CO-OPETITION IN THE AIRLINE INDUSTRY

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Abstract

This paper examine the effects co-opetition on structural and operational performance in the airline industry with the research analysis centered on cooperation and performance statistics from high ranking and famous airline alliances, STAR, One World and Sky Team. Although our analysis is theoretical based, we hypothesized that in densely populated co-opetition, political turmoil and natural disaster management may adversely affect airline performance. Political stability, economic growth and proper management may positively moderate the relationship between co-opetition and airline performance

Keywords: Co-opetition, performance, alliance, network, airline industry

1 INTRODUCTION

Globally speaking services has become a crucial aspect and the most sought for; customers and users continued to demand value for services that worth the amount paid in every transactions made of which airline services are not left out if such businesses must gain fit in their industry (Seiders et al., 2007;). Service industry has substantial share in the global arena, regional GNP and national GDP. For instance the industry provides employment for about 75% and 70% of the labor force in the U.S and OECD’s respectively (Triplett & Bosworth, 2004; Karmarkar, 2004). Further, a recent analysis (Martínez & Silveira, 2012) suggested that the industry employs 41.9% of the workforce and represents 63.2% GDP globally. In management, the service industry is considered as a powerful business strategy tool for competitive advantage; meanwhile these strategies are built upon the industry’s challenges and success.

Zeithaml and Bitner (2000) stated that the nature of service industry was altered a few decades ago due to the advent of technology, precisely the internet and other form of hypermedia. Scholars came to a consensus that the industry entails both tangible and intangible (Namasivayam & Hinkin, 2003;
Namastivayam, 2004). According to Cesarotti and Spada (2009), the service industry like airline consists of hard and soft phases. They asserted that the hard phase inhibits the formation of tangible and intangible factors of the service and backs the service design; on the other hand the "soft" phase supports the maintenance, management and enhancement of the service delivery. Hence, this could be applied to the airline service sector where the interplay between tangible and intangible elements of service is evident.

1.1 Value of the study

Rivalry amid air-companies remains not a matter of separate organizations contending separately with other airline companies, nonetheless that airline company's cluster versus other air-companies. (Gomes-Cassares, 1994). Commercial airlines linked through numerous methods of collaboration will possibly enjoy the benefit attached to volume and cost reduction in servicing geographic of their confinements which infers their ability to use those assets that may not be within their reach. Definitely, conglomerates of this form are even or parallel, consequently collaboration or co-opetition relations where organization of this type exist will contend in some areas and collaborate on the other side. However co-opetition is given solid responsiveness in business organizations and administrative practices. Only a few researches are available as regards the administrative backgrounds and activities among airline industry concerning co-opetition (Bouncken & Fredrich, 2012). This paper attempts to explore and define the nature of co-opetition in the airline industry and how it is developed and institutionalized. How do co-opetition capabilities of firms and its partners shape their performance?

2 THEORETICAL BACKGROUND

Co-opetition or cooperation between competitors has become a hot-debated issue in recent time among scholars (Peng et al., 2012). This came to existence in 1990s through Ray Noorda, this idea has remained in business world since its adoption by Adam Brandenburger and Barry Nalebuff was vividly discussed in their influential book “Co-opetition” published in 1996, which has gained adoption in the business atmosphere. Co-opetition means cooperation and competition simultaneously. Quint (1997) described co-opetition as the act of “sleeping with the enemy” according to this phrase, co-opetition means cooperation with competitors implying that firms may compete each other in the similar marketplace but they cooperate in other grounds. Co-opetition is relatively new and little literature exists; the existing literature review regarding co-opetition like that of (Peng et al., 2012) pointed out three streams, namely: Precursor of co-opetition, dynamic forces that exist in such collaboration and coalition development and its resultant effect.

The first phase of this study focuses primarily on the past history of co-opetition in airline companies. Bengtsson and Kock (2000) tested simultaneously rivalry and collaboration among companies. They proposed that these companies compete and cooperate simultaneously because of the crucial factors as heterogeneity in resources, short distance between the activity and the customer, connections among players plus the links they possess and the agreement and disagreement regarding the organizational goals. Similarly, Gnyawali et al. (2006) studied the causal elements that affect players in the cooperative-competitive network. They found that structurally and heavily centralized independent organizations have the tendency to be more competitive. Scholars such as (Chin et al., 2008) claimed that the success of co-opetition relies on communication management, management commitment and the development of the relationship. While other scholars who conducted non-empirical studies to develop conceptual model and propose antecedents for co-opetition Zeng, & Chen, 2003 pay more attention to the motives of co-opetition and the outcomes.

Co-opetition dynamics and alliance formation is the second research stream.

Scholars such as (Barretta 2008; Peng & Bourne 2009) carried out empirical studies to examine the dynamics of co-opetition and alliance formation. The conclusion was that the relationship between an organization and any competitor may changes as time goes on, due to the changing business environment, besides firms could be a part in any type of parallel relationships that include coexistence, competition, cooperation and co-opetition. Gimeno (2004) examined the effect of the third part on the alliance formation; he found that co-particularized alliances among competitors may imply exclusively forbidding alliances with the competitors’ partners. Hence supporting counteracting alliances, while non-particularized alliances are not so considerably exclusive and are mostly used when competitors uses the same business partners. Madhavan et al. (2004) tried to distinguish between competitive and cooperative motives. Competitive motives can be noted in technology barriers while cooperative motives in geographic barrier. Peng and Bourne (2009) diagnosed the concurrent rivalry as well as collaboration among healthcare industry, it was pointed out that these organizations contend in some instances and collaborate when the need arises they have complementary but separate and different resources and the competition is separate from cooperation.
In addition to empirical researches, there are some non-empirical researches regarding co-opetition dynamics and alliance formation. Lado et al. (1997) suggested a syncretic model for cooperation and competition. Their model includes: high collaboration with high competition, showing that there is high level of the two at the same time, the cooperation is high with low competition, again sometimes the cooperation low while competition remains high, and at times low cooperation and low competition do occurs. Similarly, Luo (1997) suggested a conceptual model suitable to define the behaviour, highlighted their level-headedness, development and approaches that come to play in competition of multinational corporations by connecting eastern and western ideas. Co-opetition may decrease the potential of value appropriation in innovation although it may increase the potential of value-creation (Hurmelinna-Laukkonen, 2009).

The third stream is the co-opetition consequences. Park and Russo (1996) found that co-opetition in Joint Ventures (JV) fails. Competitors’ lower alliances raise an organization’s possibility to quit than their upper coalition does (Silverman, & Baum, 2002). Oum et al. (2004) established impact that parallel coalitions/alliances have on organization profitability and efficiency. The authors argued that parallel alliances are firmly connected with organization productivity but do not have significant effect on profitability. Luo et al. (2007) examined the impact of rival associations on monetary performances; they concluded in their view that rival alliance actions with rival awareness have positive financial benefits and dark sides. Granovetter (1985) postulated that commercial relations are directly related to social and economic structures at every given point.

Kim and Parkhe (2009) highlighted five items to measure alliance performance. The study demonstrated collaborating similarity’s impact on cooperation efficiency though contending similarly displays a deleterious impact. in their research Park and Ungson (2001) suggested a frame work debates that alliance with powerful competition are set to fail since its seldom hard evolving a trustworthy relationship in business ventures, going by game theory. Co-opetition has various advantages and disadvantages; among others are: the benefits of economy of scale (EOS), decreasing the risk and uncertainty, and accelerate production development. On the other hand disadvantages of co-opetition refer to cost such as risks associated with technology failure, challenges for management and loss of control (Gnyawali & Park, 2009).

2.1 Airlines industry

The Airline sector in the world contributes about one percent of national GDP, making it ranked as one of the viable industries in the glob economically. The industry has experienced tremendous growth in the past two decades, two world largest aircraft manufacturers Airbus and Boeing reported that the growth is currently at 5% and it is expected to keep growing for the next 20 years (Tugores-Garcia, 2012). With the United States (US) and the European Union (EU) presently accounting for the highest markets respectively, accounting for about sixty percent 60% of the global routes, both economies have liberalized their internal market. In 1978, the US deregulated its local airline market, thus making it possible for carriers to set their prices as they wish and to freely enter and exit the given routes.

Considering the success in applying this process in the United States, in 1997 European airlines followed the same process by liberating their local markets, for instance the permission was granted to all airlines from EU member countries to fly through any domestic routes within the EU. However, in 2008, the US and the EU worked hand in hand to create a single Open Aviation Area with the aim of eliminating market access barriers between them. From other point of view the air travel industry provides a safer and comfortable means of transportation, the impact is clearly acknowledged in the tourism industry. Other aspects include political e.g. mutual agreements between nations, economic e.g. national airspace passage fees, sociocultural e.g. cultural integration and increased awareness.

The three existing international co-opetition nets of Air Company offer their memberships with a rich global route opportunity at minimal expenses. However, certain constraints are still visible in the industry especially in cross-regional routes due to variation in regulations. This indicates that the type of agreement, network or country of registration of an airline with others parties determines the carriers possible routes of service. Collaborative actions likes co-opetition between airlines are perhaps productive and beneficial for airlines to overcome some of these barriers since co-opetition enhances network and market expansion.

Globalization has created shift in the Airline industry, thus forcing individual firms to establish competitive networks rather than individual competition. So the competition now in airline industry is between networks (Gomes, 1994). Main researches on networks and alliances have concentrated on the advantages of alliances. However, some scholars proposed some model of different ways to operate these treaties (Child & Faulkner, 1998). As stated earlier, co-opetition refers to sleeping with the enemy, in this sense network is created. Network as defined by (Podolny & Page, 1998:59; Gudmundsson, &Lechner, 2006) as a set of.
entities (more than two) that shares mutual relationships in the absence of legitimate body to arbitrate and resolve conflicts between them.

Networks in airlines industry can be in form of dyadic or multilateral. Airlines networks include customer network, route network and rights network. From social theory perspectives, a social network consists of entities namely: points, agents or nodes that have linked (edges or ties) to one another (Hanneman, 2001). Data in a social network is assumed to be complete when all ties binding it to all factors in its vicinity (Marsden, 1990). Customer network refer to the pool of previous, present and prospective customers. Route network refer to pathway or flying routes. Rights network refer to the agreements with national and international air services to fulfil their standards and regulations (Gudmundsson, & Lechner, 2006). Having these networks may attract new members to the existing network because it has huge customer base or exceptional routes or access to exclusive geographical routes (US airlines with the authorities in the US).

From a pragmatic opinion, the main reason behind network creation stands in its ability to harvest unexploited market opportunities in similar vein to structural holes. Burt (1992) defined structural holes as under exploited market space that can be only optimized if the network is created. Some networks compete each other over same market space. Child and Faulkner (1998) acknowledged co-opetition as a game that involves more than dual-party coalition, in addition recent theoretical frameworks have also noted that the “new” cooperation in other words co-opetition focuses more on networks of alliances Gomes-Cassares, (1994) stated that competition characteristics in a particular marketplace resembles that of a single organization and separately in other markets. Nohria and Eccles (1992) extended this view, by arguing that proliferation of many members in an alliance has led to the formation of a different methods of rivalry namely among the industry: “cluster versus another cluster” or “nets against another networks”. With the Famous air company alliances including Sky Team, Star and one-world.

3 PERFORMANCE IMPLICATION FOR CO-OPETITION IN THE AIRLINE INDUSTRY

A airline co-opetition (alliances) started at the end of last century, today we have three well known alliances namely, Sky Team, STAR, and One-World. The members of these alliances fly over two-third of all international destinations. Bengtsson and Johansson (2012) stated that co-opetition has various benefits, though it has its difficulties in establishing sustainable and balanced relationship. In addition, co-opetition can enhance performance and creativity and also the vulnerability of misunderstanding and opportunism, therefore the likeness that creativity and performance may decline. In 1995 Gulati argued in his work that critical strategic interdependence is one of the main drivers that force most firms to form alliances with one another. Elements of interdependence such as: firm size, scope, age, reputation and resources, financial and other external environment.

Goh and Uncles (2003) suggested that Airline firms can get major benefits in a short term from joining alliances, which are: (a) access to the domestic market and overcoming limitations regarding routes and airline ownership; (b) reduction of cost and economies of scale; (c) optimization of request made by customers and its availability; (d) establishing barriers for new competitors. Moreover, (Wolf, 2001; pels, 2001) suggested other advantages from joining alliances such as, marketing strategy will gain more effectiveness, cost for partners will be lowered, and passengers get benefits from new service access, better services at lower cost. In airline co-opetition, firms can use existing hierarchies and experience alliance management granted by the alliance function.

In a nutshell, coopetitive programs require an array of management issues, like searching for partners, selecting them, forging contracts, establishing coordination procedures, building better communication channels, and implementing monitoring for coopetitive activities. Co-opetition merges firm’s resources to compete and collaborate simultaneously. It enhances the access to markets and resources, especially learning and knowledge acquisition (Bengtsson & Kock, 2000). Co-opetition can lower cost and evenly enhance risk sharing, especially in his research and development field (Ritala et al., 2009). Every firm engages in co-opetition is set to get great and mutual benefits such as improving performance and taking the advantage of resources among firms. Therefore, we conclude that relationships are the fountain of new ideas, new resource combinations, accumulations and higher performance.

4 ANALYTICAL FINDINGS AND DISCUSSION

In 2013 the International Air Transport Association (IATA) used various parameters to follow the yearly accomplishment made by each members. This subsumes:

(a) Operational activities: number of plane take off, distance flown and hours.
(b) Financial performance

(c) Operating efficiency: RPK which refers to revenue passenger traffic

(d) Firm size: ASK which denoting numbers of available seat per kilometres, distance of arranged linkage and the passengers available

(e) Traffic: PTK which denotes commuter / passengers tons kilometres performed (FTK) that is freight loads kilometres completed

(f) Weight data: passenger load factor (PLF)

In the study regarding the advantages associated with partnerships, Morrish and Hamilton (2002) noted ASK and passenger load factor are performance indicators. Shibata (2001) utilized ASK, RPK, passenger load factor, airplane exits and the totality of travellers as performance indicators to assess firms performance. We sought to extend this view by leveraging on more factors. We gathered statistics from the websites of the three alliances. Based on the figures in the table above, we argue that co-opetition has its advantages and drawbacks. Detailed explanations are presented in the following paragraphs.

Table 1: Performance indicators of co-opetition

<table>
<thead>
<tr>
<th>Indicators 2009</th>
<th>Star Alliance</th>
<th>One World</th>
<th>Sky Team</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily departures:</td>
<td>More than 21,900</td>
<td>More than 8,500</td>
<td>More than 15,723</td>
</tr>
<tr>
<td>Countries served:</td>
<td>195</td>
<td>150</td>
<td>178</td>
</tr>
<tr>
<td>Airports served:</td>
<td>1,328</td>
<td>750</td>
<td>1,064</td>
</tr>
<tr>
<td>Lounges:</td>
<td>More than 1,000</td>
<td>More than 550</td>
<td>More than 564</td>
</tr>
<tr>
<td>Revenue Passenger Km:</td>
<td>1,469 billion</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Annual Passengers:</td>
<td>727.42 million</td>
<td>330 million</td>
<td>588 million</td>
</tr>
<tr>
<td>Number of employees</td>
<td>460,238</td>
<td>300,000</td>
<td>459,781</td>
</tr>
<tr>
<td>Fleet:</td>
<td>4,701</td>
<td>*</td>
<td>2963 (+1504)</td>
</tr>
<tr>
<td>Total revenue:</td>
<td>US$198.98 billion</td>
<td>US$100 billion</td>
<td>US$ billion</td>
</tr>
</tbody>
</table>

Source: Star Alliance (2009), One World (2009), Sky Team (2009)

<table>
<thead>
<tr>
<th>Indicators 2014</th>
<th>Star Alliance</th>
<th>One World</th>
<th>Sky Team</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily departures:</td>
<td>More than 18,500</td>
<td>More than 14,011</td>
<td>More than 16,323</td>
</tr>
<tr>
<td>Countries served:</td>
<td>192</td>
<td>152</td>
<td>177</td>
</tr>
<tr>
<td>Airports served:</td>
<td>1,316</td>
<td>994</td>
<td>1,052</td>
</tr>
<tr>
<td>Lounges:</td>
<td>More than 1,000</td>
<td>More than 600</td>
<td>More than 516</td>
</tr>
<tr>
<td>Revenue Passenger Km:</td>
<td>1,312 billion</td>
<td>1,104 billion</td>
<td>*</td>
</tr>
<tr>
<td>Annual Passengers:</td>
<td>618.19 million</td>
<td>507.0 million</td>
<td>612 million</td>
</tr>
<tr>
<td>Number of employees</td>
<td>408,998</td>
<td>391,968</td>
<td>481,691</td>
</tr>
<tr>
<td>Fleet:</td>
<td>4,456</td>
<td>3,324</td>
<td>3,054 (+1,580)</td>
</tr>
</tbody>
</table>
Case 1: Star alliance

The figures in table 1, do not present delighting results when we compare the data from 2009 and 2014 of STAR Alliance. There was no increase in the total revenue, perhaps due to market maturity and saturation in the sector. In addition the exit of some members, for example reports shows that Tam airline, Continental Airlines, Ansett Australia, TACA Airlines, Shanghai Airlines, Mexicana, US airways left the alliance (Star Alliance, 2014b). There exit has in one way or the other affected the strategic performance of the cooperation practices. Global recession, political turmoil and natural disasters are other factors. For instance many of the airlines cannot access Iraqi, Syrian and Libyan airspace due to the ongoing war. In 2010 many airline firms cancelled their flights across Europe because of the volcanic eruption in Iceland. Further, some airlines stopped flying to certain destinations in West Africa due to disease outbreak; however the impact will be witnessed in the next annual reports. Star alliance has strong coverage in Africa, Asia, Europe and North America with moderate coverage in Australia and New Zealand.

Case 2: One World

Although some statistics are missing, but it is clear the all other numbers increased between 2009 and 2014. These increases were the resultant effect of alliance expansion as many firms joined. However, new members in this alliance are strong and well known in their regions such as British Airways in 2012, Qatar Airlines in 2013, Royal Jordanian in 2012, and Malaysia Airlines in 2013 (Oneworld.com). In addition it will be interesting to have a look to the next report because US Airways and TAM Airlines have just joined the alliance.

Case 3: Sky Team

Some statistics increased and decreased between 2009 and 2014. Although missing data exist but there are no significant changes. Perhaps, this simple volatility is because of ongoing joining and leaving the alliance. Some well-known firms such as continental airlines and Copa airlines left the alliance in 2009 and new companies like China Eastern Airlines in 2011 and Saudi Arabia Airlines in 2012 joined the alliance, thus, leading to an increase in the market share of the members, secondly economic booming in China and most Asian countries have significant impact on growth experienced by this alliance.

5. LIMITATIONS AND SUGGESTION FUTURE STUDIES

Limitations of this study can be summarized in two points: First: Lack of qualitative and quantitative studies regarding co-opetition in airline industry, studies conducted regarding co-opetition in airline industry are few and did not covered all indicators mentioned by IATA to track performance of firms. Further, literature review in these studies discussed competition and cooperation and tried to adapt these terms to co-opetition because of the lack of qualitative and empirical researches regarding co-opetition. So, the researchers suggest that qualitative studies should be conducted to give a comprehensive insight about the impact of co-opetition on airlines performance.

In addition, some firms switch from one alliance to another. As we noted in the case of One-World alliance some firms left this alliance to join another alliance. Why? This is an important issue to be addressed in future studies. Moreover, comparative studies had to be conducted to know the impact of co-opetition on airline firms before and after joining alliances according to IATA indicators. Then, quantitative studies can be conducted to examine all factors related to overall performance. Secondly: It was not easy to get information regarding the indicators from alliances websites. We concluded that, the transparency is questionable. All statistics should be displayed in a proper way to help researchers and others interested parties to get information easily when needed.

We recommend futures studies to examine the relationships between alliances and the possibilities of acquisitions and merges. Because, before establishing alliances, single firms preferred to work separately, but later came together and formed alliances. Future studies should also focus on the criteria that single firm’s takes into consideration when they join alliances or co-opete. Other areas to look into include: Do firms join the alliance that their main competitor is in? What are the standards that alliance management accepts to approve firms to join them? Why do some firms reject the idea of alliance? What is the effect of alliance
and co-opetition on customer’s loyalty, trust and transaction? What are the implications of entry and exit into alliance/co-opetition for management and customers? Having a clear picture of coopetitive relationship as well as the objects and goals of partners, the potentials of moral hazards or opportunism may be reduced.

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