

10355: The Role of Dependence Relationships in the Value Capture Process

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The Role of Dependence Relationships in the Value Capture Process

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Abstract

We view the firm as a complex system and deploy Emerson's power dependence theory to explain who captures value in deals between the firm and its suppliers and customers. The value realised in a deal is the difference between the buyer and seller reservation prices and dependence is a function of need strength and the availability of alternative deals. We argue that prices are the outcome of perceived dependence relationships between buyer and seller. Dependence on the focal deal is based on the buyer or seller's subjective judgements concerning the use value being traded, the other party's dependence and the availability of alternative deals. We develop eight *value levers* which firms can deploy to improve their dependence relationships. We then use this value capture perspective to address three questions: 1) should firms pursue generic strategies? 2) what is a valuable resource? 3) how should firms approach strategic change? We conclude that any change or resource which enhances the firm's dependence relationships improves firm performance.

Introduction

A helpful distinction has been made between the processes of *value creation* and *value capture*. As regards what value means again we have a clear distinction between *use value*, the usefulness of a product or service as perceived by the buyer, and *exchange value*, being the monetary amount (\$) exchanged for the use value. Firms capture *use values* from suppliers and *exchange value* (\$) from customers. Whilst there has been a stream of contributions that address the value capture process using cooperative game theory, as Gans and Ryall (2017) point out, specifying prices is not the goal of this theorising. Bargaining relationships between buyer and seller are key to understanding who captures value and our first aim is to augment this body of knowledge by developing an explanation of how value is distributed between buyers and sellers. To do this we draw on Emerson's (1961) theory of social dependence.

Our second aim is to address the practical question posed by Gans and Ryall: "how do managers formulate strategies to capture value given their competitive environments? What *should* they do?" (2017:39).

To address these aims we focus on deals or transactions between the firm, its suppliers, and customers. Molloy and Barney (2015) examine the bargaining relationships between the firm and suppliers of different types of human capital. Here we extend this work and explore deals between the firm and all its suppliers and customers. The firm acts as a buyer of inputs e.g. components, equipment, knowhow, which are deployed to produce outputs, which are sold to customers. We argue that the price of deals between buyers and sellers is an outcome of the dependence of both parties on doing the focal deal, and price distributes the deal value between buyer and seller. We explain how bargaining power is based on the *perceived*

dependence of both buyer and seller on making this deal at this time. Dependence is in turn based on the need strength of the buyer or seller on doing this deal and the availability of alternative equivalent deals. Strong need to do a deal combined with no perceived alternatives leads to high levels of dependence.

To address the second aim of the paper we then set out eight *value levers* which a firm can deploy to improve its dependence relationships with suppliers and customers and hence capture more deal value. Improved leverage can come about through the firm reducing its need strength with respect to suppliers or customers, or by increasing the availability of alternative sources. The firm can also act to increase the dependence of suppliers and customers on the firm.

In the last section we use the value capture perspective to explore three questions: 1) should firms pursue generic strategies? 2) what is a valuable resource? 3) how should firms approach strategic change?

We conclude that value capture is the outcome of dependence relationships between deal makers and these deals are made at different times with different actors. As a consequence, the value captured by input suppliers does not reflect the contributions that these inputs e.g. knowhow, brand names and equipment have made to the value creation process. This is because the actors, their relative situations, and the timing of deals for inputs are disconnected from factors influencing subsequent deals with customers. We further conclude that any change or resource that enhances the firm's dependence relationships with suppliers and/or customers will improve firm performance. This enables us to form qualitative assessments of 'valuable' resources and to evaluate the likely effectiveness of proposed changes to the firm's value system, which may be provoked by the pursuit of a 'generic' strategy.

Throughout the paper we view the firm as a complex open system (MacIntosh and MacLean, 1999; Cilliers, 2000; Colbert, 2004; Lichtenstein, 2014; Thietart, 2016) and we highlight the role of time, uncertainty and ambiguity in the deal making process between the firm and its suppliers and customers. Value system complexity means that no-one is able to predict the ultimate outcome of any deal e.g. the hiring of a manager, thus deals are necessarily made in ignorance of the future. However, buyers or sellers behave rationally in making their choices and decisions. This rationality is entirely subjective, contextual, and personal to the deal maker. They act in ways they perceive to be the best for themselves at the time of the decision. The absence of information about the future excludes any notions of decision makers being able to predict the outcomes of today's decisions. Thus, the complexity lens gives us some license to explore alternative ways of conceiving how a firm functions, something that Pitelis (2009) argues for.

We begin by defining use value and exchange value.

Use Value and Exchange Value

Defining value has been an enduring challenge for economists (Pitelis 2009) and there have been many attempts to pin down a workable definition (Levitas, 2013). In line with prior contributions to the value debate (Ramirez, 1999; Bowman and Ambrosini, 2000; Lepak, Smith and Taylor, 2007; Priem, Li and Carr, 2012; Schmidt & Keil, 2013; O' Cass & Sok, 2014) we distinguish between *use value* and *exchange value*. This distinction is not new; it can be traced back to Aristotle (Vargo & Lusch, 2004). Use value (UV) refers to a buyer's "perceptions of the usefulness of the product on offer" (Bowman & Ambrosini, 2000: 15) i.e., use value refers to the benefits, utility, or satisfaction the buyer realizes from a product (see also Sweeney & Soutar, 2001; Pitelis, 2009; Walsh, Shiu, & Hassan, 2014). As Buchanan (1987) states "value exists in the mind of the individual who chooses" (1987: 719) hence the

use value of a product or service is an entirely subjective evaluation made by the buyer at the point of the decision to purchase.

Exchange value (EV) refers to “the amount paid by the buyer to the seller for the use value” (Bowman & Ambrosini, 2000: 15). In an exchange or deal the buyer acquires use value and the seller receives exchange value (\$) in return.

Perceptions of use value are made at the time of the transaction or deal; therefore, we need to distinguish between *anticipated* use value (AUV) and *realised* use value (RUV) (Pitelis, 2011). For routine repeat purchases it is likely that $AUV=RUV$, but for other deals, for example hiring an employee, it may be months or years before the use value is manifested. Where there is a time lag between the deal and the ultimate realisation of use value the deal moves from being commoditised and predictable to being ambiguous and speculative. Where $AUV>RUV$ we will have a disappointed buyer, and where $AUV<RUV$ we have a delighted buyer. Procurement deals made on behalf of the firm are based on the perceptions of the firm’s agent. These are perceptions of anticipated UV not realised UV.

We need to be clear about the exchange value of an input (e.g., human capital) and the contribution that the input makes to firm value creation. The *use value* contribution of an employee’s human capital can be subjectively estimated *ex ante* by the hiring agent, based on information available at the time of an interview e.g., how effective this person will be in performing in a particular job (AUV). Having hired the employee their realised use value (RUV) in the role can again be subjectively evaluated. But because of complexity and the problem of team production (Alchian and Demsetz, 1972) what cannot be known is the *exchange value contribution* that this employee makes to the firm. This certainly cannot be known *ex ante*, and at best it could be roughly estimated *ex post* but only for some job roles

e.g., hiring a salesperson, where their performance could be compared to similar sales peoples' actual performance.

What can be known is the price of this inputted resource, in this case the employee's salary. But this price does not represent the value *contribution* of the employee. As we will argue, prices of inputs are the outcome of perceived dependence relationships; price does not represent the exchange value contributed by an employee (or any input) to the firm's value creation process.

Value Creation and Value Capture

The bargaining power of suppliers and buyers constitute two of the five forces that determine industry profitability (Porter 1979). At the firm level of analysis, the ability of stakeholders to appropriate rents deriving from VRIN resources (Barney, 1991) has been of interest to strategy scholars since the early contributions to the resource based view of the firm (Castanias and Helfat, 1991; Coff, 1999; Blyler and Coff, 2003; Peteraf and Barney, 2003; Sirmon, Hitt & Ireland 2007; Molloy and Barney, 2015). Bargaining power plays a significant role in the ability of agents to capture value and hence what gives an agent power is key to understanding the value capture process.

The value *creation* process, the role of unique resources in delivering competitive advantage, how isolating mechanisms can enable these advantages to persist (Dierickx and Cool 1989; Lippman and Rumelt 1982) and the role of dynamic capabilities in enabling firms to continually renew their resource base are all germane to the firm's ability to both create and capture value. But here we take these as given and focus instead on how firms *capture* value from suppliers on the one hand and customers on the other.

Some prior contributions that have addressed value creation and capture (Lepak, Smith and Taylor, 2007; Kang, Morris and Snell 2007; Priem, 2007) view value creation as the

introduction of *novelty*: “a product... will be judged as creative to the extent that it is both a novel and appropriate, useful, correct or valuable response to the task at hand” (Amabile, 1996: 35), and attention focuses on the ability of the creator to capture this newly created value. Central to the ability to capture value being the isolating mechanisms (Lippman and Rumelt, 1982) that prevent rival individuals or firms from imitating the novelty, where the absence of isolating mechanisms would lead to competition eroding the bargaining power of the creator.

Here we broaden considerably the notion of value creation to the creation of *all products and services offered for sale*. A can of beans that rolls off the production line is new to the world, even if it looks identical to the one before it and after it. Thus, we relax the notion of creativity as novelty, and instead view value creation as the production of goods and services for sale.

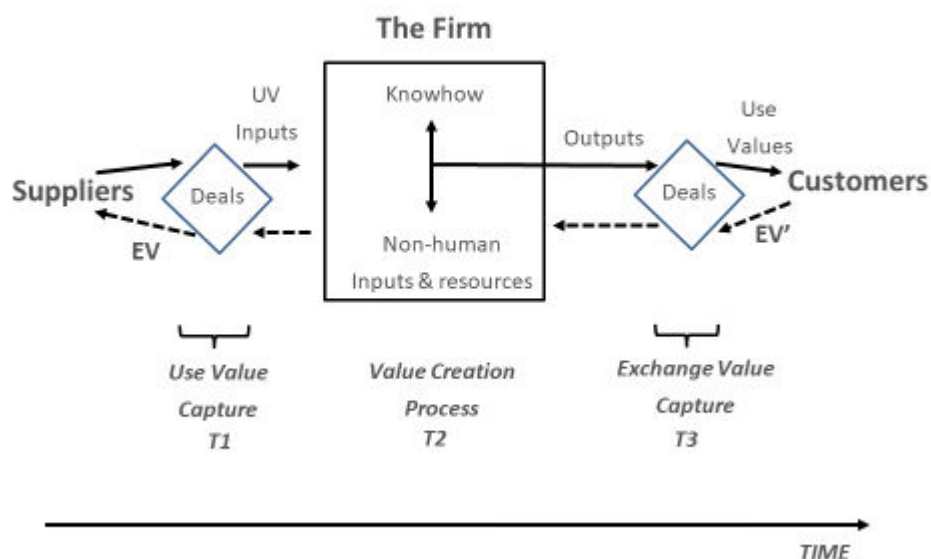


Figure 1 The Processes of Value Creation and Value Capture

The firm acts as *buyer* when procuring productive resources from suppliers, and a *seller* of products and services to customers (see Figure 1). Typically, the value system consists of a sequence involving the procurement of productive resources in Time 1 (T1) where the firm is capturing *use values* from suppliers, the creation of products or services during T2 and sale of outputs to customers in T3, where the firm captures *exchange value* from customers (Brandenburger and Stuart 1996). Thus, value creation and capture are discrete processes involving different actors at different points in time.

The firm hires employees, who provide their knowledge and energy to the firm, and non-human inputs like equipment, raw materials and components from supplying firms. These deals occur in Time 1 (T1). In T2 the non-human use value inputs interact with knowhow and the firm's accumulated resources to create outputs. The *outputs* from the value creation process are transformed into *use values* by customers. Use value is *conferred* on outputs by customers, and hence outputs that remain unsold have no use value, and zero exchange value (Kim and Mahoney, 2002). Figure 1 also shows the flows of exchange value from firm to suppliers in T1 (EV), and from customers to the firm in T3 (EV'). We assume that the firm is established to make money for its owners, and thus firm performance would be a positive flow of cash: $EV' > EV$.

Suppliers of equipment, components etc play no role in the value creation process in T2.

Those who supply finance to the firm also play no role in value creation, but neither does the finance (\$) they supply. Cash cannot create value: it needs to be transformed into productive resources for value creation to take place. However, where an investor joins the board of a company, and engages in collective strategic decision making, they are involved in the value creation process.

The elapsed time between T1 and T3 could range from minutes or years depending on what the firm is making. The longer the time lapse the more difficult it is for deal makers to anticipate the state of the world in the future.

Deals are made at a point in time and reflect both party's perceptions of their situation at that time. The flow of costs is driven by the deals made with suppliers in T1, the flow of revenues is driven by deals made with customers in T3. As these processes are separated across time and involve different actors who have different time and context-specific interests, motivations, and perceptions we must conclude that there is no relationship between the deal making processes between the firm and its suppliers in T1 and subsequent deal making processes between the firm and its customers in T3.

Moreover, because it is not possible to isolate the exchange value contribution of any component in a complex value system (the problem of team production, Alchian and Demsetz, 1972), payments to suppliers for their inputs do not reflect the value contribution the input makes.

A distinct body of knowledge has developed, referred to as *value capture theory*, that deploys cooperative game theory (Brandenburger and Nalebuff, 1995; Brandenburger and Stuart 1996, 2007; Lipmann and Rumelt 2003b; MacDonald and Ryall, 2004; Chatain 2011; Bennett, 2013; Gans and Ryall 2017). Here we have a different starting point for our theorising: power dependence relationships. We focus on the deal or transaction, and we explore how dependence relationships can affect the price of deals and how time impacts the value capture process.

Deals and Dependence

Resource dependence theory (Pfeffer and Salancik 1978; Hillman, Withers and Collins, 2009; Drees and Heugens, 2013) which explores inter-organizational power and dependence

relationships, whilst influential has nevertheless been “accused of confounding the theoretically separate dimensions of power imbalance (the power differential between two organisations) and mutual dependence (the sum of the dependencies between two organisations) in the single construct of interdependence” (Drees and Heugens, 2013:1667). To avoid this problem, we revert to the original paper that Pfeffer and Salancik (1978) built on in the development of their theory: Emerson’s (1962) power dependence theory. Emerson states that “power is a property of [a] social relation; it is not an attribute of an actor” (1962:32) where an actor could be a person, a group, or a firm. Social relations entail ties of mutual dependence between actors: A depends on B if he “aspires to goals or gratifications whose achievement is facilitated by appropriate actions on B’s part.... thus the power to control or influence the other resides in control over things he values” (1962:32). He states formally that the “dependence of A on B is 1) directly proportional to A’s motivational investment in goals mediated by B and 2) inversely proportional to the availability of these goals to A outside of the A-B relationship” (1962:32).

Emerson summarises the theory as follows: *the power of A over B is equal to, and based upon, the dependence of B upon A.*

Emerson’s aim was to produce a theory of power that could be generally applied across the range of social situations. Here we use these building blocks to develop a theory of the process of value capture; specifically, we seek to explain how the firm captures value through interactions with customers and suppliers. In this social context dependence becomes a function of the goals, desires, motivations of suppliers to and buyers from the firm, the firm’s ability to meet these goals and the availability of alternative sources for gratifying them.

Using the terminology developed earlier, the goals and desires would be either use values, or exchange value (\$) and the firm could be either a buyer or seller of use values, depending on

the relationship being considered. The firm is in a powerful, neutral, or weak position only in relation to a particular supplier or customer at a point in time. Thus, power and dependence are situational and relational.

The deal between the firm as a legal entity and a supplier or customer is the critical mechanism in the value capture process. Deals are based on subjective judgements of buyer and seller at the point in time when the deal is made. These judgements are made in anticipation of a future outcome. The buyer procures a product or resource input in anticipation of realised use value post the deal. The deal is conducted on the basis of *anticipated use value* (AUV). The subsequent buyer experience of the item or service being traded, the *realised use value* (RUV) may be as anticipated or better or worse than anticipated. Agents acting on behalf of the firm procure a range of inputs from suppliers, which would include materials, components, equipment, knowhow, management talent, finance capital e.g., loans. The typical deal involves the reciprocal transfer of use values and exchange value (\$) between buyer and seller.

Value is *realised* in the deal, and price distributes the deal value between buyer and seller. A high price means the seller captures most of the value, and a low price means the buyer gets the 'lion's share' of the value. In some deals e.g., an employment contract, the employee (seller) receives both exchange value (salary) and *use values* in the form of security, interesting work, collegial relationships. An employee will likely assess the 'package' of salary and other benefits in forming a view about the attractiveness of the job opportunity.

Dependence on doing a particular deal is driven by a) the strength of the need, motivation or desire of the buyer or seller in relation to the focal deal, and b) the availability of alternative ways to meet these needs. We can assume that the seller's need is to capture exchange value (\$) and the buyer's need would be to acquire use value. Where need strength is great and the

buyer or seller perceives there to be no feasible alternatives to doing this deal, the buyer or seller perceives high dependence. Alternatively, where the buyer or seller's need strength is low, and they perceive there to be many available alternative deals which can meet the need, then they perceive low dependence on the focal deal.

The price struck in the deal is an outcome of the *perceived dependence relationship between buyer and seller in respect of the focal deal*. It is not just the buyer or seller's dependence in isolation; it is the *relationship* of both buyer and seller's perceived dependence that drives price. Buyers and sellers can only behave according to their perceptions of the situation.

These may be aligned, where both actors see the deal situation in the same way, or they could be misaligned. There is no objective reality here, only subjective beliefs and judgements.

In Figure 2 we draw together the strands of the argument.

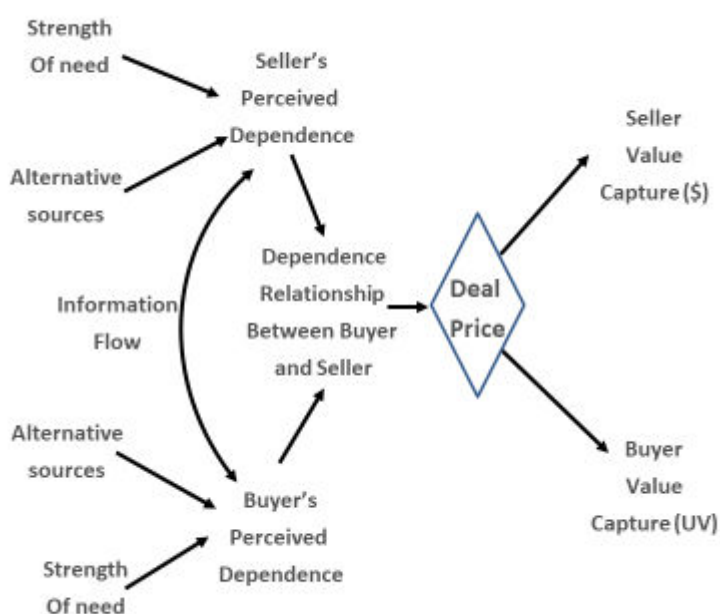


Figure 2 The Role of Dependence Relationships in the Value Capture Process

Working from the left of Figure 2 we have the drivers of buyer and seller dependence.

Perceived dependence is the outcome of *strength of need* combined with the perceived availability of *alternative sources*. The *dependence relationship* between buyer and seller is the outcome of buyer and seller perceived dependence on the focal deal, as well as their perceptions of the other party's dependence on this deal. Perceptions of the other party's dependence will be affected by the flows of *information* between them. Full information sharing will likely be rare, but it would lead to an informed negotiation around price.

Expertise in negotiation, bargaining and persuasion and search and switching costs will combine to shape the perceptions of buyer and seller. The price struck distributes the value *realised* in the deal between buyer and seller.

To summarise the argument thus far: *Prices are the outcome of perceived dependence relationships between buyer and seller. Dependence on the focal deal is based on the buyer or seller's subjective judgements concerning the use value being traded, the other party's dependence and the availability of alternative deals.*

Reservation Price

Game theoretic contributions to our understanding of the value capture process explain how competition between agents places upper and lower *bounds* on the amount of value an agent can capture (Gans and Ryall 2017). Here we explain how the upper and lower price limits in relation to a focal deal are set by buyer and seller *reservation prices*.

The buyer's reservation price (BRP) is the *maximum amount they are willing to pay if there were no equivalent alternative deals*. In most transactions there will be alternative deals and the BRP would be notional and not likely to be consciously estimated by the buyer. However, where there are no equivalent deals e.g., at an auction, the buyer may set themselves a maximum price they are prepared to pay for the item being auctioned. Similarly, the seller's

reservation price (SRP) would be the *minimum price the seller will accept before walking away from the deal*, which Gans and Ryall (2017) refer to as ‘willingness to sell’. These minimum prices are a common feature in on-line auction sites like *ebay*.

The reservation price reflects the *strength of the need* that motivates the buyer and seller to deal. For the buyer, a high need strength coupled with a perception that there are no alternative deals would lead to high perceived dependence on the focal deal, and hence a *high* reservation price. In the seller’s case the need strength would be driven by how necessary the seller thinks it is to make this trade at this time.

In the case of the seller’s reservation price, this reflects their need for cash income. This in turn will reflect their current situation and their views about likely future deals. Where the seller has been unable to deal and therefore has a strong need for *any* income, we would expect SRP to be very low. For example, the seller may be prepared to price at a level which barely covers escapable costs. To be clear reservation prices have no relationship to *actual* average costs, marginal costs, long run costs, margins etc. These costs are rarely calculable in any event, and even if they were able to be estimated, it only matters what the seller *perceives* these costs to be and whether they feel this cost estimate is relevant to the focal deal.

Gans and Ryall (2017) argue for a broadening of the definition of competition beyond Porter’s (1979) ‘five forces’ to include “suppliers of suppliers, substitute buyers in other markets, potential entrants into distribution channels, and so on” (2017: 23). This broader definition of competition can be accommodated within the model we present in Figure 2. Whilst the firm does not transact with competitors their presence influences the deal *indirectly* if either buyer or seller incorporates them into their set of possible alternative sources. These ‘competitors’ are only relevant if the buyer or seller perceives them to be germane to the focal deal.

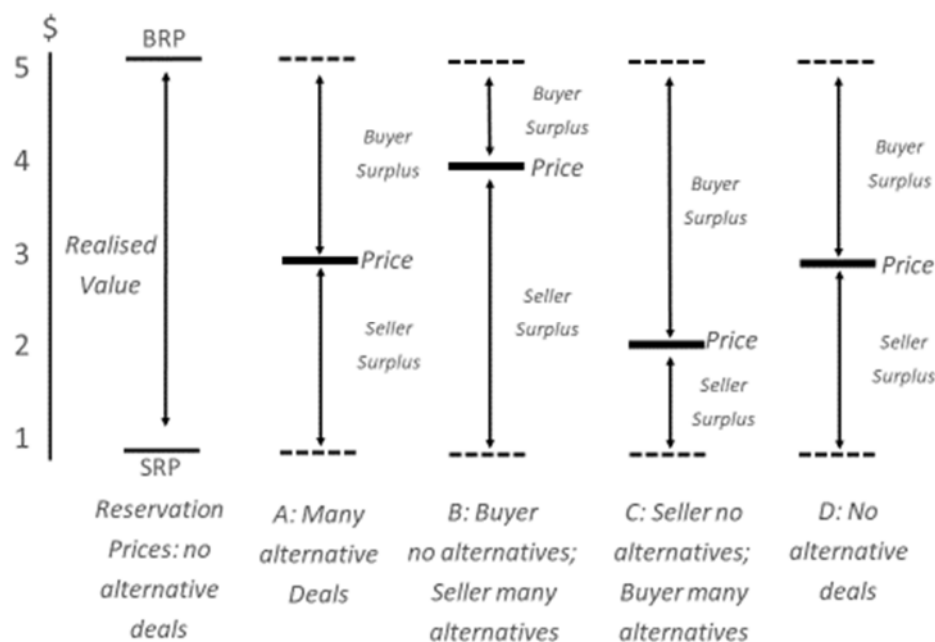


Figure 3 Combinations of reservation price, deal price and buyer and seller surplus

To the left of Figure 3 we have a price scale (\$1 to \$5) and we represent the buyer reservation price (BRP) and seller reservation price (SRP); reservation prices are set as if there were no equivalent alternative deals. These prices are typically notional in most deals but reflect the actor's perceptions in relation to the focal deal. In this deal the buyer's reservation price is \$5, the seller's reservation price is \$1. Thus, the maximum the buyer would be willing to pay would be \$5, and the minimum the seller would accept would be \$1.

The difference between BRP and SRP represents the value *realised* in the deal, in this case $\$5 - \$1 = \$4$. This \$4 value is not *created* in the deal, it is *realised* in the deal. The product or use value being traded has typically been created prior to the deal (the exceptions being services which are created in real time), and the cash the buyer exchanges for the product represents value created by the buyer as earned income e.g., from work they performed in the past. The deal realises value which would otherwise remain unrealised e.g., if the product was not sold, or the income was not spent.

Moving to the right in Figure 3 we have a Type A deal where both buyer and seller perceive they have many equivalent alternative deals. This situation approximates to a functioning market and the market price emerges from hundreds of similar situations of buyers and sellers with many equivalent alternative deals. Type A deals would include Lippman and Rumelt's (2003a) payments for commodity inputs and resources. In Type A deals the emergent market price is \$3. The buyer's surplus (or consumer surplus) is the difference between their reservation price (BRP = \$5) and the price they pay (Deal price = \$3) i.e., buyer's surplus is \$2.

Similarly, the seller's surplus is the difference between the deal price (\$3) and the seller's reservation price (SRP = \$1) i.e. seller's surplus is also \$2. Type A deals are likely to account for most routine transactions between the firm and its suppliers and customers.

In Type B deals the buyer perceives there to be *no alternative deals*, whereas, in contrast, the seller perceives there to be many equivalent alternative deals. Now, if we assume that both buyer and seller have full access to the information about their respective situations, we might expect that an informed negotiation would lead to a deal price outcome of \$4. At this price the buyer still gets some buyer's surplus (\$1), whereas the seller is able to capture the lion's share of the deal value: seller surplus would be \$3. The deal price is struck based on full information available to both parties, a situation that is unlikely to obtain in many Type B circumstances. It would be in the buyer's interest to hide their true position from the seller. Bluffing and misinformation would likely lead to a deal price other than \$4.

Consider a variation of the Type B deal which would be the case of an entrepreneur who desperately needs finance to grow her fledgling business. She is 'buying' cash to spend today but may have to give away a significant chunk of equity in her firm in exchange, which will have a lasting impact on her ability to capture future value.

In Type C deals we have the opposite situation to Type B. Here the seller perceives they have no alternative deals, and the buyer sees they have many equivalent deals. With full information available to both parties, we would expect the deal price to be struck at \$2, with the seller gaining a surplus of \$1, and the buyer's surplus being \$3 i.e., the buyer captures the lion's share of the deal value.

In Type D deals both the buyer and seller perceive there to be no alternatives to the focal deal. This is akin to a 'bilateral monopoly' (Peteraf, 1993) where the co-dependence of buyer and seller leads to an indeterminate distribution of value. But if we assume full information about each actor's circumstances is available to both, we might expect an informed negotiation which would result in a 'sharing of the spoils', with a deal price of \$3, buyer surplus = \$2, seller surplus = \$2.

Type B, C and D deals between the firm and its suppliers would fall into Lippman and Rumelt's (2003a) payments for scarce resources where who captures value depends on bargaining power.

Most firm transactions will operate as if there was a fully functioning market, where both parties perceive they have feasible alternative deals and price is the outcome of the operation of the market (Type A). However, as Lippman and Rumelt (2003b) point out many significant firm transactions will fall outside these market driven deals, ones where either or both parties perceive there to be no alternative equivalent deals (Types B, C, D). These deals are often strategically important for the firm. For example, consider a transaction between firms where a VRIN resource is being traded e.g., a patent, brand name, a prime retail site etc. VRIN resources are almost by definition unique and there is no functioning market for them, so this cannot be a Type A situation.

It is impossible for the buying firm to calculate the value/profit contribution that the acquired resource will generate into the future. Thus, a valuation (and hence the BRP) will be formed around *beliefs* about the resource, the complementary capabilities required to generate value from it into the future, the extent to which the buying firm is endowed with these capabilities and what is likely to be happening in the firm’s future product markets. As there is no information about the future, the buyer will form a subjective judgement based on their experience. This would be the anticipated contribution of the resource to the firm’s future operations (AUV). The realised use value (RUV) of the resource may not be manifest for months or years, and due to complexity, the resource’s contribution cannot be known, only subjective estimates of what this might be are possible. This realised use value (RUV) may or may not align with the AUV. Whether this deal ends up as Type B, C, or D would be down to the specifics of the situation and the availability of information.

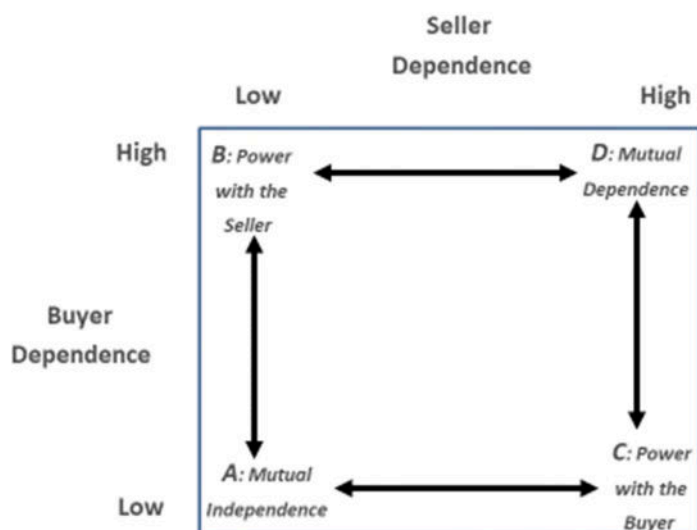


Figure 4 Dependence Relationships Between Buyer and Seller

In Figure 4 the axes set out the buyer's and seller's perceptions in relation to the focal deal. The degree of perceived dependence on doing this deal is driven by need strength and perceived availability of alternative deals. To recap, high need combined with no alternatives leads to high dependence and *vice versa*.

The four deal types (A-D) are located in the figure. In Type A deals both parties perceive there to be many alternative deals. Both buyer and seller perceive themselves not to be dependent on the focal deal, which we characterise as *mutual independence*. Here the deal price will likely be the ruling market price. Even where the need strength may be high the availability of equivalent alternative deals means both buyer and seller have feasible options to the focal deal so they can 'walk away' if either of them judge the proposed terms of the deal to be inferior to alternatives.

In Type B deals the buyer sees no alternatives, whereas the seller perceives there to be many alternatives. The perceived dependence of the buyer on the focal deal and the independence of the seller gives the bargaining power clearly to the seller, and we would anticipate a high deal price. This circumstance may arise where what is being traded is unique and valued highly by the buyer. The uniqueness may be to do with the *timing* of the deal. Deals are made at a point in time and reflect the buyer and seller's prevailing circumstances.

In Type C we have the reverse situation where the buyer holds the power and the outcome would likely be a low price, yielding a large amount of buyer surplus. For example, a bakery just before closing may well price unsold bread and cakes at a fraction of the prices charged that morning, knowing that they cannot sell stale produce the following day.

In Type D we have a circumstance of *mutual dependence*, where both buyer and seller perceive no alternatives. If there was full information sharing, we would expect a deal price that delivers the same amount of buyer and seller surplus. Note that these are *perceptions*

about the focal deal. Buyers and sellers can act to shift the perceptions of the other party in ways which enhance their relative power.

To summarise this section of the argument: *For the buyer a high need strength coupled with a perception that there are no alternative deals would lead to high perceived dependence on the focal deal and hence a high reservation price. For the seller a high need to deal would be reflected in a low seller reservation price. Value is realised not created in the deal and the value realised is the difference between the buyer's reservation price and the seller's reservation price.*

Gans and Ryall (2017:39) pose the questions “how do managers formulate strategies to capture value given their competitive environments? What *should* they do?” Firms act as buyers of use value inputs and sellers of product/service outputs. A shift in attention from competitive strategy to the vertical relationships between the firm and suppliers and customers suggests we could usefully explore how firms can enhance their ability to capture use values from suppliers and exchange value from customers. These outcomes can be achieved if the firm can *alter its dependence relationships* with suppliers and customers in the firm's favour. In the following section we address the second aim of the paper and consider how firms can enhance their ability to capture value from suppliers and customers.

Eight ‘Value Levers’

In its relationships with suppliers the firm can increase its leverage by either reducing the firm's dependence on the supplier, or by increasing the supplier's dependence on the firm. In Figure 5 we use a simple lever metaphor to represent the firm's relationship with a supplier. To the right of the figure, we represent the firm's strength of need by the height of the block. The availability of alternative deals with other suppliers is represented by the location of the block on the lever. The current situation depicted (the solid block) sees the firm having a high

level of need, and no alternative suppliers they could deal with i.e., high dependence. To the left we represent the supplier's current position (the solid block) representing a low need strength and many alternative firms to trade with i.e., low dependence on doing the focal deal.

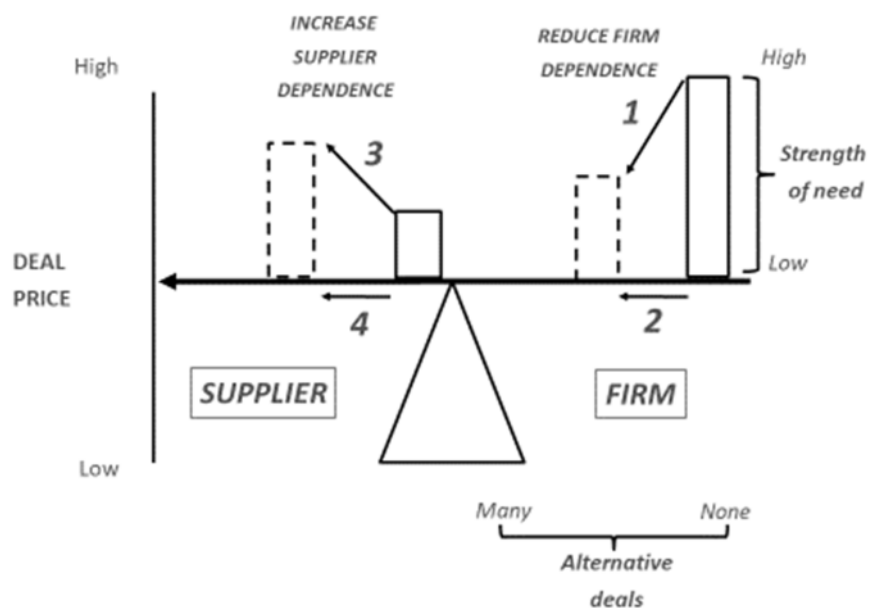


Figure 5 Increasing Firm Leverage Over Suppliers

In the current situation the lever tilts down to the right indicating the firm would pay a high deal price. The firm can increase its leverage over a supplier by shifting the blocks towards the dotted positions indicated in Figure 5. We label these as *value levers* which are numbered 1-4 in Figure 5, and 5-8 in Figure 6.

We can identify four value levers that impact the firm's dependence relationship with suppliers:

1) *reducing the firm's need strength* (reducing the height of the block), by for example reducing the need for skilled and expensive employees. This could be achieved by codifying as much of their knowhow as is feasible, by training up replacement employees, or by de-

skilling and automating some tasks where possible. Where the firm has little bargaining power, need strength can be reduced through internal efficiencies e.g., improved quality assurance, learning which increases productivity, which reduce the quantity of procured inputs.

2) *increasing the range of alternative suppliers* (shifting the block closer to the fulcrum) as Molloy and Barney (2015) suggest managers can ‘create human capital pipelines that connect their firm with targeted universities’ (2015: 320) or they might secure talent from another country.

3) *increasing supplier need* (increasing the height of the block). Where the firm can place relatively large order volumes this would increase the perceived dependence of the supplier on dealing with this firm. If the firm can achieve this without incurring switching costs, then the firm’s dependence on the supplier remains low as the firm could readily switch to an alternative provider. If firms foster the development of firm specific knowledge in their employees (rather than transferable knowledge) then this is likely to increase the employees’ dependence on the firm (Molloy and Barney, 2015).

4) *reducing the number of alternative deals the supplier can make* (shifting the block away from the fulcrum) e.g. through requiring the supplying firm to make contract-specific investments that lock them in. For example, an automaker requires a seat manufacturer to build a seat making facility close to the assembly plant to facilitate just-in-time seat delivery direct to the production line.

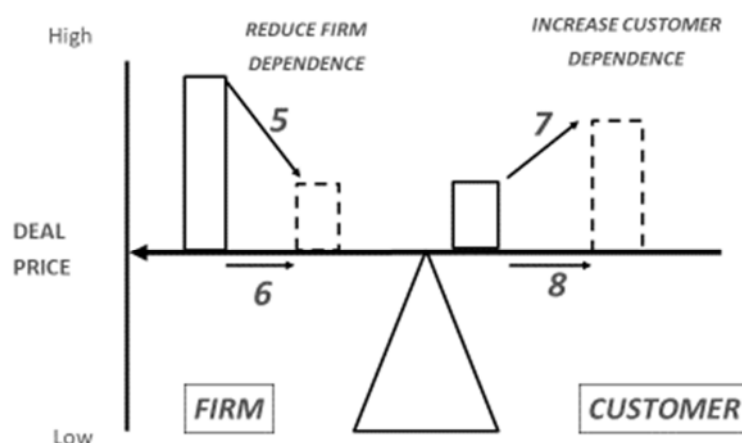


Figure 6 Increasing Firm Leverage Over Customers

In Figure 6 we depict the firm's relationship with customers. The current situation indicates high firm dependence on the focal deal and low customer dependence. The lever tilts down to the left of the fulcrum with the outcome being a low deal price. We can suggest four value levers that can improve firm dependence with respect to customers:

5) *reducing the firm's need to do this deal*, (reducing the height of the block) for example broadening the firm's geographic scope and operating in new markets.

6) *increasing the number of equivalent alternative deals* (shifting the block closer to the fulcrum) e.g., through diversifying the firm's product range.

7) *increasing the customer's need*, (increasing the height of the block) e.g., through valued product innovations which are not offered by competitors, or by offering bespoke services that lock-in the customer.

8) *reducing the customers perceived availability of alternative deals* (shifting the block away from the fulcrum): increasing customer dependence by creating customer switching costs e.g., customer investments in using the firm's unique system, the firm's staff building deep knowledge of the client's context and history, building trust-based relationships between firm staff and the customer.

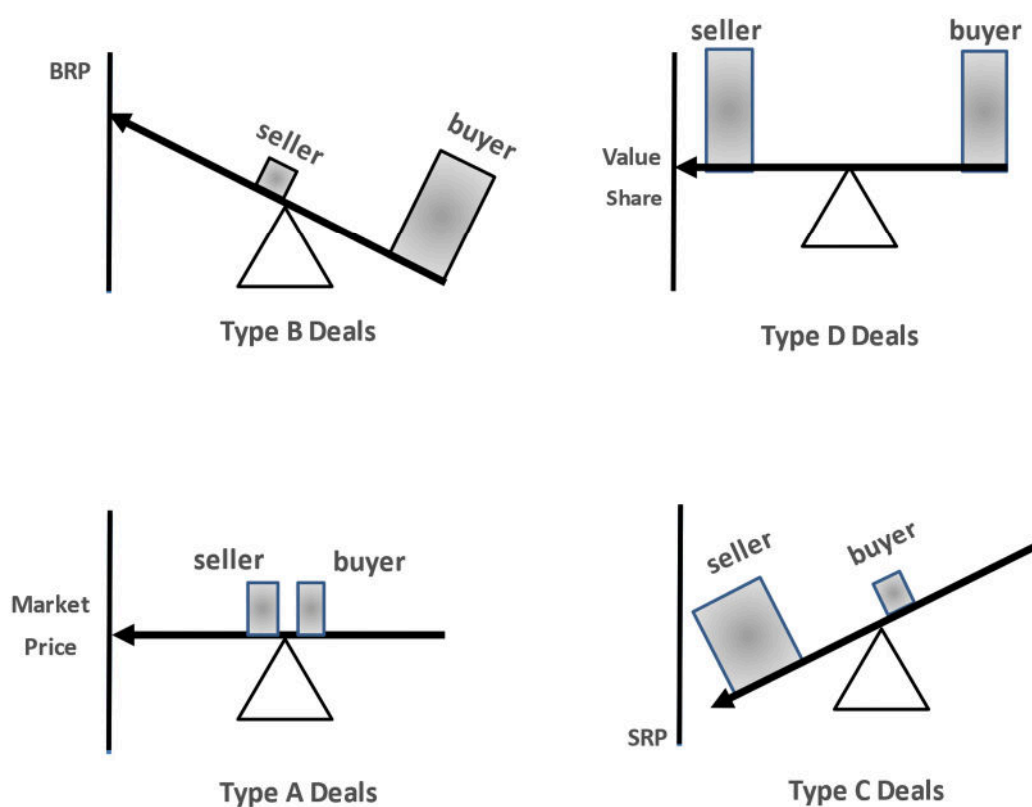


Figure 7 Type A-D Deals as Leverage Relationships

In Figure 7 we use the lever analogy to represent the four deal types explained earlier. The successful pursuit of value levers should either *shift* the firm's relationships or *sustain* relational advantages. For instance, product innovation (lever #7) could successfully differentiate the firm in the eyes of target customers and shift the firm from a commoditised relationship where Type A deals prevail, to a Type B relationship with these customers, enabling the firm to premium price. The successful implementation of lever #3 e.g. exploiting

scale economies in procurement, could shift the firm from a Type A relationship with a component supplier towards a Type C relationship, where the firm benefits from lower unit costs for these inputs.

This perspective could shed some light on why CEO remuneration has escalated from 20 times the median employee's wages in the 1970s to well over 200 times today. This can't be explained by the value contribution they make, as this cannot be calculated, and why would it have changed so dramatically? One explanation could be that the perceived dependence relationships between firm stakeholders (shareholders, employees, senior managers) have shifted over this time period and these shifts in relationships may have driven the narrative around the value contributions of executives in their favour. Referring to Figure 7 we might assume that a Type A situation prevailed in the past, where there was a functioning market for CEO knowhow, and where both the hiring firm and the CEO feel they have alternatives to the focal deal. We seemed to have shifted from Type A deals to Type B deals where the firm seems to perceive a high dependence on the current CEO, whereas the CEO feels they could easily and profitably move elsewhere. The narrative around executive remuneration has been influenced by the presence of remuneration consultants and the structures of remuneration committees which may have shifted the dependence relationship in the CEO's favour. A Type D relationship could be the outcome of a situation where both the CEO and the hiring firm perceive that the CEO possesses valuable firm specific knowledge. There is no market for this knowledge, but it adds great value to this firm. An honest and open dialogue could lead to a deal where both parties share the value in the deal equitably (Type D).

Applying the Value Capture Perspective

In this section we explore what a value capture perspective can contribute to three questions from the strategy field.

Should firms pursue generic strategies?

Porter (1980, 1985) argues that firms need to select from one of three generic competitive strategies (cost leadership, differentiation, focus) and that to fail to do this risks the firm being ‘stuck in the middle’ and hence achieving no advantage over competitors. Similarly, Treacy and Wiersema (1993) set out three ‘value disciplines’ (operational excellence, product innovation, customer intimacy) and argue that firms should choose one value discipline and stick with it. Pitelis (2009) and Gans and Ryall (2017) have summarised these and other generic strategies that populate the strategy literature. These include exploiting economies of scale and scope, differentiation, diversification, new market development, vertical integration, product innovation and horizontal mergers.

If we define firm value as profit flow, any improvements in the firm’s dependence relationships should have the potential to enhance the flow of profit, by either reducing cost flow or increasing the flow of revenues. We would argue that for any of these strategies to create firm value they must shift the dependence relationships between the firm and its suppliers and customers. Although some are labelled ‘competitive strategies’ they operate through vertical relationships with suppliers and buyers.

For example, economies of scale achieved in pursuance of a ‘cost leadership’ strategy can change the dependence relationship between the firm and suppliers: increasing supplier dependence and hence lowering deal prices. A differentiation strategy creates firm value if it results in customers perceiving the firm’s products as offering superior use value and hence reducing the availability of equivalent alternative deals. Mergers between competing firms can create firm value if they have the effect of reducing the availability of alternative deals for customers.

Firms operate within a value system and vertical scope choices situate the firm within this wider system. Vertical integration upstream changes who the firm engages with as suppliers. This may eliminate some transaction costs as well as increasing the firm's leverage over suppliers to the acquired firm. Similarly, vertical integration downstream redefines the firm's customers, and this would create value if this move results in the firm having more leverage over these newly defined downstream customers.

Firms have choices whether to 'make' or 'buy' i.e., whether to conduct activities within the hierarchy or to use the market. For example, Apple and Nike chose to exit manufacturing and focus on R&D and marketing. One reason for this may have been to pursue value lever #1 (increase seller dependence by exploiting scale advantages in procurement). Another reason might be that by continuing to manufacture in-house Apple and Nike would be required to employ assembly workers on similar contracts and terms as their R&D and marketing staff. By outsourcing and offshoring they avoid these costs. Apple's choice to outsource manufacturing enables them to exert considerable power over their suppliers e.g., Foxconn, whilst earning premium prices from innovative products. A decision to in-source a stage in a value system previously operated by a supplier uses value lever #4 if it reduces the firm's dependence on a particular supplier.

For product innovations to create value they must increase customer dependence and then generate more net revenue, by increasing sales volume or increasing average prices. Process innovations may create value if they enable the firm to reduce its dependence on inputs that are expensive and scarce e.g., de-skilling, routinizing or automating activities to reduce firm dependence on expensive knowhow. Diversification into new product markets creates firm value if it reduces firm dependence on existing customers.

If the firm is able to exploit a value lever and at the same time the firm co-creates isolating mechanisms, then the advantage will likely persist. This leads us to the next question: *what is a 'valuable' resource?*

What is a valuable resource?

Lockett, Thompson and Morgenstern (2009) and Priem and Butler (2001a, 2001b) argue that the RBV is based on analytic statements that are tautological, true by definition, and not able to be tested. As Kraaijenbrink, Spender and Groen (2010) point out “if we are to consider the RBV a theory, we must find a way to decouple or deny the tautology. This would require that “value” means something different in the *explanans* than in the *explanandum* and thus that the value of a firm’s resources and capabilities must be determinable independently of the value of products or services delivered to the firm’s customers.” (Kraaijenbrink et al 2010:357).

Part of the problem with the RBV is its starting point. As the RBV offers an explanation as to why firms can earn supernormal profits in equilibrium, its roots are clearly in the neoclassical theory of the firm, where firms deploy ‘factors of production’ (land, labour, capital) and compete in homogenous markets against rivals who offer the same products to the same customers. Competition should result in the industry moving towards an equilibrium where all firms would earn a base level of profit (normal profit). If a firm can earn supernormal profits in equilibrium, it must possess unique resources which cannot be replicated by rivals. Thus, the explanation of supernormal profits resides in factor market imperfections.

The value capture perspective set out here takes a different approach. As we explained earlier one consequence of adopting a complex system lens to explore value capture is we must abandon the neoclassical theory of the firm, which underpins a good deal of strategy theory. Instead, by focusing exclusively on the vertical relationships between the firm, its suppliers,

and customers, and by not assuming that ‘factors of production’ are homogenous, we can explain the capture of value from customers, and the retention of value within the firm through the dependence relationships that drive the deals the firm makes.

Game theoretic contributions to value capture recognize that there are finite limits to the world’s stock of productive resources which must inhibit processes of competition (Villalonga, 2004). Thus, there is no necessary tendency for supernormal industry profits to be competed away. Here we argue that scarce resources that enable firms to *enhance and sustain beneficial dependence relationships* can combine to deliver performance improvements. Whether we judge this as an outcome of *competitive* advantages requires us to first define the competitors. Customers define a firm’s competitors, and they may well include alternative ways of meeting needs in this set of firms (Porter’s ‘substitutes’). As most firms will have many customers there are likely to be many different sets of competitors.

If we consider the eight different ways a firm may increase its leverage (the *value levers* 1 to 8 above), we should be able to identify unique assets and capabilities that the firm has developed that enable it to exploit one or more of these sources of leverage. In this way we can define a valuable and unique asset in relation to its ability to enable the firm to enhance firm leverage (hence why it is ‘valuable’) and sustain leverage (if it cannot be imitated). This avoids the tautology problem, but because of the complex nature of the firm as a value creating system, there will still be ambiguities and challenges in identifying and isolating the contributions of specific components of this complex system.

The value capture perspective enables us to *qualitatively* appraise the *use value* of a specific resource: does it deliver value leverage? If it does and this sustains over time, then we might choose to label this a VRIN resource. Schmidt and Keil (2013) address how managers assess *ex ante* the monetary value of a resource, and this informs their managers’ judgements about

whether to create a resource or acquire one. Here we take a different view. It is not possible to identify the monetary value of a resource *ex ante*, *in situ* or *ex post* as it is part of a complex value creation/capture system. Subjective judgements about the use value of a resource are possible, but the only way of establishing the exchange value of a resource is to offer it for sale: the *exchange value* of a specific resource is the amount the buying firm is prepared to pay for it. As explained earlier, this can only be a subjective assessment based on beliefs about the value creating potential of the resource in the acquiring firm's value creation system. But as most VRIN resources are embedded in the firm's value creating system (Bowman and Swart, 2007) they can only feasibly change ownership if the whole firm is sold.

How should firms approach strategic change?

A strong argument for adopting a clear generic strategy is that it can lead to the *alignment* of many different parameters of an organization into a synergistic *configuration*. These parameters would include control systems, knowledge management, routines, processes, rewards, structures, culture, and values.

How might a chosen generic strategy move from espoused *intentions* of senior management to a *realised* embedded configuration of aligned practices? These practices could be designed and introduced into the organisation, driven by managerial authority, and reinforced by control mechanisms. The resulting organisation would perform better than the original firm if the implemented generic strategy aligns the firm more closely with its context.

But this 'top down' strategy process rarely occurs in practice. Typically, changes are introduced that align with the intended strategy, but they may not 'take' in the complex system that is the firm. They may be modified, adopted in a half-hearted manner, or ignored. Given complexity, no management team can know a) what the firm would need to look like

to be successful in an unknowable future, or b) how the firm can be shifted from where it is today to that designed configuration.

The value capture perspective may lead us to a different conclusion. If 'strategy' is more of an emergent than deliberate process (Mintzberg and Waters, 1985; Lichtenstein, 2014) then changes to the firm's value system that synergise with existing practices and the firm's context will likely persist. Hence, there is no reason why practices associated with a 'cost leadership' strategy could not co-exist with some aspects of a 'differentiation' strategy.

If we abandon the idea of firms needing to have a top-down overarching generic strategy we can approach the process of strategic change as 'guided incrementalism'. There is no *a priori* reason why the pursuit of several of the eight leverage strategies would not improve firm performance. The way the firm approaches change needs to respect a) the complexity of the firm as a value creation system, b) the inability of anyone to predict the outcome of any action, and hence c) the need to abandon any notion that managers 'control' the firm. Hence, organization change should be approached with some humility.

The firm as a complex system is an outcome of deliberate attempts to change the system, reactions to these attempts, and emergent processes e.g. learning, routines, culture. For the firm to exist there must be more positive interactions between the system's components than negative ones. This would suggest that an appropriate approach to change, in line with the value levers set out above, would be as follows: 1) identify a possible change that would enhance the firm's leverage, 2) set up an experiment which can test aspects of the change in a low risk and low cost way, 3) decide on the appropriate feedback from the system that would indicate whether the change is moving the firm in the required direction, 4) on the basis of this feedback either escalate the experiment, adjust it or abandon it.

In this way novel and potentially profitable practices can be encouraged to emerge which may not align with an overarching generic strategy, but instead may evolve into unique configurations of practices which deliver sustained profitability.

The value capture perspective precludes approaches to strategizing that are predicated on any ability to predict future outcomes of strategic choices. In its stead we suggest that actions and decisions that have the effect of improving the firm's dependence relationships with stakeholders are likely to be 'selected in' and will persist in the system. These actions and choices may be the outcome of deliberate strategizing activity, or they may emerge from other on-going and emergent change processes inside the firm e.g. learning, hiring staff, chance events, opportunities, crises. These emergent changes 'invade' the system and, where they have the effect of improving the firm's dependence relationship with a stakeholder, they are likely to be selected and retained.

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