The efficacy of Strategic Alliance through International cooperative Learning

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Abstract
Cooperative learning is an instructional method by which small groups of individuals learn material and then make presentations to other groups. Cooperative learning from the biblical perspective, “in Matthew 18:19, Jesus said, again, I say unto you, that if two of you shall agree on earth as touching anything that they shall ask, it shall be done for them of my Father which is in heaven.” The resultant effect of this is the strong cooperation and alliance among the learners group. The history of strategic alliance is dated the past several decades as popular problem solving tool. This paper presents issues on strategic alliance as comparative study based on results obtained through questionnaire from two hundred and seventy four (274) Ghanaian respondents in the Ashanti region on cooperative learning and their comparison with other similar international type of research that used larger sampling size through a structured collection of data. The findings from the responses obtained were analyzed through statistical charts and line diagrams to detect and establish any relationship in divergence or pattern for the research. The major distinguishing feature of this research is the development of key variables of alliance through cooperative learning and testing of these variables theoretically and scientifically why explaining the benefits of alliance through cooperative learning. The findings indicate that key variables of specificity, complexity, experience and protectiveness are inversely related to knowledge ambiguity in alliance formation and cooperative learning. Based on these findings, the recommendations are that future researchers and new firms going into strategic alliance must adopt variety of alliance strategies through cooperative learning to achieve organizational goals. The study concludes that for a successful alliance, there should be social network, policy planning and implementation. The cooperative learning must begin from top-bottom approach of management level in order to motivate subordinates participation.

Index items: complexity, Tacitness, experience, protectiveness, knowledge ambiguity, specificity, cooperative learning.

1. Introduction
1.1 Research Backgrounds
The history of strategic alliance through cooperative learning is dated the past several decades as popular problem solving tool. Strategic Alliance is collaborative organizational arrangements that use resources or governance structure from more than one existing organization. In biblical perspective, our Lord Jesus states in his words,” if two of you shall agree on earth as touching anything that they shall ask,
it shall be done for them of my Father which is in heaven. This portrays the importance of alliance between two or more individuals. Strategic alliance can take different forms: Equity Joint Ventures, Shared purchasing and manufacturing and shared product development projects and Minority equity relationship and Licensing arrangement. One main important note is to consider whether mergers and acquisitions can be treated as strategic Alliance? Mergers and Acquisitions is inconsistence with the concept of alliance and therefore have not been considered as a form of strategic alliance. With Mergers and Acquisitions, the new organization that results does not depend on two or more existing organization for its survival as does an alliance. Strategic alliance according to Varadarajan and Cunningham (1995) ‘involves the pooling of specific resources and skills by the cooperating organizations in order to achieve common goals, as well as goals specific to each Partner involved in the alliance. Bamford and Ernest (2002), described alliance simply as an agreement between separate companies, each employing its own processes and systems and each following its own goal for the alliance. The author added that this makes it hard for alliance partners to agree on one bases of measurement. Grant and Baden,( 2004) added that, a knowledge accessing theory of strategic alliance have a major role to play in alliance formation. Strategic alliance was defined as an agreements characterized by commitment of two or more companies to reach a common goal which entails pooling together resources and activities. Arino,Dela and Ring (2001), in another article clearly explained alliance as a formal agreement between two or more business organization to pursue common goals through resource sharing such as intellectual property, people, capital, organizational capabilities and physical assets. Parkhe (1991), posits that strategic alliances represent one of the most popular strategies where firms combine some of their resources and capabilities to create a competitive advantage. Strategic learning is often applied to business organizations and little is applied to cooperative learning by groups that lead to alliance formation. This research delve into Strategic alliance through cooperative learning to assess the importance of alliance formation at different cooperative learning levels among Ghanaian groups and compare with key alliance formations in formal business enterprises at international level.

1.2 Statement of the problem

Many firms enter into alliance without considering the key variables influencing the alliance which cause the alliance to end in failure. Though alliance literature already exist are rich and multinational in nature, many existing research opportunities still remain especially in the area of alliance through cooperative learning outside business organizations. There remain broader and more detailed conceptualization on alliance measurement formation and it success especially when it comes to e-commerce-based alliances. Simonin (1999) explores how knowledge is managed in the international Joint venture and how knowledge is transferred across borders and identified key research variables which include Knowledge Ambiguity, Tacitnes, Asset Specificity, Complexity, Experience, and Partner Protectiveness. There is
therefore the need to assess these concepts of alliance theoretically to confirm its application in Ghanaian context as they only exist in international arena.

1.3 Purpose of the study

The purpose of this research is to relate the key concept of alliance theoretically and statistically. Many variables have been used by researchers to relate strategic alliance to many situations but little have been formed using the key variables of knowledge Ambiguity, Tacitness, Assets Specificity, Complexity, Experience and Partner Protectiveness. These variables are believed by many researchers to influence alliance formation. The rationale is to test these variables using questionnaire in Ghanaian environment and compare the results with existing literature to ensure their consistency with other variables being used with alliance formation in many countries.

1.4 Research objective

For the purpose of this study, the main dependent variable is knowledge ambiguity and other independent variables identified include Tacitness and Complexity, Experience, partner protectiveness and Asset Specificity. The objective of this research is to form these variables and test them scientifically and theoretically to portray their actual relationship with the main variable of Ambiguity. Therefore the specific objectives for the study are stated as follows:
1. To assess how Tacitness and complexity relate to ambiguity.
2. To examine the relationship between Experience and ambiguity.
3. To measure how Partner protectiveness affect ambiguity.
4. To evaluate specificity and its impact on ambiguity.

1.5 Research Questions

The research questions for the study include the following:
1. What relationship exist between Tacitness, complexity and ambiguity?
2. How does Experience affects ambiguity?
3. Are there any relationship between Partner protectiveness and ambiguity?
4. Can specificity impact ambiguity in any way?

1.6 The significance and limitation of the study.

The significance of this study is to bridge academic literature about strategic alliance through cooperative learning in Ghana and indicates the relationship between the key variables with alliance formation. This research relates the main variables identified in alliance formation in Ghanaian context and this may serve as a limiting factor. Other researchers may want to use several variables in their
analysis such as cultural and organizational distance in addition to the ones identified to test their hypothesis and to show their greater impact on alliance formation.

2.0 Literature review

2.1 Introduction

The literature review covers the new theoretical dimension of framework of the alliance through cooperative learning, related studies on working definition and research benefits of strategic alliance as well as definition of independent and dependent variables.

2.2 Framework of efficacy on strategic Alliance

2.3 Working definitions of Strategic Alliances

Strategic alliance according to Varadarajan and Cunnigham (1995) in the article ‘a synthesis of conceptual foundations ‘involves the pooling of specific resources and skills by the cooperating organizations in order to achieve common goals. This definition makes it clear that alliance partners have common goals to pursue. Bamford and Ernest(2001) summarized alliance simply as an agreement.
between separate companies, each employing its own processes and systems to achieve own goal. The authors added that this makes it hard for alliance partners to agree on one bases of measurement. This definition matches with the former one where each party tries to pursue their hidden individual goals. Grant and Baden(2004) definition is characterized by commitment of two or more companies to reach a common goal. The author added that with strategic alliance, bilateral agreement are necessary but each party is autonomous and its usually more formal which can take different forms as outsourcing, franchising, joint research project and technical collaborations. This definition introduces the new concept of autonomous and formal which were not emphasized in the first two definitions. In the nutshell, all the three definitions by the collaborative authors pointed to one major purpose of alliance formation “to achieve a common goal among the cooperative groups”.

2.4 Benefits of Strategic Alliance

Strategic alliances are formed for several reasons. Grikscheit and Cag(2002) in their article addressed six main reasons behind major alliances formation: share technology and expertise, access to manufacturing capacity and second source arrangement, access to distribution channels and customer bases, share Research and Development expenses, risk sharing, market share and economies of scale. Referring to the earlier research by investment banking firms between 1999 and 2000, the authors pointed out that the level of executive confidence in the benefits of strategic alliance has increased tremendously and firms with higher number of alliances enjoyed higher market value than firms that decide to go alone. It is in this light that cooperative learning can be related to strategic alliance to produce better results to any alliance learning and business environment. On the contrary, Jagersma(2005), in the research article on cross-border alliances, stated that firms use alliance to achieve three fold purpose: secure economies of scale in the research and development, reduce the cost and time required to establish major plant in new geographical locations and participate in some rapidly growing markets elsewhere. Bleek (1991) summarized the benefits of alliance: that strategic alliance is quick way to crack new markets, to gain skills and technology or products and to share fixed cost and resources.

2.5 Definitions of Terms
Tacitness refers to codifiable accumulation of skills that result from learning by doing. Complexity refers to the number of interdependent technologies, routines, individuals, and resources linked to a particular knowledge or asset.

Experience involves attributes and choices made by both information seekers and providers. Partner protectiveness referred to a partner transparency or permeability of the organizational membrane. Specificity refers to Transaction cost's asset specificity that is durable investments that are undertaken in support of particular transactions.

Knowledge Ambiguity refers to the uncertainties surrounding the Alliance formations.

2.6 Measurement of Variables

The main research dependent variable for this study is knowledge Ambiguity with Tacitness, complexity, experience, specificity and partner protectiveness as independent variables. The main part of this study is not only to find the relationship amount these variables in the Ghanaian business settings by the use of questionnaire but to also relate the findings to the learning results from international level through cooperative learning among a particular focus or distinguished group of companies or partners.

3.0 Methods

3.1 Introduction

This research uses quantitative analysis which is analyzed through statistical means and compare with existing research which uses larger sample size from different countries to establish its comparative trend. The comparative nature of this research makes it entirely unique from other research that simply uses quantitative or qualitative analysis without establishing a concrete basis for larger sample size across countries. For the purpose of presentation and analysis percentages and charts are used to analyze the behavior and the trends of the responses provided by the questionnaire by the respondents.

3.2 Study type and design
A quantitative approach is used to gather the information needed through questionnaires from the respondents. A comparison study on international research findings are used as a basis of comparison among international alliance. Most of the international alliances in literatures conducted used large sample size of cases from different countries. Quantitative and statistical analyses are used to provide reliability and validity of their data. The main purpose of this study is to assess the relationship through cooperative learning with local data vis-à-vis existing international research data to deduce a pattern of relationship among the variables.

3.3 Study setting and area

Although the study setting is Kumasi, Ghana, the comparative findings by other authors were conducted in international countries such as China, USA and Japan. The research conducted from such countries used large data to test their hypotheses and the result can be reliably applied to different population group in different countries. In addition, resident of these countries usually emanate from other parts of the world and therefore their responses represent an ideal mixture of cultural differences and opinion of diverse group than responses from one particular country such as Ghana.

3.4 Population and Sampling technique:

The population of the study comprises all the focus learning groups either business or non-business working in Kumasi and achieving their goals through cooperative learning. Leedy and Ormrod (2004) stated that research is conducted to learn more about a particular category of objects, a sample of the research is therefore selected from that category to be studied and then a conclusion can then be drawn about the category as a whole. In view of this simple random sample was used to select two hundred and seventy four (274) working professionals learning in cooperative manner. The findings obtained from the respondents are compared with the other related studies which have best mix of sample data using different methods such as questionnaire, event studies, interviews and face-to-face study. The research mainly took on quantitative study approach to strategic alliance.

3.5 Sources of data
The data source for this research was gathered from the respondents in the field. The questionnaire was issued to the respondents and the responses obtained from the respondents were the primary source of data which were used for the analysis. Questionnaire issued as a primary source of data seemed very appropriate for this type of research so that the research objectives could be achieved by these means. As far as other types of the existing research, it used methods such as event study, observations and interviews since their research were carried in more than one country. Both primary and secondary data were the main data collecting methods used to gather existing but relevant literature on cooperative learning leading to alliance success. The secondary literature selected followed both empirical and exploratory research which adopted large sample data and cases relevant to interorganizational learning Dilemma. The method adopts cooperative learning as a key method in its analysis. From the theoretical approach, a management perspective on the linkage of cooperative learning in quantitative analysis of statistical data is usually preferred. Due to this fact analysis are linked to research-findings conducted from different continents which demonstrate more managerial and leadership perspectives.

3.6 Research Instrument

A questionnaire was chosen as data collection instrument. A questionnaire is a printed self-report form designed to elicit information that can be obtained through the written responses of the respondents. The questionnaire was in English. The respondents read and provided their answers for them. The questionnaire tested the respondents’ knowledge on cooperative learning that most of the international firms do not consider in alliance formation. Closed ended questions are easier to administer and to analyze. They are also more efficient in the sense that a respondent is able to complete more closed-ended items than open-ended items in a given period of time. Because of this, questionnaire was merely designed with more closed-ended questions. Cooperative learning is very important in my own view, because disjointed organizations alliance is bound to fail but through cooperative learning, alliance partners can turn out odds into success. Alliance variables considered in this research are the main instrument for measurement in the analysis.

3.7 Ethical Consideration
Ethical issues in research have become of major concern recently between researchers and respondents’ rights. The respondents were assured that the rights of anonymity and confidentiality will be maintained. Information through the data collected will be used for the purpose of the research and not for disclosure of any individual identity when publishing this study. This research ensures that demographic identities of the individual are undisclosed but rather represented by a meaningful variable.

4.0 Analysis

Figure 1

On the aspect of objective one, the findings are as shown on figure 1. More of the respondents believe that tacitness and complexity relate to ambiguity indirectly. In other words, the results found out that tacitness and complexity are inversely related to knowledge ambiguity. As tacitness and complexity increase, knowledge transfer can reduce or vice versa. The situations where tacitness and complexity can be equal are very rare. Most of the 133 respondents pointed out that cooperative learning by tacitness and complexity result in 40% and above when compared to the knowledge ambiguity.

Comparison with similar research of large international data
Mowery, Oxley and Silverman (1996), confirmed this research objective by examining interfirm knowledge transfer within strategic alliance. They analyzed the extent in which partners technological resources overlap each other in the alliance process. A comprehensive data set that contains information on over nine thousand alliances involving some five thousand firms in many industries and countries were collected.

The resulting sample contains a total of 792 alliances. Of these, 132 (16%) are equity joint ventures, 226 (29%) are unilateral contract-based alliances (i.e., technology licenses, R&D contracts and second-source agreements) and 434 (55%) are bilateral contract-based alliances (cross-licensing, joint development and technology sharing agreement, etc.). 280 (35%) of the alliances partners are U.S. firms; 102 (13%) have a Japanese firm partnered with a U.S. firm and the remaining 410 (52%) involve a country from elsewhere in the world (but primarily Europe). The 838 firms in the resulting data set controlled approximately 14,500 subsidiaries and more than 275,000 patents. They found out that culture, language, educational background and distance associated with domestic alliance should result in higher level of knowledge transfer. Japanese firms exhibit consistently superior abilities to learn more through alliances with U.S firms than is true of firms from other countries. Little evidence was found on the rumor that Japanese firms have siphoned important technologies from US alliance partners therefore hollowing out of US corporations.

Figure 2 Experience and knowledge ambiguity;
Figure 2 shows the responses from ninety respondents on whether experience is negatively related to ambiguity. About more than 80% responded in affirmative as most of the relationship exists to the tune of 30%. Few respondents foresee stronger relationship of more than 40% between experience and ambiguity.

Comparison with international larger data
This objective was evidenced in further research by Dancin, Hitt, and Levitas (1997) into the aspect of selecting partners for international Alliance on US and Korean Firms. Their objective was to examine partner selection criteria employed by managers from U.S and Koreans firms as well as understanding partners’ objectives in selecting collaborators. Their findings show that US executives place primary emphasis on the financial health of a partner whereas Korean Executives place significant emphasis on potential partner's technical capabilities. US executives placed emphasis on partner’s capabilities and unique competencies. They are also concerned with partner’s managers to guide their firm efficiently and effectively and interested in partners that possess abilities and skills that others do not. Finally, US executives are interested with resources that can be used in conjunction with the capabilities of their firm. For example, US firm may desire a partner that has distribution channels through which the U.S firms’ products can be marketed. Korean executive on the other hand placed importance on the attractiveness of the partners industry, special skills that their firm could learn from its partner and the partner’s willingness to share its expertise. Finally, they are concerned about selecting a partner working in an industry with an
environment favorable to achievement of the Korean firm’s goals. Their research concluded that though strategic alliance has become highly popular in firms entering international markets, they continue to have higher failure rates. Partners must seek a win-win strategy with partners that will not only help them to achieve their firms’ goals but partners that can mutually benefit from the alliance.

*figure 3: Partner Protectiveness and Specificity*

On the aspect of research objective three, assets specificity is and partner protectiveness are indicted above. Respondents rated these to be below 50% in relation to knowledge ambiguity. Transparency and cost are directly related to ambiguity. As transparency reduces, cost is also reduced in an inappropriate manner. Comparison with large sample research on international alliance

4.3 Discussion of Findings:
In order to achieve the research objectives in a reliable manner, questionnaires were sent to the two hundred and seventy four(274) respondents which responded within the timeline given. It is evidenced from the figure 1 that, in Ghana most of the cooperative learners among the first one hundred and thirty-three(133) respondents believe that tacitness and complexity relate indirectly to knowledge ambiguity. The comparison of this findings with international findings using a sample size of seven hundred and ninety two(792) alliance proved to be consistent. However, certain element such as culture, language, educational background and distance play a key role in determining knowledge ambiguity. As these elements increases, knowledge ambiguity also increases and vice versa. These findings will contribute greatly to future knowledge in the sense that, future cooperative alliance partners must assign heavy weight to factors such as culture, language and educational backgroinds as well as the distance between the cooperative partners as these will lead to the eventual success of the alliance and ensure maximum knowledge transfer.

The next ninety one(91) Ghanaian respondents provided a stronger relationship between experience and knowledge ambiguity in cooperative alliance. In other words, as cooperative partners have more experience in the industry, the alliance formation is likely to be successful. These findings were not totally consistent with findings from the international level. The international research used data from US and Korea firms and the findings are that, alliance partners must strive for win-win situation rather than depending solely on experience of partners as a key factor. Whereas US firms placed emphasized on financial health, unique competencies, efficiencies and effectiveness and resources to determine alliance success, Korean firms consider technical skills, attractiveness favorable environment, and any special skill of the cooperative partners. The contribution of this research to body of future knowledge is that experience is not a key factor in alliance formation but each partner must have its defined success factors or critical success factors to consider in ensuring win-win situation.

The remaining fifty(50) Ghanaian respondents on transparency and the transaction cost in alliance formation gave downwards or negative trend of relationship between transparency, cost and knowledge ambiguity. Most of the respondents are of the opinion that transparency and cost are below average which lead to low knowledge transfer in Ghana. Comparing these findings with Two hundred and twenty five(225) international firms proved otherwise. Cultural adjustment cost is the main specificity and has been on the increase at the international alliance whereas partner protectiveness is found to be positively
related to knowledge ambiguity due to high level of transparency required by the cooperative partners at the start of alliance formation. The contribution of this finding to body of knowledge in Ghana is that future alliance formation in Ghana or developing countries must request more transparency which invariably will increase specificity and have resultant positive effect on knowledge transfer as happening at the international level.

5. Conclusion and Recommendation.

5.1 Introduction

The conclusion of this research is that the primary factors playing a major role in alliances are tacitness, complexity, experience, specificity and protectiveness. These factors relate to knowledge ambiguity either directly or indirectly and explain some of the reasons firms enter alliances. Doz (1996) found out that partners in more successful alliances engage in such a series of iterative and interactive learning cycles over time as well as the willingness to make larger and larger irreversible commitment. Alliances that fail has its configuration initial conditions block or at least delay, therefore breeding growing frustrations and leading to unmet expectations.

5.2 Summary of findings

<table>
<thead>
<tr>
<th>Factors influencing knowledge ambiguity in Alliance formation.</th>
<th>Author’s research findings with sampling size of 274</th>
<th>Analysis with international findings.</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tacitness and Complexity</td>
<td>Tacitness and complexity are indirectly related to knowledge ambiguity.</td>
<td>Culture, language, educational background and distance result in higher level of knowledge transfer.</td>
<td>Result of authors finding from Ghanaian respondents are consistent with international results.</td>
</tr>
<tr>
<td>Experience</td>
<td>Stronger relationship between experience and knowledge ambiguity.</td>
<td>Experience in financial health and technical capabilities dominate alliance</td>
<td>Experience cut across both Ghanaian and international</td>
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but partners seek a win-win strategy.

Specificity and partner protectiveness are inversely related to ambiguity. Cultural adjustment cost and Protectiveness is found to be positively related to ambiguity.

Results were inconsistent due to lack of transparency in alliance formation in Ghana as compared to increased level of transparency at cross border alliances.

5.3 Conclusion

In conclusion, there is growing need for future Alliance research issues to be very useful to managers and corporations. Though alliance literature already exist are rich and multinational in nature, many existing research opportunities still remain. Research opportunity in the area of alliance evolutionary as well as real need for greater understanding of what happens once the formation of alliance begins still need to be explored. Theoretical linkage between alliances and network are still needed because some termilogies on organizational network and industry network are confusing. Also, major research opportunity is mostly needed in the expanded understanding of multiple alliance forms and in particular, internet and e-commerce-based alliances. Most of the empirical research has been on equity alliance. There remain broader and more detailed conceptualization on alliance measurement formation and it success especially when it comes to e-commerce-based alliances. Multinational firms need to adapt their approaches for establishing alliances in separate countries. Cools and Roos (2005), found out that alliances remain central to competitive advantage in key sectors of global economy. Contrasting these views, Madhok (1997) concluded that although in today’s fast-paced and knowledge –based economy, even so called static environments are becoming increasingly dynamic and firms in such environments are being forced
to compete not on the basis of cost but on the overall value. Kogut (1989), mentioned that the findings indicate the importance of understanding contractual hazards and benefits in terms of the relationship among firms. Cooperation prosperity in alliance in the context of a wider set of transactional agreements between two firms is of far reaching consequences for the design and governance of economic exchange. Overall, Inkpen (2000), tried to bridge the gap between many research differences on alliance in his study on the dynamics of learning alliances: competition, cooperation and relative scope of examining the dynamics of alliance learning and develop a conceptual framework designed to capture the tension between cooperation and competition.

Recommendation for future research In particular, further research in the area of suboptimal learning behavior patterns should be a primary issue for alliance researchers interested in learning knowledge management. Hitt, Ahlstrom, Dacin, Levitas, and Svobodina (2004), asserted that the stability and supportiveness of Chinese institutional environment has helped Chinese firms take a longer term view of alliance partner selection focusing more on the potential partner’s intangible assets along with technological and managerial capabilities. Most of the alliance focuses on areas of little importance. For a successful alliance there should be social network, policy planning and implementation. Social networks are valuable conduits of information that provide both opportunities and constraints for firms and have important behavioral and performance implications for their alliances. Future research on how to implement policy document may be a contributing factor for alliance formation. Future research must also focus on cooperative learning with involvement of manufacturing firms, universities and non-governmental organizations. Can cooperative learning be used to improve the performances of these firms and enable them to achieve sustained economic growth and development?, what planning and policy implementation tools are needed for effective cooperative learning’s among alliance partners at both local and cross border levels?. Finally, research to provide sufficient evidence on alliance partners which siphon important technologies from each alliance partners therefore hollowing out each partner will serve as a guide for potential and prospective alliance partners planning to engage in international alliance.
References:

1. Holy Bible, Matthew ,Chapter 18  verse 19,King James Version.


