pressing areas & technological solutions

2.3.1 Cyber security and privacy regulation

One of the most pressing areas which Qantas may face is cyber security (Qantas 2017, p.23). Qantas should focus on developing its technology control over the integrity and privacy of data, and maintain compliance with regulatory requirements.

Nowadays, the power of Big Data along with information technology have helped Qantas maintain its competitive position in the market. However, every coin has two sides. Power of Big data brings along with it the threat of security and privacy for the user and organization (Jindal 2014, p.95). Especially for large organizations, such as Qantas, it may have lots of intangible assets such as confidential information of customers. Therefore, it is not hard to understand once the database is being affected (e.g. hacking attacks or confidential information is being leaked out of the database), which would lead to financial losses and erosion of customer confidence.

Technology Solutions

There are two latest information security technologies and risk management responses which would help Qantas to overcome the difficulties facing with cyber security (Jindal 2014, p.99):

Data Loss Prevention (DLP) Tool;

It is a tool to protect and monitor data actively during transmission and at rest.

Wireless IDS/IPS and NAC

It is also suggested that wireless IDS and NAC are active mechanisms which would help Qantas to identify unauthorised devices connected to the network.

Regular log reviews and Third Party Risk Assessment

Qantas could think about developing a proactive and effective mechanism for reviewing logs. By regular reviewing logs, it could see whether there is any important information is missing, therefore it could prevent and investigate data loss in the first place.

Furthermore, Qantas also could think about the way that a third party could conduct risk assessments for its database regularly, as it would give them a general idea regarding the way that the system could be improved, or the parts of the system that is vulnerable to hacking.

2.3.2 Intensive market competition faced by qantas

By the 2017 financial year, Qantas' net revenue from its passenger flights, as one of its main revenue sources, has decreased from $13,961 million to $13,857 million, along with a total expenditure increase from $14,557 million to $14,687 million, leading to its statutory profit decreased by $176 million (Qantas 2017, p.56). It suggests that one of the biggest problem Qantas may face is the way to grow its profit.

From the latest news, it states that Qantas and Jetstar's domestic operations have already produced an outstanding result, but the international market for Qantas has still remained tough (Robertson 2017, p.2). The main pressure in international market competition Qantas are facing is how to grow their customer base and lower fares for customers.

Technology Solutions

Virtual Reality Marketing

If Qantas want to grow its statutory profit, it is compulsory to think about how to attract new customers, especially in the international market. Virtual Reality Marketing (VRM) might be one of the solutions.

Nowadays, by using a phone-based VR solution (e.g. Android application along with Samsung VR), users can see LAX international First Class Lounge or take a fight around Sydney without leaving home (Tromp, 2017). It would provide immersive experience for customers, and if it piques anyone's sense of adventure, there is an option within the application which can directly transfer customers to the Qantas website.

VR also could help with the expansion of in-flight entertainment, it would be an immersive experience for customers who can watch a 3-D movie, explore the wine list, or enjoy a virtual tour of selected location (Tromp, 2017). Qantas should only offer these service to the business or first-class passengers, for two purposes: (1) maintaining the existing VIP passengers continue to fly with Qantas; and (2) attract and encourage passengers who are in the economy class to upgrade their seats.

Another use of VR is to help the first-time flyers to reduce anxiety and cope with nervousness through the experience without a typical takeoff and landing scenario (Tromp, 2017). Imagine if a consistently nervous flyer who could claim his nerves by flying with Qantas, it would certainly suggest that Qantas has won a long-term valuable customer.

Technology Solutions

Oscar Chabot

Some airlines such as Air New Zealand has already used Artificial Intelligence (AI) to improve customer experience. The robot they are currently using is called 'Bravo Oscar Tango', is a Chabot which can answer frequently asked questions by customers. Oscar could help customers with inquiries in relation to lounge, air points and baggage. In the future, it is

predictable that Oscar could recognize passengers and guide them by every steps in their journey, from booking the air tickets to finding a taxi near the airport (Henderson, 2017).

Qantas can use this technology to reduce labor costs, in order to grow its statutory profit. Another advantage of using chatbot is to maintain the loyalty of existing customers by offering them a more personalized experienced when they are trying to search commonly asked questions on the Qantas website.

2.3.3 Environmental impacts

Findings of Environmental Protection Agency (EPA) consistently show how the aircraft engines are threatening the global climate, and the airplanes have become the largest unregulated source of greenhouse gas emissions (McDonnell 2015). As shown in Appendix A, according to the EPA, the operations of domestic commercial flights hit the fourth place when it comes to the the travel-related emissions in US in 2013. As the rising demand of air travel necessitates a rapid growth of air travel over years not only locally but also internationally, it is unquestionable that the environmental consequences of the aviation industry have been even exaggerated since then.

A recent study conducted by The International Council on Clean Transportation (ICCT) has ranked Qantas as a major airline with the worst fuel efficiency and carbon emissions while carrying out trans-Pacific flights (Brinley 2018). This study found out that contrast to the best carriers, Hainan Airline and ANA that allow 36 people to fly 1 kilometer for each liter of fuel consumption, Qantas was allegedly only capable to carry 22 passengers using the same amount of fuel. This indicates that it is critical and pressing that the red flying kangaroo could make a leap in its fuel efficiency technologies, not only aligning its operations with the minimum environmental regulatory requirements, but also fulfilling its corporate social responsibility towards the global stakeholders.

Back in 2013, EPA carried out a research that compare the amount of CO_2 emissions caused by five different transportation modes to carry each passenger from Washington DC to New York city. Appendix B clearly shows that air travel is the least green when travelling over shorter distances due to a peak of emissions during take-off and landing, disadvantaging the flights' competiveness on short distances (McDonnell 2015).

Technology Solutions

Continuous Climb and Descent Operations (CCO and CDO)

In order to achieve an emissions reduction and an optimal fuel efficiency, Continuous Climb and Descent Operations (CCO and CDO) allow airplanes to continuously descent or climb while arriving or departing. According to EUROCONTROL, by applying certain airspace design, instrument procedure design and facilitations of Air Traffic Control (ATC), these techniques enable fuel saving measures with an aggregation of time being spent at higher cruising levels, hence a resultant significant fuel burn reduction, lowering emissions and fuel costs. What's more, since the level of safety offered by these technologies does not compromise the advantages of the conventional landing and take-off techniques, it is practical and realistic to be put into practice soon.

Double-Bubble D8

Another technique that can potentially boost the environmental performances of commercial aircraft involve Double-Bubble D8. This technology is still undergoing experiments and researches and, once realized, could considerably cut off aircraft noise, emissions and fuel burns. The D8 designs place the engines on the top near the rear of the airplane, which extremely reduce the drag and boost up fuel efficiency (Aurora Flight Sciences 2018). It is estimated by Koppula (2018) that once designed and implemented, aviation-related fuel consumption could be reduced by up to 37%, community noise by up to 50% and landing and take-off nitrogen oxide emissions by 87%. It is expected that Qantas, as an industry leader, could consider the deployment of these technologies in their future flights.
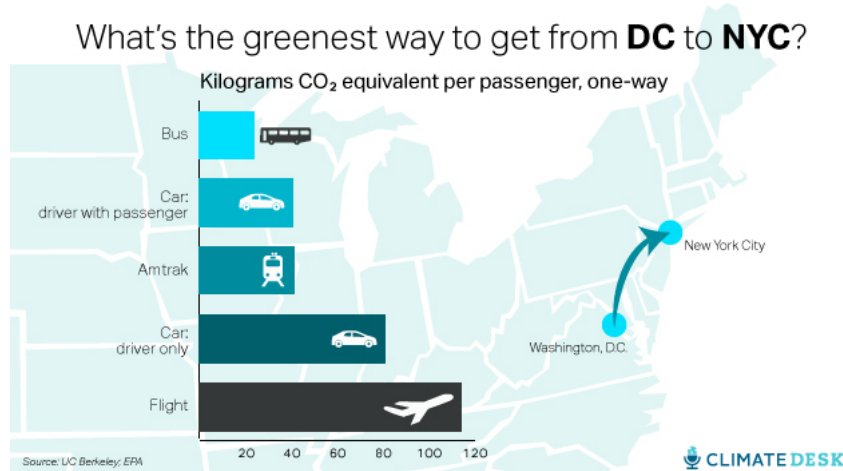
3. LITERATURE REFERENCES

Appendix A
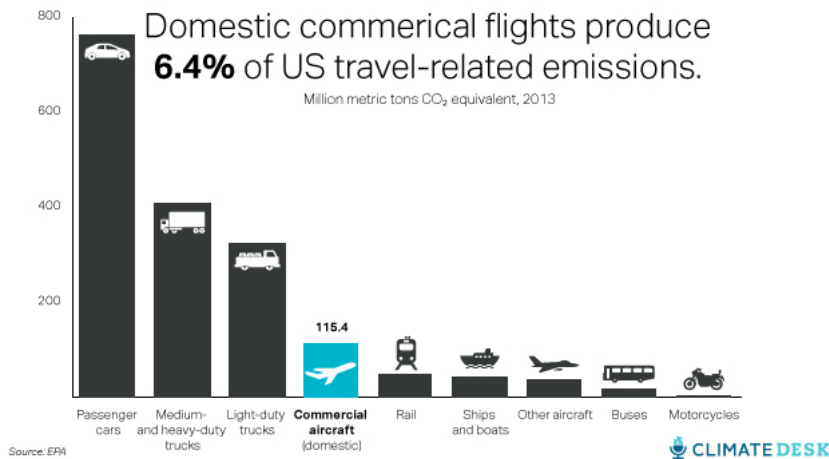
Source: EPA 2014, 'Profile of Version 1 Of The 2014 National Emissions Inventory', viewed 20 April 2018, <https: //www. epa. gov/ sites/ production/ files/ 2017-04/ documents/ 2014 neiv1_ profile_ final pril182017.pdf>

Appendix B

Source: EPA 2014, 'Profile of Version 1 of The 2014 National Emissions Inventory', viewed 20 April 2018,

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