

# [Network based theories and internationalization of smes](https://assignbuster.com/network-based-theories-and-internationalization-of-smes/)

Researchers have been using of different basic theories to explain the internationalization of companies, such as transaction cost approach (TCA) (Anderson, 1986; Lee, Koh, & Heo, 2011), resource-base view (RBV) (Mariz-Pérez & García-Álvarez, 2009; Sharma, 1999; Westhead & Wright, 2001), network theory (Elo, 2005; Fletcher, 2008) and sometimes, a combination of them (Schwens & Kabst, 2009). Although, more recent studies have recommended to apply a holistic approach to explain the internationalization due to its iterative nature (Crick & Spence, 2005), and insufficiencies of existing theories like RBV, networking and even contingency theory to clarify it (Axinn & Matthyssens, 2002; Crick & Spence, 2005). In fact, a single theory can not fully explain and justify the internationalization strategies and process (Crick & Spence, 2005). Considering these recommendations and in view of usefulness of other theories to justify some dimensions of internationalization process, in this paper, we will focus on network theory to describe the internationalization process.

In spite of this fact that using of networking and network relationships in internationalization context needs to precise strategies because they have some negative impacts beside their benefits (Tang, 2011). Over the last decade, more researchers have applied networking approach to justify the internationalization of SMEs insofar the most powerful explanations for rapid internationalization are come from network theory, which refers to the use of networking concepts and relationships to describe the mechanism of early internationalization (Coviello & Munro, 1995; Oviatt & McDougall, 2004).

The internationalization is contain more risks for SMEs because their lack of resources. SMEs suffer from limited resources, restricted access to information and constrained financial budget to hire professionals (Musteen, Francis, & Datta, 2010; Tang, 2011). Because of these borders, SMEs are more rely on networking and network relationships in their internationalization (Coviello, 2006; Musteen et al., 2010). Therefore, SMEs’ studies are the most important context, which can provide the most influential evidence regarding the benefits of networking in internationalization (Tang, 2011).

There are two main streams about applying networking and network relationships in the context of internationalization of SMEs. While some studies use of network perspective as their framework theory to justify the internationalization (Elo, 2005; Fletcher, 2008; Fletcher & Barrett, 2001; Sydow, Windeler, Wirth, & Staber, 2010), others just consider the network relationship as a variable, which can influence the internationalization in different ways (Coviello & Munro, 1997; Kontinen & Ojala, 2011; Zain & Ng, 2006). This paper has focused on investigating and categorizing the former kinds of studies to provide clear insights about using of network perspectives in empirical internationalization studies. So, the main research question is, how can researchers choose a suitable network theory (theories), which can help them to explain their considering dimensions of internationalization in their future empirical studies?

## Networking Theories and Internationalization

Networking interactions can facilitate the internationalization among firms (Kontinen & Ojala, 2011), mitigate their perception of associated risks with entering to foreign markets (Musteen et al., 2010), reduce the cost of investment and time for process integration (Lin & Chaney, 2007), and improve their internationalization decisions and performance (Redding, 1996). In the field of entrepreneurship and SMEs’ studies, network ties can act as a driver of internationalization (Al-Laham, 2008), and help entrepreneurs to make the best decision for starting their internationalization (Xie & Amine, 2009).

It seems that the network perspective is more consistent with new business models, which have focused on higher level of technology and worldwide marketing (Overby & Min, 2001). In spite of this consistency of network theory, today’s studies, have failed to provide a comprehensive framework of the effects of networking and network relationships on the internationalization process. Because of this knowledge gap, designing a holistic picture to understand the role of networking in internationalization is very difficult (Musteen et al., 2010). But, at least, the literature clears for us that the internationalization is happened in an interactive environment that is conducted by a network of firms, which includes of focal and external actors (Awuah, Gebrekidan, & Osarenkhoe, 2011). Interaction of actors in a networks, can help them to access activities, resources and information that are necessary for internationalization (Awuah et al., 2011).

By reviewing the literature of networking and internationalization, this study has identified two main criteria include area of origin and context of origin, to categorize the network theories, which are used in empirical internationalization researches. Area of origin refers to the geographical regions of universities that the theories are developed in. There are two main, areas of universities that have presented and developed network theories. First, European universities that have focused on industrial networking theories, which originally developed to be used in organizations and companies, and second, American universities that have concentrated on theories, which are developed to justify the individual networking relationships at beginning and then they are used in managerial and organizational studies.

Another criterion is context of origin that points out to the starting context of a specific theory. Internationalizations are theories that emerged to explain the internationalization process and had used of the network perspective in their justification process. Network theories are original network perspectives that can be used in several contexts such as internationalization because of their more extended domains.

Interaction Approach

ARA-Model

Network Embeddedness

Revised Uppsala Model

Network-Based Internationalization Approach

Relationship Approach

Social Network Analysis

Network Mapping Technique

## Context Of Origin

## Area of Origin

## Networking

## Internationalization

## USA

## Europe

Figure 1: taxonomy of internationalization-networking theories

This taxonomy contains eight theories in four distinct boxes. There are three theories including interaction approach, ARA-model, and network embeddedness in the category of European original network theories. In the box of American original networking models, there are four theories. These theories are relationship approach, social network analysis and network mapping technique. There are two main original internationalization theories that had used of networking in their justification include revised Uppsala model and network-based internationalization approach. Surprisingly, both of them are settled in European category. In the next sections, all theories are explained and some recommendations are proposed to apply them in empirical studies.

## Original European Networking Models

As mentioned before, three theories are positioned in this category:

Interaction model: this model that is designed by Hakansson (1982) has focused on three elements: Actors, environment and atmosphere of interaction. When an interaction takes place between individuals or organizations, all elements that show in Figure 2 can affect it (Hakansson, 1982)

Figure 2: Interaction Model (adopted from Hakansson, 1982).

This model is presented to analyze the interaction between supplier and buyer in industrial market. This model can explain the short term and long-term exchanges in the form of products, services, information, and financial or social exchanges. Environment in the model refers to the macro elements that influence the interaction for example, institutional or political structures. Atmosphere points out to the microelements that affect the dyads of cooperative companies. Power, dependence, expectations and closeness are the important factors in this level. These factors can affect the behavior of both actors. The institutionalization of the market may affect the organizations and their motivation to improve their relationships. Adaptations can also strengthen the connections between actors (Hakansson, 1982).

ARA model: This model is presented by Håkansson and Johanson (1992) and includes three main elements in its first layer: actors, activities and resources. Actors are firms or individuals who control resources and create the value through transforming them. These three elements are strongly interdependent and there is interplay between them, so researchers should pay attention to them as a whole. The second layer of the model deals with analyzing the network relationships based on activity links, resource ties and actor bunds (Hakansson & Johanson, 1992). Figure 3, shows the model.

Figure 3: ARA-Model (adopted from Hakansson and Johanson, 1992).

The final purpose of this model is to justify the function of business relationships based on mentioned layers. The most important function of the business relationship is to interlink the activities in an especial manner to help the actors to transform resources for creating the optimal values (Hakansson & Johanson, 1992).

Network embeddedness model: Halinen and Tornroos (1998) developed this approach in Finland. They argued that firms are embedded in wider business networks. These networks can affect the firms based on the relationships with other actors and their positions within them (Halinen & Törnroos, 1998).

Figure 3: Network Embeddednes Model (adopted from Halinen and Tornroos, 1998)

As the Figure 3 shows, there are six types of network embeddedness that researchers should consider when investigate the behavior of firms in network context. Temporal embeddedness refers to the time. It says every company has past, present and future. History and future expectations can influence the current activities of the firm. Spatial embeddedness deals with the role of space and location on firm’s behavior. Social embeddedness, market embeddedness and political embeddedness, in turn point out to the affect of social structure, market structure and political structure on the decision-making behavior. Technological embeddedness implies to the impact of the level of technology in the firm and industry on business activities. This model claims that by focusing on these six kind of embeddedness and analyzing them correctly, we can explain and forecast some behaviors of firms (Halinen & Törnroos, 1998).

## Original American Networking Models

There are three identified theories that originally are presented in the context of network by American universities and then are used in the internationalization studies. These theories are:

Relationship approach: Andersen and Buvik (2002) based on the works of Dwyer et al. (1987) and Scanzoni (1979) developed a revised model regarding choosing international exchange partners. This model explains the selection of a proper international exchange partner in three continuous steps. As you can see in Figure 4, the beginning step is the awareness, in this stage the firm tries to investigate and find all feasible partners and gaining information about their strengths and weaknesses. In this step, the most important thing is the source of information and firms use of different kind of sources to access enough information (Andersen, 2002).

Figure 4: The choice of international exchange partner: a relationship approach (Adopted from Andersen and Buvik, 2002)

The next step that called exploration refers to selecting the most attractive partners based on selective criteria, which has already defined. In this phase, attractiveness of partners and their desire to negotiate about building mutual relationships are most important paints. The last step is the choice of the most suitable partner who can help focal firm to gain more benefits in the future. Trust, goal compatibility and enhance performance by cooperation are the most important consideration in this pace (Andersen, 2002).

Social Network Analysis: American researchers such as Aldrich (2006), Coleman (1988) and Granovetter (1985) extended this approach to organizational studies from social science. This approach has focused on the processes and mechanisms that are used by people in social structures to access resources and information (Aldrich & Ruef, 2006; Coleman, 1988; Granovetter, 1985). This perspective, has mainly focused on the informal relationships of actors (Granovetter, 1985) and uses of different kinds of connectedness such as weak, strength, direct and indirect ties beside some structural aspect of networks like size, density and diversity to justify a network based phenomenon (Aldrich & Ruef, 2006; Coleman, 1988; Granovetter, 1985). One of the most frequently used concepts in this kind of analysis is the social capital that refers to the number of relationships of a special actor in a network.

Network Mapping Technique: this technique seems to be developed from the field of social networking. The main goal of this technique is to design some maps of a given actor’s network in different points of time and compare them to analyze the target behavior of that actor. The main weakness of this technique is its ignorance to motivations and dynamisms behind the change. In fact, this approach just shows the changes and doesn’t say anything about the dynamisms and motivations underpinning behaviors (Fletcher, 2008).

## Original European Internationalization models

These theories are originally presented in the field of internationalization to justify the dynamisms and process of internationalization. There are two main theories in the literature that have used network framework in their justification logic to explain the internationalization. These theories are:

Uppsala Revised Model: Johanson and Vahlne (2009) revised their previous internationalization model by applying a basic networking prospect. The following figure shows the mechanism of this revised model.

Figure 5: The business network internationalization process model (Adopted from Johanson and Vahlne, 2009)

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This model like pervious model has two main parts, state variables and change variables. These two parts have interaction together and they influence each other. The upper left box of the model shows the opportunities beside the knowledge that implies to the opportunities as the most important element of the body of knowledge. The second state variable in the model is network position. Network position points out to this reality that the internationalization process takes place within a network context. The most important current activities include learning, creating, and trust building construct one of the changing aspects of the model. This aspect points out to the learning, creating knowledge and trust building as daily activities of firms. Another changing variable is relationship commitment decision that refers to the increasing or decreasing of commitment to the relationships (Johanson & Vahlne, 2009).

The state and changing dimensions of the model provide an interaction mechanism to explain the internationalization process in a network context. Based on this model, companies in the international environment, try to improve their knowledge about opportunities via their network position. Because the internationalization is conducted in a network context, gaining success in that process return to the network position, which help companies to get unique knowledge about existing opportunities.

For getting a better network position and gaining fresh knowledge regarding opportunities, firms should focus on their daily activities. The most important daily activities in the model are learning, knowledge creating and trust building. If firms can improve their learning capabilities, gaining more useful knowledge and building truthful relationships, they settle in a position to increase their commitment to the relationships. This dynamic nature behaviors that labeled as the change dimension in the model can affect the stat variables, which facilitate the internationalization process and in turn, the state dimension, will foster the dynamism of the change aspect (Johanson & Vahlne, 2009).

In sum, this model justify the internationalization of companies, in a network context, based on the interaction of two dimensions include state and change. State variable refers to long-term variables that they facilitate internationalization and changing aspect points out to short-term variables or daily activities, which support them.

Network-based internationalization approach: this model is presented and developed by Johanson and Mattson (1988) and tries to explain the internationalization of companies by paying attention to the environment as a business network and market. Based on the model, firms are embedded in a network and their internationalization process is completely influenced by their networks. In fact, the networks of companies, predict their international or domestic activities (Johanson & Mattsson, 1988).

They defined internationalization as an evolutionary process that is conducted in three sequential stages: 1- Market expansion: finding a new position in a new market as a network, 2- market penetration: improve existing position and increase resource commitment in the network, and 3- market integration: improve harmony between different position in the market (Johanson & Mattsson, 1988).

The position of the firm in the network (market) is the most important driver for internationalization. This position is defined based on two main elements: Degree of internationalization of the firm, and degree of internationalization of the network (market). According these two main elements, they defined four-market position for firms (Johanson & Mattsson, 1988).

Figure 6: the network-based internationalization model (Adopted from Johanson and Mattson, 1988)

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Early starter: this kind of firm is positioned in a market that its suppliers, competitors and its other cooperative companies have a few international relationship and the firm also doesn’t have access to information about international market. Because these firms can’t find useful knowledge via its market or its internal information systems so it prefers to use of agents for entering to foreign market. These agents have more knowledge about given foreign market and help early starter to bridge their knowledge gap (Johanson & Mattsson, 1988).

Lonely international: suppliers, competitors and other cooperative companies of this kind of firm don’t have access to international market, so they can’t help the firm to enter international market, but they have enough own experiences and knowledge about international market, which can be used in internationalization activities. These firms have better network position over their competitor because of their access to international markets (Johanson & Mattsson, 1988).

The late starter: these firms are in an environment, which competitors, suppliers and cooperators have widespread international relationships but the company doesn’t have enough knowledge and experience about foreign activities. In fact, these firms have indirect relationships with foreign partners via their competitors, suppliers and cooperators. Lonely starter has a weaker position than its competitors and building a tight network is very difficult for it (Johanson & Mattsson, 1988).

International among others: when the firm and its environment be highly internationalized, this position is shaped. In this position, both firm and its external actors have enough experience and knowledge about international markets. In this position, companies can have tight networks, which provides external resources for them and enable them to enter to third countries via cooperative strategies (Johanson & Mattsson, 1988).

## Application of the models in internationalization

Researchers point out to several applications and benefits of networking and network relationships in the context of internationalization, especially internationalization of SMEs. Awuah et al. (2011) point out to selecting foreign market, mode of entry and the level of resource commitment in international markets as some outcomes and dimensions of internationalization that are depended on the interaction of focal firm with external actors. Jones (1999) add another dimension of internationalization that can be justified by networking: speed of internationalization and Sharma (2003) exert that the best model for explaining the internationalization of born global firms is the network approach.

The mentioned dimensions are some general applications of the network approach in the context of internationalization, but this paper tries to present some instances of empirical applications of mentioned theories of networking and internationalization by reviewing existing literature.

Relationship approach is a limited domain theory that developed for a very narrow target: selecting the best international partner. Therefore it is used to explain selecting foreign market and entry mode based on choosing a proper international partner (Andersen, 2002).

Social network approach and its concepts such as weak and strong ties, and social capital have broadly applied in the context of small entrepreneurial firms. Researchers have used it to justify the international opportunity recognition by entrepreneurial companies (Kontinen & Ojala, 2011), selecting foreign market by born global firms (Sharma, 2003), international performance of new ventures (Han, 2007), and their internationalization speed (Kiss & Danis, 2010).

Countertrade is a form of internationalization that links an import activity to an export one as a continues process that bring mutual benefits to both parties (Fletcher, 1996). The most useful perspective to explain the countertrade internationalization is networking view (Fletcher, 1996). Ahlström & Westerlund (1990) applied interaction approach to justify this phenomenon while Fletcher (1996) used of network mapping technique and the ARA-model to explain it.

The life-cycle internationalization points out to the process of internationalization as a life patch that includes some improvements, difficulties and declines. Fletcher (2008) and Fletcher & Barrett (2001), employed network mapping technique and network embeddedness approach to describe this patch. Network mapping is an appropriate approach to justify the internationalization of firms during a period of time, but as earlier implied, this approach just shows the changes not dynamisms and motivations. Hence, researchers should apply it beside other models to gain a comprehensive picture of lifecycle internationalization. The best approach that it can help researchers beside network mapping technique to explain this view of internationalization is the network embeddedness. Table 1 summarizes some of empirical applications of reviewing theories.

Network-based theories

Application for internationalization

Example empirical works

Relationship Approach

Selecting international partner

Selecting foreign market

Selecting entry mode

(Andersen, 2002)

Social Network Analysis

International opportunity recognition

(Kontinen &Ojala, 2011)

Selecting foreign market

(Sharma, 1999)

International performance

(Han, 2007)

Internationalization speed

(Kiss &Danis, 2010)

Network Mapping technique

Beside other approaches to justify life cycle, countertrade internationalization.

(Fletcher, 1996)

(Fletcher, 2008)

(Fletcher &Barrett, 2001)

Interaction approach

Countertrade Internationalization

(Ahlström &Westerlund, 1990)

ARA-Model

Countertrade Internationalization

(Fletcher, 1996)

Network embeddedness approach

Life cycle internationalization

(Fletcher, 2008)

(Fletcher &Barrett, 2001)

Network-based approach

Internationalization process

(Chetty &Blankenburg Holm, 2000)

(Hadley &Wilson, 2003)

Revised Uppsala model

Internationalization process

(Vahlne, Ivarsson, &Johanson, 2011)

(Tavoletti, 2011)

Table 1: empirical applications of network based theories in internationalization

The original internationalization theories like network-based internationalization approach of Johonson and Mattson (1988) and revised Uppsala model, have tried to describe the whole process of internationalization. Although, the network-based internationalization is used in several empirical studies as their framework theories (Chetty & Blankenburg Holm, 2000; Hadley & Wilson, 2003), Uppsala revised model seems to be gained a lower attention (Tavoletti, 2011; Vahlne, Ivarsson, & Johanson, 2011) .

## Discussion and conclusion

There are several network-based theories that are used to internationalization context for examining internationalization process ad some aspects or outcomes of the process. The most important original network theories that are developed by European researchers are Interaction approach, ARA-model, and network embeddedness. It seems that these models and approaches are more suitable in some kinds of internationalization like countertrade and life cycle. In fact, these approaches are more applied to explain the holistic analysis of special internationalization strategies by companies especially larger ones.

In contrast with these theories that are originally developed in the context of networking and then are used by internationalization researchers, some internationalization-based theories are designed by applying networking perspective in their justification logic. The most important theories of this kind are network-based internationalization model and revised Uppsala model. These theories try to describe the whole process of internationalization by all firms, but researchers find some insufficiencies for applying them in SMEs.

American researchers broadly present the basic theories of social networking that are shaped the underpinning of other theories. Three of them are identified in this paper based on reviewing of networking and internationalization literature. Relationship approach explains choosing a suitable international partner by large and small companies. Network mapping is a complementary technique that is used beside other approaches to justify some aspects of internationalization during a period of time. The most important approach in this category and the most suitable perspective for explaining the internationalization of SMEs is social network analysis. Many empirical studies have used of this approach to clarify and describe the internationalization process and some different aspects of international strategies of SMEs. Therefore, it seems that the best approach for studying some aspects of SMEs internationalization is this theory.

In summary, as other researchers (Axinn & Matthyssens, 2002; Crick & Spence, 2005) have recommended to apply several framework theories such as RBV, TCA and Networking to provide a comprehensive understanding of internationalization, this paper extends this recommendation to sub-theories of networking framework. In fact, researchers should employ one or more suitable theories based on their research goals to gain a fully picture of their determined internationalizations aspects.