

# **Interfirm Power-Dependence in Marketing Channels: A Historical Perspective**

**Mert Tokman**  
**James Madison University**

**Casey Waldsmith**  
**The University of Memphis**

*The purpose of this manuscript is to review the literature on power-dependence from a historical perspective. Our examination of nearly seventy years of research revealed an evolution of this phenomenon through various disciplines and theoretical lenses. The transaction cost and resource-dependency theory era focused on the potential of opportunistic behaviors and use of coercive power resulting from asymmetric resource dependencies between channel members. The ensuing commitment-trust theory era established that coercive power usage would be detrimental for channel relationships causing instability. Commitment-trust era researchers encouraged non-coercive power utilization methods even in cases of asymmetric dependency in order to strengthen trust, commitment, and stability among channel members. In the present era, resource-advantage and value co-creation perspectives recommend firms to collaborate interdependently and build various operant resource interconnections to co-create value for the end-users. Finally, we offer possible directions for the future of power-dependence research as marketing channels and supply chains adopt new technologies like Blockchain and artificial intelligence to enhance co-created value for end-users.*

*Keywords: power, dependence, historical perspective, blockchain, artificial intelligence*

## **INTRODUCTION**

The concept of power-dependence is defined as one member's "ability to control the decision variables" in a marketing channel as a result of the other member's reliance on continuing the channel relationship in order to achieve desired outcomes (El-Ansary, 1975, pg. 61; El-Ansary & Stern, 1972; Brown, Lusch & Muehling, 1983). Dependence among channel members has never been more relevant than in the recent era where supply chains and marketing channels are defined as value co-creation networks (Lusch, Vargo & Tanniru, 2010). The members of these networks depend on each other to exchange resources to co-create value for the end-users (Vargo and Lusch, 2004). In an era where dependence is driven by reciprocal resource exchange and interconnections, the firms that possess the most valuable resources gain a potential advantage to use power and control the decisions made within interfirm networks.

For instance, in manufacturer-retailer channels, Walmart, the largest retailer in the world, can exert power on one of the largest consumer goods companies in the world, Proctor & Gamble (P&G). This is because Walmart possesses critical resources like shelf space and retail distribution on which P&G is dependent on creating more than 14% of their overall revenues (Nassauer & Terlep, 2016). Similarly,

Amazon, the leading electronic retail platform, can apply power on its business-to-business product suppliers because Amazon's retail distribution resources account for 60% of the growth in the online sales of these firms (Kodali, 2016). Therefore, it is very important for researchers and practitioners to understand the historical evolution of the power-dependence concept and the future research directions with impact from new technologies.

The purpose of this manuscript is to review the literature on power-dependence from a historical perspective and analyze how the evolution of power-dependence concept made an impact on the norms of relational exchanges in marketing channels. Our review starts with early conceptualizations in sociology (1950s-1960s), political science, and macroeconomics (1960s-1970s). Then, the progression of the concept within marketing channels is analyzed as the concept went through examination in various theoretical eras including the Transaction Cost Economics and Resource Dependency theory era (1980s-1990s), Trust-Commitment Theory of Relationship Marketing era (1990s-2000s), and Resource-Advantage Theory and Value Co-creation era (2000s-2010s). Next, directions are offered for future developments in power-dependence research based on new technological innovations like Blockchain and artificial intelligence. Finally, implications for theory and practice are discussed.

### **EARLY CONCEPTUALIZATIONS IN SOCIOLOGY (1950s-1960s)**

The concept of "social power" initially appeared in sociology during the 1950s. In an effort to conceptualize social power, Bierstedt (1950) first distinguished power from similar concepts like prestige, influence, and dominance and then defined social power as a latent force that derives from a majority in numbers and greatness in various types of resources in social organizations. Bierstedt's (1950) mention of greater resources as a source of gained power is very influential in the way we discuss power-dependence today, in the era of Resource-Advantage Theory. Following Bierstedt, Abramson et al. (1958) defined the concept of power as social actions taken to fulfill an expectation by actors who are motivated by the commitment to fulfill the expectation. Moreover, Abramson et al. (1958) differentiate between negative and positive power. They define positive power as the exceedance of actions beyond what needs to be committed to fulfilling an expectation and negative power as actions to adjust expectations and/or levels of commitments in cases of authoritative breakdowns and intolerable situations. Abramson et al. (1958) use the example that an army has positive power if they commit more soldiers to defend military outposts than what needs to be committed to winning a war. Conversely, negative power would occur if the expectation or commitment to winning the war was adjusted because of intolerable situations like infighting within the army that diminishes the authority of its generals. Here, it is important to note that Abramson et al. (1958) argued that the fulfillment of expectations is driven by the commitment of the actors. This notion later influenced the way the power-dependence concept is discussed in the Trust-Commitment Theory of Relationship Marketing where the trust and commitment variables are key drivers of cooperation and achievement of mutual benefits between marketing channel members.

Following the conceptualizations of social power in the early 1950s, French and Raven (1959) developed a formal theory of social power. This theory suggested that interpersonal relationships could be used as a guide to understanding complex issues about group dynamics and postulated five bases for social power within groups: *attraction power* based on one party liking the other; *expert power* based on one party's dependence on the knowledge and information possessed by the other; *reward power* based on one party's ability to present the other one with incentives; *coercive power* based on one party's ability to present the other one with disincentives; and *legitimate power* based on one party's belief that the party can control their decisions. French and Raven (1959) concluded that expert power would have the broadest range of utilization among the five bases. While coercive power was posited as the power base that would increase resistance and conflict between parties, reward power was argued to have the opposite effect. Later, Lundstedt (1966) examined how organizational leaders utilized various types of social power and agreed with French and Raven's (1959) assertion about coercive power's negative impacts on relationships within organizations. French and Raven's (1959) theory of social power has been widely accepted and used in marketing channels literature including several seminal articles on channel power like El-Ansary and Stern

(1972), Hunt and Nevin (1974), and Lusch (1976). The broad acceptance of French and Raven's social power theory (1959) in marketing channels literature also came with criticism, mainly due to its lack of developmental rigor (Bloise and Hopkinson, 2013). Hunt (2015) later rebutted these criticisms. Hence, one can conclude that French and Raven's (1959) bases of social power model has been the main driver of marketing channel power-dependence discussions to this date. However, these discussions are far from being over as alternatives to the five power bases are being offered in more recent models (see Lusch and Brown, 1982).

Emerson (1962) is the first article in sociology literature that put the terms power and dependence together and formed the theory of power-dependence relations. According to Emerson (1962, pg. 32), one party's "power resides implicitly in the other's dependency." Moreover, Emerson (1962) suggests that the power to influence others exists in control of resources on which the others are dependent. Emerson's views on power-dependence closely follow the original thoughts written by Bierstedt (1950) and they form the basis of power-dependency concept in marketing channels as described by the Resource-Advantage Theory (Hunt and Morgan, 1998).

### **CONCEPTUALIZATIONS IN POLITICAL SCIENCE AND MACRO ECONOMICS (1960s-1970s)**

Sociologists studied the social power concept not only at the micro (individual/small group) level but also at the macro level – especially within political organizations. Lehman (1969) summarized the main differences between micro and macro levels of power utilization and explained how both the sources and the outcomes of power might be more extensive (multiple) at the macro level. The macro level studies yielded two major schools of thought in social power: the power elite (Mills, 1956) and the pluralist (Dahl, 1957) views of power. The power elite (Mills, 1956) and community power (Hunter 1953) researchers viewed power as being mainly embedded in organizations and not in individuals. Moreover, they observed that the elites who gained their power from economic resources and enforced their power on non-elites controlled the communities (including nations) (Merelman, 1968). Mills (1956) suggested two indicators as to who owns power: (i) those who benefit from using power and (ii) those who govern by using power. Later, Perrucci and Pilisuk (1970) conceptualized power as an outcome of interorganizational resource network ties rather than economic elitism. The network-based view of power held important implications for the more recently developed Resource-Advantage and Value Co-Creation theories that explain power-dependence issues in marketing channels.

Once the social power concept made its transition to the national level, political scientists joined the discussion led by Dahl (1957, 1961) and his pluralist followers like Polsby (1963) and Merelman (1968). According to pluralists, the two indicators of power suggested by Mills (1956), "who benefits" and "who governs," were not useful indicators. They argued that excessive accumulation of economic resources may be accidental or may be a consequence of uncontrolled environmental factors rather than power (Dahl, 1961). Furthermore, they suggested that unbalanced representation of reputed "elites" in government might be a case of using figureheads in these positions and key decisions possibly being made by others. Consequently, the pluralists argued that the main indicator of power is "who wins." Dahl (1957) conceptualized power as a relation between people and added that power exists when one party can influence another to do something they would not otherwise do. He went on to illustrate his theory of power comparability by rank ordering US senators based on the policy decisions they were able to pass by using their influence to get the other side of the aisle to vote for them. Moreover, Michel (1964) illustrated that the power elite theory only held for small communities but not for larger communities. The discussion of social power among elitists and pluralists evolved in time and led to a conceptualization of the power concept with four widely accepted indicators that are being used today in political science (Domhoff, 2006). These four indicators include: (i) who receives the most of what people seek for and value; (ii) who is overrepresented in key decision-making positions; (iii) who wins in the decisional arena; and (iv) who is thought to be powerful by knowledgeable observers and peers.

As the power concept started to gain more impetus at the national community and government levels, the economists began to use the terms power and dependence in their articles. For example, Deutsch (1960)

wrote about the Canadian economy's dependence on international trade – especially trade with the US. Deutsch (1960, pg. 443) noted that the U.S. “has the power of life and death over the majority of Canadian exports which are sold in the United States market” and urged Canadian officials to negotiate a more reciprocal trade agreement with the USA. Similarly, Weisskoff and Wolff (1975) observed the dependence of the Puerto Rican economy on trade with mainland U.S. and suggested Puerto Ricans to diversify their agriculture and industries beyond sugar canes. Studying relationships between host manufacturing companies from less developed countries and foreign multinational suppliers from developed countries, Helleiner (1971) observed the interdependencies between these organizations and noted existence of power in cases of dependence imbalance. Also at the organizational level, Taylor (1977) examined the concept of contrived dependence between focal firms and their suppliers. This type of dependence is created by the focal firms' use of power to lower the opportunity cost of the supplies and thus to give them an ability to exploit their suppliers. Taylor's (1977) view of “power and dependence” is in line with the transaction cost theory and its main construct, opportunism, which has been widely used in marketing channels literature. Finally, Mock (1979) applied Emerson's (1962) theory of power-dependence relations on intergovernmental relationships and concluded that the imbalance of critical resources is the basis of a government's power over its alternatives.

### **POWER-DEPENDENCE IN MARKETING CHANNELS (1970s-1980s)**

The concepts of power and dependence initially made their way into the marketing channels literature as the researchers were studying and writing book chapters about the notion of channel conflict (Stern and Gorman, 1969; Stern and Heskett, 1969; Baier and Stern, 1969). Stern and Gorman (1969) defined channel conflict as a situation where one channel member perceives the behavior of another member to be impeding for the attainment of its goals. Consequently, they argued that one channel member could not pursue its own goals without considering how it affects the other channel members and this thought led them to the concept of interdependence between channel members (Stern and Gorman, 1969). Then, they explained how the imbalance of dependency might lead to the use of power by channel members paralleling the thoughts of Bierstedt (1950) and Emerson (1962) from sociology. With influence from French and Raven's typology of power bases, Stern and Heskett (1969), as well as Baier and Stern (1969) wrote about the various types of power use in the management of channel conflict situations. Unlike some of the economists like Taylor (1977), Stern and Heskett (1969) argued that the possession of power does not automatically advocate exploitation of other channel members or regular use of coercive power. They emphasized the use of non-coercive types of power bases (e.g., reward and expert power) and discussed how utilizing power in a non-coercive way can have a positive impact on the attainment of mutual goals. Similarly, Bucklin (1973) stated that it would be unwise to use coercive power in channel relationships even in cases where unbalanced dependency between suppliers and middlemen exists. Later, Hunt and Nevin (1974) empirically tested franchisors' use of coercive and non-coercive power on their franchisees and found evidence for Stern and Heskett's (1969) assertions on the benefits of non-coercive uses of power.

The channel-conflict based discussions of power and dependence concepts paved the way for the first seminal article in the marketing channels literature written by El-Ansary and Stern (1972). In this article, El-Ansary and Stern (1972) combined Emerson's (1962) view of power as a function of dependency with French and Raven's (1959) view of power as a function of its five sources and developed the first empirically derived measurement instrument for the concept of channel power. Following this article, El-Ansary (1975) wrote a second seminal paper on the channel power and dependency topic. In this article, El-Ansary (1975) empirically tested the two determinants of dependence developed by Emerson (1962): (i) motivational investment in goals and (ii) availability of alternatives. The results of the study suggested that Emerson's (1962) dependency determinants identified in sociology did not directly transfer to marketing channels. Instead, El-Ansary identified two alternative dimensions of dependence: (i) stake in channel relations and (ii) commitment to marketing programs. Whereas the stake in channel relations dimension covered the two Emerson determinants (investment in goals and availability of alternatives), the

commitment to marketing programs dimension included all aspects of wholesaler and dealer marketing campaigns.

The next few years of power-dependence literature in marketing channels offered readers with several controversial publications. In El-Ansary and Robicheaux (1974), the authors questioned Bucklin's (1973) "theory" of channel control stating that it was based on a false assumption of power being used on a unidirectional basis in channel relationships. They contributed that "power is a dyadic relationship because of the mutual dependency inherent in the channel relationship and the channel member's control over different channel policies" (El-Ansary and Robicheaux, 1974, pg.7). Etgar (1976) also noted the dyadic aspect of power use in channel relationships in an empirical study that tested French and Raven's (1959) five power sources, Emerson's (1962) dependency, and the countervailing power of another channel member (dyadic aspect) as drivers of power use. This study was criticized by Fornell (1978) mainly because it tested a non-refutable relationship between two power variables, the focal firm's power use and the channel partner's countervailing power use. Later, Etgar criticized Lusch's (1976) empirical study that tested the relationship between coercive/non-coercive power use and channel conflict because it disregarded the dyadic aspect of channel power. While discussions over the dyadic aspect of power and issues in regards to its operationalization and measurement went on for a while (see e.g. Lusch, 1978; Etgar, 1978), the positive link between coercive use of power and channel conflict was established after the studies published by Hunt and Nevin (1974), Robicheaux and El-Ansary (1976), and Lusch (1976).

At the beginning of the 1980s, the marketing channels researchers developed an alternative classification scheme for French and Raven's (1959) power sources. In addition to exploring power sources as coercive/non-coercive, Lusch and Brown (1982) used the economic/non-economic power sources classification where coercive, reward, and legitimate power sources were deemed as economic and referent, informational, and expert power sources were posited as non-economic. They concluded that the alternative model did not have more explanatory power than the previous models that used the coercive/non-coercive power source classification but noted that the link between economic power sources and perceived possession of power by channel members was stronger than the link between non-economic power bases and perceived power. Similarly, Brown, Lusch, and Muehling (1983) found that economic bases of power have a positive and significant effect on both perceived power and dependence, but the same did not hold for non-economic power sources. Dickson (1983) also took Hunt and Nevin's (1974) coercive/non-coercive power source classification as its foundation to propose two new methods for managing power-dependence in marketing channels, including (i) distributor portfolio analysis (DPA) and (ii) channel dependence matrix (CDM). While DPA was proposed to assess distributors' aggressiveness, CDM was offered as a complementary analytical tool to DPA for observing power balance/imbalance in a channel. Finally, Gaski (1984) provided a thorough review of the power concept in marketing channels literature and presented a series of proposals that tied the channel power-conflict link to satisfaction with channel relationships.

## **TRANSACTION COST ECONOMICS AND RESOURCE DEPENDENCY THEORY ERA (1980s-1990s)**

While channels researchers were conducting empirical studies to transfer the power-dependence theories from sociology to marketing, a parallel research stream on power and dependence was taking place in organizational behavior literature. One of the first articles that introduced power and dependence concepts to organizational behavior was Patterson (1969). In this article, Patterson (1969) suggested that the imbalance of power brings up questions of unethical behavior in interorganizational relationships and firms may choose to be opportunistic when they possess power over other firms or consumers. The concept of "opportunistic behavior" is one of the main building blocks of transaction cost theory and it refers to one party's propensity to seek unilateral gains at the expense of others (Williamson, 1975). Transaction cost theory argues that firms engage in various types of governance mechanisms with other firms to attain the goal of minimizing their transaction costs that occur due to such factors as opportunism and dependence (Williamson, 1975; 1985; Kogut, 1988). Hence, it has been argued in organizational behavior research that

opportunistic behavior and conflict are functions of one firm's dependence on the other (Bacharach and Lawler, 1976; Heide and John, 1988; Provan and Skinner 1989).

Complementing the transaction cost theory, resource dependence theory (Pfeffer and Salancik, 1974; 1978) posits that the firm is an open entity that relies on its external environment to acquire valuable resources. Often, these valuable resources exist in the hands of other organizations and thus interdependencies and resulting conditions for power imbalance, conflict, and opportunism arise. Sharing similar views, Jacobs (1974) identified five types of resources on which organizations may become dependent, including: (i) input acquisition (supplies), (ii) output disposal (distribution), (iii) capital, (iv) production factors, and (v) labor force. Later, Kotter (1979) developed a framework for managing external dependencies and offered four main strategies to do so. The first strategy suggested that firms should build expertise around a domain based on their strengths where they can become a powerful player on which other firms may become dependent. Second, Kotter (1979) suggested firms to establish linkages with external partners including joint ventures and other types of strategic partnerships where the resources may be shared within the network in a reciprocal manner. While the third strategy advocated firms to control their domain possibly through vertical integration, the fourth suggested for firms to adapt to their external environment through changes in their internal environment.

Having observed the parallel research streams in marketing channels and organizational behavior, Reve and Stern (1979) offered an in-depth review of the power-dependence studies in both disciplines and called for collaboration between the two disciplines to extend the theory. Answering the call, Provan, Beyer, and Kruytbosch (1980) combined ideas from multiple streams including resource dependence, interorganizational networks, and political economy. This study contributed to the power-dependence literature by developing measures for three types of power: (i) perceived power, (ii) potential power, and (iii) enacted power. In this study, Provan et al. (1980) developed several hypotheses and tested them using data obtained from United Way and its 46-member agencies. The results suggested that potential power, which was measured as the individual agency's dependence on United Way, provided the strongest linkages between agencies community resources and balance of power. In addition, linkages with other organizations were found to be the strongest indicators of enacted power, which was measured as an agency's success in obtaining funding from United Way. Later, Skinner, Donnelly, and Ivancevich (1987) also attempted to extend the power-dependence theory through an empirical study that confirmed the positive linkage between dependence and power but failed to support two possible drivers of dependence: (i) conventional/contractual transaction forms and (ii) the extent of environmental linkages (including interorganizational partnerships).

In the following years, several studies focused on transaction cost economics (TCE) to explain the interorganizational power-dependence phenomenon. First, Heide and John (1988) concentrated on the transaction-specific investments aspect of TCE that they defined as tangible and intangible assets that are necessary for the continuation of an exchange relationship. They argued that transaction-specific investments made by one of the parties in a relationship is a source of dependence that can be mitigated by offsetting investments made by the other party. Heide and John (1988, pg. 21) concluded, "a dependence-balancing approach can safeguard specific assets, even in situations for which the traditional safeguard of vertical integration is infeasible." Sriram, Krapfel, and Spekman (1992) also concentrated on the relation-specific costs and found that relation-specific costs are strongly linked to both dependence and transaction costs, which have a negative relationship with cooperative behavior. Alternatively, Provan and Skinner (1989) focused on the opportunism aspect of TCE and concluded that opportunistic behavior in a buyer-supplier relationship would be negatively driven by buyer's dependence on the supplier and would be positively affected by supplier's control (power) over the buyer. Finally, Kumar, Scheer, and Steenkamp (1998) conducted an empirical study and found that it is a firm's punitive capacity that increases punitive actions (use of coercive power) and not the asymmetry (imbalance) of power or dependencies.

## **TRUST AND COMMITMENT THEORY ERA (1990s AND 2000s)**

During the 90s, research began to focus on the central role that trust plays in governing channel relationships. By that time, the importance of cooperation in the rapidly expanding global competitive environment has been realized. The increasing demands of this competitive landscape meant that sustainable success would not come from companies competing individually, but through their success in seeking out and managing relationships that improved the productivity and efficiency of both parties (Andaleeb, 1996; Doney and Cannon, 1997). This recognition of the key role that long-term relationships play in successful marketing management led to a shift towards relationship marketing (Houston and Gassenheimer, 1987; Andaleeb, 1996). Morgan and Hunt (1994) developed the commitment-trust theory of relationship marketing. The rationale of their theory is based on three major pillars suggesting that commitment and trust persuade firms to (1) sustain highly invested relationships through cooperation; (2) prefer long-term benefits of mutually committed relationships to appealing short-term options; and (3) approach to high-risk situations with more confidence since the cooperative partners are not expected to behave opportunistically. Simply put, Morgan and Hunt (1994) suggest that it is commitment and trust rather than balance of power and/or prevention of opportunism that cooperative relationships are built upon.

Morgan and Hunt's (1994, p. 23) define trust as "existing when one party has confidence in an exchange partner's reliability and integrity." While there is some variation in early conceptualizations of trust, most conceptualizations seem to agree on two components of trust: the reliability component and the benevolence component (Doney and Canon, 1997; Duarte and Davies, 2004). While reliability component posits that partners can trust each other's word to be true, benevolence component explains the belief that the other party has a genuine interest in joint gains and is not just self-interested. Hence, the emergence of trust caused a shift in explaining the motivation behind interfirm relationships from power and opportunistic gains to reliability, benevolence, and reciprocal resource exchanges.

One of the reasons why trust-based research on interfirm relationships practically replaced power with trust was because the concept of power was often misunderstood to only imply coercive power (Frazier, 1999), and as such, to not be effective in long-term relationship building. Given the undeniable role that power plays in most channel relationships however, and particularly those with highly asymmetric power structures, later work started to examine the relationship between power (coercive and noncoercive), dependency, trust, commitment, and cooperation. For example, Andaleeb's (1996) experiment showed that dependency leads to greater commitment in the relationship only when there is high trust. When trust is low, the dependent party simply stays in the relationship until the first chance they get to switch. In fact, Andaleeb (1996) finds that commitment in the relationship is higher in low dependency-high trust conditions than in high dependency-low trust conditions. Geykens et al. (1999) tested the relationship between dependency, power (coercive and non-coercive), trust, and satisfaction (economic and non-economic satisfaction). Results from their meta-analysis showed that not only was there a strong relationship between dependence, power and trust, but that this relationship was not always negative. Simply put, they revealed that lower levels of dependence lead to less coercive and more non-coercive influential tactics, which in turn increases noneconomic satisfaction. Noneconomic satisfaction in return, has a direct and powerful influence on trust.

The exploration of the linkages between power, dependence, trust, and commitment continued in the 2000s. Kim (2000) found that firms use more non-coercive power than coercive even in cases of power asymmetry when trust exists between the firms. Li and Dant (2001) developed a definition and measurement tool for interdependency in marketing channels and concluded that a balanced interdependence between channel members is a strong driver of trust between firms. Later, Duarte and Davies' (2005) study of 887 financial agencies (franchisors) showed how power asymmetry influences the type of power to be used, which then impacts trust, cooperation/conflict and finally, satisfaction. In short, their results showed that lower levels of power asymmetry lead to more use of non-coercive power, higher levels of trust and ultimately to higher satisfaction through cooperation and reduced levels of conflict. On the other hand, at higher levels of power asymmetry, more coercive power usage, less trust, and lower levels of satisfaction are observed. Payan and Farland (2005) also studied the relationship between dependency,

influence tactics (contingent and non-contingent), trust and satisfaction. Their study on 356 distribution firms reveals that trust mediates the relationship between dependence and satisfaction. More specifically while some influence tactics like threats and promises decrease trust, other influence tactics like recommendations and requests to exchange information improve trust and as a result, improve satisfaction. In addition, both Skarmeas and Katsikeas (2001) and Barnes et al. (2005) found a positive link between trust and supplier dependency and provided support for the results of Payan and Farland (2005).

Palmatier, Dant, and Grewal (2007) offered, perhaps, the most comprehensive study of interfirm exchange relationships to date. They tested several theoretical perspectives, including power-dependence and commitment-trust, to shed light on the economic and non-economic performance of exchange relationships. In sum, they found that commitment and trust are stronger drivers of cooperation and economic performance than power and dependence in interfirm exchange relationships. Moreover, they confirmed the strong linkages established between interdependence, trust, and commitment in previous studies. These findings in marketing channels literature also encouraged supply chain researchers to examine the relationships between the same variables in buyer-supplier relationships. First, Davis and Mentzer (2006) found that in cases of high logistics service performance (an indicator of trust); dependence asymmetry leads to relationship continuity (commitment) in buyer-supplier relationships. Later, Petersen et al. (2008) conducted an empirical study and their results indicated that the positive relationship between dependence and trust is mediated by social interactions like joint workshops and team building activities between buyers and suppliers. Testing these findings with a Chinese sample of buyers and suppliers, first, Cai and Yang (2008) found a strong link between dependence and cooperation and then Chu and Wang (2012) claimed a positive relationship between dependence and relationship quality (measured by a construct that combines trust and commitment). Recently in a study examining the relationships between dependence and brand/store loyalty among Chinese retailers and their suppliers, Zhang et al. (2017) found that consumers' brand loyalty has a positive effect on retailers' dependence on suppliers, while consumers' store loyalty has a positive impact on suppliers' dependence on retailers. Hence, one can conclude that the commitment-trust era in marketing channels established a strong connection between balanced interdependence, non-coercive use of power, trust, and relationship commitment.

## **RESOURCE ADVANTAGE THEORY AND VALUE CO-CREATION ERA (2000s AND 2010s)**

Hunt and Morgan (1995) developed the Resource-Advantage (R-A) theory as an extension to Resource Based View (Barney, 1991) and define resources as the tangible and intangible inputs accessible to the firm that allows it to produce a market offering that holds some value for the marketplace. Hence, R-A theory argues that resources are heterogeneously distributed among firms in a given industry. Similarly, Value Co-Creation theorists classify resources as operant (intangible, dynamic resources that produce impacts and outcomes on other resources like organizational core competencies and culture) and operand resources (tangible, static resources that can be processed to produce a result like raw materials) and suggest that value creation is primarily a result of utilizing operant resources (Vargo and Lusch, 2004). Madhavaram and Hunt (2008) further analyze operant resources and develop a hierarchical order. This hierarchical order includes basic, composite, and interconnected levels of operant resources; as firms go from basic to interconnected levels of the hierarchy, they increase the value (cost of acquisition, time needed to develop/imitate) of their resources. Value co-creation framework suggests that value for end-users are co-created through exchanges of higher-level resources between value network members (Tokman and Beitelspacher, 2011).

Both R-A theory and Value Co-creation views seem particularly appropriate for examining channel relationships because firms essentially use such relationships to gain access to other firms' valuable resources. These two frameworks agree that cooperation is about creating the superior value for the targeted customer segments by bundling existing resources with the channel partner's resources (Hunt and Morgan, 1995; Vargo and Lusch, 2004). R-A theory further indicates that cooperative inter-firm linkages are sources of the firm's relational capital that accumulates in time as a stock of relationships. In turn, these relational



exchanges constitute valuable shared resources that contribute to the firm's ability to produce a market offering and gain a competitive advantage (Hunt, 2002).

Using these two theoretical perspectives, several recent studies explored the links between resource interactions and power-dependence relationships in marketing channels, supply chains, and strategic alliances. For example, Griffith and Harvey (2001) tested the relationships between existence of various types of resources and power between foreign distributors and US manufacturers. They found positive linkages between such foreign distributor resources like relationship predictability, knowledge asymmetry and distributor's power over the US manufacturer. Alternatively, in a study that explored the retailer-supplier marketing channel in China, Zhuang and Zhou (2002) found a reversed relationship between power and dependence suggesting that channel members "choose" to depend on other channel members based on the power (or valuable resources) they hold rather than powerful members obtaining their power based on the dependence of the others. Another study by Kim, Hoskisson, and Wan (2004) explored power-dependence relations in Japanese *keiretsu* interfirm networks. This empirical study provided results suggesting that Japanese *keiretsu* networks can be identified as a power dependence system where there is a member order based on their power status. Moreover, they found when some *keiretsu* members combined their strong power within the network with their resources to diversify their product and geographic market resources; their growth outcomes were greater than the weaker members' growth outcomes. Moreover, Gilliland, Bello, and Gundlach (2010) examined the dependence management strategies using unilateral and bilateral methods and concluded that conflicts in industrial interfirm relationships would be best managed by using bilateral incentives when there is dependence asymmetry in a relationship. Then again, Touboulis, Chicksand, and Walker (2014) ran a series of case studies on exchange relationships between a multinational food producer and its agricultural suppliers and concluded that the lack of resource exchanges between channel members cause a shift from power positions to balanced interdependencies in the United Kingdom food industry. In a study exploring the links between product/market-based resources and manufacturer's dependence on private brand retailers, Kim, Jung, and Park (2015) found four positive resource-based drivers of dependency. These four drivers included (i) retailer's ability to innovate products faster than other retailers; (ii) retailer's ability to provide consumers with necessary information about the private brand products; (iii) retailer's distributor power (such as brand power of retailer), and (iv) retailer's knowledge specificity and ability to produce sophisticated ideas.

On the value co-creation front, Fryberg and Juriado (2009) conducted an empirical study about interactions in value co-creation networks in the Swedish travel industry and concluded that balance of power and trust are the two facilitating interfirm resources for value co-creation. In a case study of a Portuguese packaging materials manufacturer and its outsourcing relationship partners, Baraldi et al. (2014) determined that outsourcing relationships are value co-creation activities that are cultivated through mutual dependence between the partnering firms. Moreover, they identified several antecedents to mutual dependence including flexible and transparent pricing, long-term and regularly renewed contracts, joint teams (integration), and developing customized solutions. In another study examining the antecedents of value diminution (opposite of value co-creation) through dyadic interviews, Vafeas, Hughes, and Hilton (2016) concluded that value diminution is an outcome of deficiencies in resource exchange due to lack of trust and power/dependence imbalance.

## **CONTEMPORARY TECHNOLOGIES AND THE FUTURE OF POWER-DEPENDENCE RESEARCH**

To date, the power-dependence research in marketing channels examined the two variables from the resource-dependence, transaction cost, commitment-trust, relational exchange, resource advantage, and most recently from the value co-creation perspectives as described in previous sections. In this section, future research directions for the power-dependence relationships in marketing channels and supply chain networks will be discussed. In fact, Paulin and Ferguson (2010) have developed a conceptual model to provide a plan for future relational exchange research based on the principles of Service-Dominant Logic and Co-creation of Value perspectives. Parts of this model also included power-dependence as a component

of relational exchange norms in marketing channels. Pauline and Ferguson's (2010) model start with various types of operant resources described as "relational competencies" including organizational culture and boundary spanning technologies. Cultivation of these operant resources leads to relational exchange described as formal contractual agreements between network members, which in turn leads to value co-creation facilitators including mutual trust, *interdependent* collaboration, and shared acquisition of knowledge. Finally, the model indicates that these three facilitators drive the end-user value co-created by network members. In sum, Pauline and Ferguson (2010) view balanced interdependency (rather than asymmetric dependency) as one of the core components of value co-creation perspective and suggest that future research should consider co-created end-user value as an outcome of balanced interdependency which is driven by formal contracts directly and operant resources indirectly. Moreover, by including balanced interdependence in their model, Pauline and Ferguson (2010) essentially excluded any consideration of power from future research.

While we agree with the general tenets of Pauline and Ferguson's (2010) model, we noted two possible areas of contribution for the future. First, we suggest that future research should consider developing models with direct linkages among technology-based operant resources, mutual trust, and interdependent collaboration to maximize co-created value. More specifically, we focus on two technologies that are gaining widespread use in marketing channels and supply chains, Blockchain and Artificial Intelligence (AI), to explain the reasons for our assertions. Second, we suggest that the concept of power should still have a place in upcoming models even though the holders of power may shift from direct channel members to technology service providers in the future.

Blockchain technology is a shared ledger on a digital platform that uses encryption to make entries permanent and tamper-proof (Kshetri, 2018). It has become popular in the financial field with the emergence of cryptocurrencies and since then it has been widely adopted in the supply chain and retail channel management industries (Mathieson, 2017). Recently, supply chain professionals have been very active in promoting the use of this technology citing several benefits. The benefits of Blockchain include increased transparency, accountability, data security, and agility in a global supply chain and therefore it creates trust in an industry where interfirm trust is not easy to establish (Powers 2018, Mathieson 2017, Burnson, 2017). In fact, in an interview with Salustri (2018, pg. 13), Sandy Selman (CEO, CPROP – Blockchain service provider for real estate industry) emphasizes Blockchain's ability to create trust as follows: "show me a pain point around trust and verification, and I'll show you a nascent Blockchain application." Blockchain is a shared technology by supply chain partners and therefore interdependent collaboration is inherent in its utilization. For example, the Danish logistics service provider, Maersk, the Chinese e-commerce giant, Alibaba, and the US based IT services provider, IBM, have joined forces to introduce a Blockchain application to link all supply chain members on a central platform to record and exchange critical information (Burnson, 2017). The food industry has also been very active in the adoption of the technology to be able to create value for the end-users by building trust in their food source through utilization of transparency and traceability aspects of Blockchain data (Pendrous, 2017; Kim and Laskowski, 2018). Reviewing a series of case studies, Kshetri (2018) concluded that Blockchain aided early adopters in the supply chain industry by improving their metrics in dependability, risk reduction, sustainability, flexibility, and cost. Additionally, as companies search for ways to create more sustainable supply chains, many are adapting block chain technology to better monitor assets, reduce disruptions, and create more efficient transactions, benefitting supply chain partners and satisfying government requirements (Sanders et al., 2019). More recently, in another case study analysis in the wine industry involving producers, importers, logistic companies, and United Kingdom Government agencies, it was again shown that blockchain technology supports the trust process by reducing information asymmetry through the sharing of information and increasing data visibility (Brookbanks and Parry, 2021). The implementation of block chain technology can also help small and medium enterprises (SMEs) who face challenges pertaining to financing by removing intermediaries, thus reducing transaction costs (Chang, Iakovou, and Shi, 2020).

Artificial Intelligence (AI) technology has been around much longer than Blockchain but its widespread use in supply chain and retail channel management industries has started in recent years. In their Handbook

of Artificial Intelligence, Barr and Feigenbaum (1981, pg.3) describe AI as “[computer] systems that exhibit characteristics we associate with intelligence in human behavior – understanding language, learning, reasoning, solving problems, and so on.” Toorajipour et al. (2021) stated that supply chain management has been recognized as one of the fields most likely to benefit from AI. Lately, several articles from both the academia and the industry examined the benefits of AI for supply chain and retail channel management. For instance, Liao, Chen, and Yang (2013) offered a method to segment retail channels and products utilizing AI to look for patterns in big data. Aras, Kocakoc, and Polat (2017) presented a modeling technique to use AI for retail sales projections. Ehret and Wirtz (2017) proposed that retail channel managers can benefit from AI by utilizing its analytical functions to optimize their buying, to offer customization, and to identify target markets. Zhang et al. (2017) and Hamdi et al. (2018) both suggested that firms can cultivate the risk analysis function of AI for supplier selection and supply chain network optimization. Toorajipour (2021) proposed that natural language processing, an AI technique, presents a promising opportunity for computers to interact with humans aiding production, manufacturing, and logistics. Additionally, an AI technique called expert systems can be employed in supply chain decision support systems to assist with supplier and buyer selection (Toorajipour, 2021). During times of disruption, such as during the Covid-19 pandemic, firms that adopted AI displayed increased supply chain resilience by quickly detecting and correcting potential issues benefitting supply chain members and the economy (Modgil et al., 2021). Supply chain risk management, a subfield of supply chain management, heavily relies upon AI. For example, an AI technique called machine learning uses various data sources to develop intelligent predictive approaches to minimize risk (Deiva Ganesh and Kalpana, 2022). Finally, with increased customer demand of customized products, Dogru and Keskin (2020) suggest that members of the supply chain would benefit from heavily investing in AI to ensure proper data storage and security. This data storage and security is typically outsourced, creating a multitude of layers and blurred lines among the “owner, collector, controller, and processor of data” (Dogru and Keskin, 2020, p. 72).

According to Akter et al. (2022), the adoption of advanced systems such as block chain technology and AI are critical to the digital transformation of firms. The majority of past research focuses on these two technologies in isolation (Tsolakis et al., 2022). However, when used in tandem, the capabilities of each can be used to the fullest extent. Research has found block chain technology can augment the implementation of AI in supply chain operations (Grover et al. 2022) by “ensuring interpretable and trustworthy AI in real-world settings via ascertaining data security, privacy reliability, usability, and governance” (Tsolakis et al., 2022). Furthermore, AI supports block chain technology by enabling autonomous processes, allowing personalized services, and planning production based on predictions (Toorajipour et al., 2021). The synergistic capabilities of block chain technology and artificial intelligence improve supply chain performance through promoting operational efficiency, sustainability, and value delivery (Tsolakis et al., 2022).

Given the benefits of Blockchain and AI technologies for the supply chain and retail channel management, we can only expect to see growth in their adoption. In fact, Grewal, Motyka, and Levy (2018) emphasized that AI and Blockchain technology utilization should be included in the retail management curriculum in universities. Having reviewed the recent literature on the benefits of these two technologies, we identified several implications for the future of power-dependence research. First, Blockchain technology provides supply chain and marketing channel network members with data transparency, security, and traceability. These benefits of the Blockchain technology increases accountability and interdependence among network members. As a result, the network members trust each other more and work collaboratively to co-create end-user value by improving costs, dependability, sustainability, flexibility, and speed to market. Second, AI improves data quality, information exchange agility, and knowledge symmetry between supply chain and channels partners. As does Blockchain’s, the benefits of AI increase interdependency and trust between partners. In the light of these observations and based on the findings from Resource-Advantage and Value Co-Creation eras, we suggest future research to explore the direct linkages between adoption and shared utilization of technological resources like AI and Blockchain, mutual trust, and interdependency between buyers and sellers leading to co-creation of end user value.

As illustrated by the Maersk, Alibaba, and IBM Blockchain partnership example, the widespread adoption of contemporary technologies like Blockchain and AI in supply chains will make IT service providers like IBM critical members of their networks. Several of the important attributes that make these technologies so valuable like data security, dependability, accuracy, and privacy are going to be managed by these information technology (IT) service providers. As a result, one can argue that these third-party IT service providers will gain more power in their networks going forward. While these technologies may act as a dependence equalizer and trust enhancer between buyers and suppliers in a network, the power and asymmetric dependence may shift towards the third-party IT service providers. Therefore, as a second area of contribution, we suggest future research to examine a potential shift of power-dependence from powerful direct material buyers/suppliers to third party IT service providers.

## **IMPLICATIONS FOR PRACTICE AND CONCLUSION**

Our review of nearly seventy years of research on the power-dependence concept revealed an evolution of this phenomenon through various disciplines and theoretical lenses. Within the realm of marketing channels relationships, the transaction cost and resource-dependency theory era focused on the potential of opportunistic behaviors and use of coercive power resulting from asymmetric resource dependencies between channel members. The ensuing commitment-trust theory era established that coercive power usage would be detrimental to channel relationships causing instability. Commitment-trust era researchers encouraged non-coercive power utilization methods like reciprocity and flexibility even in cases of asymmetric dependency. As a result, channel members would be able to enhance mutual trust and commitment, which are the two key variables that drive future cooperation and relationship stability. In the present era, resource advantage and value co-creation perspectives classify mutual trust and commitment between channel members as relational resources that are dynamic or operant. Thus, the firms are recommended to collaborate interdependently and create interconnections between the relational resources and other types of operant resources like shared technologies, joint branding efforts, and reciprocal information sharing to co-create value for the end-users. The value co-creation lens proposes firms to focus on establishing a balanced interdependence and collaborative climate in channel relationships so that power-based conflicts can be avoided and end-user value can be co-created.

Going forward, firms need to take note of the growing adoption rate of contemporary technologies like Blockchain and AI in supply chain and marketing channels management. Undeniably, these shared technologies provide interfirm networks with tremendous benefits like operational transparency, data security, service dependability and accountability. These benefits not only enhance the mutual trust among network members but also eliminate asymmetries in knowledge resources. Ultimately, attainment of interdependent collaboration among channel members leads to co-creation of value for end-users. However, attainment of balanced interdependency among channel members may also lead to dependence on the contemporary technologies and resulting dependence on providers of such technological services. Consequently, channel members that adopt these technologies need to consider the third-party IT service providers as a critical part of their value co-creation network and encourage the use of non-coercive power methods in the channel in case the technology service providers start gaining asymmetric power.

In conclusion, this manuscript set its aim to explore the power-dependence concept in marketing channels from a historical perspective. Similar to Zhuang and Herndon's (2015) review of the dependence concept in marketing channels, our examination illustrated that power-dependence concept progressed through various theoretical perspectives and call for additional theoretical model development on the topic in marketing channels. The implications of this historical review are not only meant to offer marketing channels and supply chain managers some guidelines to manage interdependencies in relational exchanges, but also to stimulate future researchers of the topic to consider the impact of contemporary technologies as they develop their models to explain the power-dependence phenomenon in a new era.

## REFERENCES

- Abramson, E., Cutler, H.A., Kautz, R.W., & Mendelson, M. (1958). Social Power and Commitment: A Theoretical Statement. *American Sociological Review*, 23(1), 15–22.
- Akter, S., Michael, K., Uddin, M.R., McCarthy, G., & Rahman, M. (2022). Transforming Business Using Digital Innovations: The Application of AI, Blockchain, Cloud and Data Analytics. *Annals of Operations Research*, 308, 7–39.
- Andaleeb, S.S., & Ingene, C. (1996). An Experimental Investigation of Satisfaction and Commitment in Marketing Channels: The Role of Trust and Dependence. *Journal of Retailing*, 72(1), 77–93.
- Aras, S., Deveci Kocakoç, İ., & Polat, C. (2017). Comparative study on retail sales forecasting between single and combination methods. *Journal of Business Economics & Management*, 18(5), 803–832.
- Bacharach, S.B., & Lawler, E.J. (1976). The Perception of Power. *Social Forces*, 55(1), 123–134.
- Baraldi, E., Proença, J.F., Proença, T., & de Castro, L.M. (2014). The supplier's side of outsourcing: Taking over activities and blurring organizational boundaries. *Industrial Marketing Management*, 43(4), 553–563.
- Barnes, B.R., Naudé, P., & Michell, P. (2005). Exploring commitment and dependency in dyadic relationships. *Journal of Business-to-Business Marketing*, 12(3), 1–26.
- Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17(1), 99–120.
- Barr, A., & Feigenbaum, E.A. (1981). *The handbook of artificial intelligence* (Vol. 1). Reading, MA.: Addison-Wesley.
- Beier, F.J., & Stern, L.W. (1969). Power in the Channel of Distribution. In L.W. Stern (Ed.), *Distribution Channels: Behavioral Dimensions* (pp. 92–116). Boston: Houghton Mifflin Co.
- Bierstedt, R. (1950). An Analysis of Social Power. *American Sociological Review*, 15(6), 730–738.
- Blois, K., & Hopkinson, G. (2013). The Use and Abuse of French and Raven in the Channels Literature. *Journal of Marketing Management*, 29(9–10), 1143–1162.
- Brookbanks, M., & Parry, G. (2022). The Impact of a Blockchain Platform on Trust in Established Relationships: A Case Study of Wine Supply Chains. *Supply Chain Management: An International Journal*, 27(7), 128–146.
- Brown, J.R., Lusch, R.F., & Muehling, D.D. (1983). Conflict and Power-Dependence Relations in Retailer-Supplier Channels. *Journal of Retailing*, 59(4), 53–80.
- Bucklin, L.P. (1973). A Theory of Channel Control. *Journal of Marketing*, 37(1), 39–47.
- Burnson, P. (2017). Blockchain coming of age. *Supply Chain Management Review*, 21(3), 10–11.
- Cai, S., & Yang, Z. (2008). Development of Cooperative Norms in the Buyer-Supplier Relationship: The Chinese Experience. *Journal of Supply Chain Management*, 44(1), 55–70.
- Chang, Y., Iakovou, E., & Shi, W. (2020). Blockchain in Global Supply Chains and Cross Border Trade: A Critical Synthesis of the State-of-the-Art, Challenges, and Opportunities. *International Journal of Production Research*, 58(7), 2082–2099.
- Chu, Z., & Wang, Q. (2012). Drivers of Relationship Quality in Logistics Outsourcing in China. *Journal of Supply Chain Management*, 48(3), 78–96.
- Dahl, R. (1961). *Who Governs: Democracy and Power in an American City*. New Haven, CT; Yale University Press.
- Dahl, R.A. (1957). Administration Behavior: A Study of Decision-Making Processes in Administrative Organization/Models of Man, Social and Rational. *Administrative Science Quarterly*, 2(2), 244–248.
- Davis, B.R., & Mentzer, J.T. (2006). Logistics Service Driven Loyalty: An Exploratory Study. *Journal of Business Logistics*, 27(2), 53–73.
- Deiva Ganesh, A., & Kalpana, P. (2022). Future of Artificial Intelligence and its Influence on Supply Chain Risk Management – A Systematic Review. *Computers and Industrial Engineering*, 169.

- Deutsch, J.J. (1960). A Canadian Looks at American Trade Policy. *American Economic Review*, 50(2), 443–456.
- Dickson, P.R. (1983). Distributor Portfolio Analysis and the Channel Dependence Matrix: New Techniques for Understanding and Managing the Channel. *Journal of Marketing*, 47(3), 35–44.
- Dogru, A.K., & Keskin, B.B. (2020). AI in Operations Management: Applications, Challenges, and Opportunities. *Journal of Data, Information and Management*, 2, 67–74.
- Domhoff, W.G. (2006). *Who rules America? Power and politics in the year 2006* (3rd Ed.). Mountain View, CA: Mayfield Publishing.
- Doney, P.M., & Cannon, J.P. (1997). Trust in buyer-seller relationships. *Journal of Marketing*, 61(2), 35–51.
- Duarte, M., & Davies, G. (2004). Trust as a mediator of channel power. *Journal of Marketing Channels*, 11(2–3), 77–102.
- Ehret, M., & Wirtz, J. (2017). Unlocking value from machines: Business models and the industrial internet of things. *Journal of Marketing Management*, 33(1/2), 111–130.
- El-Ansary, A.I. (1975). Determinants of Power-Dependence in the Distribution Channel. *Journal of Retailing*, 51(2), 59–75.
- El-Ansary, A.I., & Robicheaux, R.A. (1974). A Theory of Channel Control: Revisited. *Journal of Marketing*, 38(1), 2–7.
- El-Ansary, A.I., & Stern, L.W. (1972). Power Measurement in the Distribution Channel. *Journal of Marketing Research*, 9(1), 47–52.
- Emerson, R.M. (1962). Power-Dependence Relations. *American Sociological Review*, 27(1), 31–34
- Etgar, M. (1976). Channel Domination and Countervailing Power in Distributive Channels. *Journal of Marketing Research*, 13(3), 254–262.
- Etgar, M. (1978). Intrachannel Conflict and Use of Power. *Journal of Marketing Research*, 15(2), 273–274.
- Fornell, C. (1978). Problems in the Interpretation of Canonical Analysis: The Case of Power in Distributive Channels. *Journal of Marketing Research*, 15(3), 489–491. Frazier 1999.
- French, J.R.P., & Raven, B.H. (1959). The basis of social power. In D. Cartwright (Ed.), *Studies in Social Power*. University of Michigan, Institute for Social Research: Ann Arbor, MI.
- Fyrberg, A., & Juriado, R. (2009). What about interaction? Networks and brands as integrators within service-dominant logic. *Journal of Service Management*, 20(4), 420–432.
- Gaski, J.F. (1984). The Theory of Power and Conflict in Channels of Distribution. *Journal of Marketing*, 48(3), 9–29.
- Geyskens, I., Steenkamp, J.B.E., & Kumar, N. (1999). A meta-analysis of satisfaction in marketing channel relationships. *Journal of Marketing Research*, 36(2), 223–238.
- Gilliland, D.I., Bello, D.C., & Gundlach, G.T. (2010). Control-based channel governance and relative dependence. *Journal of the Academy of Marketing Science*, 38(4), 441–455.
- Grewal, D., Motyka, S., & Levy, M. (2018). The Evolution and Future of Retailing and Retailing Education. *Journal of Marketing Education*, 40(1), 85–93.
- Griffith, D.A., & Harvey, M.G. (2001). A Resource Perspective of Global Dynamic Capabilities. *Journal of International Business Studies*, 32(3), 597–606.
- Grover, P., Kar, A.K., & Dwivedi, Y.K. (2022). Understanding Artificial Intelligence Adoption in Operations Management: Insights from the Review of Academic Literature and Social Media Discussions. *Annals of Operations Research*, 308, 177–213.
- Hamdi, F., Ghorbel, A., Masmoudi, F., & Dupont, L. (2018). Optimization of a supply portfolio in the context of supply chain risk management: literature review. *Journal of Intelligent Manufacturing*, 29(4), 763–788.
- Heide, J.B., & John, G. (1988). The Role of Dependence Balancing in Safeguarding Transaction-Specific Assets in Conventional Channels. *Journal of Marketing*, 52(1), 20–35.
- Houston, F.S., & Gassenheimer, J.B. (1987). Marketing and Exchange. *Journal of Marketing*, 51(4), 3–18.

- Hunt, S.D. (2002). *Foundations of marketing theory: Toward a general theory of marketing*. Armonk, NY: M.E. Sharpe, Inc.
- Hunt, S.D. (2015). The bases of power approach to channel relationships: Has marketing's scholarship been misguided? *Journal of Marketing Management*, 31(7–8), 747–764.
- Hunt, S.D., & Morgan, R.M. (1995). The comparative advantage theory of competition. *Journal of Marketing*, 59(2), 1–15.
- Hunt, S.D., & Nevin, J.R. (1974). Power in a Channel of Distribution: Sources and Consequences. *Journal of Marketing Research*, 11(2), 186–193.
- Hunter, F. (1953). *Community power structure: A study of decision makers*. Chapel Hill: University of North Carolina Press.
- Jacobs, D. (1974). Dependency and Vulnerability: An Exchange Approach to the Control of Organizations. *Administrative Science Quarterly*, 19(1), 45–59.
- Kim, D., Jung, G.O., & Park, H.H. (2015). Manufacturer's retailer dependence: A private branding perspective. *Industrial Marketing Management*, 49, 95–104.
- Kim, H., Hoskisson, R.E., & Wan, W.P. (2004). Power Dependence, Diversification Strategy, and Performance in Keiretsu Member Firms. *Strategic Management Journal*, 25(7), 613–636.
- Kim, H.M., & Laskowski, M. (2018). Toward an ontology-driven blockchain design for supply-chain provenance. *Intelligent Systems in Accounting, Finance & Management*, 25(1), 18–27.
- Kim, K. (2000). On Interfirm Power, Channel Climate, and Solidarity in Industrial Distributor-Supplier Dyads. *Journal of the Academy of Marketing Science*, 28(3), 388.
- Kodali, S. (2016). *Brief: US Retail eCommerce: Readjust Continually to Combat Amazon Highlights from The US Online Retail Forecast: 2016 To 2021*. Retrieved August 22, 2016, from <https://www.forrester.com/report/Brief+US+Online+Retail+Forecast+2015+To+2020/-/E-RES122904#>
- Kogut, B. (1988). Joint Ventures: Theoretical and Empirical Perspectives. *Strategic Management Journal*, 9(4), 319–332.
- Kotter, J.P. (1979). Managing External Dependence. *Academy of Management Review*, 4(1), 87–92.
- Kshetri, N. (2018). 1 Blockchain's roles in meeting key supply chain management objectives. *International Journal of Information Management*, 39, 80–89.
- Kumar, N., Scheer, L.K., & Steenkamp, J.-B.E.M. (1998). Interdependence, Punitive Capability, and the Reciprocation of Punitive Actions in Channel Relationships. *Journal of Marketing Research*, 35(2), 225–235.
- Lehman, E.W. (1969). Toward a Macrosociology of Power. *American Sociological Review*, 34(4), 453–465.
- Li, Z.G., & Dant, R.P. (2001). Channel Interdependence: Conceptual and Operational Considerations. *Journal of Marketing Channels*, 9(1/2), 33–64.
- Liao, S.-H., Chen, Y.-J., & Yang, H.-W. (2013). Mining Customer Knowledge for Channel and Product Segmentation. *Applied Artificial Intelligence*, 27(7), 635–655.
- Lundstedt, S. (1965). Administrative Leadership and Use of Social Power. *Public Administration Review*, 25(2), 156–160.
- Lusch, R., Vargo, S., & Tanniru, M. (2010). Service, value networks and learning. *Journal of the Academy of Marketing Science*, 38(1), 19–31.
- Lusch, R.F. (1976). Sources of Power: Their Impact on Intrachannel Conflict. *Journal of Marketing Research*, 13(4), 382–390.
- Lusch, R.F. (1978). Intrachannel Conflict and Use of Power: A Reply. *Journal of Marketing Research*, 15(2), 275–276.
- Lusch, R.F., & Brown, J.R. (1982). A Modified Model of Power in the Marketing Channel. *Journal of Marketing Research*, 19(3), 312–323.
- Madhavaram, S., & Hunt, S.D. (2008). The service-dominant logic and a hierarchy of operant resources: Developing masterful operant resources and implications for marketing strategy. *Journal of the Academy of Marketing Science*, 36(1), 67–82.

- Mathieson, S.A. (2017). Blockchain Begins to Prove Versatility beyond Finance. *Computer Weekly*, pp. 20–23.
- Merelman, R.M. (1968). On the Neo-Elitist Critique of Community Power. *The American Political Science Review*, 62(2), 451–460.
- Michel, J.B. (1964). The Measurement of Social Power on the Community Level: An Exploratory Study. *American Journal of Economics & Sociology*, 23(2), 189–196.
- Mills, C.W. (1956). *The power elite*. New York: Oxford University Press.
- Mock, R. (1979). Intergovernmental Power and Dependence. *Public Administration Review*, 39(6), 556–561.
- Modgil, S., Gupta, S., Stekelorum, R., & Laguir, I. (2021). AI Technologies and Their Impact on Supply Chain Resilience During Covid-19. *International Journal of Physical Distribution and Logistics Management*, 52(2), 130–149.
- Morgan, R.M., & Hunt, S.D. (1994). The Commitment-Trust Theory of Relationship Marketing. *Journal of Marketing*, 58(3), 20–38.
- Nassauer, S., & Terlep, S. (2016, June 15). Wal-Mart and P&G: A \$10 Billion Marriage Under Strain. *Wall Street Journal* (Online), p.1.
- Palmatier, R.W., Dant, R.P., & Grewal, D. (2007). A Comparative Longitudinal Analysis of Theoretical Perspectives of Interorganizational Relationship Performance. *Journal of Marketing*, 71(4), 172–194.
- Patterson, J.M. (1969). Corporate Behavior and Balance of Power. *Business Horizons*, 12(3), 39–52.
- Paulin, M., & Ferguson, R.J. (2010). Relational Norms in Interfirm Exchanges: From Transactional Cost Economics to the Service-Dominant Logic. *Journal of Business-to-Business Marketing*, 17(4), 365–405.
- Payan, J.M., & McFarland, R.G. (2005). The effects of influence strategies and dependence on satisfaction: Does trust mediate these relationships? *Journal of Marketing Channels*, 13(1), 3–20.
- Pendrous, R. (2017). Blockchain takes off in food and drink. *Food Manufacture*, 27.
- Perrucci, R., & Pilisuk, M. (1970). Leaders and Ruling Elites: The Interorganizational Bases of Community Power. *American Sociological Review*, 35(6), 1040–1057.
- Petersen, K.J., Handfield, R.B., Lawson, B., & Cousins, P.D. (2008). Buyer Dependency and Relational Capital Formation: The Mediating Effects of Socialization Processes and Supplier Integration. *Journal of Supply Chain Management*, 44(4), 53–65.
- Pfeffer, J., & Salancik, G.R. (1978). *The external control of organizations: A resource dependence perspective*. New York: Harper & Row.
- Polsby, N.W. (1963). *Community Power and Political Theory*. New Haven: Yale University Press.
- Powers, V. (2018). The Power of Technology-Enabled Supply Chains. *Supply Chain Brain*, 22(1), 88.
- Provan, K.G., & Skinner, S.J. (1989). Interorganizational Dependence and Control as Predictors of Opportunism in Dealer-Supplier Relations. *Academy of Management Journal*, 32(1), 202–212.
- Provan, K.G., Beyer, J.M., & Kruytbosch, C. (1980). Environmental Linkages and Power in Resource-Dependence Relations between Organizations. *Administrative Science Quarterly*, 25(2), 200–225.
- Reve, T., & Stern, L.W. (1979). Interorganizational Relations In Marketing Channels. *Academy of Management Review*, 4(3), 405–416.
- Salancik, G.A., & Pfeffer, J. (1974). The Bases and Use of Power in Organizational Decision Making: The Case of a University. *Administrative Science Quarterly*, 19(4), 453–473.
- Salustri, J. (2018). Blockchain for Property Managers. *Journal of Property Management*, 83(5), 10–13.
- Sanders, N.R., Boone, T., Ganeshan, R., & Wood, J.D. (2019). Sustainable Supply Chains in the Age of AI and Digitization: Research Challenges and Opportunities. *Journal of Business Logistics*, 40(3), 229–240.
- Skarmas, D.A., & Katsikeas, C.S. (2001). Drivers of Superior Importer Performance in Cross-Cultural Supplier-Reseller Relationships. *Industrial Marketing Management*, 30(2), 227–241.



- Skinner, S.J., Donnelly Jr., J.H., & Ivancevich, J.M. (1987). Effects of Transactional Form on Environmental Linkages and Power-Dependence Relations. *Academy of Management Journal*, 30(3), 577–588.
- Sriram, V., Krapfel, R., & Spekman, R. (1992). Antecedents to Buyer-Seller Collaboration: An Analysis From the Buyer's Perspective. *Journal of Business Research*, 25(4), 303–320.
- Stern, L.W., & Gorman, R.H. (1969). Conflict in distribution channels: an exploration. *Distribution Channels: Behavioral Dimensions*, pp. 156–175. Houghton Mifflin Company: New York.
- Stern, L.W., & Heskett, J.L. (1969). Conflict management in interorganization relations: A conceptual framework. *Distribution Channels: Behavioral Dimensions*, pp. 288–305. Houghton Mifflin Company: New York.
- Taylor, J.R. (1977). Exploiting through Contrived Dependence. *Journal of Economic Issues*, 11(1), 51.
- Tokman, M., & Beitelbacher, L.S. (2011). Supply chain networks and service-dominant logic: Suggestions for future research. *International Journal of Physical Distribution & Logistics Management*, 41(7), 717–726.
- Toorajipour, R., Sohrabpour, V., Nazarpour, A., Oghazi, P., & Fischl, M. (2021). Artificial Intelligence in Supply Chain Management: A Systematic Literature Review. *Journal of Business Research*, 122, 502–517.
- Touboulic, A., Chicksand, D., & Walker, H. (2014). Managing Imbalanced Supply Chain Relationships for Sustainability: A Power Perspective. *Decision Sciences*, 45(4), 577–619.
- Tsolakis, N., Schumacher, R., Dora, M., & Kumar, M. (2022) Artificial Intelligence and Blockchain Implementation in Supply Chains: A Pathway to Sustainability and Data Monetisation? *Annals of Operations Research*.
- Vafeas, M., Hughes, T., & Hilton, T. (2016). Antecedents to value diminution. *Marketing Theory*, 16(4), 469–491.
- Vargo, S.L., & Lusch, R.F. (2004). Evolving to a New Dominant Logic for Marketing. *Journal of Marketing*, 68(1), 1–17.
- Weisskoff, R., & Wolff, E. (1975). Development and Trade Dependence: The Case of Puerto Rico, 1948-1963. *Review of Economics & Statistics*, 57(4), 470.
- Williamson, O.E. (1975). *Markets and hierarchies, analysis and antitrust implications: A study in the economics of internal organization*. New York: Free Press.
- Williamson, O.E. (1985). *The economic institutions of capitalism: Firms, markets, relational contracting*. New York: Free Press.
- Zhang, C., Zhuang, G., Yang, Z., & Zhang, Y. (2017). Brand Loyalty versus Store Loyalty: Consumers' Role in Determining Dependence Structure of Supplier–Retailer Dyads. *Journal of Business-to-Business Marketing*, 24(2), 139–160.
- Zhang, X., Chan, F.T.S., Adamatzky, A., Mahadevan, S., Yang, H., Zhang, Z., & Deng, Y. (2017). An intelligent physarum solver for supply chain network design under profit maximization and oligopolistic competition. *International Journal of Production Research*, 55(1), 244–263.
- Zhuang, G., & Herndon, N.C. (2015). Inquiry and Review of Dependence in Marketing Channels: An Economics of Exchange Approach. *Journal of Marketing Channels*, 22(4), 299–310.
- Zhuang, G., & Zhou, N. (2004). The relationship between power and dependence in marketing channels. *European Journal of Marketing*, 38(5/6), 675–693.