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**THE IMPACT OF COOPETITION-BASED
INNOVATION ON PERFORMANCE IN NON-PROFITS**

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Master's Thesis

Supervisor

Asst. Prof. Dr. Bella GULSHAN

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ABSTRACT

THE IMPACT OF COOPETITION-BASED INNOVATION ON PERFORMANCE IN NON-PROFITS

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The ultimate dividing line distinguishes co-opetition from related ideas such as cooperation and strategic partnerships. The competitive paradigm suggests that co-opetition is anti-competitive or collusion (Jorde & Teece, 1990). The collaboration aspect of co-opetition tries to produce value for all stakeholders by integrating the complementary resources of competitors. It is insufficient to comprehend co-opetition through a single lens because it is a complex and multidimensional phenomenon. Therefore, the drivers of co-opetition among competitors, the steps that lead to cooperative/competitive interactions, and the results and repercussions of such partnerships are significant to understand the impact on innovation and performance of non-profits. This study has used quantitative research design to survey the non-profits from Iraq. Purposive sampling is the most appropriate sampling technique because the study only included managers of non-profit organizations as respondents. The questionnaire was floated to 209 non-profit organizations in Iraq. 153 valid responses were collected and used for the data analysis. The results indicated that all three hypotheses are accepted. Moreover, non-profit groups that develop cooperative links to innovative climate and work toward similar goals are successful to achieve the improve performance. Further, nonprofit organizations have a higher need to engage in competitive relationships and embrace new business practices.

Keywords: Co-opetition, Innovative Climate, Performance, Non-profit organizations

ÖZET

İŞBİRLİĞİNE DAYALI İNOVASYONUN KAR AMACI OLMAYAN ORTAKLARDA PERFORMANS ÜZERİNDEKİ ETKİSİ

Yüksek Lisans, İşletme, Altınbaş Üniversitesi,

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Nihai ayırım çizgisi, işbirliğini işbirliği ve stratejik ortaklıklar gibi ilgili fikirlerden ayırır. Rekabetçi paradigma, ortak rekabetin rekabete aykırı veya gizli anlaşma olduğunu öne sürer (Jorde ve Teece, 1990). Ortak rekabetin işbirliği yönü, rakiplerin tamamlayıcı kaynaklarını bütünleştirerek tüm paydaşlar için değer üretmeye çalışır. Karmaşık ve çok boyutlu bir olgu olduğu için rekabeti tek bir mercekten kavramak yetersizdir. Bu nedenle, rakipler arasındaki işbirliğinin itici güçleri, işbirlikçi/rekabetçi etkileşimlere yol açan adımlar ve bu tür ortaklıkların sonuçları ve yansımaları, kar amacı gütmeyen kuruluşların yenilik ve performans üzerindeki etkisini anlamak için önemlidir. Bu çalışmada, Irak'taki kâr amacı gütmeyen kuruluşları araştırmak için nicel araştırma tasarımı kullanılmıştır. Amaçlı örnekleme en uygun örnekleme tekniğidir, çünkü araştırmaya yalnızca kar amacı gütmeyen kuruluşların yöneticileri yanıtlayıcı olarak dahil edilmiştir. Anket, Irak'taki 209 kar amacı gütmeyen kuruluşa dağıtıldı. 153 geçerli yanıt toplandı ve veri analizi için kullanıldı. Sonuçlar, her üç hipotezin de kabul edildiğini göstermiştir. Ayrıca, yenilikçi ortamlarla işbirliğine dayalı bağlantılar geliştiren ve benzer hedeflere yönelik çalışan kar amacı gütmeyen gruplar, performansı artırmada başarılıdır. Ayrıca, kar amacı gütmeyen kuruluşların rekabetçi ilişkilere girme ve yeni iş uygulamalarını benimseme ihtiyacı daha yüksektir.

Anahtar Kelimeler: İşbirliği, Yenilikçi İklim, Performans, Kar Amacı Gütmeyen Kuruluşlar

TABLE OF CONTENTS

| | <u>Pages</u> |
|---|--------------|
| ABSTRACT..... | v |
| ÖZET..... | vi |
| LIST OF TABLES..... | ix |
| LIST OF FIGURES..... | x |
| 1 INTRODUCTION..... | 1 |
| 1.1 PROBLEM STATEMENT..... | 4 |
| 1.2 RESEARCH QUESTIONS | 4 |
| 2 LITERATURE REVIEW | 5 |
| 2.1 CO-OPETITION: DELIMITATION AND DEFINITION | 5 |
| 2.2 CO-OPETITION AT INTER-FIRM LEVEL..... | 8 |
| 2.3 THE PROS AND CONS OF COLLABORATION IN COMPETITIVE MARKETS | 9 |
| 2.4 DRIVERS OF CO-OPETITION | 15 |
| 2.5 TYPOLOGIES OF COOPETITION | 20 |
| 2.6 MODELS OF INNOVATION | 26 |
| 2.7 STATIC AND DYNAMIC MODELS | 31 |
| 2.7.1 Static Models..... | 31 |
| 2.7.1.1 Schumpeterian..... | 31 |
| 2.7.1.2 Model of abernathy clarke..... | 31 |
| 2.7.1.3 Henderson clark..... | 32 |
| 2.7.2.4 Normal teece..... | 32 |
| 2.8 INNOVATIVE CLIMATE AND PERFORMANCE | 33 |
| 2.9 HYPOTHESES..... | 35 |
| 3 METHODOLOGY | 36 |
| 3.1 RESEARCH METHOD—SURVEY | 36 |

| | | |
|----------|--|-----------|
| 3.2 | SAMPLING..... | 36 |
| 3.3 | RESPONSE RATE..... | 37 |
| 3.4 | THE MEASUREMENT INSTRUMENTS..... | 37 |
| 3.4.1 | The Measurement Instrument for Coopetition..... | 37 |
| 3.4.2 | The Measurement Instrument for Innovative Climate..... | 37 |
| 3.4.3 | The Measurement Instrument for Performance..... | 38 |
| 4 | DATA ANALYSIS AND DISCUSSION..... | 39 |
| 4.1 | MEASUREMENT MODEL..... | 39 |
| 4.1.1 | Internal Consistency Reliability..... | 41 |
| 4.1.2 | Convergent Validity..... | 41 |
| 4.1.3 | Discriminant Validity..... | 46 |
| 4.2 | STRUCTURAL MODEL..... | 46 |
| 4.3 | HYPOTHESES TESTING..... | 47 |
| 5 | CONCLUSION..... | 50 |
| | REFERECES..... | 53 |

LIST OF TABLES

| | <u>Pages</u> |
|---|--------------|
| Table 3.1: Coopetition Scale | 37 |
| Table 3.2: Innovation Climate Scale | 38 |
| Table 3.3: Performance Scale..... | 38 |
| Table 4.1: Cronbach's Alpha | 41 |
| Table 4.2: Composite Reliability | 41 |
| Table 4.3: Factor Loadings..... | 43 |
| Table 4.4: Average variance extracted (AVE) | 44 |
| Table 4.5: VIF | 45 |
| Table 4.6: Heterotrait-monotrait ratio (HTMT) | 46 |
| Table 4.7: Path Coefficients | 47 |

LIST OF FIGURES

| | <u>Pages</u> |
|---|--------------|
| Figure 2.1: Theoretical Framework..... | 35 |
| Figure 4.1: Measurement Model 1 | 40 |
| Figure 4.2: Measurement Model Final | 40 |
| Figure 4.3: Structural Model | 47 |



1 INTRODUCTION

Cooptition is "the pursuit of collaboration and competition simultaneously" (Gnyawali & Park, 2011, p. 12). It has encountered and continues to face various challenges about the limits of the construct or, more precisely, what distinguishes co-opetition from other related concepts (Walley, 2007). The issues have been researched in several different studies. Limitations in the present paradigms for dealing with co-opetition have been revealed in many researches. Co-opetition is best described by a model that combines competitive and cooperative elements.

Businesses can allocate limited resources more effectively to foster innovation and entrepreneurship. Moreover, transaction costs in the competitive paradigm are decreased thanks to increased competition, all of which contribute to greater economic efficiency and competitive advantages, as posited by the competitive paradigm. These benefits stem from having a solid market presence or offering exceptional goods/services to customers (Porter, 1985). Competition is a zero-sum game (win-lose/lose-win) that only increases profits for one company at the expense of others. This view falls short because it ignores the mutual benefit that results from cooperative actions (Padula & Dagnino, 2007).

A cooperative paradigm emphasises relational rents or the benefits of working together (Dyer & Singh, 1998). This view holds that businesses are built on a web of interconnected relationships nurtured by intentional teamwork with the eventual goal of reaping advantages for all parties involved. Cooperation is a win-win strategy since it boosts everyone's chances of success in the long run, whether in product sales or market share. However, the paradigm fails to account for the trade-offs inherent in collaborative efforts adequately.

Padula and Dagnino (2007) defined co-opetition as "the incursion of competition into a cooperative gaming context" that synthesises the two paradigms (p. 56). Moreover, co-opetition incorporates elements of both cooperative and competitive games, and it is categorised as a positive-sum game known as a win-win-win. Some scholars advocate for a multiparadigm strategy that incorporates strategic positioning, game theory, and the resource-based perspective to understand co-opetition and better

Consideration must also be given to co-opetition's multilayered nature to characterise it. The multidisciplinary nature of co-opetition research highlights that academics from other fields usually focus on different levels of analysis. This gap in disciplinary methods compels

researchers to focus on specific competition-related drivers, processes, and outcomes. Further, the distinction between individual and organisational co-opetition occurs when individuals and groups compete. Moreover, co-opetition at the inter-firm level engages organisations in simultaneous cooperation and competition.

Similarly, network-level co-opetition occurs when many actors participate in a network. There is connection and dependency among these levels, which are not entirely independent. This study focuses on the inter-firm organisational level.

The ultimate dividing line distinguishes co-opetition from related ideas such as cooperation and strategic partnerships. The competitive paradigm suggests that co-opetition is anti-competitive or collusion (Jorde & Teece, 1990). The collaboration aspect of co-opetition tries to produce value for all stakeholders by integrating the complementary resources of competitors. In contrast, the cooperation element in collusion aims to unjustly steal value (primarily customers, as in the case of cartels) (Gnyawali et al., 2008). Two factors differentiate collusion and collaboration 1) the objective of the relationship (surplus of producer versus customers), and 2) the activities that the link is employed for (downstream versus upstream activities).

Collusion penalises the consumers by diminishing consumer surplus, but businesses profit from a rising producer surplus via price hikes and monopoly power. Consequently, it decreases the total surplus or social welfare. In co-opetition, corporations collaborate to benefit both consumers and their interests. Thus, "coopetitive" collaboration yields a "win-win-win" outcome (Walley, 2007). Cooperation occurs at the activity level, such as pricing, while co-opetition assumes collaboration in upstream activities, such as R&D and rivalry in downstream activities.

Additionally, co-opetition is different from strategic alliances. For instance, cooperation and strategic alliances are linked (Bengtsson & Kock, 2001). An alliance is a bilateral or multilateral cooperation in which two or more partner businesses are committed to a single aim (Jorde & Teece, 1990). Therefore, strategic alliances are more comparable to collaboration than to competition. For co-opetition to be successful, businesses must be aware of the potential benefits it might bring. Companies that fail to achieve their co-opetition goals risk losing an entire market and their share of the cooperative effort.

It has been suggested that cooperative competition could be a useful innovation method in the high-tech industry (Tether, 2002). Research has shown that incorporating cooperation into R&D

is challenging due to its complexity and inherent difficulties (Carayannis & Alexander, 2006). Elements relating to cooperation were integrated at various levels. However, research has looked at the advantages of cooperative versus competitive firm activity in industrial settings but ignored the contextual elements that encourage or prevent the creation of co-opetition (Fjeldstad et al., 2004). Businesses have many options for developing new technologies, such as working in-house, with partners in the supply chain, etc. However, little is known about how technology affects businesses' co-opetition decisions. According to the literature, upstream operations make greater use of cooperation than downstream ones. As it stands, it is unknown why businesses prefer R&D collaboration to other strategies, so it is essential to look into the factors that may impact this decision.

The pace of technical development can determine whether an innovation will be revolutionary or incremental. Which form of teamwork to advance new ideas get picked? According to the available literature, the innovation type should be considered while selecting a co-opetition approach. For example, research has found conflicting results when investigating the usefulness of collaboration for both revolutionary and incremental innovation (Ritala & Hurmelinna-Laukkanen, 2013). Moreover, co-opetition can also take many shapes and sizes depending on the number of involved parties—particularly ground-breaking new ideas, dyadic or many-on-many competition. Understanding the connection between different types of co-opetition and innovation is critical.

Managing competitive tensions is crucial to reaping the benefits of co-opetition for firms (Fernandez et al., 2014). Current literature solely investigates tensions' origins, magnitudes, and manifestations (Raza-Ullah et al., 2014). Literature suggests separation and integration strategies for conflict resolution. Cooperative behaviour is more complicated than is accounted for in this body of studies. Co-opetition involves staff members at various levels in the cooperating organisations, which is the primary cause of this intricacy. It spans the gap between the individual and cross-organisational spheres; internally and externally, coordination and control are essential for achieving collective goals. The second component that increases complexity is how people at each level integrate cooperation and competition as opposing forces through their perceptions and behaviours. These factors prompted the cognitive and structural aspects of co-opetition regulation: While structural variables are tied to organisations' design, cognitive elements are related to individual capacities.

1.1 PROBLEM STATEMENT

Co-opetition has been identified as a strategy for innovation in high-tech companies (Schiavone & Simoni, 2011). The success of this innovation strategy can only be measured by its continued uptake by businesses in both high-tech and low-tech sectors. The absence of robust data on the connection between co-opetition and innovative climate (radical or incremental) is at the forefront effect on performance. It indicates insufficient support for a co-opetition strategy for value creation. The impact of co-opetition on innovation and performance has been the subject of conflicting findings in the non-profit sector.

These discrepancies highlight the need for further investigation and in-depth research on co-opetition, innovation, and performance. It is insufficient to comprehend co-opetition through a single lens because it is a complex and multidimensional phenomenon. Therefore, the drivers of co-opetition among competitors, the steps that lead to cooperative/competitive interactions, and the results and repercussions of such partnerships are significant to understand the impact on innovation and performance of non-profits.

1.2 RESEARCH QUESTIONS

This study has the following research questions:

- a. What drives non-profit organisations to choose co-opetition strategy?
- b. How does non-profit co-opetition impact the innovation climate of the alliances?
- c. How does a non-profit innovative climate influence the alliance's performance?

2 LITERATURE REVIEW

Since the publication of the fundamental study on co-opetition by Brandenburger and Nalebuff in 1996, several studies have been carried out to gain a deeper understanding of this phenomenon. It is possible to rearrange the body of research on cooperation at its numerous levels of analysis (individual, organisational, and inter-organisational) around three fundamental themes: the motives for collaboration, the method of cooperation, and the outcomes of collaboration (Bengtsson et al., 2010). In most studies of drivers, the researchers are interested in the elements that contribute to the formation of co-opetition. Copetition refers to the situation in which two or more organisations work together to achieve a common goal. Research on co-opetition focuses on the characteristics that increase the benefits of cooperation and reduce its downsides (e.g., unintended knowledge leakages).

2.1 CO-OPETITION: DELIMITATION AND DEFINITION

Throughout its evolution, the idea of "co-opetition" may be defined as "the pursuit of collaboration and competition at the same time" (Gnyawali & Park, 2011, p. 16). It has been confronted with several current issues (Walley, 2007). Numerous studies have been conducted to investigate the topics in question. Certain academic community members have argued that the prevalent paradigms² for managing co-opetition is inadequate (Lado et al., 1997). The term "co-opetition" refers to a business model that blends characteristics of traditional competition with those of traditional cooperation.

As a result of increased competition, businesses can allocate their limited resources more efficiently, innovation and entrepreneurship are encouraged, and transaction costs are reduced; these factors contribute to greater economic efficiency and competitive advantages, as postulated by the competitive paradigm. Competition is a paradigm that posits that the best way to achieve economic efficiency and competitive advantages is through increased competition. These advantages result from maintaining a powerful presence in the market or providing superior products to customers (Porter, 1985). Competition is viewed as a zero-sum game (win-lose/lose-lose game). It is because an increase in individual profit benefits only one company while doing so at the expense of others. This viewpoint is flawed because it disregards the connections that are advantageous to both parties and are the direct outcome of cooperative efforts (Brandenburger and Nalebuff, 1996).

Under the framework of a cooperative paradigm, an emphasis is placed on relational rents, often known as the benefits obtained by working together (Dyer & Singh, 1998). According to this point of view, businesses are constructed on a network of interdependent relationships that have been cultivated through the application of purposeful cooperation with the ultimate objective of producing benefits for all parties involved. Every party engaged can benefit from cooperation as a win-win strategy that increases product demand and the overall size of the market (Brandenburger & Nalebuff, 1996). However, this model suffers from several significant flaws, one of which is that it does not consider the potential pitfalls of collaborating with others in an acceptable manner.

Co-opetition, a synthesis of the two paradigms, is defined as "the incursion of competition into a cooperative gaming context" (Padula & Dagnino, 2007, p. 16). Copetition is an acronym for "the incursion of competition into a cooperative gaming environment" (Okura & CARFI, 2014, p. 56). Since co-opetition contains components of both cooperation and competition, it is categorised as a variable-positive-sum game that is referred to as a win-win-win game. Some academics believe that a multiparadigm approach, which considers game theory in addition to strategic positioning and the resource-based point of view, is the best way to comprehend the phenomenon of co-opetition (Clarke-Hill et al., 2003). According to the findings of this research, the most effective method for completely comprehending the interplay between cooperative and competitive dynamics is to investigate co-opetition using an approach that draws on multiple theoretical paradigms.

The phenomenon of cooperation in competition is complicated and calls for considering more than one component. Bengtsson et al. (2010) drew attention to the interdisciplinary nature of prior research on co-opetition and the fact that scholars from different fields tend to focus on different levels of analysis. It was done to highlight the fact that co-opetition research has been conducted in the past. Because of this gap in methodological understanding, research on competition has been forced to concentrate on a select few factors, procedures, and outcomes. The writers differentiate between four separate ways of working together and competing with one another as follows: There are four different kinds of co-opetition: (1) individual-to-individual, (2) organisational-to-organisational, (3) inter-organisational, in which organisations participate in both competition and collaboration, and (4) network-level, in which numerous actors within a network engage in both competition and cooperation. Each of these levels affects the others, and vice versa; they are not entirely independent.

The bottom line differentiates co-opetition from other related ideas, such as collusion and strategic alliances. Co-opetition was formerly misunderstood as collusion or monopolistic behaviour due to an outmoded understanding of the competitive paradigm (Jorde & Teece, 1990). According to Gnyawali et al. (2010), cooperation in co-opetition seeks to produce value for all stakeholders by integrating the complementary resources of competitors. In contrast, cooperation in collusion seeks to steal value from other stakeholders in an unfair manner. co-opetition aims to produce value for all stakeholders by integrating the complementary resources of competitors (primarily customers, as in the case of cartels). Co-opetition and collusion are both examples of anti-competitive behavior; however, there are two key distinctions between the two, which are as follows: (1) the goal of the relationship (the producer's surplus as opposed to the customers' surplus), and (2) the activities that the link is engaged for (downstream vs upstream activities) (Rusko, 2011).

Consumers pay the price in the form of a smaller consumer surplus, while producers reap the benefits of higher profits when corporations work together to raise prices and establish monopolies. Consumers pay the price when corporations work together to raise prices and establish monopolies. Consequently, there has been a deterioration in either social welfare or the overall surplus. Co-opetitive teamwork ultimately results in a "win-win-win" scenario for all participating individuals and organisations (Walley, 2007). Co-opetition is characterised by cooperative behaviour in upstream activities like research and development and competitive behaviour in downstream activities like pricing. Collusion, on the other hand, takes place at the activity level in downstream activities.

"co-opetition" should not be used interchangeably with "strategic collaborations." By the findings of Bengtsson and Kock (2004), cooperation and strategic alliances are inextricably linked. Alliances can be either bilateral or multinational, but in any case, they entail at least two companies working together to achieve a common objective (Jorde & Teece, 1990). Therefore, strategic alliances are more analogous to cooperation than competition. To summarise, a competitive coalition is considered co-opetitive if it contains competitive manoeuvres. Collusion is considered co-opetitive if the participating businesses compete for at least one strategic variable (such as quality, brand, or flexibility) (Rusko, 2011).

2.2 CO-OPETITION AT INTER-FIRM LEVEL

Many different theoretical traditions have contributed to the development of definitions of co-opetition. Brandenburger and Nalebuff (1996) explain co-opetition by describing a scenario in which competing businesses cooperate to produce value and a larger market before engaging in individual competition for the value that is made. In this scenario, co-opetition is a prerequisite to engaging in individual competition for the value produced. The prisoner's dilemma and the stag hunt are two game-theoretic models that serve as the basis for this explanation (Ritala & Hurmelinna-Laukkanen, 2009). Brandenburger and Nalebuff proposed the concept of cooperative competition as a "new way of thinking" (1996). They provided a "value net" tool to track the embedded network of competitive and supportive ties within an organisation. In addition to Porter's five forces analysis, the value net adds analysis considers a sixth force called complements of products and resources (Porter, 1985).

The identities and incentives of the non-profits are the valuable contributions made by each player (including the firm itself), game structure, play, player perceptions, mental models, game boundaries, and player relationships. The second definition of co-opetition is the process through which two businesses collaborate and compete against one another, with the various parts of the link being divided across activities (Bengtsson & Kock, 2000). It suggests that competitors will cooperate in some areas while maintaining a severe level of competition in other others. It is more likely for competitors to work together on upstream activities, such as research and development, than for them to work together on downstream operations, such as marketing (Dahl, 2014). Bengtsson and Kock (2000) differentiate four horizontal linkages between companies and their competitors: coexistence, cooperation, competition, and co-opetition. Which of these four partnerships the company seeks will be determined by the company's standing in the industry and the resource requirements.

Both of these definitions take different approaches to the idea of a competitor, so they cannot be used interchangeably. In the first case, a company must demonstrate that the value their customers' place on their product is lower when compared to the offering of another company to be considered a competitor (Brandenburger & Nalebuff, 1996). A competitor is "an entity that competes with you by offering similar products or services and by targeting clients who are similar to you," as stated in the second definition of the term "competitor" (Chen, 1996, p. 104).

Both cooperative and competitive partnerships have one thing in common: they both have a dilemma involving the production of value and its subsequent appropriation.

Brandenburger and Nalebuff's (1996) definition is better suited to dynamic environments in which all actors are competitors for value, and the definition of who is a competitor is subject to change. Bengtsson and Kock's (2000) definition best suit to local analysis of co-opetition because it allows for the study of cooperative and competitive interaction at a single moment in time. The ambiguity of the situation is described by Baumard (2009) as follows: "a competitor who was not a competitor, seeing and not seeing a partner who was not a partner, seated on an advantage which was not an advantage, launched and did not launch an offensive which was not offensive." (Baumard, 2009, p. 11).

Co-opetition relationship is one in which both cooperative and competitive interactions develop over time (Bengtsson et al., 2010). Researchers investigated the phenomenon by looking at it from the point of view of the mechanisms that were linked with it. Collaboration and competition are not mutually contradictory concepts but rather cohabit inside a relationship that might be described as coopetitive (Bengtsson et al., 2010). This technique opens the door to multiple layers of competitive cooperation and cooperative efforts. The relational perspective, co-opetition is "a paradoxical link that arises when two or more competitive organisations cooperate in some tasks while competing against one another" and "a paradoxical link that arises when two or more competitive organisations cooperate in some tasks while competing against one another" (Bengtsson and Kock, 2000, p. 412).

2.3 THE PROS AND CONS OF COLLABORATION IN COMPETITIVE MARKETS

Conflicts directly result from co-opetition, a paradoxical relationship between competing forces. Raza-Ullah et al. (2014) state that the paradoxical nature of co-opetition is the outcome of two different types of paradoxes. The most important difference between creating value by societies and individuals because of this mismatch, there is friction between the two goals of preserving and spreading information (Bouncken & Kraus, 2013). Second, the long-term goals versus the short-term goals of the partners or competitors. Their convictions for cooperative competition are at odds with one another since one is interested in working together over the long term. At the same time, the other is more interested in making quick gains (Das & Teng, 2000).

Raza-Ullah et al. (2014) found that several environmental variables influenced the establishment of internal and outside conflict borders in cooperative behavior. Their study looked at the relationship between conflict and cooperative conduct. Internal barriers appear to be the only thing that can be seen to exist between the two opposing aspects or dualities. The external ones combine two opposites or put them next to each other in a juxtaposition. The paradox of co-opetition depends on these two limits to materialise and persist during its existence. These characteristics, which can be categorised into industrial, relational, and firm-specific categories, include, for example, short product life cycles, technological convergence, and significant R&D expenditures. In addition, these firms tend to have a high level of innovation because of their close relationships with other companies (Luo, 2015). Many studies have investigated the dual nature of, or the competing forces in, strategic interactions. Because other terms in the literature have similar meanings that could lead to a misunderstanding of the content, the paradox is distinguished from analogous organisational disputes using that table.

Cooperation vs. rivalry, rigidity versus flexibility, and short-term versus long-term orientations are the three pairs of opposing forces that Das and Teng (2000) identified as being in strategic partnerships from the perspective of a dialectical approach. If these factors are not balanced and controlled appropriately, the potential ramifications include internal upheaval, instability, and the breakup of the strategic partnership. When engaging in competition, one prioritises achieving one's own goals over those of others, whereas cooperating means working together toward accomplishing a shared objective. Rigidity refers to characteristics such as reciprocal dependency and interdependence, whereas flexibility encourages a partner's capacity to adjust without being bound by inflexible arrangements. Rigidity and flexibility are complementary to one another.

Last, people who think of the long term perceive alliances as more permanent entities and place a higher value on joint efforts. On the other hand, people who think in terms of the short term view coalitions as temporary and place a higher value on attaining instant results. A dispute that arose between three rival groups that had the potential to join forces has been settled thanks to De Rond and Bouchikhi (2004) mediation. These seemingly contradictory drives are broken down into four categories in the research on paradox (Lüscher & Lewis, 2008): learning (knowledge), belonging (identity/interpersonal connections), organising (processes), and performing (goals). Some examples of paradoxes include learning paradoxes, such as invention vs. replication; belonging paradoxes, such as collectivism versus individuality; organising

paradoxes, such as emergence versus design; acting paradoxes, such as autonomy versus control; and so on.

The numerous paradoxical conceptions can be distinguished by their directional and temporal dualities (horizontal vs. vertical, for example). In some cases, a contradiction may emerge as a consequence of the collapse of a diachronic duality into a synchronic duality, or even more dramatically, the collapse of a diachronic and vertical duality into a synchronic and horizontal duality. The breakdown of synchronic and diachronic dualisms at the same level of analysis simultaneously gives rise to the paradox of co-opetition (Clarke-Hill et al., 2003).

Because these two opposed pressures continue to exist, friction can develop. The combination of cooperative and competing logic creates tension in co-opetition, and different people experience this strain on various levels. This tension can also be thought of as "co-opetition tension." One of the distinguishing characteristics of tension is the presence of emotional ambivalence, sometimes known as the inability to decide. Ambiguity rears its head on several fronts, frequently assuming the primary focus position (Raza-Ullah et al., 2014). According to the previous study's findings (Tidstrom, 2014), the implications of co-opetition are contingent on the resolution of cooperation-related issues.

Separating tensions and appreciating their differences is required for acceptance, spatial separation requires dividing opposing forces among various organisational units, temporal separation requires choosing one pole of tension at a time and then switching, and synthesis requires attempting to find a perspective that considers both opposing elements. Acceptance, spatial separation, and temporal separation are all required for synthesis. This widely used typology is comprised of four different techniques. The first of these strategies encourage acceptance, while the others work to alleviate underlying tensions.

Das and Teng (2000) suggest going about things in a way that strikes a healthy balance, in which neither of the opposing viewpoints is given greater weight than the other. It suggests that the forces are in equilibrium and the strengths of each are approximately equivalent to one another. If the partners can strike a healthy balance between these four different sorts of stress, the alliance will be successful and long-lasting. When one power begins to dominate another, the alliance will either fall apart or be absorbed by the one now in the dominating position. They argue that partners should strike a balance between the opposing pressures threatening the status quo. As a result, Das and Tang have been accused of emphasising continuity above innovation.

The dialectical process is weakened due to Das and Tang's premise that certain states of social phenomena are superior to or more desirable than others.

Tidstrom (2014) finds success in resolving competitive disagreements by applying a model for conflict management. According to the findings of Tidstrom's research (2009), there are three levels of inter-competitor cooperation conflicts and tensions. These levels include organisational, relational, and external actors. Motives might range from practical to theoretical (suppliers, salespeople, and institutional). Daily operations and established social conventions can potentially create conflicts within an organisation. The corporation is impacted in several ways, including me-too products (imitation goods, marketing, and trademarks), variable product dimensions, and multiple distribution channels. One of the most common motivations is self-preservation, which can encompass a variety of perspectives on authority as well as individualism and collectivism.

Normative and strategic considerations often play a role in what drives conflict in relationships. Conflicting systems and procedures that have their origins in the tradition of a corporation or more or less established ways of thinking and behaving are examples of what are known as normative causes. Mismatched objectives, unclear roles, and headhunting are all examples of strategic mistakes. The cooperation/competition dynamic between competing enterprises can be influenced by various third parties. People in this category include those who provide goods and services, those who sell goods and services, clients, and politicians (products of poor quality had been delivered late from a supplier or the role of an institution in the case of forced competition). The author discovers that several factors might lead to conflict, and one of these factors is a cooperation between competitors (less cooperative, more cooperative, voluntary, or forced). Based on the research by Bengtsson et al. (2010). Tidstrom (2014) proposes three options for resolving conflicts: cooperation, competitiveness, and avoidance. The findings establish a connection between the nature of the relationship and the approach taken to resolving conflict as a factor influencing the likelihood of encountering difficulties of this nature. Three different approaches to relieving pressure can be utilised, depending on the nature of the stress being experienced. The first two approaches are utilised in settings involving cooperation, whereas the latter are utilised in settings that involve low competition and voluntary cooperation. Stress in the workplace was reduced as a result of collaborative efforts.

Two companies participating in co-opetition concluded that they needed to reorganise their efforts and either zero in on their core competencies or switch the nature of the co-opetition from horizontal to vertical. It was speculated that a company's rivals or business partners were responsible for compelling it to stop producing and selling its goods. They were able to dispel any remaining questions by working together, which was to the advantage of both parties. Regarding resolving and making meaning of paradoxes, Lüscher and Lewis provided a similar strategy back in 2008. Other partners and rivals turned to competition to relieve the tension brought on by the contentious situation. It would appear that, except in two instances, the opposing causes that drive tensions in co-opetition were not identified, resolved, or synthesised. It is because all disagreements and tensions were resolved through either competition or avoidance⁹. These strategies for defusing tense situations are analogous to the dialectical tradition, which holds that one force must prevail over the other (either through collaboration or competition) (Das & Teng, 2000).

According to Fernandez et al. (2014), competitive tensions can arise on three distinct levels, each of which has its unique set of primary causes: between organisations, within organisations, and between individuals. Each of these levels has a unique set of factors contributing to developing competitive tensions. There are many potential resolutions to these conflicts; the right one will depend on what caused them. Commercial conflicts are made worse due to the ongoing struggle to find a middle ground between value creation and appropriation. Because both parties want some of the value they helped to produce, there is competition between them. This competition causes friction. Two institutional bodies can only exercise the legal authority to regulate these disagreements with responsibilities that are opposed to one another in terms of either lessening or escalating these tensions. However, the organisation and coordination of the competitive program needed to be handled by a third-party business. For instance, all of the stakeholders engaged in the delivery challenges worked together to devise solutions that were either technically or commercially feasible.

We could get through the friction between the collective and the individuals by expanding the program's scope with the money we saved by cutting back on our spending. However, because the two institutional parties had different ideas about what the program was supposed to accomplish, the competition that followed benefited the producers. The primary sources of contention at this business level were the challenge of sharing vs. protecting information and the collision of two distinct manufacturing processes. Because the team members came from

competing companies, it was difficult for them to perceive each other in a cooperative light when working together.

Competitors and allies formed a second team of two project managers in total—one from each organisation—to deal with problems on these two levels. The project managers believed they had the authority to decide whether to disclose information deemed essential to the project's success. In light of this, it is possible to distinguish between two distinct ways businesses respond to the challenges of competition. The party that placed the order significantly impacted the manufacturers' ability to compete in the market and compelled them to collaborate on their efforts. To successfully coordinate the teams' work, the project managers oversaw the healthy competition and supportive collaboration between the teams.

At the level of the organisation, use value and exchange value are the two categories of value that Bowman and Ambrosini (2000) identify as being present. The degree to which a product can fulfill the requirements of the market for which it was designed is the primary determinant of how useful that product is (e.g., the speed or quality of performance of a new task or the aesthetics or performance features of a new product or service). The term "exchange value" can refer to either the monetary amount obtained at a certain time (during which the exchange of the new work, good, service, or product) or the monetary amount paid by the buyer to the seller in exchange for the use value. Value creation is contingent on the relative amount of value that is subjectively realised by a target user (or buyer) who is the focus of value creation because "the relative amount of value that is subjectively realised by a target user (or buyer) who is the focus of value creation—whether individual, organisation, or society—and that this subjective value realisation must at least translate into the user's willingness to exchange a monetary amount for the value received" (Lepak et al., 2007, p. 182).

When assessing creative endeavours, their uniqueness and applicability are considered. A higher use value and exchange value are likely to be associated with the work, product, or service being evaluated if it is regarded as more unique and acceptable. Because the process of creating value is highly subjective and dependent on the surrounding environment, its outcome is notoriously difficult to forecast. Because the user needs expert knowledge of the item being evaluated and the alternatives available at the moment the item is being rated, this method is vulnerable to subjectivity (value). In addition, he will be able to determine the value of the items in question now that he has this information. The social or cultural context is inseparable from

the one in which innovation and appropriateness are evaluated, and neither can exist independently of the other. Therefore, the type of value that is created, how it is regarded as valuable, and the processes that are utilised in creating this value rely on the source of the value and the level of analysis performed. It is necessary to differentiate between the contributions made by individuals, organisations, and society to highlight the significance of each type of contribution.

Mechanisms of rivalry and isolation were two value-capture methods that were studied in the relevant literature (Lepak et al., 2007). In contrast to the traditional authoritarian model, the competitive model may shed light on how value is distributed across users and competitors. As a direct result of increased levels of competition, the value of a commodity or currency that is traded will decrease (fall) until supply and demand reach a state of equilibrium (increasing supply). In contrast, an isolating mechanism is any factual, physical, or legal obstacle that stops a rival from duplicating the value-creating (new) activity, product, or service. These barriers can be factual, they can be physical, and they can get even legal. Businesses can continue to generate value for themselves by making full use of and capitalising on their resources and expertise, even while they implement isolation strategies to stop competitors from achieving the same results (such as patents, causal ambiguity, trademarks, etc.).

Co-opetition is when two or more businesses that are in direct competition with one another work together to create value while at the same time taking credit for their contributions. Examples of value appropriation strategies include market competition (such as the launch of products based on jointly developed technology) and higher-level learning processes (e.g., learning races in alliances). Relational and firm-level strategies have their unique aims and logic of value creation and appropriation (Ritala & Tidstrom, 2014). The authors demonstrate how varied relational and firm-level techniques influence the appropriation and creation of value in various ways by demonstrating their findings. Because each idea shifts as a direct result of its connection to the other, relational and organisational tactics have a good chance of being impacted by the dynamic interaction between the two conceptions.

2.4 DRIVERS OF CO-OPETITION

One of the key study goals for this issue is to figure out why there is such a thing as co-opetition. Or, why do competing businesses choose to work together? One type of IOR is cooperative partnerships, and while they share some similarities, there are also significant differences

between them. Consequently, we have decided to alter the common IOR drivers rather than concentrating on the factors unique to the competition.

Oliver (1990) identifies six factors—necessity, asymmetry, reciprocity, efficiency, stability, and legitimacy—as the primary motivators behind forming relationships. The concept of necessity draws attention to the fact that companies frequently form relationships with other organisations to satisfy the requirements imposed by laws or regulations. IORs are sometimes triggered due to directives issued by higher authorities (such as government agencies, laws, businesses, or professional regulating organisations). The existence of asymmetry demonstrates that IORs are driven by the possibility of exerting influence on another organisation or the assets it controls. Size of the organisation, control over the norms that regulate trade, the ability to choose a "do without" option, the effectiveness of coercive techniques, and the concentration of inputs are all factors that can affect inter-organisational power.

Reciprocity describes IORs for achieving similar or mutually beneficial goals or interests. Motives of reciprocity place a greater emphasis on the coordination, collaboration, and cooperation between organisations as opposed to the dominance, power, and control of those organisations. The theory of efficiency maintains that the reasons for an organisation's IOR are its efforts to improve its internal input/output ratio. If a company wants to increase its return on assets or lower its unit costs, waste, downtime, or cost per patient or customer, it will look for IORs to improve its efficiency. Organisations develop IORs to promote stability, highlighted by stability (predictability). IORs, according to this point of view, serve as coping mechanisms that help humans avoid, anticipate, or absorb environmental uncertainty to produce a reliable, ordered pattern of resource flows and exchanges. These are created in part so that they may improve their legitimacy. They might result from an organisation's attempt to demonstrate or enhance its stature or position, or to demonstrate or improve its compliance to commonly recognised standards within an institutional framework. Organisations will likely try to create ties with other organisations whose legitimacy is seen as being much greater than that of their own.

Need is the only one of these causes that results in businesses deliberately creating cooperative connections to accomplish particular goals imposed from the outside. The other ones, on the other hand, lead to vitally important competitive partnerships that are mandated by law or regulation. It explains the creation of IORs on its own; a firm's choice to link with another

company can be influenced by various factors interacting simultaneously. The fact that these determinants illustrate how ideas from several theoretical paradigms (including but not limited to TCE, institutional theory, and social capital theory, among others) may coexist to explain the development of IOR is one of the strengths of these determinants.

Gulati and Gargiulo (1999) used the concepts of resource dependence and social network theory in their research on the origins of inter-organisational connections. It allowed them to understand better how organisations choose other businesses to collaborate. They provided more specific evidence pointing to the notion that external variables were mostly connected with resource reliance. There is a possibility that tradition will play a factor in deciding whether or not an organisation should take part in a partnership; nevertheless, the social structure into which the organisation is embedded will play a part in the choice of partners. Establishing connections with other organisations is one strategy businesses use to reduce the degree to which they depend on the organisations located in their immediate environment and to alleviate some of the anxiety brought on by this dependency. Therefore, resource reliance serves as a kind of middleman between organisational behaviour and the demands of the environment (Pfeffer and Salancik, 1978).

Organisations need information about the capabilities, needs, and dependability of potential partners so that they can decide on who they will collaborate. When organisations are building future alliances, they turn to this network as a resource for guidance. As a result, the likelihood that these choices will be included in the new network is increased. This network will continue to grow, which will result in the maturation of the data bank, including information about possible partners. The network will disseminate information in a timely and reliable manner, allowing organisations to pick and choose with whom to build new partnerships.

The relationship between social activity and social structure has a lot of weight on this issue. The social structure of inter-organisational relationships is the outcome of corporations' decisions at the "micro" level to gain access to resources and minimise the uncertainty associated with choosing alliance partners. This "macro" phenomenon results from these "micro" decisions. Consequently, the likelihood that relationships develop between these organisations is increased by their interdependence, the number of prior direct relationships, the number of prior indirect relationships (structural embeddedness), and the combined network

centrality (positional embeddedness), and all of which contribute to an increased likelihood that relationships will develop between them.

When moving from an emerging to a mature network, the relevance of strategic interdependence will decrease while the significance of combined centrality will increase. It is because network differentiation (maturity) has a favourable influence on the chance that new connections will develop. When a network develops, organisations can use it as a source of information for future partnerships, which lessens the negative effects of external dependence on forming new ties. One explanation for this is that when a network evolves, organisations can use it as a source of information for future partnerships.

According to Ahuja (2000), neither the strategy, the resource demands of companies, nor the social structure, can forecast the development of inter-organisational ties in later work. It was one of his main points. The establishment of links is significantly influenced methodically by opportunities and inducements. The three advantages of technological, commercial, and social capital associated with tenure considerably affect the possibilities and incentives for connection creation presented to firms. The development of a significant innovation gives an alternative route to forming linkages for businesses that do not have the three tenure-based advantages.

Dowling et al. (1996) employed resource dependency and transaction cost theory in their research of co-opetition as a complex connection to account for the reasons for establishing these partnerships. It was done to analyse co-opetition as a complex relationship. According to the resource dependence theory, the formation of co-opetition may result from a combination of internal factors related to the transaction cost theory (importance of resources, asset specificity, and opportunism) and external factors or structural characteristics (concentration, generosity, and interconnectedness). When seen from the outside, the likelihood of co-opetition occurring in a company is increased when that company is globally owned, has a highly integrated business model, and has a less altruistic corporate culture.

Large firms that deal with a diverse range of consumers and suppliers, some of whom may also be rivals, tend to dominate highly concentrated sectors. When fewer resources are available, communities are more likely to depend on one another and engage in conflict with one another over the available resources. One thing that tends to be in short supply in industries with intense competition is the time required to produce freshly designed components or create new

generations of technology. In very unusual circumstances, turning a rival business into a supplier can be the only realistic option.

The quantity or patterns of links or interconnections between local and multinational organisations are what we mean when we talk about interconnectedness. This element is analogous to Oliver's (1990) idea of necessity, which is connected with legally required inter-organisational links and is the major cause of many complex partnerships. Necessity is a key factor in forming many different types of partnerships. One evidence of this rule is in the form of collaborations with Chinese industry rivals. The internal environmental conditions have a role in determining not only the relevance of a resource to an organisation but also the proportion of its inputs and outputs that it contributes. These businesses are more likely to participate in buyer-supplier transactions that include several facets. Switching costs and the complexity of disconnecting these links are increased when assets are coupled to a single transaction.

Even if a business partner's strategy changes and eventually becomes a competitor, the presence of such assets may make it difficult for the firm to find a new customer or supplier. In addition, the availability of specialised resources may encourage behaviour that is exploitative of opportunities. If a component requires more specialised knowledge, either the supplier or a competitor may be able to learn more about it. If you use a rival company as a supplier while developing a new product, the rival company might discover your plans. Therefore, supply companies build complex relationships with one another to achieve the ideal state of perfect opportunism.

Numerous studies have been conducted to understand the factors that motivate competitors to work together. According to Tether (2002), competitors work together to develop standards, gain a better understanding of the capabilities of their adversaries, and address issues that are not directly related to competition. For example, competitors may work together to address issues concerning regulations and legislative change regarding environmental controls. Fjeldstad et al. (2004) stated that increases in market penetration, size, and concentration would increase the likelihood that a rival would engage in strategic cooperation. According to Gnyawali and Park (2009), competition between small and medium-sized enterprises (SMEs) is driven by high R&D costs in high-tech industries¹⁹, a short product life cycle, and technology

convergence. The time it takes a company to bring a product to market has to be shortened if the company is to have a short product life cycle.

This allows the company to release its goods at the most profitable moment and maintain adequate earnings throughout the product's useful life. Competitors can now rapidly infuse their technological characteristics into society through institutional norms thanks to the establishment of new industrial structures and standards. In addition, firms that compete with one another try to establish the new industry structures and standards that are necessary to allow their expansion and proliferation. When there is a great deal of technical unpredictability, having a competitive partnership with another company might be an effective way to combine R&D costs, skills, and risks. According to the authors, small and medium-sized enterprises (SMEs) decide which of their rivals to collaborate with based on typical relationship strategies. These relationship strategies include complementarities between partners, reasons for cost and risk sharing, and equivalent or overlapping resources (Carayannis & Alexander, 2003).

These external factors, together with the distinguishing qualities of the firm, will play a role in determining whether or not a business collaborates with one of its competitors. It contradicts Ahuja's (2000) assumption that opportunities and incentives constantly alter link-building behaviour. Consequently, the strategy of co-opetition will be used if its predicted value is positive and bigger than the projected value of any other forms of governance aimed to accomplish the same goal). Specifically, fairness issues affect partners' expectations of future wealth generation and capture all during the negotiation and formation processes. The partners need to be persuaded that the anticipated benefit of the cooperation will be commensurate with their participation and that they will not detract from the value of the partnership in any way. Only under these circumstances would competitors forge contacts with potential co-competitors. The drivers who are willing to cooperate.

2.5 TYPOLOGIES OF COOPETITION

In the research that has been done on the topic, co-opetition techniques have been categorised using several different typologies. In 1996, Dowling and colleagues published a typology for co-opetition, often known as "multifaceted links." This study was published in the year 1996. The individuals who make up the first category are the buyers and vendors who participate in direct market rivalry.

The second kind of rivalry is one of an indirect nature and takes place between customers and sellers. The connection develops when a company competes with a client, supplier, or partner on an indirect level rather than on a direct one. Direct competition is the opposite of indirect competition. In this sense, types of rivalry, such as lobbying or legal actions, are seen as indirect forms of competition since they constitute a threat without directly interfering with the activities of the other firm. The third type is called "partners in the competition," It refers to circumstances in which firms in direct conflict with one another join forces in some way, such as via a joint venture, a research collaboration, or a licensing deal. Partners pool their resources and efforts to create a more formidable defense against attacks from hostile actors.

Similarly, Pellegrin-Boucher et al. (2013) included a dynamic component in their study by analysing the development of competing initiatives within the ERPI business. They distinguished between two types of collaboration: 1) vertical cooperation, and 2) cooperative competition. When two firms vertically engage with one another, one of the companies will choose to target the other company's market. Despite this decision, they continue to collaborate; for more information. A merger refers to when two companies pool their resources and abilities in the same field of expertise before or after the era of direct rivalry.

According to the findings of Dagnino and Padula (2002)'s study of the automotive sector, there are four distinct types of cooperative competition: dyadic (simple or complex), network, vertical, and horizontal (simple or complex). The term "simple dyadic cooperation," which is also known as "two-firm partnerships" or "corporate dyads," describes the interactions that take place between firms that are in direct competition with one another at a single level of the value chain. Some examples of this type of cooperation include research and development consortiums. Interactions between the same two organisations at different value chain stages are depicted by the term complex dyadic co-opetition. For example, two companies may cooperate on vehicle research and development and production while competing for market share in the distribution of automobiles. Multiple organisations operating at a single level of the value chain that are linked together by relatively straightforward forms of network collaboration, such as parallel sourcing partnerships between consumers and suppliers. Several businesses engage in cutthroat competition inside intricate networks at varying points throughout the value chain. These networks may take the form of industrial zones, corporate clusters, or international agreements.

Carayannis and Alexander (2006) established the notion of forced co-opetition as part of their investigation of the co-opetition. According to this theory, co-opetition is generated and maintained by institutional factors and public monies. Mariani (2007) devised emergent co-opetition, an unplanned technique in which Italian opera houses joined in co-opetition due to being obliged by authorities to cooperate. The significance of strategic learning as a self-reinforcing mechanism that transformed forced cooperation into a conscious and emergent process is emphasised. This transition occurred because strategic learning allowed for new ways of working together.

Luo (2007) has published a categorisation of the rivalry in international markets. A multinational corporation (MNE) can find itself in one of these four situations, depending on the degree of cooperation and competition that occurs concurrently among global competitors: competing, isolating, collaborating, or adapting. This kind of circumstance is referred to as a contesting scenario. By maintaining low levels of rivalry and collaboration with other significant global players, a firm might create an environment characterised by a lack of interaction with such players. It can lead to an isolated feeling. The company streamlines its worldwide investments and operations independently, and in the foreign marketplaces in which it competes, it acts or responds independently. A significant global player makes it a point to keep a high level of cooperation with another important global player while keeping the degree of competition between them at a low level to discover shared synergies that are the consequence of their complementary resources and talents.

Two essential conditions must be met before global competitors work together successfully: strong resource complementarity and limited market similarity. Adapting is a circumstance in which two primary parties are required to collaborate to attain their objectives while simultaneously maintaining a fierce level of rivalry with one another. The addition of a global competition dimension and the completion of this typology with a second one that adds both geographic breadth (the number of foreign markets in which the MNE engages in co-opetition) and rivalrous breadth (the number of rivals with whom the MNE simultaneously competes and cooperates). In addition, tactics that enable MNEs to respond to global competition add originality to the research. Although the first typology proposed by (Luo, 2007) is similar to the one proposed by Bengtsson et al. (2014).

According to what was said before, Luo (2007) divides the four requirements into two distinct groups: rivalrous breadth and geographic breadth. These requirements are as follows: (1) The circumstances of the dispersal, (2) Concentration under the given conditions, (3) A situation in which connections are made, or (4) an instance of networking. It is claimed that a scenario disperses when a global player engages in competition and collaboration with a chosen selection of global competitors across numerous global marketplaces. A global player is said to be in a concentrating scenario when they maintain concurrent rivalry and collaboration with a limited number of competitors in many international markets. It is generally done to insulate themselves from the onslaught of other MNEs. In a small number of concentrated markets, a global firm is said to be in a connecting scenario when it is concurrently engaged in competition and collaboration with several international competitors. In a networking scenario, a global actor simultaneously competes and collaborates with a large number of other global rivals in a large number of international marketplaces.

Gnyawali et al. (2008) provided co-opetition techniques may be classified according to (1) the axis of business contacts, (2) the number of individuals participating, (3) the degree of analysis, and (4) the location of cooperation and competition. In the context of the industrial value chain, vertically next to one another competitors are regarded as involved in vertical co-opetition (rivals at the same stage in the industry value chain). The number of active participants differentiates dyadic co-opetition (between two firms) from multiple co-opetition (between three or more organisations). Because of this dichotomy, we may distinguish between three levels of analysis: the company, the dyad, and the network. Scholars try to address the geographical and temporal separation and collocation of the cooperative and competitive components of the relationship by using the phrase "locus of co-opetition." This phrase is a play on the phrase "locus of competition," which refers to the geographical location of a competition. When competition and cooperation occur simultaneously in the same time and space, the same actors participate in both activities in the same locations. Actors will compete in one area while collaborating in another when collaboration and competition are seen as independent activities.

Bengtsson et al. (2010) discriminated between competition-dominating, cooperation-dominant, and balanced co-opetition based on the strength of cooperative vs. competitive components/activities of co-opetitive partnerships. It was done in addition to their two-continuum model of co-opetition. The terms "weak cooperation" and "weak competitiveness" refer to circumstances wherever is little to no contact between businesses engaged in

cooperative or competitive endeavors. Firm contact along the cooperative and competitive continuums is representative of robust cooperation and intense competition, which provide the optimal setting for co-opetition.

It suggests that opponents are most likely to be the source of tension in situations with a high degree of antagonism and symmetry because frequent movements and countermoves characterise such activities. Weak collaboration and robust competition result from low cooperation in cooperative activities and increased competitiveness in competitive activities. They suggest a situation where significant tensions originate from cooperative and competitive interactions. These results indicate that there is a situation in which there are substantial tensions arising from both cooperative and competitive activities. The term "co-opetition" refers to interaction with low overall pressures and, as a result, restricted dynamics. This interaction is produced when strong cooperation and moderate competition are paired together.

Rusko (2011) suggests a combination typology that incorporates two dimensions: the phases of the supply chain, as well as the degree to which external (or internal) cooperation is present. Bengtsson and Kock (2000) stated that the horizontal axis illustrates the supply chain stages. The four primary strategic areas of collaboration.

The level of success an organisation has had with other businesses engaging in cooperative endeavours affects the organisations' assessments of the kind of cooperative relationships they value the most (Schiavone & Simoni, 2011). When faced with the fact that they do not have sufficient past expertise, organisations often take a cautious stance. As a result, they favour intra-network co-opetition, sometimes known as working with rivals while operating inside a reliable network. The more experience a company has, the better it will be able to differentiate between attempts that are likely to be successful and those that are unlikely to be successful. Despite this, companies are eager to continue increasing their portfolio of successful projects to have the upper hand in co-opetition.

As a consequence of this, people will consider the benefits of concurrently participating in rival relationships. As a result, they will be more likely to choose an inter-network cooperative approach over an intra-network cooperative strategy. At last, businesses that have accumulated a significant amount of expertise will establish connections with the most formidable of their rivals. Consequently, they will abstain from participating in any additional conceivable networks, concentrating their efforts instead on cultivating the most fruitful cooperative ties and

pledging their allegiance to a single collaboration. It indicates that there should be a resumption of competition inside networks.

A typology of cooperation inside and between value networks. The writers are concentrating on the extent of competition inside value networks and the dynamics of working together are the two key areas of investigation. The authors distinguish between cooperative competition across several value networks and cooperative competition within the same value network based on the degree of the relationship. The first scenario is "players who operate in the same value network environment collaborating to meet sufficiently similar consumer needs by providing value to the same (or nearly the same client base". Moreover, it refers to a situation in which players who operate in the same value network environment collaborate to meet similar consumer needs. In cases like this, the co-opetitive relationship may consist of contemporaneous cooperation and rivalry within the same territory. The second scenario refers to a situation in which co-opetition occurs outside a single value network, resulting in rivalry and collaboration between competitors that are more diversified than the first scenario's participants.

Value leveraging and value co-creation are the two unique processes that the authors evaluate while analysing the nature of cooperation. Value leverage begins with the search for synergies and complementarities among various stakeholders' resources, competencies, and talents to deliver higher customer value than would be possible if these assets were utilised individually. It is done to maximise value delivery to customers. As a result, value leverage may be understood as a set of causes connected to competitiveness that lead to utilising supplemental and complementary resources. Second, the process of cooperating with others to develop new goods and services, which ultimately results in new or enhanced sources of consumer value, is referred to as value co-creation. Within the context of the value network, customers, suppliers, and rivals are only some of the numerous stakeholders that have the potential to engage in the co-creation of value. Despite this, the primary emphasis of this research is on the process through which competitors co-create value. The participants in a competitive market agree to work together to expand their own markets and develop new consumer goods.

This study focuses on the effects of co-opetition on competitors and partners in terms of their ability to innovate, competitive action, profitability, and productivity. Previous research has examined horizontal alliances and joint ventures' success, failure, stability, and dissolution (Das

& Teng, 2000). It focuses on the effects of co-opetition on competitors and partners in terms of their ability. It might mean that the other partner is unsuccessful, and vice versa. This decision is contingent on the subjectivity and individual perceptions of success and failure that each partner brings to the table. This decision was also influenced by the fact that earlier research favoured relationship stability or continuity while discounting instability or dissolution as avoidable outcomes.

Research on collaborative consumption has been going on for a very long period. Co-opetition is seen as anti-competitive or a kind of collusion since it boosts corporation profits at the price of society's prosperity. This view originates from an emphasis on the potentially detrimental effects that competitor cooperation might have on the market's level of competition. This impression of co-opetition persisted until 1984 when the National Cooperative Research and Production Act was created. This law lessens the possible antitrust obligations that research joint ventures and organisations that set standards are responsible. The advocates of this point of view consider the potential efficiencies that may be achieved via cooperation and the advantages that businesses can get from the complementary resources their business partners provide. According to Ingram and Yue (2008), the prospect of collaboration between rivals should not be seen as a violation of antitrust regulations but rather as a good economic practice. They state that their research supports this viewpoint.

According to Gnyawali et al. (2008), the effects of co-opetition may be studied on a business level, as well as on a bilateral level, a multilateral level, and an industrial level. Prior research has shown that strategies combining competitive and cooperative behaviour at the company level are more effective at raising rents for firms than adopting a pure competitive or cooperative behaviour. It is because these strategies raise rents for firms more than adopting either pure competitive or cooperative behaviour. When considered in this context, syncretic rent behaviour becomes important. Lado et al. (1997) outline four different rent-seeking behaviours—these behaviours are by the cooperative and competitive firm-level orientations—conduct that is rent-seeking in a cooperative, monopolistic, competitive, and syncretic manner.

2.6 MODELS OF INNOVATION

Technology may advance in two distinct ways: by making incremental improvements to existing items and processes or by making revolutionary leaps when new concepts are introduced. Both of these approaches are distinct from one another. In the context of this

discussion, Christensen (1997) makes a distinction between "sustaining innovations" and "disruptive innovations."

Sustaining innovations prolong the usable life of existing goods and allow established enterprises to polish their existing competencies. On the other hand, Romanelli and Tushman (1994, p. 1143) write that "organisations establish an initial pattern of activity, based on the environmental conditions prevailing and the managerial decisions made during their time of the founding. Then, due to inertia and institutionalisation, organisations develop coherent systems of shared understandings that support the continuation of the established patterns. These systems make it easier to continue using the same patterns that have already been developed. Because they are so focused on maintaining what is successful, CEOs of businesses sometimes fail to see potentially game-changing ideas. This phenomenon is called the "innovation conundrum" and describes established firms' inclination to disregard disruptive technologies and pass on developing market potential.

The phrase "disruptive innovation" is qualitatively and functionally different from what already exists in the market, such as new technology, commodities, services, or processes. It can also refer to any innovation that has the potential to alter an existing market significantly. Because of their one-of-a-kind characteristics, conventional marketing approaches are ineffectual, paving the way for them to create or construct new markets. Christensen (1997) identifies five common elements with revolutionary advances. Disruptive innovations often outperform conventional goods in various categories, including price, complexity, size, and usability.

- i. Unmet or served in the wrong manner
- ii. For innovative technologies to make an impact, they have to cater to the requirements of a particular market subset that was not previously addressed or given sufficient attention.
- iii. An improved performance all around: The disruptive technology will continue to improve until it can compete successfully in the mainstream market with the solutions that have already been created.
- iv. The usefulness of legacy systems is not immediately rendered obsolete when disruptive technologies are implemented. They instead decrease in value as more time passes. If the new technology cannot supplant the older technology successfully, niche markets will emerge and, in time, develop into formidable rivals.

- v. According to The Innovators' Dilemma, conventional organisations often pass up the opportunities presented by new markets because they lack the resources necessary to adapt to innovations that threaten to disrupt their industry correctly.

Both incremental and revolutionary progress may be examples of innovations that have the potential to upset existing systems. Enhancing and using previously developed inventions using modification and advancement is called incremental innovation. It may be possible to make the existing design more stable by applying incremental enhancements that build on and broaden the applicability of previous knowledge. Radical innovations are the driving force behind economic expansion. These breakthroughs are characterised by large gains in either performance or cost, displacing current markets or establishing new ones. Because the organisation has to make ground-breaking technical breakthroughs to make revolutionary improvements, these kinds of advancements are uncommon. Introducing major change to the status quo requires innovation on several levels of strategic complexity. In most cases, there is an effect on the economic, organisational, social, and technical sectors (Choi & Garcia, 2010).

- a. Technology: Breakthrough inventions sometimes rely on ground-up discoveries of new technology ideas, architectural designs, or material formulations.
- b. Architectural Designs and Materials: The eradication of antiquated practices and the implementation of ground-breaking technologies that set the path for the further advancement of technology in the future.

Due to disruptive advances, new markets and industries have come into being. To make the most of technical improvements, new business partnerships, markets, and rivals need to emerge to satisfy growing customer demand. The vast majority of the time, a radical innovation will result in a significant increase in customer value since it will finally fulfill a long-standing customer need.

- a. Organisation: To develop game-changing innovations, it is often necessary for the firm to make modifications to its overall strategy, organisational design, practices, people, competencies, incentives, and culture. It is the case in many cases. The fact that manufacturers don't need to learn anything new to make incremental improvements is one of the primary reasons why innovative technologies often create disruption.
- b. On a social level, those who put radical ideas into practise generally need to make substantial adjustments to how they think and behave. Customers will sometimes be

instructed to forget all they have ever known. Despite having many beneficial characteristics, radical innovations may be highly distressing to consumers since they supply new goods and value propositions. It is because radical innovations present customers with completely new options.

The following are some other instances of innovative literary work:

It's possible to classify an invention as a product, a service, or a process. Intangible methods that provide clients with a more satisfying experience might be considered service. An organization may see productivity increase due to implementing new process innovations. Technological innovation, which should not be confused with administrative innovation, refers to the use of scientific and engineering concepts in developing new applications for technology or achieving a specific technical goal. Administration innovations are novel ideas that make a company's operations more efficient in some way. In a circuitous sense, they are tied to the core objectives that the organisation has set for itself. They are now responsible for many managerial tasks. Creative thinking in management and administration.

As opposed to modular design, which focuses on reusing existing elements, architectural innovation focuses on envisioning familiar objects in innovative ways while sticking to basic design principles. Modular design is an example of architectural innovation (Henderson & Clark, 1990). The study was carried out by Magnusson, Lindstrom, and Berggren (2003). It is called "modular innovation" when some product components are updated with cutting-edge technology. Magnusson et al. (2003) did the research. It alters the fundamental concepts behind the design while maintaining most of the existing interactions between the various components. Table 13 presents a classification of the many advancements that have been made. The first thing that must be done to come up with original concepts is to identify the point of departure and the motivation behind the idea. The confluence of a person's desires and the resources at their disposal gives rise to their works of art.

One potential source of innovation is found on the supply side, which examines the products and services companies are willing to deliver (Sarasvathy & Dew, 2004). It is possible to consider both the supply and demand sides, with the demand side emphasizing what buyers have indicated they are interested. When it comes to the demand side of the company, managers are always on the lookout for developing trends and preferences that might result from changes

in technology, social conventions, or government legislation. Specifically, they are looking for the following.

These preferences and inclinations convert into unmet needs and demands, which motivates management to develop new goods. The responsibility of marketing management is to find out what customers desire to identify demands that are not being met. In the supply industry, one strategy to innovate is to develop an original product and then effectively sell that product to end users. The application of cutting-edge concepts is the primary emphasis here, specifically expanding what currently exists in goods, processes, strategies, domains, or economic prospects resulting from such implementation (Morris et al., 2010). Drucker (1985) identified the seven aspects that follow as potential contributors to creative output: The unexpected, the inconsistent, the needs of the process, the industry and market, the demographics, the way people view things, and what we've learned are all subject to change.

- i. Unpredictable events force businesses that value innovation to consider social, political, cultural, economic, and macroenvironmental problems as entrepreneurial opportunities that might result in industry-leading inventions. It is because these types of problems are often at the root of the most pressing issues facing societies today.
- ii. This mismatch is something that Drucker refers to as "expectations and outcomes," and it takes place when there are opportunities for better aligning the behaviours of producers and consumers.
- iii. Requirements from the production process: Sometimes, new ideas are developed when the "process requirements" are not satisfied by any currently available things. It indicates that customers' requirements are not being adequately met by the items that are now available.
- iv. The fourth component is the progression of the market and the industries connected to it. When there is a change in the regulatory landscape, the industrial landscape, the technical landscape, the political landscape, the economic landscape, the cultural landscape, or the commercial landscape, new ideas are certain to surface.
- v. Changes in the region's demographics: alterations in the average age, income and racial mix of the population are all examples of circumstances that might lead to the development of novel concepts.

- vi. Changes in perception and the functioning of social cognitive frameworks may sometimes give rise to innovations. Because of this, people's ways of thinking about things may shift, affecting how enticing a product is to consumers.
- vii. Expanding one's knowledge may be a source of innovation, as shown in the use of genetically modified organisms in food production (GMOs).

2.7 STATIC AND DYNAMIC MODELS

The likelihood of a company adopting an innovation, capitalising on it, and maintaining revenues from it is an essential aspect that may be modeled using innovation models. These models may be used to simulate innovation. Either a static or a dynamic approach might be used with these models. The cross-sectional knowledge and skill set of a company and its investment incentives over various epochs are modeled using static models. It is not accurate to say that inventions develop over time. It is feasible to track the development of an innovation after it has been released into the market by using a longitudinal study in conjunction with a dynamic model.

2.7.1 Static Models

2.7.1.1 Schumpeterian

To anticipate how firm age and size influence innovation, these models analyse a variety of variables (Schumpeter, 1950). According to Schumpeter, small, entrepreneurial enterprises have a competitive edge owing to their adaptability and willingness to experiment. He continued by stating that enormous firms with varying monopolistic power foster innovation. Subsequently, he provided evidence to support the claim that big firms are more likely to innovate than smaller ones since they often hold various assets that facilitate the transition from idea conception to concept realisation and production. Larger businesses may also be better positioned to defend their intellectual property, get cost savings through economies of scale across the supply chain, and attract more investors.

2.7.1.2 Model of abernathy-clarke

According to this hypothesis, established rivals are superior to new entrants in generating substantial technical advancements. This concept emphasises market skills while distinguishing them from technology and business knowledge. Suppose an established participant in a market

may utilise its better expertise and resources to the injury of newcomers. In that case, it is permitted if such advantages are essential for the equitable distribution of profits.

Innovations may be classed based on their effect on incumbent sectors and technology as either: First, continual experimentation, so long as the business maintains its current degree of technical and commercial expertise. 2) A niche invention circumvents the market's technical and commercial constraints. Thirdly, disruptive innovation enhances market capacities while making obsolete technology advantages. Lastly, architectural innovation is described as taking place when both the market and technology capacities are outmoded.

2.7.1.3 Henderson-clark

This hypothesis aims to explain why it is so tricky for market leaders to execute modifications that seem trivial at first look but are, in fact, revolutionary architectural enhancements (Henderson and Clark, 1990). According to the authors, products comprise a network of interconnected elements, and knowing how these parts interact together is vital to their production. According to them, inventions fall into four categories: An innovation is incremental if it enhances our comprehension of its components and the architecture of the broader system. 2) Component and architectural expertise is lost due to revolutionary advances. When architectural knowledge is lost, but component knowledge is increased, this is called architectural innovation. 4) Modular innovation happens when comprehension of the whole increases but an understanding of its pieces decreases.

2.7.1.4 Normal teece

This model analyses the processes deriving value from readily replicable technologies and their corresponding assets. This model provides a more accurate depiction of an inventor's chances of benefitting from an innovation. Strong imitability and easy-to-copy technologies make it difficult for the inventor to generate income if additional assets are readily accessible or superfluous. Suppose the complementary assets are sizable and privately held, the owner benefits. The inventor will be paid if the invention is difficult to copy and has poor imitability. It is particularly true if the supporting resources are accessible or of minor importance. If complementary assets are valuable, rare, and readily imitated, whoever controls both assets or has the more valued complementary or imitability regime will come out on top.

This model illustrates the dynamic evolution of an industry's enterprises in response to technological advancement. This model portrays the development of technology as a sequence

of distinct phases. The writers classify an invention's development phases as amorphous, nascent, and mature. There are various technical and commercial risks at this time. Businesses are not sure how much or whether they should spend on research and development. In this era of sophisticated product technology, custom designs are ubiquitous yet infamously costly and difficult. However, particular markets may need specialised designs. There is little innovation in terms of processes at this time. During this transitional period, corporations' network with consumers to better comprehend their wants, and manufacturing standardization results in the dominant form's emergence. During this period, process innovation becomes more significant than product innovation. At this stage, products are constructed based on the dominant design, therefore, process innovation is prioritised. Currently, most product enhancements are accomplished in tiny, gradual increments. This cycle is repeated a new technology anytime with the potential to replace the existing one arises.

2.8 INNOVATIVE CLIMATE AND PERFORMANCE

Public, for-profit, and non-profit organisations are all confronted with the fundamental challenge of defining performance. As performance is a multidimensional notion, there is no one wide gauge for it. Because many members of an organisation's performance components have varied objectives and internal and external stakeholders have distinct political interests, it is challenging to define performance and determine how well the company is doing in the real world. According to experts, performance is more than a fabricated idea that resists straightforward measurement (Brewer et al., 2000). Instead, we should use internal and external sizes to measure the performance of an organisation. When analysing a company's performance, it is crucial to consider employee input and external stakeholders' feedback. When production, outcome, time, targets, goals, objectives, purposes, and missions, constituencies, such as members of an organisation, taxpayers, consumers, and politicians, constituents, and measurement levels all work together, a clearer picture of performance emerges (e.g., individual, group, program, and agency).

The ability to quantify outcomes is a primary concern for enterprises of all types, whether for-profit, public, or private. In practise, many definitions focus on the results that an organisation and its stakeholders have generated through time, such as efficiency (Swanson and Holton, 2001). In other words, the focus on measurables is centred on the needs for measurement, such as input, output, cost, and profit. Organisational performance increasingly extends beyond

outputs, productivity, and efficiency measurements. According to Moynihan (2008), the definition of "performance" has been enlarged to include "effectiveness," or the extent to which an organisation or programme can achieve its goals.

Efficiency (or productivity), effectiveness, quality, and equality may be used to measure the performance of modern organisations. Boyne (2003) uses the results of 65 studies to develop seven criteria for evaluating performance (which may be a proxy for some or all of the above, depending on the questions posed to service users). A 1992 study by the GAO assesses the success of programmes at federal agencies with more than 1,000 employees and offers eleven performance indicators. When measuring their performance, non-profits should prioritise the views and concerns of their most significant stakeholders, including companies, government agencies, citizens, and customers, above monetary values (Berman, 2006).

The success of a business in the RDT depends on various criteria, two of which are the organisation's effectiveness and efficiency. The effectiveness is based on how well an organisation interacts with its surroundings, while efficiency is concerned with the smoothness of its internal processes. The phrase "organisational effectiveness" refers to the capacity of an organisation to "meet the needs of the numerous groups and organisations with activities" (Pfeffer and Salancki, 2003, p. 11). A measure of efficiency is an internal evaluation of the number of resources necessary to complete a particular activity. According to proponents of the RDP and the system resource approach, a company's viability is determined by its ability to acquire the necessary resources to operate. The availability and effectiveness with which an organisation obtains and uses its resources are also key performance indicators. The achievement of a company's mission, vision, and goals rests on its capacity to measure and evaluate its own performance effectively.

According to this research, performance happens when an organisation effectively completes its specified duties. This strategy is predicated on the premise that "organisations will function better if people inside them set goals and evaluate their performance against those goals" (Rainey & Rainey, 2003, p. 129). Having well-defined goals and dependable measurements is essential to the success of any firm.

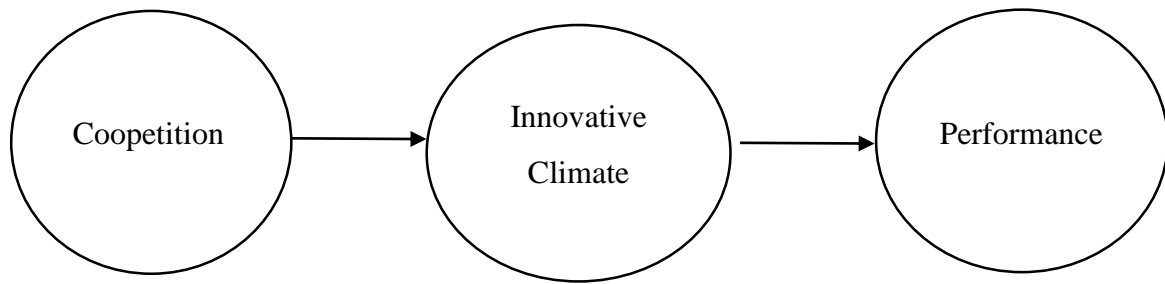


Figure 2.1 Theoretical Framework

2.9 HYPOTHESES

H1: The strength of the coopetition strategy positively impacts the innovative climate of the non-profit organisations.

H2: A high level of innovative climate for non-profit organisations is positively associated with the performance.

H3: Innovative climate mediates the relationships between coopetition and performance of the non-profit organisations.

3 METHODOLOGY

A study can be organized in a number of different ways; however, the mono, mixed, and multiple method structures are the ones that are used most frequently (Saunders et al., 2007). It is also feasible to gather and integrate a single set of data (qualitative or quantitative) by employing the mono technique, which makes use of the same set of data analysis tools as the other methods. Tools such as pattern recognition and thematic analysis are utilized in the process of conducting an analysis of qualitative data obtained from interviews. In the event that the data collection was carried out through the use of a survey, however, the data will be analyzed making use of the necessary statistical processes (questionnaire).

It is claimed that a researcher is employing numerous techniques when they obtain the same kind of information but use more than one method to do it. One example of quantitative multiple-method research is doing a survey that combines quantitative questions with an observational approach. A statistical analysis of the data will also be performed. In the same vein, qualitative approaches are equally as legitimate as their quantitative counterparts. One of the most prevalent approaches to the collection and examination of data is known as the mixed-method approach, which is the third type of design. A researcher could begin with the collection and analysis of qualitative data before going on to the collection of quantitative survey data and the statistical analysis of that data. The collected data was analysed using structural equation modeling to address the following research questions:

- a. What drives non-profit organisations to choose co-opetition strategy?
- b. How does non-profit co-opetition impact the innovation climate of the alliances?
- c. How does a non-profit innovative climate influence the alliance's performance?

3.1 RESEARCH METHOD—SURVEY

The variable of competition is measured through a questionnaire adapted from Gulshan (2020), climate change instrument from Campbell (2014), and performance outcome is measured using an adapted scale from Coombes et al. (2011)

3.2 SAMPLING

To evaluate the entire population accurately and equitably, a representative sample must be collected. Probability sampling and non-probability sampling are the two primary types of sampling. This study examines the effect of nonprofit competition on fundraising and

operational outcomes. Purposive sampling is the most appropriate sampling technique because the study will only include managers of non-profit organizations as respondents.

3.3 RESPONSE RATE

The questionnaire was floated to 209 non-profit organizations in Iraq. 153 valid responses were collected and used for the data analysis.

3.4 THE MEASUREMENT INSTRUMENTS

To conduct any type of research, a valid and reliable measuring instrument is essential. Validity is contrasted with dependability, which relates to how regularly an instrument gives the same results. Consequently, utilizing inappropriate measuring equipment can bias results. Three structures have received custom-made instruments, while a fourth is being measured with a brand-new scale.

3.4.1 The Measurement Instrument for Coopetition

The fascinating usage of coopetition in the context of corporate partnerships has been the topic of extensive scholarly investigation. According to management literature, inter-organizational interactions are the natural flow of information between businesses or network nodes. The measurement instrument is adapted from Gulshan (2020).

Table 3.1 Coopetition Scale

| |
|--|
| Cooperate intensively in some activities |
| Commit a significant amount of resources and efforts to the collaboration |
| Share a significant amount of knowledge with each other |
| Exchange many ideas on how to improve our capabilities |
| Create new knowledge through close collaboration |
| Compete intensively in some areas |
| Need the same type of knowledge to develop products, services or solutions |
| Cooperate for the same funding opportunities and grants |
| Are major competitors in different areas |
| Respond rapidly to each other's competitive actions |

3.4.2 The Measurement Instrument for Innovative Climate

The instrument for innovation climate is adapted from Campbell et al. (2014). The scale includes four questions that measure innovation climate.

Table 3.2 Innovation Climate Scale

| |
|--|
| My organization's leadership encourages creative solutions to problems |
| Members at all levels are encouraged to contribute new ideas to improve the organization |
| My organization is open and responsive to change |
| Resources are available to implement new initiatives |

3.4.3 The Measurement Instrument for Performance

Perspectives from both academics and professionals in business have been meticulously documented. However, throughout the past three decades, there has been extensive discussion in the context of nonprofits. Despite the academic community's interest, there are major knowledge gaps when it comes to defining and assessing the effectiveness of non-profits. Success in the nonprofit and philanthropic sectors is notoriously difficult to operationalize, and there is little agreement in the literature on how to define and quantify performance (Glassman & Spahn, 2012). The year is 1994, and the authors are Stewart and Walsh. There is a high level of complexity in defining and measuring the success of non-profits because their financial, social, and legal status is based on the perception of their social value.

The evaluation method used to study social entrepreneurs' performance was derived from a scale created by Coombes et al. (2011) to evaluate the entrepreneurial effectiveness of philanthropic organizations. The eight-item scale used to evaluate performance is shown in Table 3.3.

Table 3.3 Performance Scale

| |
|---|
| Commercial |
| Experiencing an increase in revenue |
| Engaging in more organizational activities |
| Achieving customer satisfaction |
| Expanding organization activities to different locations |
| Social |
| Providing more social services |
| Serving more beneficiaries in the community |
| Expanding social service to different locations |
| Bidding government (or its funding bodies) grants for enterprise activities |

4 DATA ANALYSIS AND DISCUSSION

Theoretical model estimate yields empirical evidence for construct interactions and the relationships between indicators and the construct (measurement model) (structural model). Empirical techniques use acquired data to compare the theoretical framework (measurement and structural models) to reality. To put it simply, it aids in determining whether theory and data are compatible.

The SmartPLS software results are assessed and evaluated using a standardized method. Although structural equation modeling (SEM) analysis is based on two procedures, covariance-based SEM (CB-SEM) and partial least square SEM (PLS-SEM), which require separate software, two methods are employed to analyse the data. It is critical to recognize that there are a few broad principles that might assist researchers in selecting the ideal strategy. For this experiment, I employed PLS-SEM using the SmartPLS program because the theoretical model is meant for the prediction of target constructs with a few second-order constructs, which demands a complex measurement model. Furthermore, because PLS-SEM does not condition normality, the data's normality was not investigated. As a result, the SmartPLS program was employed in the theoretical model analysis in this work.

The purpose of PLS-SEM is to enhance the variance explained by endogenous latent variables, or their R-square; the model's ability to predict is used to assess its efficacy. The three most significant measurement model parameters are reliability, convergent validity, and discriminant validity. The structural model metrics R-square, f-square, and structural path coefficient analysis are critical. Furthermore, PLS-SEM, like CB-SEM, now provides goodness-of-fit measurements such as Standardized Root Mean Square (SRMR), Chi-square, and Normal Fit Index (NFI); however, it is not recommended to publish these metrics because they are not yet trustworthy. As a result, the PLS-SEM analyzes both the structural and measurement models individually. The measurement model is prioritized for evaluation in order to obtain estimates of indicator loadings, construct validity, reliability, and significance.

4.1 MEASUREMENT MODEL

The measurement model is the first step in the evaluation and measurement of data. The data are evaluated for composite reliability, internal consistency, indicator reliability, and average variance obtained from the measurement model (AVE). Notably, the initial evaluation of the measurement model revealed that three cooperation indicators (Coop3, Coop 4, Coop 5) had factor loadings of less than 0.5.

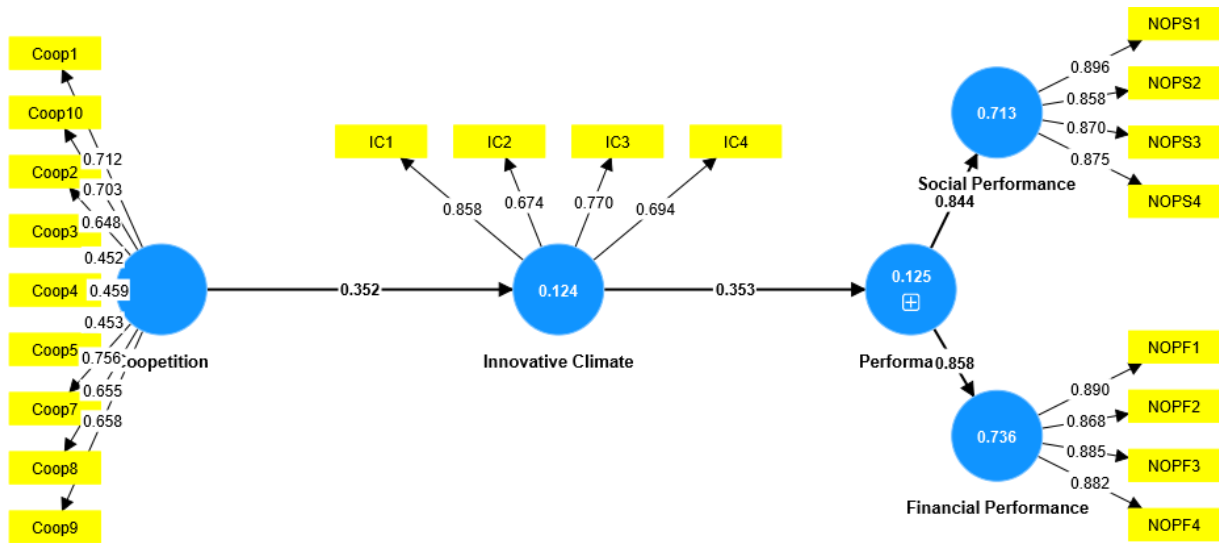


Figure 4.1 Measurement Model 1

In turn, this impacts the extracted average variance as well as the reliability and validity. Before beginning the hypothesis testing, these indications must be eliminated. To improve model fit, a new measurement model is attempted without these indicators. Figure 4.2 illustrates how the improved measurement model (after deleting the indicators having values less than 0.5).

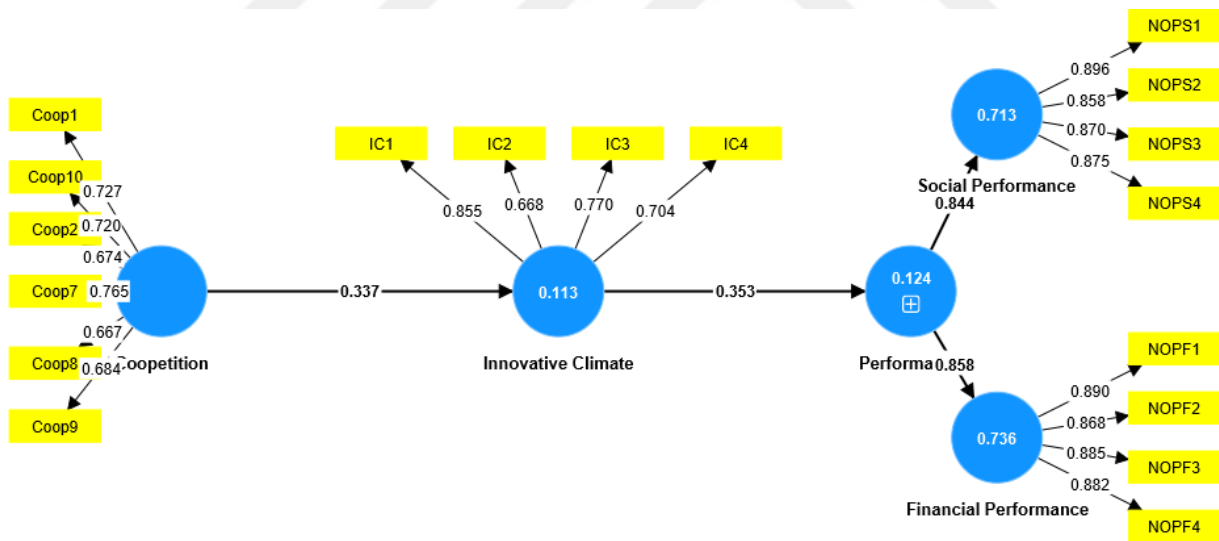


Figure 4.2 Measurement Model Final

Based on the measurement model in Figure 4.2 that suggest that all the indicator values are more than 0.5. It is now possible to present the values of reliability and validity.

4.1.1 Internal Consistency Reliability

Internal consistency reliability and Cronbach's alpha are the major criteria used to assess the measurement model. The indicators' intercorrelations between variables can be estimated using the measurements. Cronbach's alpha values may be found in Table 4.1, and composite reliability values can be found in Table 4.2. Cronbach's alpha is a reliability coefficient with values ranging from 0 to 1; the higher the number, the more trustworthy the data. Table 4.1 illustrate that Cronbach's Alpha for all variables ranges from 0.75 to 0.904. Thus, all the variables qualify the reliability.

Table 4.1 Cronbach's Alpha

| | Cronbach's Alpha |
|-----------------------|------------------|
| Coopetition | 0.800 |
| Performance | 0.886 |
| Innovative Climate | 0.752 |
| Social Performance | 0.898 |
| Financial Performance | 0.904 |

Values in Table 4.2 range from 0 to 1, with higher numbers suggesting higher reliability. It is worth noting that for a preliminary study, a composite reliability criterion of 0.60 is sufficient. Since all of the composite values in Table 4.2 for this variable are more than 0.60. Therefore, the constructions meet the composite reliability criteria.

Table 4.2 Composite Reliability

| | Composite Reliability |
|-----------------------|-----------------------|
| Coopetition | 0.802 |
| Performance | 0.888 |
| Innovative Climate | 0.827 |
| Social Performance | 0.901 |
| Financial Performance | 0.905 |

The tests for the reliability of the constructs given in the Table 4.1 and Table 4.2 suggests that all the variables succeed the internal consistency reliability.

4.1.2 Convergent Validity

According to Hair et al. (2016), convergent validity refers to how "a measure positively correlates with different measures of the same construct" (p. 127). The extracted average variance and outer loadings (factor loadings) are utilized to assess convergent validity.

The high outer loadings suggest that the indicator will catch the specific variable if it has more qualities with other indicators. In addition, external loads affected the dependability of the indications. Figure 4.2 and Table 4.2 depict the exterior loads for every indication. Each signal has an outside loading that exceeds the minimum criterion of 0.5.



Table 4.3 Factor Loadings

| | Innovative Climate | Coopetition | Financial Performance | Performance | Social Performance |
|--------|--------------------|-------------|-----------------------|-------------|--------------------|
| Coop1 | | 0,727 | | | |
| Coop10 | | 0,720 | | | |
| Coop2 | | 0,674 | | | |
| Coop7 | | 0,765 | | | |
| Coop8 | | 0,667 | | | |
| Coop9 | | 0,684 | | | |
| NOPF1 | | | 0,890 | | |
| NOPF1 | | | | 0,776 | |
| NOPF2 | | | 0,868 | | |
| NOPF2 | | | | 0,725 | |
| NOPF3 | | | 0,885 | | |
| NOPF3 | | | | 0,740 | |
| NOPF4 | | | 0,882 | | |
| NOPF4 | | | | 0,781 | |
| NOPS1 | | | | | 0,896 |
| NOPS1 | | | | 0,784 | |
| NOPS2 | | | | | 0,858 |
| NOPS2 | | | | 0,683 | |
| NOPS3 | | | | | 0,870 |
| NOPS3 | | | | 0,705 | |
| NOPS4 | | | | | 0,875 |
| NOPS4 | | | | 0,776 | |
| IC1 | 0,855 | | | | |
| IC2 | 0,668 | | | | |
| IC3 | 0,770 | | | | |
| IC4 | 0,704 | | | | |

Convergent validity, according to Hair et al. (2016), is how "a measure correlates favorably with several measures of the same construct" (p. 127). The extracted average variance and outer loadings (factor loadings) are used to assess convergent validity.

The indicator will capture the particular variable if it shares more features with other indicators, according to the high outer loadings. Outside demands also had an impact on how reliable the indicators were. Figure 4.2 and Table 4.2 show the external loads for each indication. There is an external loading on each signal that is greater than the 0.5 threshold.

Table 4.4 Average variance extracted (AVE)

| | AVE |
|-----------------------|-------|
| Coopetition | 0.500 |
| Performance | 0.558 |
| Innovative Climate | 0.567 |
| Social Performance | 0.777 |
| Financial Performance | 0.766 |



Table 4.5 VIF

| | |
|--------|-------|
| Coop1 | 1.667 |
| Coop10 | 1.525 |
| Coop2 | 1.431 |
| Coop7 | 1.697 |
| Coop8 | 1.479 |
| Coop9 | 1.515 |
| IC1 | 1.518 |
| IC2 | 1.376 |
| IC3 | 1.600 |
| IC4 | 1.332 |
| NOPF1 | 3.030 |
| NOPF1 | 3.147 |
| NOPF2 | 2.678 |
| NOPF2 | 2.661 |
| NOPF3 | 3.052 |
| NOPF3 | 3.037 |
| NOPF4 | 2.994 |
| NOPF4 | 2.789 |
| NOPS1 | 2.819 |
| NOPS1 | 2.945 |
| NOPS2 | 2.358 |
| NOPS2 | 2.340 |
| NOPS3 | 2.517 |
| NOPS3 | 2.526 |
| NOPS4 | 2.449 |
| NOPS4 | 2.618 |

4.1.3 Discriminant Validity

Table 4.6 Heterotrait-monotrait ratio (HTMT)

| | |
|---|-------|
| Financial Performance -> Coopetition | 0.507 |
| Innovative Climate -> Coopetition | 0.396 |
| Innovative Climate -> Financial Performance | 0.389 |
| Performance -> Coopetition | 0.603 |
| Performance -> Financial Performance | 0.951 |
| Performance -> Innovative Climate | 0.402 |
| Social Performance -> Coopetition | 0.509 |
| Social Performance -> Financial Performance | 0.493 |
| Social Performance -> Innovative Climate | 0.287 |
| Social Performance -> Performance | 0.951 |

4.2 STRUCTURAL MODEL

You can evaluate the discriminant validity of two reflecting concepts: cross-loadings and the Fornell-Larker criterion. Recent studies, however, have evaluated the efficacy of various methods and discovered that none consistently resolve issues with discriminant validity (Henseler et al., 2015). Cross-loadings in particular are not helpful for empirical research because, when applied to a wholly correlated construct, they fail to disclose the absence of discriminant validity (Hair et al., 2016). Even when the indicator loadings differ greatly, the Fornell-Larcker criterion does not perform noticeably better (Hair et al., 2016).

Henseler et al. (2015) defined the heterotrait-monotrait ratio (HTMT) as "the ratio of the between-trait correlations to the within-trait correlations" (Hair et al., 2016, p. 133). It is frequently referred to as the disattenuated correlation since it resembles the actual correlation between two ideas. On the assumption that the route model has substantially identical components, 0.90 is considered to be a threshold value (Henseler et al., 2015), yet there is disagreement on the HTMT threshold level. Therefore, a score above 0.90 would indicate a lack of discriminant validity; nonetheless, it is recommended to utilize the more conservative threshold of 0.85. (2015) Henseler et al. The results of this inquiry are shown in Table 4.5, which includes the bootstrapped PLS technique with 5000 randomly selected subsamples and

HTMT of the correlation of path model constructs. The lower and upper limits of the 95% confidence intervals for the biased corrected results for the HTMT of the correlation of path model are displayed in Table 4.5, respectively. The conservative requirements of 0.85 confirm the discriminant validity of all constructs, and Table 4.5 demonstrates that none of the confidence intervals include 1. Since all constructs have discriminant validity as a result, the HTMT confidence interval strongly suggests that they all do.

Table 4.7 Path Coefficients

| Hypothesised Path | Standardised Beta (Path Coefficient) | T Values | P Values |
|-----------------------------------|--------------------------------------|----------|----------|
| Coopetition -> Innovative Climate | 0.337 | 4.988 | 0.000 |
| Innovative Climate -> Performance | 0.3353 | 4.362 | 0.000 |

Table 4.7 and Figure 4.3 show the path coefficients (standardised beta coefficients) obtained from SmartPLS's regression analysis. By stating that a one-unit change in the independent variable results in a one-unit change in the dependent variable, the path coefficient underlines the significance of the relationship between the variables. The hypothesized paths presented in Table 4.7 and Figure 4.3 adequately indicate the statistical importance of the hypotheses.

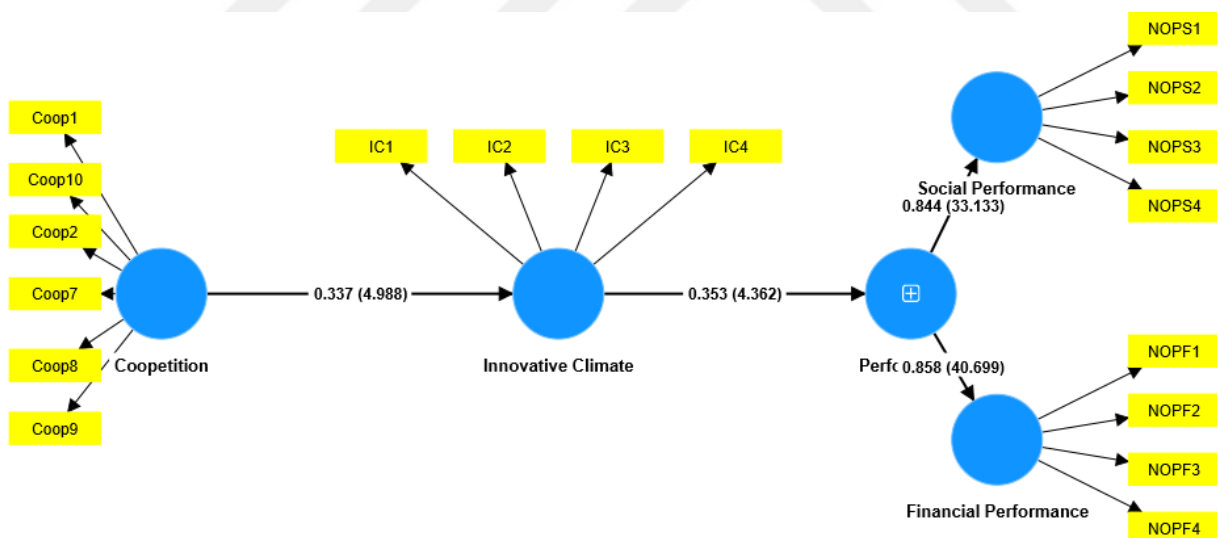


Figure 4.3 Structural Model

4.3 HYPOTHESES TESTING

The theoretical model for this study developed using the coopetition, innovative climate, performance, and non-profit sector. Literature suggests that coopetition create synergy for the for-profit companies to create an innovative climate. Moreover, similar literature is building up

in the non-profit sector that also indicate that coopetition is a valuable strategy for non-profit performance. The hypotheses of the study are as follows:

H1: The strength of the coopetition strategy positively impacts the innovative climate of the non-profit organisations.

H2: A high level of innovative climate for non-profit organisations is positively associated with the performance.

H3: Innovative climate mediates the relationships between coopetition and performance of the non-profit organisations.

Figure 2.3 demonstrate that there is a direct effect of coopetition on innovative climate. Similarly, innovative climate directly impacts the performance. The first hypothesis of the study

H1: The strength of the coopetition strategy positively impacts the innovative climate of the non-profit organisations—that is tested as Coopetition \rightarrow innovatice climate has $\beta=0.337$, $t\text{-value}=4.988$, $p\text{-value}=0.000$, and $R\text{-square adjusted}=0.108$. The results indicate the 1-unit change in coopetition will change 33.7% in the innovative climate of the non-profit organisations. Similarly, the $t\text{-value}=4.988$ is highly significant at the 5% of degree of freedom—it is to note that the threshold for 5% of degree of freedom is 1.96, therefore, the relationship between coopetition and innovative climate is statistically significant. Further, the $R\text{-square adjusted}=0.108$ indicate the variability of the response data—the variable of innovative is being 10.8% explained by coopetition, the independent variable. Therefore, the null hypothesis is rejected, and alternative hypothesis is accepted that states that there is a significant relationship between coopetition and innovative climate.

The second hypothesis of the study **H2:** A high level of innovative climate for non-profit organisations is positively associated with the performance—that is tested as Innovative Climate \rightarrow Performance has $\beta=0.363$, $t\text{-value}=4.362$, $p\text{-value}=0.000$, and $R\text{-square adjusted}=0.119$. The results indicate the 1-unit change in coopetition will change 0.363 in the analytical capability of managers of the non-profit organizations. Similarly, the $t\text{-value}=4.362$ is significant at the 5% of degree of freedom and the threshold value of 1.96. Therefore, the relationship between innovative climate and performance is significant. Further, the $R\text{-square adjusted}=0.119$ is extremely low that indicates that there is a minor variability in the performance. Thus, adding more variables may increase the variability in the analytical capability of non-profit managers. Therefore, the null hypothesis is rejected, and alternative

hypothesis is accepted that states that there is a significant relationship between cooperation and analytical capability.

The third hypothesis of the study **H3**: Innovative climate mediates the relationships between cooperation and performance of the non-profit organizations—that is tested as Cooperation -> Innovative Climate -> Performance—it is an indirect relationship that is mediating using a mediating variable of innovative climate. The results are beta=0.119, t-value=2.602, p-value=0.009, and R-square adjusted=0.119. The results indicate that there is a mediation in the relationship. Therefore, the null hypothesis is rejected. Therefore, innovative climate mediate the relationship between cooperative and performance.



5 CONCLUSION

In many academic studies, the literature on coopetition in the context of inter-organizational linkages is intriguing and noteworthy. In the literature on strategic management, inter-organizational linkages between organizations or networks are depicted. The majority of businesses desire to combine their mutual benefits and resources, making the cooperative function attractive (Laine, 2002; Eikebrotke & Olsen, 2005). However, it is essential to note that when numerous organizations interact, internal and external threats might lead to conflicts (Bengtsson, Raza-Ullah, & Kock, 2014). In addition, the coopetitive relationship can give birth to collusive behavior that raises the likelihood that corporations will begin to focus on their own objectives rather than the shared benefits and objectives of all rivals (Mariani, 2007).

In the current research study, non-profit groups that develop cooperative links to collect funds and work toward similar goals were considered. Later, these nonprofits compete to increase both their customer base and their market share (communities). Consequently, the concept of co-opetition within the framework of a network of organizations is dynamic in nature and assumes a higher level of social interaction (Poulymenakou & Klein, 2006). The characteristics of a coopetitive relationship reveal how an organization's management responsibilities and competencies are aligned, which facilitates the growth of mutual trust, advantages, identification, and commitment. Specifically, at the organizational level, management must specify the shared values that must align with common objectives and interests.

Numerous research studies have been conducted in an effort to operationalize public value within the performance measurement of non-profit organizations. Nonetheless, there is disagreement among them (Nowell, 2014). The six factors used to determine public value are (Moulton and Eckerd, 2012). Nonetheless, the measurement of public value in non-profit organizations is quite distinct. Public value determines the community's expectations and the consensus of non-profits. Therefore, a single public value framework may be appropriate in Pakistan and Afghanistan, but not in the United States. However, the most important contextual factor is the public's wants, expectations, and value perception at the time.

Using the theory developed to characterize the coopetition strategy in respect to the non-profit sector, the conclusion section summarizes the current research study. The concept elaborates on the oversaturated market, altering consumer needs for services, socioeconomic environment, limited support resources, and the inadequacy of governments to aid the general population.

Therefore, nonprofit organizations have a higher need to engage in competitive relationships and embrace new business practices (Herman & Associates, 2005).

Consider the rise of social entrepreneurship, in which conventional non-profit organizations adopt a business model to further their social mission. NGOs and these classic non-profit organizations face intense competition, however, due to a lack of funds and resources, as well as the high cost of funding options such as writing grant proposals. The competition for funding and limited funding options preclude NGOs and nonprofits from relying entirely on local governments. However, these organizations should focus more on the viability of their daily operations and seek out new financing sources. As a result, it is clear what the goals and purposes of non-profit organizations are: to construct a system for producing money as their primary activity and to build local and global capability.

Unexpectedly, nonprofit groups did not form networks prior to being able to promise consistent funding. For instance, cooptation is commonly employed in corporate groups where members collaborate and compete to achieve competitive resources. When non-profit organizations collaborate to boost fundraising efforts, the same logic applies. This is the driving factor for non-profit organizations' adoption of the cooptation technique to build dyadic or network-based inter-organizational relationships. The hypothesis that non-profit cooperative alliances assist and inspire organizations to engage in fundraising activities has been explored empirically. Therefore, the development of funds assists nonprofits in achieving their humanitarian mission and enhancing their financial performance.

According to the findings of this study, nonprofit organizations within the field of human development collaborate in a network. In recent years, non-profit groups in a variety of industries have received more attention. Management, resource acquisition, strategic position enhancement, and firm operations all intertwine. Achieving the compatibility of the high resources is one of the most important reasons for a non-profit organization to join a competitive network. The empirical findings of this study corroborate the theorized relationship between fundraising and cooperative conduct. There are few donors, and the other fundraising opportunities are highly competitive. Cooperation is therefore the optimal technique for fundraising and achieving shared objectives (Bengtsson & Kock, 2014).

This study also highlighted the importance of external environmental elements, including market, industry, and sector characteristics, as well as stakeholder influence. The characteristics of the industry, including a lack of resources, a large number of businesses, and unification bylaws, indicate cooperation in concentrated industries. However, rather than in terms of the quantity of goods produced, the agriculture industry is diverse in terms of the level of farmers, which ranges from large corporations to individual farmers. As a result, the market and industry structure provide greater leverage to large producers at all levels, such as the wholesale buyer. Consequently, the structure, unpredictability, and growth trends of the industry are what motivate companies to collaborate and compete.

Within the framework of mutual agreements, it is generally accepted that direct contact between individuals is reciprocal. In a network relationship, the shared ties highlight the relationships, and only the strong ties assist an organization in developing its strong identity. Due to the profound emotional regularity in communication and the stability that further ensures the maintenance of the cooperative relationship, these factors are exclusively determined by the strength of the reciprocal ties between the organizations. On the other side, weaker ties result in random encounters, short conversations, and sporadic exchanges.

Non-profits and NGOs must take significant steps to identify societal problems, find solutions for these issues, and execute programs to address these concerns in order to provide the essential circumstances for continued environmental gains.

Non-profit organizations and NGOs must take action to identify societal problems, find solutions, and implement programs and other measures to solve these problems. They should be compelled to present the government with innovative ideas and alternatives by fostering conditions conducive to ongoing environmental progress. A substantial amount of knowledge should also be present, especially from third-sector organizations that arose out of regional customs and traditions. In the present world, it is clear that there are a number of nongovernmental and nonprofit organizations active in the field of development.

REFERECES

- Ahuja, G. (2000). Collaboration networks, structural holes, and innovation: A longitudinal study. *Administrative science quarterly*, 45(3), 425-455.
- Baumard, P. (2009). An asymmetric perspective on coopetitive strategies. *International Journal of Entrepreneurship and Small Business*, 7(4), pp. 6-22.
- Bengtsson, M., Eriksson, J., & Wincent, J. (2010). Co-opetition dynamics—an outline for further inquiry. *Competitiveness review: An international business journal*.
- Bengtsson, M., & Kock, S. (2000). ” Coopetition” in business Networks—to cooperate and compete simultaneously. *Industrial marketing management*, 29(5), 411-426.
- Bengtsson, M., & Kock, S. (2014). Coopetition—Quo vadis? Past accomplishments and future challenges. *Industrial marketing management*, 43(2), 180-188.
- Berman, B. (2006). Developing an effective customer loyalty program. *California management review*, 49(1), 123-148.
- Bouncken, R. B., & Kraus, S. (2013). Innovation in knowledge-intensive industries: The double-edged sword of coopetition. *Journal of Business research*, 66(10), 2060-2070.
- Bowman, C., & Ambrosini, V. (2000). Value creation versus value capture: towards a coherent definition of value in strategy. *British journal of management*, 11(1), 1-15.
- Boyne, G. A. (2003). Sources of public service improvement: A critical review and research agenda. *Journal of public administration research and theory*, 13(3), 367-394.
- Brewer, G. A., Selden, S. C., & Facer li, R. L. (2000). Individual conceptions of public service motivation. *Public administration review*, 60(3), 254-264.
- Carayannis, E., & Alexander, J. (2006). *Global and local knowledge: Glocal transatlantic public-private partnerships for research and technological development*. Springer.
- Carayannis, E. G., & Formica, P. (2006). Intellectual venture capitalists: an emerging breed of knowledge entrepreneurs. *Industry and Higher Education*, 20(3), 151-156.
- Chen, M.-J. (1996). Competitor analysis and interfirm rivalry: Toward a theoretical integration. *Academy of management review*, 21(1), 100-134.

- Choi, P., Garcia, R., & Friedrich, C. (2010). The drivers for collective horizontal cooptition: a case study of screwcap initiatives in the international wine industry. *International Journal of Strategic Business Alliances*, 1(3), 271-290.
- Christensen, C. M. (1997). Marketing strategy: learning by doing. *Harvard business review*, 75(6), 141-151.
- Clarke-Hill, C., Li, H., & Davies, B. (2003). The paradox of co-operation and competition in strategic alliances: towards a multi-paradigm approach. *Management Research News*.
- Dagnino, G. B., & Padula, G. (2002). Cooptition strategic: towards a new kind of interfirm dynamics. The European Academy of Management. Stockholm: Second annual conference-innovative research in management,
- Dahl, J. (2014). Conceptualizing cooptition as a process: An outline of change in cooperative and competitive interactions. *Industrial marketing management*, 43(2), 272-279.
- Das, T. K., & Teng, B.-S. (2000). A resource-based theory of strategic alliances. *Journal of management*, 26(1), 31-61.
- Dew, N., Sarasvathy, S. D., & Venkataraman, S. (2004). The economic implications of exaptation. *Journal of Evolutionary Economics*, 14(1), 69-84.
- Dowling, M. J., Roering, W. D., Carlin, B. A., & Wisnieski, J. (1996). Multifaceted relationships under cooptition: Description and theory. *Journal of management inquiry*, 5(2), 155-167.
- Dyer, J. H., & Singh, H. (1998). The relational view: Cooperative strategy and sources of interorganizational competitive advantage. *Academy of management review*, 23(4), 660-679.
- Fernandez, A.-S., Le Roy, F., & Gnyawali, D. R. (2014). Sources and management of tension in co-opetition case evidence from telecommunications satellites manufacturing in Europe. *Industrial marketing management*, 43(2), 222-235.
- Fjeldstad, Ø. D., Becerra, M., & Narayanan, S. (2004). Strategic action in network industries: an empirical analysis of the European mobile phone industry. *Scandinavian Journal of Management*, 20(1-2), 173-196.

- Glassman, D. M., & Spahn, K. (2012). Performance measurement for nonprofits. *Journal of Applied Corporate Finance*, 24(2), 72-77.
- Gnyawali, D. R., Fan, W., & Penner, J. (2010). Competitive actions and dynamics in the digital age: An empirical investigation of social networking firms. *Information Systems Research*, 21(3), 594-613.
- Gnyawali, D. R., Offstein, E. H., & Lau, R. S. (2008). The impact of the CEO pay gap on firm competitive behavior. *Group & Organization Management*, 33(4), 453-484.
- Gnyawali, D. R., & Park, B.-J. R. (2011). Co-opetition between giants: Collaboration with competitors for technological innovation. *Research policy*, 40(5), 650-663.
- Gnyawali, S. C., Chen, Y., Wu, F., Bartels, K. E., Wicksted, J. P., Liu, H., Sen, C. K., & Chen, W. R. (2008). Temperature measurement on tissue surface during laser irradiation. *Medical & biological engineering & computing*, 46(2), 159-168.
- Gulati, R., & Gargiulo, M. (1999). Where do interorganizational networks come from? *American journal of sociology*, 104(5), 1439-1493.
- Hair Jr, J. F., Sarstedt, M., Matthews, L. M., & Ringle, C. M. (2016). Identifying and treating unobserved heterogeneity with FIMIX-PLS: part I—method. *European Business Review*.
- Henderson, R. M., & Clark, K. B. (1990). Architectural innovation: The reconfiguration of existing product technologies and the failure of established firms. *Administrative science quarterly*, 9-30.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the academy of marketing science*, 43(1), 115-135.
- Holton, E. F., Swanson, R. A., & Naquin, S. S. (2001). Andragogy in practice: Clarifying the andragogical model of adult learning. *Performance improvement quarterly*, 14(1), 118-143.
- Ingram, P., & Qingyuan Yue, L. (2008). 6 structure, affect and identity as bases of organizational competition and cooperation. *The Academy of Management Annals*, 2(1), 275-303.

- Jorde, T. M., & Teece, D. J. (1990). Innovation and cooperation: implications for competition and antitrust. *Journal of economic perspectives*, 4(3), 75-96.
- Lado, A. A., Boyd, N. G., & Hanlon, S. C. (1997). Competition, cooperation, and the search for economic rents: A syncretic model. *Academy of management review*, 22(1), 110-141.
- Lepak, D. P., Smith, K. G., & Taylor, M. S. (2007). Value creation and value capture: A multilevel perspective. *Academy of management review*, 32(1), 180-194.
- Luo, J. (2015). The united innovation process: integrating science, design, and entrepreneurship as sub-processes. *Design Science*, 1.
- Lüscher, L. S., & Lewis, M. W. (2008). Organizational change and managerial sensemaking: Working through paradox. *Academy of management Journal*, 51(2), 221-240.
- Mariani, M. M. (2007). Coopetition as an emergent strategy: Empirical evidence from an Italian consortium of opera houses. *International Studies of Management & Organization*, 37(2), 97-126.
- Morris, M. H., Kuratko, D. F., & Covin, J. G. (2010). *Corporate entrepreneurship & innovation*. Cengage Learning.
- Moulton, S., & Eckerd, A. (2012). Preserving the publicness of the nonprofit sector: Resources, roles, and public values. *Nonprofit and Voluntary Sector Quarterly*, 41(4), 656-685.
- Nalebuff, B. J., Brandenburger, A., & Maulana, A. (1996). *Co-opetition*. HarperCollinsBusiness London.
- Nowell, R. (2014). A kind of Bacall quality”: Jamie Lee Curtis, stardom, and gentrifying non-Hollywood horror. *Merchants of menace: The business of horror cinema*, 129-146.
- Okura, M., & CARFI, D. (2014). Coopetition and game theory. *Journal of Applied Economic Sciences*, 9(3).
- Padula, G., & Dagnino, G. B. (2007). Untangling the rise of coopetition: the intrusion of competition in a cooperative game structure. *International Studies of Management & Organization*, 37(2), 32-52.
- Pellegrin-Boucher, E., Le Roy, F., & Gurău, C. (2013). Coopetitive strategies in the ICT sector: typology and stability. *Technology Analysis & Strategic Management*, 25(1), 71-89.
- Porter, M. E. (1985). Technology and competitive advantage. *Journal of business strategy*.

- Poulymenakou, A., & Klein, S. (2006). Networks as orchestrations: management in IT-enabled inter-firm collaborations. In *Managing dynamic networks* (pp. 3-15). Springer.
- Rainey, P. B., & Rainey, K. (2003). Evolution of cooperation and conflict in experimental bacterial populations. *Nature*, *425*(6953), 72-74.
- Raza-Ullah, T., Bengtsson, M., & Kock, S. (2014). The coopetition paradox and tension in competition at multiple levels. *Industrial marketing management*, *43*(2), 189-198.
- Ritala, P., & Hurmelinna-Laukkanen, P. (2013). Incremental and radical innovation in competition—The role of absorptive capacity and appropriability. *Journal of Product Innovation Management*, *30*(1), 154-169.
- Romanelli, E., & Tushman, M. L. (1994). Organizational transformation as punctuated equilibrium: An empirical test. *Academy of management Journal*, *37*(5), 1141-1166.
- Rusko, R. (2011). Exploring the concept of coopetition: A typology for the strategic moves of the Finnish forest industry. *Industrial marketing management*, *40*(2), 311-320.
- Salancik, G. R., & Pfeffer, J. (1978). A social information processing approach to job attitudes and task design. *Administrative science quarterly*, 224-253.
- Saunders, M., Lewis, P., & Thornhill, A. (2007). Research methods. *Business Students 4th edition Pearson Education Limited, England*.
- Schiavone, F., & Simoni, M. (2011). An experience-based view of co-opetition in R&D networks. *European Journal of Innovation Management*.
- Schumpeter, J. A. (1950). The march into socialism. *The American Economic Review*, *40*(2), 446-456.
- Tether, B. S. (2002). Who co-operates for innovation, and why: an empirical analysis. *Research policy*, *31*(6), 947-967.
- Tidström, A. (2014). Managing tensions in coopetition. *Industrial marketing management*, *43*(2), 261-271.
- Walley, K. (2007). Coopetition: an introduction to the subject and an agenda for research. *International Studies of Management & Organization*, *37*(2), 11-31.