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A Content Analysis of International Airline Alliances Mission Statements

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Abstract

Background: Mission statements have come to play an important role as tools for organizational value sharing. **Objectives:** This study aims to shed light on what types of values are highlighted in international airline alliance members' mission statements, and whether there are significant differences or not. **Methods/Approach:** Quantitative content analyses have been conducted with the goal to investigate mission statements of 61 members of international airline alliances: Star Alliance, SkyTeam, and oneworld. **Results:** Frequency test outcomes reveal that "philosophy", "self-concept" and "location" are the predominant components in oneworld, "philosophy" is the primary component in SkyTeam, and "philosophy" and "customer" are the focal components of Star Alliance. According to chi-square tests, Star Alliance members emphasize "customer" more often than others do, and oneworld members highlight "profitability" more often. One-way Anova tests with a post hoc analysis reveal that Star Alliance members cover more components than SkyTeam. **Conclusions:** The theoretical implication of these findings is that they reveal the existence of unique values among international airline alliances members offering a competitive advantage. As a practical implication, these findings will be helpful for international airline alliances and airline managers for comparative purposes.
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Introduction

In recent years, as a result of radical environmental changes surrounding the airline industry, for example, global economic recession and skyrocketing oil prices, deregulation, the privatization and commercialization of airline service, the global market penetration of new international airlines, etc., competition among airlines has intensified (Lin et al., 2018; Min et al., 2016). For these reasons, airlines are required to be competent enough to appeal to customers regarding their own merits (Lin et al., 2018; Lin et al., 2016), and they form international alliances and affiliate with alliances (Min et al., 2016). There exist many cases of failure of airline alliances and it has been pointed out that instability is in the nature of these alliances. Yet, in the airline industry, the influence of alliances has increasingly been extended (Morrish et al., 2002). Button et al. (1998) suggested that in the future, an airline that failed to be a member of an alliance would be isolated and encounter strategic disadvantages. Therefore, it is expected that the number of airlines participating in alliances will continue to increase (Evans, 2001). In fact, the members of Star Alliance, the biggest international airline alliance, have increased from eight airlines in 1998 to twenty-eight airlines in 2018.

Currently, not only competition among airlines but also competition among alliances has intensified. International airline alliances have implemented the expansion of route networks, integrating the loyalty programs of members to maintain competitive advantages (Min et al., 2016). In addition, they are enhancing efficiency and productivity by sharing airport lounge facilities and Computer Reservation Systems (CRS) among members. In addition, enhancing the overall brand value and organizational value sharing among members are available strategic options for ensuring competitive advantages (Min et al., 2016). For instance, an alliance itself plays a role as an "umbrella brand" and each member becomes a "sub-brand" (Evans, 2001). In this manner, the brand management at the overall alliance level is crucial for international airline alliances because, when customers use an airline, the service of the airline is connected with that of other partner airlines, and customers experience the whole alliance's service. Weber et al. (2004) argued that when an airline leaves a bad image with customers, it badly affects the whole alliance. Meanwhile, service standardization between members and value sharing are also critical challenges for international airline alliances. For example, alliances set service standards so that airlines can provide similar service and maintain service quality (Min et al., 2016; Evans, 2001).

There has been an extensive discussion about the operational efficiency, productivity and financial performance of international airline alliances (Min et al., 2016; Tiernan et al., 2008; Oum et al., 2004; Kleymann et al., 2001). However, little attention has been given to what types of values are emphasized among alliance members. Corporate mission statements are significant in value sharing among alliance members as they imply particular types of values. In addition, a mission statement can be a hint when airlines and alliances choose optimal strategic partners. Mission statements include important information about airlines' main services, strengths, relative similarities and differences (Kemp et al., 2003). In mission statements, airlines' cultures and core values are reflected. Whether the culture and values of an airline fits one's own company or not is a significant standard when choosing alliance partners (Medcof, 1997; Brouthers et al., 1995). However, regardless of its importance, it has been pointed out that very few studies have attempted to investigate the situation of mission statements in the airline industry (Law et al., 2018; Lin et al., 2018; Kemp et al., 2003).

The main purpose of this study is to clarify what kind of values are highlighted in international airline alliance mission statements. Hence, this study focuses on the

content analysis of 61 mission statements of three major international airline alliance member airlines.

This paper consists of five sections. The next section will focus on existing studies of international airline alliances and mission statements in the airline industry. In section three, content analyses including frequency tests, chi-square tests, and one-way Anova tests with post hoc analysis relevant to the mission statements of 61 airlines will be conducted. In section four, based on results, theoretical discussions are carried out. In section five, implications and limitations are described.

International Airline Alliances

The strategic alliance is "a particular and horizontal form of inter-organizational relationship in which two or more organizations collaborate, without the formation of a separate independent organization, to achieve one or more common strategic objectives" (Evans, 2001, p. 229). Traditionally, strategic alliances have been recognized as penetrations by multinational firms in inaccessible markets. Recently, as a strategic option, alliances have been highlighted (Evans, 2001). Strategic alliances are often seen in the pharmaceutical industry, the automobile industry, and the chemical industry. In addition, in the international airline industry, strategic alliances have been formed frequently (Evans, 2001). The phrase "airline alliance" indicates a strategic alliance of airlines. This is defined as "any collaborative arrangement between two or more carriers involving joint operations with the declared intention of improving competitiveness and thereby enhancing overall performance" (Morrish et al., 2002, p. 401).

Regarding the scope of collaboration in international airline alliances, simple level cooperation, such as transfer of passenger and baggage handling service, was implemented at an early stage. Recently, such relationships have evolved to include company-wide marketing collaboration and technological cooperation.

Great attention has been paid to the advantages and disadvantages of international airline alliances. Advantages of alliances can be classified into two categories: (i) advantages for airlines, and (ii) advantages for passengers.

Dyer et al. (2001) pointed out that, through an alliance, an airline can promptly acquire the complementary assets of other airlines. Moreover, the improvement of seat capacity and revenue has often been discussed (Wright et al., 2010; Kleymann et al., 2001; Park, 1997; Hannegan et al., 1995). Also, market penetration and the maintenance of market status, as well as ensuring a stable market and cost-saving, are other merits of alliances (Button et al., 1998). Finally, through an alliance, organizational values are shared among members and brand values are elevated (Min et al., 2016). As merits for passengers, it is reported that passengers can use better services as airlines' destinations are increased and passengers' transfer times are shortened (Kleymann et al., 2001). One-stop check-in service, better baggage handling service, and the use of a common lounge are also beneficial for passengers (Evans, 2001; Dennis, 2000). On the other hand, Min et al. (2016) argued that there is no apparent evidence of improvements in operational effectiveness and performance through alliances. In addition, it has been reported that each airline's brand value has declined, flight schedules have become more complex, and operational flexibilities have disappeared, while the higher the degree of cooperation with collaborating, the higher the risk and fixed cost (Kleymann et al., 2001). Regarding demerits for passengers, the number of flight destinations shrinks as alliances monopolize flight routes. In other words, it would seem that participating in an alliance does not always guarantee airlines' strategic advantages.

Evans (2001) suggested five criteria for selecting strategic partners when airlines form alliances and participate in them (Medcof, 1997; Brouthers et al., 1995). The first one is the competence of partners. This means that partners are decided according to financial stability and market status. The second one is the degree to which the partners share the same level of risk. The third one is whether an alliance is well controlled and its operational effectiveness is sufficiently maintained. The fourth criterion is geographic fitness. Generally, there is a tendency to avoid alliances of airlines with overlapping markets. The last criterion is the compatibility of relevant organizational culture and operations (Medcof, 1997).

Several comparative studies have been conducted on the effectiveness, productivity, and revenues of international airline alliances. Kleymann et al. (2001) suggested that the degree of risk and the revenue of airlines differs depending on their integration level. Oum et al. (2004) reported that horizontal alliances affect the airlines' productivity, and that, in horizontal alliances, the higher the level of cooperation, the higher the productivity and profitability. Tiernan et al. (2008) compared alliances' service quality performance regarding on-time arrivals, baggage reports, and flight cancellations. Finally, Min et al. (2016) compared the operational effectiveness and performance between alliance members and non-members. As a result, SkyTeam members and oneworld members' revenues were found to be better than with Star Alliance. Table 1 indicates comparative airline alliance studies.

Table 1
Comparative airline alliance studies

Author	Number of alliances and airlines	Criteria for evaluation
Kleymann et al., 2001	3 alliances, 15 airlines	Degree of risk and revenue
Oum et al., 2004	22 airlines	Productivity and profitability
Tiernan et al., 2008	4 alliances, 24 airlines	On-time arrivals, baggage reports, flight cancellations
Min et al., 2016	3 alliances, 59 airlines	Operational effectiveness, financial performance

Source: Kleymann et al. (2001), Oum et al. (2004), Tiernan et al. (2008), Min et al. (2016)

However, very few studies have been done to analyze differences in alliance members' values as competitive advantages. In the next section, corporate mission statement issues in the airline industry will be discussed.

Mission statements in the airline industry

Mission statements are firms' messages and promises to stakeholders (Bartkus et al., 2004). Mission statements are answers to questions as to how companies should be in the future (Wang et al., 2011). In mission statements, companies' strategic directions and goals are reflected (David, 2001). Several studies perceived that "vision", "value", "faith", "principle", "strategy" and "philosophy" are similar to "mission" (e.g., Castro et al., 2014; Ireland et al., 1992; and Pearce et al., 1987).

It has often been said that mission statements play a significant role in relationship management with stakeholders. "A well-designed mission statement is essential for formulating, implementing and evaluating strategy" (Kemp et al., 2003, p. 635). Wang et al. (2011) argued that a mission statement is an indispensable factor of corporate management as it is an effective strategic tool. Through mission statements, companies attempt to achieve market differentiation (Lin et al., 2018; Kemp et al., 2003). A mission statement is a core factor of organizational culture (Klemme et al.,

1991) and, as the 'cultural glue'; it engages an organization's members (Kemp et al., 2003). A mission statement is an important communication tool between a company's inside and outside stakeholders such as employees, customers, investors, suppliers, the public, communities and the media (Law et al., 2018; Lin et al., 2018; Lin et al., 2016; Bartkus et al., 2004; Kemp et al., 2003). It has been reported that a well-designed mission statement positively influences employee and customer satisfaction (David et al., 2014; Jyoti et al., 2012). That is, a mission statement gives employees a sense of belonging (Lin, 2012), and produces emotional bonds and a sense of mission (Campbell et al., 1991). A clear mission statement confirms organizational values and strategic priorities (Kemp et al., 2003).

In terms of the advantages of mission statements, it has been reported that they can ensure a company's competitive advantage and improvements in brand value. Additionally, several studies have argued for a correlation between good mission statements and companies' financial performance (Williams et al., 2014; Desmidt et al., 2011; Pearce et al., 1987). Lin et al. (2016) claimed that airlines' mission statements positively affect passengers' brand trust and brand equity.

David (2007) suggested nine components of corporate mission statements, i.e., "customers", "products", "location", "technology", "concern for survival", "philosophy", "self-concept", "concern for public image" and "concern for employees". Lin et al. (2018), in addition to this, suggested "safety" as a new component, considering that it is emphasized more than other values in the airline industry.

Mission statement studies in the airline industry can be classified into two categories: (i) content analyses of mission statements, and (ii) influence of mission statements on passengers. Table 2 summarizes mission statement studies in the airline industry.

Table 2
Mission statement studies in the airline industry

Author	Data	Methodology	Purpose
Kemp et al., 2003	50 airline mission statements	Content analysis	To investigate ideal elements of mission statements
Castro et al., 2014	91 airport vision statements	Content analysis	To clarify types of international airports
Lin et al., 2016	518 passenger questionnaires	Questionnaire survey	To examine associations between mission statements and passengers' perceived brand trust and equity
Law et al., 2018	200 airline mission statements	Content analysis, Network analysis	To identify dimensions and core values of mission statements in the airline industry
Lin et al., 2018	79 airline mission statements	Content analysis	To examine the current trend of mission statements

Source: Kemp et al. (2003), Castro et al. (2014), Lin et al. (2016), Law et al. (2018), Lin et al. (2018)

Kemp et al. (2003) analyzed 50 airline mission statements and clarified the ideal elements of mission statements. Castro et al. (2014) analyzed 91 international airport vision statements and found that international airports can be categorized according to "geographic location", "passenger movement" and "airport governance models". In addition, they suggest "tourism" as a new component. Lin et al. (2018) analyzed 79 airline mission statements compared with Kemp et al. (2003). Law et al. (2018)

analyzed 200 airline mission statements and suggested 6 mission statement themes; "service", "customer", "concern for stakeholders", "concern for strategy", "competitive advantage" and "development". Finally, Lin et al. (2016) conducted questionnaire surveys with 518 passengers in Taiwan to clarify mission statements' influence on passengers.

In spite of their importance, it has been pointed out that mission statement studies on the airline industry are limited (Law et al., 2018; Lin et al., 2018; Kemp et al., 2003). Also, little research has been done on alliance members' distinctive value sharing through mission statements.

Stakeholders in airline industry mission statements

Stakeholders include inside and outside groups involved in a company's profit. David (2001) argued that a company should cover all stakeholders widely in its mission statement. It has often been pointed out that a mission statement is a communication tool between a company and its outside stakeholders (Law et al., 2018; Lin et al., 2016; Bartkus et al., 2004). Airline business success depends on how well an airline manages relationships with its international and heterogeneous partners. Therefore, concern for an airline's outside stakeholders can be crucial content in airline industry mission statements. However, concern for outside stakeholders has not received much attention in airline industry mission statement studies. For this reason, this study attempts to suggest "partners" as a new component and will explore its potential.

Methodology

Research questions and content analysis

Based on these previous discussions, this study set four research questions as follows:
o RQ1: What kind of values are highlighted in alliance members' mission statements according to the alliance?
o RQ2: Are there any significant differences in mission statement contents among alliance members?
o RQ3: Are there any significant differences in mission statement component numbers among alliance members?

Krippendorff (2004) states that content analysis is a research technique for making replicable and valid inferences from textual data. According to Lin et al. (2018), content analysis has been used in many business management research studies including corporate mission management. Through cross-organizational content analyses, organizations' values can be clarified.

Hsieh et al. (2005) claimed that a content analysis should be conducted relative to previous theoretical frameworks. By adopting a deductive measurement, in addition to previous studies, a new theoretical framework can be suggested. This study adopts a deductive measurement because components of mission statements in the airline industry have been established through several studies.

Specifically, the author adopts a content analysis research framework including the frequency tests, chi-square tests implemented by Levy et al. (2013). Data is collected, qualitative and quantitative analyses are carried out, and finally, based on the results, theoretical discussions are conducted. Table 3 summarizes the research design in this study.

In this study, "values" indicate alliances' and airlines' enduring beliefs (Brenda, 2000). "Components" are defined as elements of the alliance members' mission statements. This study assumes that by analyzing the "components" we can get insights related to the "values" of alliances.

Table 3
Research design

Research steps	Purpose
Data collection	Collecting 61 mission statements of the members of three major international airline alliances
Coding	Extracting mission statement components of each international airline alliance member
Frequency test	Counting emphasized components in mission statements
Chi-square test	Finding differences among three international airline alliances
One-way Anova test	Examining differences in component numbers

Source: Author's work

Sample and data collection

The sample consists of the mission statements of 61 airlines participating in Star Alliance, SkyTeam, and oneworld, the three major international airline alliances. The market share of the three international airline alliances is almost 60% of the whole based on revenue, passengers and flight distance (Statista, 2017). Table 4 and Table 5 show profiles of three leading international airline alliances and their 61 partners.

Table 4
Three leading international airline alliances

	Star Alliance	SkyTeam	oneworld
Members	28	20	13
Destinations	1,317	1,074	1,012
Countries	193	177	158
Daily departures	18,800	17,343	12,738
Annual passengers (millions)	725 +	730 +	527.9 +
Market share	23.5 %	19.2%	16.4%
Launch date	1997	2000	1998
Headquarters	Frankfurt	Amsterdam	New York
Revenue（US $）	$194 billion	$156 billion	$132 billion

Sources: Statista (2017), oneworld (2018), SkyTeam (2018), Star Alliance (2018), Seo (2019)

The author attempted to collect all 61 major alliance members' mission statements from their official websites from December 2nd to December 31st, 2018. Among them, AIR CANADA, Air Europa, and Lufthansa did not disclose official mission statements. However, the author contacted related staff directly via Facebook messenger or email and succeeded in collecting all 61 mission statements.

Table 5
Arlines analyzed in this study (n=61)

Star Alliance (28)		SkyTeam (20)		oneworld (13)
ADRIA Airways	EGYPTAIR	Aeroflot	Delta Air Lines	American Airlines
AEGIAN Airlines	Ethiopian	Aerolíneas Argentinas	Garuda Indonesia	British Airways
AIR CANADA	EVA AIR	Aeroméxico	KLM	Cathay Pacific
AIR CHINA	LOT POLISH AIRLINES	Air Europa	Kenya Airways	Finnair
AIR INDIA	Lufthansa	Air France	Korean Air	Iberia
AIR NEW ZEALAND	SAS (Scandinavian Airlines)	Alitalia	Middle East Airlines	Japan Airlines
ANA (All Nippon Airways)	Shenzhen Airlines	China Airlines	Saudia	LATAM
ASIANA AIRLINES	SINGAPORE AIRLINES	China Eastern Airlines	TAROM	Malaysia Airlines
Austrian Airlines	SOUTH AFRICAN AIRWAYS	China Southern Airlines	Vietnam Airlines	Qantas
Avianca Brasil	Swiss International Air Lines	Czech Airlines	XiamenAir	Qatar Airways
Avianca	TAP AIR PORTUGAL			Royal Jordanian
Brussels Airlines	THAI Airways			SriLankan Airlines
CopaAirlines	TURKISH AIRLINES			S7 Airlines
Croatia Airlines	UNITED Airlines			

Source: oneworld (2018), SkyTeam (2018), Star Alliance (2018)

Coding

This study adopted 10 components and definitions from previous studies (Lin et al., 2018; David, 2007; Kemp et al., 2003; Pearce et al., 1987) In addition, based on the discussions in section 2, a new component "partners" is suggested. Table 6 shows the components of the mission statements and their definitions.

Table 6
Components of corporate mission statements

Component	Definition
Customer	The main target customer layers of airlines and alliances
Product	The principle products or services provided by airlines and alliances
Location	The geographic domains, competing areas or main competing markets of airlines and alliances
Technology	Airlines and alliances' concern about technology
Profitability	Airlines and alliances' commitment to financial success, growth, and profitability
Philosophy	The unique identities and personalities of airlines and alliances
Self-concept	The competitive advantages and selling points of airlines and alliances
Public image	The desired public images, and concern for community, social issues and environmental issues of airlines and alliances
Employees	The commitment to employees of airlines and alliances
Safety	The emphasis on safety of airlines and alliances
Partners	The concern for outside stakeholders of airlines and alliances including all partners and investors, etc.

Source: Pearce et al. (1987), Kemp et al. (2003), Lin et al. (2018)

Based on the above 11 components, the mission statements of 61 airlines participating in three leading international airline alliances were analyzed based on the guidelines in Kemp et al. (2003). To assess inter-rater reliability, two coders were involved in this study. Each coder independently analyzed and classified the mission statements. To assess the inter-rater reliability, Cohen's (1960) kappa was calculated by SPSS to be 0.465, which indicates moderate inter-rater agreement (Landis et al., 1977).

Results and Discussion

Frequency of mission statements' components

Table 7 indicates the frequency test results. As shown in Table 7, in Star Alliance members' mission statements, components emerged as follows; "philosophy" (89.28%, ranking 1), "customer" (89.28%, ranking 1), "product" (85.71%, ranking 2), "location" (78.57%, ranking 3), "self-concept" (71.42%, ranking 4), "partners" (67.85%, ranking 5), "profitability" (64.28%, ranking 6), "employees" (60.71%, ranking 7), "technology" (50%, ranking 8), "safety" (39.28%, ranking 9), and "public image" (35.71%, ranking 10). On the other hand, in SkyTeam members' mission statements, components were as follows; "philosophy" (85%, ranking 1), "customer" (80%, ranking 2), "location" (70%, ranking 3), "product" (60%, ranking 4), self-concept" (55%, ranking 5), "public image" (50%, ranking 6), "partners" (50%, ranking 6), "profitability" (40%, ranking 7), "safety" (40%, ranking 7), "employees" (35%, ranking 8), and "technology" (25%, ranking 9). Finally, in oneworld members' mission statements, components emerged as follows; "philosophy" (84.61%, ranking 1), self-concept" (84.61%, ranking 1), "location" (84.61%, ranking 1), "profitability" (76.92%, ranking 2), customer" (69.23%, ranking 3), "product" (61.53%, ranking 4), "employees" (46.15%, ranking 5), "partners" (46.15%, ranking 5) "technology" (38.46%, ranking 6), "public image" (38.46%, ranking 6) "safety" (38.46%, ranking 6).

Table 7
Frequency test results

	Star Alliance			SkyTeam			oneworld		
Component	N	%	Rank	N	%	Rank	N	%	Rank
Customer	25	89.28%	1	16	80%	2	9	69.23%	3
Product	24	85.71%	2	12	60%	4	8	61.53%	4
Location	22	78.57%	3	14	70%	3	11	84.61%	1
Technology	14	50%	8	5	25%	9	5	38.46%	6
Profitability	18	64.28%	6	8	40%	7	10	76.92%	2
Philosophy	25	89.28%	1	17	85%	1	11	84.61%	1
Self-concept	20	71.42%	4	11	55%	5	11	84.61%	1
Public image	10	35.71%	10	10	50%	6	5	38.46%	6
Employees	17	60.71%	7	7	35%	8	6	46.15%	5
Safety	11	39.28%	9	8	40%	7	5	38.46%	6
Partners	19	67.85%	5	10	50%	6	6	46.15%	5

Source: Author's work

This study mainly focuses on the most frequently highlighted components (only those ranking 1).

"Philosophy" (84.61%), "self-concept" (84.61%) and "location" (84.61%) emerge as the predominant components in oneworld members' mission statements, "Philosophy"

(85%) in SkyTeam members' mission statements, and "Philosophy" (89.28%)" and "customer" (89.28%) in Star Alliance members' mission statements.

"Philosophy" is highlighted in the members' mission statements of all three alliances. Examples of these highlighted components with this author's comments are as follows: (i) 'It is a value-driven aviation group, bringing Indonesian hospitality to the world' (Garuda Indonesia); (ii) 'Our goal is to be the undisputed leader in domestic and international air travel in Russia and one of the best airlines in the world, combining dynamic development, high reliability and quality of service' (Aeroflot); (iii) 'Become a world-class carrier with staff devotion, customers loyalty, shareholders satisfaction, public trust' (China Eastern Airlines).

"Philosophy" is the basic faith and policy of airlines. It indicates airlines and alliances' unique identities and DNAs. It is reported that corporate philosophy is deeply involved in an organization's sustainable strategic success (Gellerman, 1989). While "self-concept" is emphasized in oneworld members' mission statements. "Self-concept" indicates airlines and alliances' strengths. The examples are as following: (i) 'We are a competent, proactive and diligent team. Our contribution is recognized and rewarded' (SriLankan Airlines); (ii) 'Qatar Airways has earned many awards and accolades, becoming one of an elite group of airlines worldwide to have earned a 5-star rating by Skytrax' (Qatar Airways).

"Philosophy" and "self-concept" are related to airlines and alliances' differentiation strategies. It is presumed that due to fierce competition in the airline industry, "philosophy" and "self-concept" are highly emphasized in mission statements. Also, "location" is revealed as oneworld's most prevalent component. Examples are as following: (i) 'Finnair is a network airline that specializes in passenger and cargo traffic between Asia and Europe' (Finnair); (ii) 'To be the airline of choice connecting Jordan and the Levant with the world' (Royal Jordanian; (iii) 'To be the most preferred airline in Asia' (SriLankan Airlines).

For airlines, clarifying their position in the market is essential for the formulation of an effective strategy (Kemp et al., 2003). It is considered that oneworld members emphasized "location" in their mission statements because oneworld mainly consists of flagship airlines (e.g., British Airways, American Airlines, Japan Airlines, Qatar Airways, Malaysia Airlines, Finnair, Royal Jordanian, and Cathay Pacific) representing countries and locations. On the other hand, Star Alliance members most frequently highlight "customer" in their mission statements: (i) 'Our customers expect technical reliability, punctuality, and an orientation to service. And as a leading quality airline in Europe, we offer all of these' (Austrian Airlines); (ii) 'Recognized for the high quality of its product, the company offers differentials to customers' (Avianca Brasil).

"Customer" indicates a concern for target customers of the airline (David et al., 2014). The emphasis on "customer" shows the companies' customer-oriented service endeavors and their pursuit of higher customer satisfaction. David et al. (2014) assumed that customer-oriented mission statements are related to higher customer satisfaction. Star Alliance has the longest history among major alliances. Also, they were the world's best international airline alliance, selected by Skytrax, in 2017 and 2018. These facts mean that Star Alliance's service quality is approved worldwide. It is presumed that Star Alliance members' customer satisfaction efforts are a reflection of their mission statements.

Significant differences in alliances members' mission statements

Chi-square tests and one-way Anova tests were performed using SPSS to demonstrate whether mission statement contents and numbers vary significantly. Figure 1 and Table 8 indicate the results of chi-square tests and one-way Anova tests.

Figure 1
Significant differences in alliance members' mission statement contents
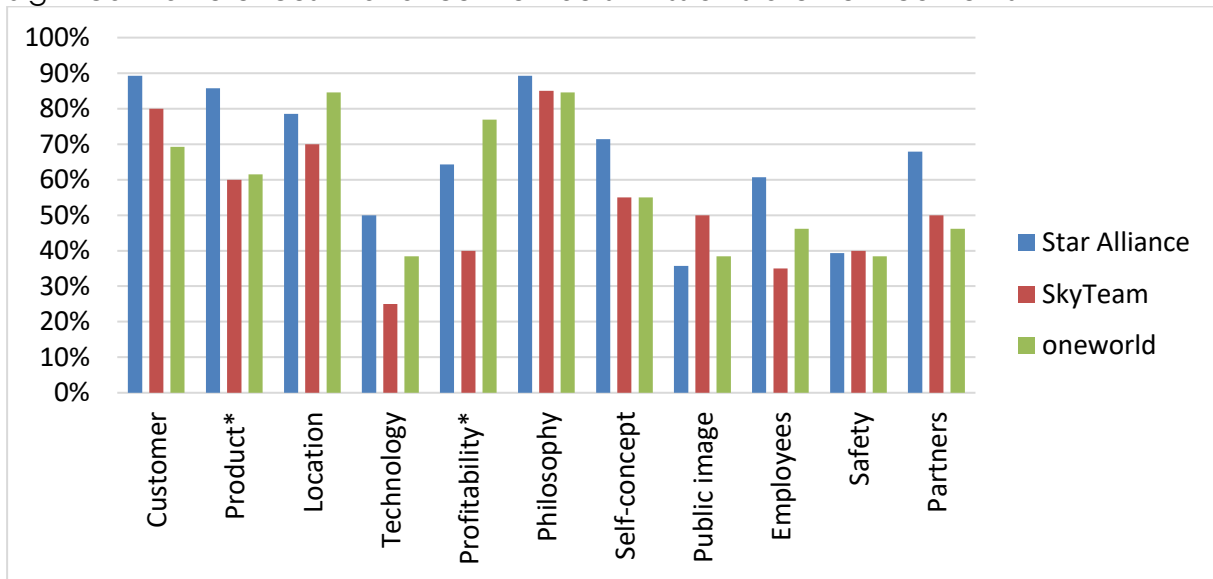
Source: Author's work
Note: * statistically significant at 10%

In Figure 1, the blue bar shows the frequency of Star Alliance members' mission statement contents, the red bar shows SkyTeam members, and the green bar indicates oneworld members. Figure 1 shows that alliances members' mission statement contents vary significantly. When it comes to "customer", 89.28% of Star Alliance members, 80% of SkyTeam members and 69.23% of oneworld members highlight it in their mission statements. 85.71% of Star Alliance members, 60% of SkyTeam members and 61.53% of oneworld members highlight "product". 78.57% of Star Alliance members, 70% of SkyTeam members and 84.61% of oneworld members highlight "location". Only 50% of Star Alliance members, 25% of SkyTeam members and 38.46% of oneworld members highlight "technology". About "profitability", 64.28% of Star Alliance members, 40% of SkyTeam members and 76.92% of oneworld members highlight it in their mission statements. 89.28% of Star Alliance members, 85% of SkyTeam members and 84.61% of oneworld members highlight "philosophy". 71.42% of Star Alliance members, 55% of SkyTeam members, 55% of oneworld members highlight "self-concept" in their mission statements. 35.71% of Star Alliance members, 50% of SkyTeam members and 38.46% of oneworld members emphasize "public image". 60.71% of Star Alliance members, 35% of SkyTeam members, 46.15% of oneworld members highlight "employees" in their mission statements. 39.28% of Star Alliance members, 40% of SkyTeam members and 38.46% of oneworld members highlight "safety". Finally, 67.85% of Star Alliance members, 50% of SkyTeam members and 46.15% of oneworld members highlight "partners" in mission statements.

As the figure shows, there are differences found relative to "product" (χ^2=5.928, Cramer's V=0.312, p=0.052) and "profitability" (χ^2 = 5.035, Cramer's V=0.287, p=0.081). That is, Star Alliance significantly highlights "product" more than other alliances. This result might indicate that Star Alliance highlights its high-level service endeavors. oneworld, on the other hand, significantly highlights "profitability". The reason for the high frequency of "profitability" is probably that, although oneworld mainly consists of flagship airlines, the alliance's whole market share is lower than the others are.

Therefore, to extend market power, they emphasize "profitability" in mission statements.

Table 8

One-way Anova test results with post hoc analysis test related to the mission statements of 61 members of 3 international airline alliances

Dependent Variable	Alliance	Mean	Std. Deviation	F / Sig.	Post Hoc Tests
Component Number	Star Alliance (a)	7.37	1.884	2.759 / 0.072*	a > b (Scheffe)
	SkyTeam (b)	5.95	2.085		
	oneworld (c)	6.69	2.428		

Source: Author's work

Note: * statistically significant at 10%

Table 8 shows the one-way Anova test results. In Table 8, an alpha level of p < .10 was accepted as significant. Results showed there are significant differences among alliances' members (p=0.072*). A post hoc Scheffe's test indicates Star Alliance members significantly cover more components than SkyTeam members do. Moreover, Star Alliance members' mission statement components are most numerous (mean score: 7.37), while SkyTeam members' mission statement components are the least (mean score: 5.95). Star Alliance members' mission statements show relatively high similarity in component occurrence frequencies so that Star Alliance's standard deviation is the lowest (1.884) (SkyTeam member's standard deviation: 2.085, oneworld member's standard deviation: 2.428).

The reason for the higher component numbers of Star Alliance members might be that as a leading alliance, Star Alliance tries to cover broad organizational values. This result is consistent with Pearce et al. (1987), which noted that high performers have more comprehensive mission statements than low performers. Moreover, Star Alliance members' mission statements show relatively high similarity in component numbers. This result implies that Star Alliance is more successful in managing members' mission statements than others.

"Partners" in mission statements

"Partners" indicates a concern for airlines and alliances outside the stakeholders, as exemplified by the following: (i) 'Air Europa, the airline company of the Globalia tourism group, is a full member of the SkyTeam alliance' (Air Europa); (ii) 'We are also a founding member of the oneworld global alliance whose combined network serves over 700 destinations worldwide' (Cathay Pacific). Table 9 shows the frequency of occurrence of "partners". As shown in Table 9, partners" emerged in 71.42% of Star Alliance members' mission statements, 50% of SkyTeam members' mission statements, and 46.15% of oneworld members' mission statements.

Table 9

Frequency of occurrence of "partners"

Star Alliance (28)		SkyTeam (20)		oneworld (13)		Overall (61)	
N	%	N	%	N	%	N	%
20	71.42%	10	50%	6	46.15%	36	59.01%

Source: Author's work

The results might need to be discussed in relation to international airline alliances' branding strategies. There is no doubt that if a certain alliance maintains a higher market status, members of the alliance are eager to stress this fact. For example, SWISS

International Air Lines introduces themselves as follows: "SWISS is part of the Lufthansa Group, and is also a member of Star Alliance, the world's biggest airline grouping". It is presumed that due to intensifying competition among alliances, "partners" are emphasized in their mission statements.

Conclusion

The main purpose of this study is to clarify what kind of values are highlighted in the international airline alliance. Therefore, this study conducted quantitative content analyses including frequency tests, chi-square tests, and one-way Anova tests with post hoc analysis related to the mission statements of members of Star Alliance, SkyTeam, and oneworld. This study makes clear the existence of unique values according to alliances linked to competitive advantages.

One theoretical implication of this study is that it clarifies what types and numbers of components are shared among the three leading alliances' members, and how they compare with each other. It can also provide a further understanding of the nature of mission statements in the airline industry. Furthermore, this study tests the potential of "partners" as a new component. Due to intensifying competition among alliances and progress in alliance branding, it is predicted that "partners" will become a significant component in mission statements in the airline industry.

Practical contributions of the study are as follows. This study can provide knowledge to alliances and airline managers for comparative purposes. By referring to these findings, alliance managers can check whether their ideal values are successfully shared or not among members. The relatively small-scale alliance managers can also compare the results with major alliances, as alliance members' mission statements imply how it implements positioning strategies in the competitive market. The findings also offer understandings for airline managers who are considering which alliances fit their organizational value and strategic purpose.

This study has also some limitations that future research has to examine. A key limitation is that the content analyses of this study have not considered relatively small-scale international airline alliances, low-cost carrier alliances such as Value Alliance, and cargo alliances such as WOW Alliance. Future research is needed to add more samples and extend views to other international airline alliances to deal with these limitations. Also, according to the emergence of advanced research techniques such as big data mining applications including topic minings (e.g., Jerman et al., 2018), cluster analyses, conceptual networks and keyword analyses (e.g., Pejić Bach et al., 2013), these research technics strongly influence both practitioners and scholars (Pejić Bach et al., 2019). Due to these innovative techniques, which share content analysis disciplines, it should be possible to achieve insights and make skillful contributions to mission statement studies in the airline industry. Therefore, in future research, advanced data mining techniques can be adopted to improve methodology in this research field.

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Appendices

Appendix A
Contents of Star Alliance members' mission statements

Star Alliance	Customer	Products	Location	Technology	Profitability	Philosophy	Self concept	Public image	Employees	Safety	Partners
ADRIA Airways	Y	Y	Y	Y	N	N	Y	Y	Y	Y	Y
AEGIAN	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y
AIR CANADA	Y	Y	Y	N	Y	Y	Y	N	Y	N	Y
AIR CHINA	Y	Y	N	N	Y	Y	Y	Y	Y	N	Y
AIR INDIA	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	N
AIR NEW ZEALAND	Y	N	Y	Y	Y	Y	Y	N	N	N	N
ANA (All Nippon Airways)	Y	N	N	N	Y	Y	Y	Y	N	Y	Y
ASIANA AIRLINES	Y	Y	Y	Y	N	Y	Y	Y	Y	N	Y
Austrian Airlines	Y	Y	Y	N	Y	Y	Y	N	Y	N	N
Avianca	N	N	Y	Y	N	Y	N	N	Y	Y	N
Avianca Brasil	Y	Y	Y	Y	N	N	N	N	N	N	Y
Brussels Airlines	Y	N	N	N	N	Y	N	N	N	N	N
CopaAirlines	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y
CROATIA AIRLINES	Y	Y	Y	N	Y	Y	N	N	N	N	N
EGYPTAIR	Y	Y	Y	N	Y	Y	N	N	Y	Y	Y
Ethiopian	Y	Y	Y	Y	N	Y	Y	N	N	N	N
EVA AIR	Y	Y	N	N	N	Y	Y	N	N	N	Y
LOT POLISH AIRLINES	Y	Y	Y	N	N	Y	Y	N	N	N	Y
Lufthansa	Y	Y	Y	Y	Y	Y	Y	N	Y	N	Y
SAS (Scandinavian Airlines)	Y	Y	Y	N	N	Y	Y	N	Y	Y	Y
Shenzhen Airlines	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N
SINGAPORE AIRLINES	N	Y	N	N	Y	Y	N	N	Y	N	Y
SOUTH AFRICAN AIRWAYS	Y	Y	Y	N	Y	Y	Y	Y	N	Y	Y
Swiss International Air Lines	Y	Y	Y	Y	Y	Y	Y	N	Y	N	Y
TAP AIR PORTUGAL	Y	Y	N	Y	Y	Y	N	Y	Y	N	Y
THAI Airways	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y
TURKISHI AIRLINES	N	Y	Y	Y	Y	Y	Y	N	Y	Y	Y
UNITED Airlines	Y	Y	Y	N	Y	Y	Y	N	Y	N	N

Source: Author's work

Appendix B
Contents of SkyTeam members' mission statements

SkyTeam	Customer	Products	Location	Technology	Profitability	Philosophy	Self concept	Public image	Employees	Safety	Partners
Aeroflot	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Aerolíneas Argentinas	Y	Y	Y	N	Y	Y	Y	Y	N	Y	N
Aeroméxico	Y	Y	Y	Y	N	Y	Y	N	N	N	N
Air Europa	Y	Y	N	Y	N	N	Y	Y	N	N	Y
Air France	N	Y	Y	N	N	Y	Y	N	N	N	Y
Alitalia	Y	Y	Y	N	Y	Y	Y	N	Y	Y	Y
China Airlines	Y	N	N	N	N	Y	N	Y	N	N	N
China Eastern Airlines	Y	N	N	N	N	Y	N	Y	Y	N	Y
China Southern Airlines	Y	N	Y	N	Y	Y	N	N	N	Y	N
Czech Airlines	N	Y	Y	N	N	Y	Y	N	N	Y	Y
Delta Air Lines	Y	N	Y	N	N	Y	N	Y	Y	N	Y
Garuda Indonesia	Y	N	Y	N	N	Y	N	N	N	Y	Y
KLM	Y	N	Y	Y	Y	Y	Y	Y	Y	N	N
Kenya Airways	Y	Y	Y	N	N	Y	N	Y	N	N	N
Korean Air	Y	Y	Y	Y	Y	Y	N	N	N	N	N
Middle East Airlines	Y	Y	N	N	N	Y	N	N	N	N	N
Saudia	N	N	Y	N	N	N	Y	N	N	N	N
TAROM	Y	Y	N	N	N	Y	Y	N	N	Y	N
Vietnam Airlines	N	N	Y	N	Y	Y	N	N	N	N	Y
XiamenAir	Y	Y	N	N	N	N	Y	Y	Y	Y	N

Source: Author's work

Appendix C
Contents of oneworld members' mission statements

oneworld	Customer	Products	Location	Technology	Profitability	Philosophy	Self concept	Public image	Employees	Safety	Partners
American Airlines	Y	N	Y	N	Y	N	Y	N	Y	N	Y
British Airways	N	Y	N	N	N	Y	Y	N	N	N	N
Cathay Pacific	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Finnair	N	Y	Y	N	Y	Y	Y	N	N	N	N
Iberia	N	N	Y	N	Y	Y	Y	N	Y	N	N
Japan Airlines	Y	Y	N	N	Y	Y	Y	Y	Y	Y	N
LATAM	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y
Malaysia Airlines	N	N	Y	N	N	Y	Y	N	N	N	N
Qantas	Y	N	Y	Y	Y	Y	N	N	Y	Y	N
Qatar Airways	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N
Royal Jordanian	Y	N	Y	N	Y	Y	Y	Y	Y	Y	Y
SriLankan Airlines	Y	Y	Y	N	Y	Y	Y	Y	N	N	Y
S7 Airlines	Y	Y	Y	Y	N	N	N	N	N	N	Y

Source: Author's work

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