What Drives Corporations to Engage?

A look at Partnerships through the Lens of Resource Dependence Theory

One could argue, that if independence and individual control is of value to an organization, then most would likely opt to conduct their business free from the restraints of partnerships or alliances (Pfeffer & Salancik, 2003; Rahman, 2008). However, that companies, organizations and governments, some more than others, do elect to ally and partner is an historical reality. However, a noted gap exists in the research literature concerning the attributes that lead some corporations and organizations to a higher probability of engagement in partner relationships and arrangements than others. In a word, there is a lack of definitive research evidence on the relativistic relationship between key aspects of an organization's collective characteristics - namely corporate reputation and corporate size - and their impact on the its probability of engagement in some sort of a partnering arrangement.

Speaking to the above, we focus here on a particularly important yet neglected subset of a corporation's macro characteristics that drives one toward more frequent engagement activity than another. To do this I apply central postulates of Resource Dependence Theory (Pfeffer & Salancik, 2003) to investigate what prompts an organization to engage in relationships which may cause them to relinquish some measure of power, autonomy, and wealth, in return for the relative benefits and security of a partnership (Pfeffer and Salancik, 2003). To be sure some prior research has examined the effect of reputation on a number of outcomes like performance and longevity (Parkhe, 1993), and others have gauged factor effects upon formation of partnership

arrangements (Oliver, 1990; Burgers et al., 1993; Podolny, 1994; Gulati, 1995; Eisenhardt and Schoonhoven, 1996; Rahman, 2008; (Isett & Provan, 2005). See Appendix A: **Research on Corporate Reputation, Size and Engagement**

This work thus contributes to the cumulative development of the literature by examining what influences a corporation's probability to engage or be engaged, to enter into some sort of partnership arrangement.

Therefore I ask, and seek to answer here, the following research question: What are the relativistic impacts of organizational characteristics such as organization reputation and size on the probability to engage in partner arrangements?

Theoretical Perspective and Related Literature

Core Literature

Resource Dependence Theory contends: "Organizations will attempt to manage constraints and uncertainty that arise from the need to acquire resources from the environment" (Pfeffer and Salancik, 2003: 2-3, 19). "To acquire resources, organizations must inevitably interact with their social environments" because the self sufficient "environment is not dependable"; it changes, and with it, the supply chain of resources (Pfeffer and Salancik, 2003: 2-3, 19). Therefore, "organizations are willing to bear the costs of restricted discretion for the benefits of predictable and certain exchanges" (Pfeffer and Salancik, 2003: 2-3, 19)

When one considers resource dependency, what comes to mind is an apt metaphor of the concept by Pfeffer and Salancik (2003: 2-3, 19): they employ the example of medieval monasteries,

convents, and abbeys as early representations of isolated independent organizations, self contained fortresses which provided all the needs for these secluded communities, which at the same time retained their power, autonomy, contemplative isolation, and even safety….perfect, except by constructing these insulated societies in such a manner, the residents also signed their own extinction notices, for how were they to replenish the population of the faithful of nuns, brothers, priests, and monks for the next generation? Some, sticking to their isolationist practices, just died out; others made contact with the outside: parishes, farmers, town populations and local governments to recruit and replenish their numbers of the faithful for their order, trading upon, in this case, the Reputation of the Church and of their Religious Order: still, that meant giving up some autonomy, contemplative isolation, and perhaps even customary practices; if a monastery was cloistered and practiced silence, someone would have to break that practice to go forth and recruit new members; so there remained a struggle, back and forth between their pursuit of resources (faithful recruits for the order) and reticence to give up their full autonomy in practice of their religious customs (Pfeffer and Salancik, 2003)….to survive and prosper, something had to give. Pfeffer and Salancik (2003) cleverly take this metaphor for resource dependence into the contemporary world of businesses and other organizations, noting that the theory rests upon the same bedrock cornerstone; the acquisition of resources one needs while managing and controlling constraints.

A similar fitting representation supporting their theory exists in the 20th century business environment: Henry Ford's disastrous gamble on self-sufficiency in Brazil (Anastakis, 2010). During the 1920's, a heyday of the car making industry in America, a virtual "duopoly" on rubber for automobile tires was held by the British and Dutch rubber trade based in South East

Asia (Anastakis, 2010: 634). Tiring of his dependence on these suppliers for this resource, Ford set out to solve the problem, practicing backward "vertical integration", not merely building his own cars, but creating his own source of rubber for his tires by growing his own rubber trees (Anastakis, 2010: 634; CNN.com, 2009; Rahman & Korn, 2009: 139, 141). He contracted with the Brazilian Government to establish the city of "Fordlandia" deep in the heart of northern Brazil, a plantation town complete with all Western amenities, to grow rubber trees, harvest the latex product, and transport the rubber back to the U.S. for his automobile tires (Anastakis, 2010). Ambitious plans included thousands of workers to support Ford's intention of independence from the constraints of unwanted business partnerships (Anastakis, 2010). It took less than two decades but over $20 million in the day's currency, for the entire operation to fall apart and be abandoned (Anastakis, 2010).

What happened? As Pfeffer and Salancik (2003) resource dependence theory later suggests, the environment Ford built and depended upon had failed him; things changed. Unrest among the workforce, malaria, difficult logistics, insect blight, poor agricultural practice, and finally technology (the invention of synthetic rubber), combined to doom his operation, '"epitomizing "dependency" as we understand it"' (Anastakis, 2010: 634, 635; CNN.com, 2009). Another company might have folded, but the Ford corporation possessed two valuable remaining resources: Size (market capitalization), and Reputation. These allowed the company to absorb its losses, and to leverage its size and reputation as a top industry manufacturer to successfully rely upon steady, old U.S. partners (think Firestone) for a dependable and secure supply of tires for their automobiles (Biggemann & Buttle, 2007). A valuable takeaway from both these examples: both size and reputation can be of critical importance to an organization's survival,

and its ability to find the resources it requires, particularly through the engagement in partnering arrangements.

Related Literatures

On the complementary subject of partnering arrangements and selection decisions, theory abounds, regarding the many internal and external factors influencing choice of best candidates with whom to form alliances when pursuing initiatives (Cummings & Holmberg, 2012; Eisner, Rahman, & Korn, 2009; Geringer, 1991; Hitt, Dacin, Levitas, Arregle, & Borza, 2000; Podolny, 1994; Rahman, 2008; Rahman & Korn, 2009).

Less researched, but still rich in the literature, are studies considering the factors that affect the propensity of an organization to choose or not choose partners across broad divides (Abramson, Lane, Nagai, & Takagi, 1993; Das & Rahman, 2010; Geringer & Hebert, 1991; Rahman, 2008). Not front and center, however, is a more granular examination the factors that influence partner selection decisions (Burgers, Charles, & Kim, 1993; Gattringer, Wiener, & Strehl, 2017; Isett & Provan, 2005; Layman, 2016; Podolny, 1994; Rahman, 2008; Rahman & Korn, 2009; Rico, Sánchez-Manzanares, Gil, & Gibson, 2008; Stuart, 1998). This paper examines those phenomena, focusing specifically upon organizational reputation and size, as measures that will influence companies to enter partnership engagements with each other. (Clark III & Moutray, 2004: 450; Cullen, 2012; Gibson, McDowell, Harris, & Voelker, 2012: 88; Johnson, 2015: 1; Layman, 2016: 171; Snider, Kidalov, & Rendon, 2013: 402; Stuart, 1998: 686).

Borrowing from "resource based theory" is the practice by manufacturers of considering, partnering, and even subcontracting to much smaller, perhaps under resourced, and unproven firms, albeit those which possess a resource of critical importance to the larger business (Das & Teng, 2000: 31-33; Layman, 2016). This study and suggests a reason for this unlikely matchup: while small companies may possess a resource of value to larger potential partners, they may not be resourced to best complete the work or deliver their product; while large corporations who can do the work, however, may need the small firms critical resource, leading to a lopsided small prime/large partner arrangement (Das & Teng, 2000: 37; Jones & Hibshman, 2009: 3; Rahman, 2008; Stuart, 1998: 686). The potential partnering between these two very different enterprises in the government contracting arena, for example, is influenced by the small company's eligibility to bid, and the large company's capability to better complete the job (Das & Teng, 2000: 37, 56; Jones & Hibshman, 2009: 3; Rahman & Korn, 2009: 133, 145). Both corporate reputation and size figure into this discussion.

Conceptual Model and Hypotheses

Following the above logic, consider the resource dependence view, specifically: "that organizations are the primary social actors, and that intercorporate relations can be understood as products of patterns of interorganizational dependence and constraint" (Pfeffer, 1987: 40). According to Pfeffer (1987: 26, 33) : "organizations take actions to manage external interdependencies" in a continuous back and forth process to best consider and address their own "primacy of organizational interests", that is, their own organization. At the core, organizations, need to acquire resources to survive, but want to manage the conditions of that exchange, and this will require interaction with external entities and forces, the "social environment" (Pfeffer &

Salancik, 2003: xxiv, 19). The idea of independent self sufficiency is a fallacy, because at the end of the day, all success depends upon a resource environment of some scale, and that environment is inevitably going to change or fail, and become "undependable", particularly, as a supplier of resources (Pfeffer & Salancik, 2003: 3). Successful corporations survive the turmoil of unpredictability by accepting the "costs of restricted discretion", contributing their own resources, in return for the consistent availability of resources afforded by a stable and secure partnership (Pfeffer & Salancik, 2003: 183; Rahman, 2008). In fact, Eisenhardt and Schoonhoven (1996: 140-141, 144) suggest that the larger the top management team size in a corporation, the higher probability exists for engagement in partnering arrangements. If one extends this notion to assume that a larger top management team is representative of a larger corporation, then my study tests their suggestion regarding the relationship between corporate size and these engagements (Eisenhardt & Schoonhoven, 1996).

Cascario and colleagues (2005:167-168) offer an alternative perspective, suggesting that reluctance to cede control, creating a "power imbalance", may deter weaker potential partners from engagement, regardless of resource or capability dependence. They deconstruct the single concept of "interdependence" into two separate components; "power imbalance and mutual dependence" which compete for prominence (Cascario, et al., 2005: 167). But perhaps these two concepts are instead positively and productively related and connected? Burgers et al. (1993) suggest that because large firms possess the financial resources to carry on in difficult times, they are particularly attractive potential partners for small firms. A large company can exercise a measure of control over the level of interdependency by partnering with smaller, weaker firms; Burgers et al. (1993: 424,429-430) found that large firms exhibit a tendency to

partner with the smaller of their potential partners. This would contradict Casciaro et al. (2005), suggesting that a large partner has less to fear from interdependencies of partnership, and perhaps its large size may even induce them into more of these engagements (Eisenhardt & Schoonhoven, 1996: 141, 145-146; Rahman & Korn, 2009: 139, 145; Stuart, 1998: 686). Gulati (1995: 645) finds empirical support for the notion that large companies are induced to ally with smaller firms and visa-versa, as they do not compete with, but complement each other, unlike same-sized firms; their "difference in liquidity" promotes alliance formation.

Neither people nor organizations want to give away their power…but they do; small businesses with the power of influence and reputation are willing to allow larger partners to "absorb constraint", to assume their power, and in fact it is the "imbalance in power" which can promote the partnerships (Casciaro et al., 2005: 167; Rahman, 2008: 236).

There is an easy parallel to be drawn between reputation and "influence" in the practice in China of "Guanxi", " by which a small business or individual may employ a series of "networks" and connections as "relational" capital to entice a large corporation to join in a partnering arrangement (Rahman, 2008: 234, 237, 243). Valuable associations and contacts in this context can form the basis of a small businesses reputation, a prized resource which cannot be discounted (Rahman, 2008: 243-244). Pitfalls and "ethical dilemmas" can exist in this unbalanced relationship, however, where one partner's intent and capabilities are unverified (Rahman, 2008: 248; Rangan, Samii, & Van Wassenhove, 2006: 750). Rangan et al. (2006: 750) suggest a manifestation of that dilemma, when small companies choose to partner with big government

partners to "deflect attention from serious inadequacies"…could that be the same for small and large company partnerships (Feldman & Kelley, 2006: 1514)?

Regarding company size, there can be many drivers for a smaller company to make the move to partner. There exists a "Halo" effect for a small business if it successfully partners with a big company (Feldman & Kelley, 2006: 1515-1516; Rangan et al., 2006: 750). Small companies may want to shoot up a flare to let big companies know of their existence (Graff, 2016: 8). The glow of a big corporation's reputation will reflect onto its small partner… "success breeds success"…always good advertising (Feldman & Kelley, 2006: 1515-1516; Graff, 2016: 8; Rahman & Korn, 2009: 140). The "status" of a corporation is suggested to attract those potential partners looking to share that glow, and infers upon that corporation an "attractiveness as a potential exchange partner (Podolny, 1994: 480).

There remains the issue of complementarities; what best fits one's needs, could certainly drive the business connection (Feldman & Kelley, 2006: 1515-1516; Rahman & Korn, 2009: 140; Stuart, 1998: 673). The partnering companies may obtain access to technology transfer…this benefit can go both ways, dependent upon which side has proprietary information, innovative "technologies" or new inventions (Geringer & Hebert, 1991: 40, 48; Rahman & Korn, 2009: 145) That can lead to a "knowledge spillover" effect for the end customer, who gets more bang for the buck by choosing a bidder team of partners with this extra edge (Feldman & Kelley, 2006: 1509; Rahman & Korn, 2009: 145).

These arguments point to both reputation and size as valid reasons companies might rather subject themselves to the "interlocks" of partnering with large, reputable firms than going it

alone in isolation (Eisenhardt & Schoonhoven, 1996: 140; Pfeffer, 1987: 42-43; Rangan et al., 2006: 750). They lead to the following two hypotheses:

- H1: Reputation Level has a positive association with a corporation's number of engagement in Partner Arrangements
- H2: Corporate Size has a positive association with a corporation's number of engagement in Partner Arrangements

To best evaluate these associations, both corporate reputation (as independent variable) and corporate size (as both control and independent variable) will be examined regarding their relationship with probabilities of engagement in partnering arrangements (as dependent outcome variable) – see Figure 1 below:

Insert Figure 1 about here

Methodology and Data Collection

Data for this study were extracted from two major sources: a pivot of three consecutive years data from the Fortune 500 (2015-2016, 2016-2017, 2017-2018) 50 Most Admired Companies list and the Standard and Poor's Net Advantage Site -S&P Global IntelligenceIQ (Fortune, 2018; S&P NetAdvantage Pace University, 2018). The Fortune site is open source while the S&P NetAdvantage Site was accessed under the account held by Pace University, N.Y. The Data provided by Fortune included the top 50 corporations by ranking, overall score based upon an average of nine categories of reputational attributes-ranked 1(high) through 13 (low) in this sample, and a current snapshot of market capitalization values per company to represent size, and

of particular importance, relative size. The nine categories included: "innovation, people management, use of corporate assets, social responsibility, quality of management, financial performance, long term investment value, quality of products and services, and global competiveness" (Fortune, 2018). See Table 1 (Reliability Statistics for Reputational Indices) which indicates good internal consistency of these indices:

Insert Table 1 about here

Fortune teamed with the Korn Ferry / Hay Group to conduct the survey for information and collect and organize the data results (Fortune, 2018; KornFerry 2018). Their screening by revenue started with 1500 companies and was refined to 689 firms (both US and 28 international) in 52 industries. 3900 survey respondent executives, directors, and analysts who were asked by the Hay Group of Korn Ferry to participate in the survey rated the companies, first in their own industry, and then to make their top 10 choices from a list incorporating the top 25% of the finishers for the prior year, the top 20% of the current finishers in their respective fields, and any remaining of the preceding year's top 50.

The remaining list of companies is indicative of a broad range of business types, sizes (all roughly 10 billion to 900 billion in market capitalization), and reputational variety to serve as fairly robust predictors for an organization's probability of engagement in teaming of some capacity. Top 50 selected based upon score, which is average of 9 reputational attributes (Bear, Rahman, & Post, 2010; Fortune, 2018).

Why were these nine particular reputational attributes chosen for the long standing Fortune study? " the attributes were developed prior to the inception of the Most Admired Companies rankings in the mid 1980's through a series of 'interviews with executives and industry analysts to determine the qualities that make a company worthy of admiration"' (KornFerry 2018)…. "a company's overall score is determined through a simple average of the individual attribute scores" (KornFerry 2018).

The S&P site database (S&P NetAdvantage Pace University, 2018), provided very detailed corporate timelines for each company in the sample. From these individual corporate timelines, over the 12 month period of 2017, were extracted all relevant engagements by each sample company; these included: joint ventures, collaborations for business and research, mergers and acquisitions, strategic alliances, teams and partnerships, business and investment consortia, and for the airlines in the group-new air route openings (representative of multiple teaming arrangements with air authorities and destination hosts). Discussions of potential engagements were omitted from the list. The total number of engagements for each sample were collected and evaluated against total reputational scores, controlling for company size (represented by market capitalization in $billions). Company Divestments were collected from the timeline, but did not yield clear enough data to discriminate in measurement.

The sample size for the ranked top 50 companies did not include 7 international companies to provide better consistency in measurement and avoid any opaqueness of international accounting and reporting (Stuart, 1998: 687). Final sample for the regression (total reputational score versus engagements) was 43 (one additional missing response); because several U.S. companies failed

to respond to reputational indices questions, the sample size for the evaluation of each individual reputational attribute versus engagements fell to 33.

Because past research had discovered a possible bias in the scoring of the reputational data due to the "halo effect" of the financial performance of a company, the independent variable "Market Capitalization" was incorporated not only as a predictor of engagement in its own right, but as a control for the possible "financial performance halo" effect (Bear et al., 2010: 212; Brown & Perry, 1994: 1347; 1995: 236). Market Capitalization is simply the "value of a company's outstanding shares of stock", measured as stock share price multiplied by the number of shares, and is thought to be one of the top indicators of corporate financial size (Investopedia, 2018; Motley Fool, 2018). Table 2 illustrates correlations among predictor and outcome variables.

Insert Table 2 about here

Analysis and Results

I used discrete count outcome data; there is no assumption of normal distribution of variables, not many excess zeros are found in the data (3), and there exists probable over dispersion of variables. Therefore, I chose to employ Negative Binomial Regression, first to predict the number of outcome engagements, as a function of overall reputation score controlling for size (market capitalization);

To measure the likelihood of a corporation to engage in partnering arrangements I regressed the predictor effects of reputation and size on the number of engagements for each company studied: First set of regression series tested predictor effect of overall reputational score, and corporate size (market cap.), on expected (log) count of partner engagements. Three runs were conducted

for all tests, one for each set of data: 2015-16, 2016-17, 2017-18. See Table 3-Descriptive Statistics for the three test runs. This method also enabled the determination whether size (market cap) which is not a reputation index, but a significant corporate attribute, may have its own significant positive effect upon probability to engage in a partnership arrangement.

Insert Table 3 about here

The null hypothesis assumes non significance of Likelihood Ratio Chi Square test: there exists no relationship between the predictor and outcome variables. See Negative Binomial Regression Omnibus Test Table 4 below. Significance would indicate that the fitted model with the predictors indicates an improvement in fit over the null (intercept only model), and thus indicates relationship between predictor and outcome. LR Chi-Square:(7.770, p=.021) as example for 2015-2016:

Insert Table 4 about here

For all of the three cross sectional years evaluated, the model with the intercept and predictors "reputational score and market cap" resulted in a significant improvement in fit over the intercept only (null) model.

Regression coefficients reflect change in predicted log counts of engagement for a 1 unit increase or decrease in the reputation score or market capitalization variables. Overall reputational score and market cap were tested (See Negative Binomial Regression Parameter Estimates in Table 5 Below): reputational score was not a significant negative predictor of the predicted log counts of engagement for any of the three years measured; market capitalization,

however, was a significant positive predictor of the predicted log counts of engagement; as corporate size grows so does the probability of engagement in partnering arrangements: *Hypothesis 1 not supported; Hypothesis 2 supported.*

Insert Table 5 about here

I additionally considered and conducted several other ancillary tests to further verify the above results. I first ran a regression series on expected (log) count of partner engagements, testing 2 composite theme component predictors after conducting principle component analysis to reduce variables, second testing all 9 predictor reputational indices, and finally testing 7 remaining reputational indices (after high correlation findings and removal of 2 variables), recognizing that the individual indices are but correlated facets of the overall construct of reputation, and would not likely discriminate as discreet predictors, and recognizing the overall score in the surveys may reflect some other perhaps subjective aspects than the listed nine reputational characteristics indicate.

Regression results found neither the constructed principal components nor the individual reputational indices were significant predictors of expected engagement log counts; market capitalization, however, was. Further investigation was therefore conducted, substituting the actual number rankings of the companies for the Reputation score: no significant changes were observed in the regressions. A sample year ranking of the companies *by industry* was attempted in lieu of overall Fortune ranking: again, no significant differences were noted. Finally, new data was collected to once again account for the reputed "halo effect" of financial performance (Brown & Perry, 1994): Corporate growth figures of each company by percentage growth year

over year, above or below the year previous, was incorporated as a control variable and run through the regressions, both with and without the market cap. variable, and utilizing first, reputation score, and last, reputation ranking in separate runs for all three years. Again, Market Capitalization (Size) remained the only predictor of significance for this model and sample. *Hypothesis 2 is again supported; Hypothesis 1 is not.*

Discussion and Implications

Resource Dependence theory suggests that for companies to engage and exchange constraints and interdependencies, they must both have a resource need that a potential partner can supply, and a resource surplus that is desired by the other party or parties in the engagement (Eisenhardt & Schoonhoven, 1996: 137). This study finds that among the resources and capabilities of sufficient value to induce a potential partner to engage (and lose some autonomy and control by tolerating certain limitations), the characteristic of corporate size measured by market capitalization and its particular attributes, is appropriate for inclusion (Pfeffer & Salancik, 2003).

This makes sense. The stability that goes with financial size and therefore, strength would reasonably stimulate confidence in potential partners and become an inducement to partners in need of a stable trusted provider of that resource. It can be logically assumed that a company's size would also serve to positively predict an increase in expected engagements, as was demonstrated in this study. The aggregate effect of reputational score as a whole, or even reputational ranking in the results of the examination and analysis, were a bit surprising: reputation as a predictor of increased probability of engagement was a non significant predictor for the probability of engagements in partnering arrangements. One explanation, could have to

do with the fact that some of these large, highly reputable corporations, are comfortable (for the moment) in their current environment (recall Pfeffer and Salancik's metaphor of the medieval Abbey) and feel no need to be anything but discriminating in their choice of partner and time to partner (Podolny, 1994). Berkshire Hathaway (ranked 4) may have everything they need at present to deliver their services, and thus entered into only 3 engagements in 2017 (Fortune, 2018). That is not to say the environment will not change (Pfeffer & Salancik, 2003). A company's success in that eventuality will depend upon its meeting the value standards to become an attractive partner for others, which includes perhaps the positive attributional indictors of corporate size.

When considering the effects of corporate size upon structure, this work expands Kimberly's (1976: 588-589, 592) conversation regarding this relationship, but employs partner arrangement decisions as potential structural changes, and substitutes market capitalization for "net assets" as one definition of size, agreeing with Kimberly that one significant level of this analysis can be "primarily external, and focuses on the implications of different aspects of size for transactions between the organization and its environment", a certain type of "organizational problem".

Contributions and Recommendations

This study examines the effects of both reputation and market capitalization on a consistently measured outcome variable of "corporate engagements", and is further validated by 3 years of reputational predictors, with consequent repeatability throughout the results (3 years replication with cross sectional predictor data). Corporate size, measured by market capitalization for this

sample data set and study, was a singularly significant predictor of corporate probability to engage in partnering arrangements, and the frequency that these arrangements will form.

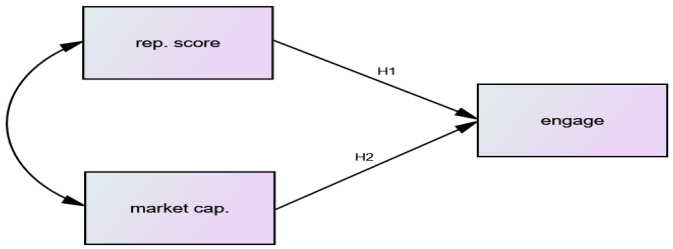
This work extends upon the research of Stuart (1998: 668, 695), whose study concluded that "technological prestige" and "crowding" of same type companies in a particular "technology space" led to higher probabilities for alliance formation, but with no significant increase for corporate size. In contrast, the findings (albeit with differing sample types, antecedents, and sample sizes), yielded the opposite results, suggesting a need for future research with larger and more generalizable samples than employed in either study. Assuming the core tenet of Resource Dependence Theory that engagement in partnering arrangements is indeed a good and necessary practice, this study contributes to the literature by identifying a factor which promotes these engagements, informing corporations how better to target potential partners or prepare and leverage their own businesses to become better partner targets: "cooperation requires resources to get resources" (Eisenhardt & Schoonhoven, 1996: 137; Pfeffer, 1987: 42-43).

Managers of organizations might take from this research several important guideposts. First, to include a tempered enthusiasm, indeed even a measured wariness of choosing potential partners by reputation alone (Rahman, 2008) ; second, to ensure accounting for company size when considering the best mix of attributes desired for partner engagements, and finally, recognize always the significant role played by the ever-changing environment in effecting determinations to take these critical engagement decisions (Pfeffer & Salancik, 2003).

Of course, all of the above must be understood in light of several important limitations. For example, the small sample size and range bound restriction in data variability (highest echelon

Fortune corporations measured by reputation), are likely factors for future research consideration, which could benefit with the inclusion of a broader range (top, middle and bottom corporations) and larger sample for generalizability. The study is limited to corporations, and might well be extended to test a more diverse sample of organizations, to include non-profits and government/public sector establishments (Isett & Provan, 2005: 151). Additionally, the creation of a longitudinal model with a number of annual observations may provide better clarity of effect, though environmental and internal changes can create difficulties further limiting the consistency of the data. That said, the study does advance the literature by specifically examining both reputation and market capitalization size effects on a consistently measured outcome variable of "corporate engagements", and further pivots for validation on 3 year's testing of reputational predictors, with consequent perfect repeatability over 3 years time. The research, therefore, adds to the broad base of study, which contends that the practice of entering into partnering engagements is more complex than just what one does, when one runs out of other options.

Figure 1 – Conceptual Model of Engagement Predictors



Reputation = rep. score
Size measured by market capitalization = market cap.
Probability of engagement in partnering arrangements = engage

Table 1-Reliability Statistics for Nine Reputational Indices

Year	Cronbach's Alpha	Cronbach's Alpha Standardized	N of items
2015-2016	.814	.826	9
2016-2017	.826	.842	9
2017-2018	.803	.819	9

Table 2-Pearson's Correlations for reputation score, market cap, engage

Year	Variable		Score	Mkt. Cap.	Engage
2015-2016	Score	Correlation	1.000	.250	-.071
		Sig. (2-tail)	.	.110	.651
	Mkt. Cap.	Correlation	.250	1.000	.325*
		Sig. (2-tail)	.110	.	.036
	Engage	Correlation	-.071	.325*	1.000
		Sig. (2-tail)	.651	.036	.
2016-2017	Score	Correlation	1.000	.166	.062
		Sig. (2-tail)	.	.305	.700
	Mkt. Cap.	Correlation	.166	1.000	.325*
		Sig. (2-tail)	.305	.	.036
	Engage	Correlation	.062	.325*	1.000
		Sig. (2-tail)	.700	.036	1.000
2017-2018	Score	Correlation	1.000	.425**	.040
		Sig. (2-tail)	.	.006	.803
	Mkt. Cap.	Correlation	.425**	1.000	.325*
		Sig. (2-tail)	.006	.	.036
	Engage	Correlation	.040	.326*	1.000
		Sig. (2-tail)	.803	.036	.

Table 3-Descriptive Statistics

Year	Variable	Mean	Std. Deviation	N
2015-2016	Score	7.1953	7.1313	43
	Market Cap.	193.2795	184.518	42
	Engage	8.37	12.093	43
2016-2017	Score	7.1229	.6352	41
	Market Cap.	193.2795	184.518	42
	Engage	8.37	12.093	43
2017-2018	Score	7.198	.5841	41
	Market Cap.	193.2795	184.518	42
	Engage	8.37	12.093	43

Table 4-Negative Binomial Regression Omnibus Test

Year	Likelihood Ratio Chi-Square	df	Significance
2015-2016	7.770*	2	.021
2016-2017	6.172*	2	.046
2017-2018	7.373*	2	.025

*p =.05
Dependent Variable: Engage
Model: (Intercept), Market Cap., Score
Compares the fitted model against the intercept only model (null model)

Table 5-Negative Binomial Regression Parameter Estimates

Year	Predictor	b	Std. Error	Significance
2015-2016	Market Cap.	.002*	.0008	.013
2015-2016	Score	-.401	.2527	.113
2016-2017	Market Cap.	.002*	.0011	.022
2016-2017	Score	-.210	.3256	.519
2017-2018	Market Cap.	.002*	.0009	.008
2017-2018	Score	-.416	.3192	.193

*p =.05
Negative. Binomial. Par. Est.: .843 (2015), .922 (2016), .881 (2017)
Estimates above indicate the presence of over dispersion and support appropriateness of negative binomial regression as choice for analysis.

Appendix A: Research on Corporate Reputation, Size and Engagement

Authors	Empirical Study	Finding/Conclusion
(Pfeffer & Salancik, 2003)	Text: "External Control of Organizations"	Reprint of 1978 source volume: a reference for the Resource Dependence Perspective
(Stuart, 1998)	Effect of prestige and crowding and size on alliance formation (p.668).	Technological prestige and crowding positive influencers of alliance formation. Size not a predictor of Alliance formation (691, 695).
(Casciaro et al., 2005)	Study of both mutual dependence and power imbalance together as predictors of "constraint absorption" in partnerships (p. 167)	"Power Imbalance" negatively influences "constraint absorption" and thus, partnering (pp.167, 192)
(Isett & Provan, 2005)	Longitudinal study of organizational relationships/bonds in a public sector funded environment (p.151).	Contractual relationships dominate due to government regulations (pp.161-162).
(Parkhe, 1993)	Alliance survey study; "game theoretic and transaction costs" (pp. 794)	Recommends future research on "impact of reputation effects on alliance structuring decisions (p. 822)
(Eisenhardt & Schoonhoven, 1996)	"Strategic and social effect of alliance formation (p.136); Semiconductor industry (pp. 141-142).	Support for Resource based view of strategic alliances. Top Management Team size as predictor of engagement (pp141, 145).
(Gibson et al., 2012)	Impact of Minority Small Business status on USG contract award type: "Johnson Space Center" study-contractor	Recommend formation of "Strategic Alliances" to assure resources (p. 98)

	subcategory type versus contract award type (p. 95).	
(Oliver, 1990)	"Six generalizable determinants of relationship formation" (Oliver, 1990: 241)	"Conditions for six types of interorganizational relations" for future research (Oliver, 1990: 260).
(Podolny, 1994)	Investment Banking study to determine "exclusivity" in partnering to reduce "uncertainty" (Podolny, 1994: 458).	"uncertainty" promotes "exclusivity" in partnering decisions…The "Aristocrat Strategy" (Podolny, 1994: 458, 482)
(Gulati, 1995)	"industrial automation, new materials and automotive sector" survey study-factors affecting alliance formation-Size as control variable: "total sales"$ (pp. 629-630, 636).	"strategic interdependence and social structure explanations of alliance formation" (p.619). support for large/small alliance formation (p.645)
(Burgers et al., 1993)	Alliances in the Global Automobile Industry (p.419)	"Cooperative alliances" reduce "demand uncertainty…competitive uncertainty" (p.430)
(Bear et al., 2010)	Health care study on reputational antecedents, Fortune Most Admired Corporations Reputational Scores as outcome	Determinants of Reputation discovered.

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