
Budiyanto Cucuk Wawan  
*Swinburne University of Technology, John Street, Hawthorn, Victoria 3122, Australia*, cbudiyanto@swin.edu.au

Prananto Adi  
*Swinburne University of Technology, John Street, Hawthorn, Victoria 3122, Australia*, aprananto@swin.edu.au

Tan Felix Ter Chian  
*Swinburne University of Technology, John Street, Hawthorn, Victoria 3122, Australia*, ftan@swin.edu.au

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Abstract

Power has been an important topic amongst scholars in Information Systems (IS) research. Despite the vast literature on power in IS research, we found there is a lack of study that investigates the significance of power in a Parent-Subsidiary relationship. As a part of an ongoing research to explore the role of IS in the Parent-Subsidiary relationship, this paper highlights the impact of Enterprise Systems (ES) on the "evolution" of power as a critical aspect of that relationship. Using case study as a research method, we explore four scenarios, namely: Domination, Consultative, Empowerment, and Incitement; each with its own distinct aspects of power and its implication to ES in a corporate group environment. Ongoing research will attempt to explore the scenarios in greater details as well as expanding the number of corporate groups.

Keywords: Power, Enterprise Systems, Parent-Subsidiary, Corporate Groups.
1 INTRODUCTION

Power has been an important topic amongst scholars in Information Systems (IS) research (Bruns Jr. and McFarlan 1987; Jasperson, Butler et al. 2002; Pozzebon and Pinsonneault 2005; Dhillon, Caldeira et al. 2011). In strategic management literature for example, researchers emphasise the importance of IS as a means of control (Burns 1961; Eisenhardt 1985; Orlikowski 1991; Bloomfield and Coombs 1992; Doolin 1999) and provide some suggestions as to how to leverage that control.

Scholars have adopted power as a lens in investigating culture and competition (Coombs, Knights et al. 1992), power differential and organization resilience (Ignatiadis and Nandhakumar 2006), and human and machine agency (Ignatiadis and Nandhakumar 2007). Others have investigated power across phases of an IS implementation cycles such as in the system development phase (Kirsch 1997; Nidumolu and Subramani 2003) and post implementation (Ignatiadis and Nandhakumar 2007). Broadly, we found that the aforementioned literature use the perspectives of power in analysing an IS phenomenon while treating power as an independent variable. Given the complexity of power as a concept, coupled with the complexity surrounding the role of IS in an organizational context, we advocate a more in-depth study on the impact of IS on organizational power and vice versa (on how power influences IS in an organization).

Several scholars (like Ignatiadis and Nandhakumar 2006) have identified that power differential between organizational entities are evidently important for inter-departmental relationships when obtaining intended IS outcomes, relatively few literature focused on the impact of power toward relationship of multi entities context. Research of power in this stream tends to concentrate on the relationship between the acquirer and the target company in merger and acquisition stream (Bingi, Sharma et al. 1999; Al-Mashari and Al-Mudimigh 2003; Mehta and Hirschheim 2004).

While other scholars applied a power lens to explore research areas of a certain management theme in corporate situations (Birkinshaw, Holm et al. 2000; Clegg, Couparsson et al. 2006; McGuire and Hutchings 2006; Zolkiewski 2011), few have explored the role of IS (under terms such as Enterprise Systems, Decision Support Systems, Networking Systems etc.) in determining the aspect of power in the inter-organizational and/or units of business issues.

This study was designed to explore the impacts of Enterprise Systems to the power differential (and vice versa) in the relationship between a parent (synonym with a holding company) and a subsidiary (or subsidiaries) within corporate group entities. This paper is presented as follows: In the next section, a literature review on the concept of power within a corporate group context and Information Systems field presents an argument of the inherent importance of the concept of Power in any organizational aspect, particularly in a complex multi-entities environment of a corporate group. The conceptualization of entities relationships and key terms would be presented in the subsequent section. The fourth section presents the research method adopted in this research, and how subsequent empirical investigation was conducted. In the penultimate section, some preliminary results and research model generated from our initial data extraction are presented. Finally, the paper concludes with the description of ongoing and future work and further elaboration on contributions to cumulative knowledge in the area that we seek.

2 LITERATURE REVIEW

2.1 Corporate Group Entities and Sources of Power

For almost a century, corporate group entities play a significant role in financial and organizational discourses (Bonbright and Means 1932; Fitzgerald and Speck 1963; Birkinshaw, Holm et al. 2000). Technically, a corporate group comprises two or more companies functioning as a single economic entity (Bowra and Clarke 1984). Typically the holding companies own their subsidiaries by occupying a certain composition of shares that authorised them to exercise control over their subsidiaries (Herring and Santomero 1990). In some cases, the influence may not necessarily be solely based on share ownership, the holding companies may be empowered by the subsidiaries’ legal provisions such as memorandums, articles, or binding contracts between entities (Bowra and Clarke
1984). The holding companies reserve the right to control their subsidiaries (Hanafizadeh, Moayer et al. 2008), the control could be exercised through the capability to appoint members of the board of directors of the subsidiary and/or to influence every aspects within the subsidiary's operation (Bonbright and Means 1932; Fitzgerald and Speck 1963), including influencing the subsidiaries’ behaviours (Georgesen and Harris 2000).

Corporate group members are separate entities, both legally and from an operational point of view (Herring and Santomero 1990). Hence a corporate group is not considered as a structure of organizations, but as a strategy to accumulate benefits of the whole group based on the economic contribution of its group members (Hanafizadeh and Nikabadi 2011). The group could potentially generating advantages from portfolio diversification (Herring and Santomero 1990; Gatzer and Schmeiser 2011), business network extension (Andersson and Forsgren 1996), and optimizing the group’s access to external capital market (Gertner, Scharfstein et al. 1994; Dewaelheyns and Van Hulle 2008). In addition to economic reasons, establishing a corporate group may be motivated by technical reason such as ensuring supply chain continuity, maximizing capacities, or eliminating competition while at the same time fostering efficiency (Bowra and Clarke 1984). Therefore it is likely that the holding companies will exercise their authority by providing policies, directions, and prescription for IS (Hanafizadeh and Nikabadi 2011) or presumably having the systems to be developed by the Holding’s IT Department.

One important aspect in studying the aspect of power among the corporate group entities is to identify the source of power of a particular group in order to obtain a comprehensive view of the phenomena. According to organizational power literature, the structural and resource control (Pettigrew 1973; Astley and Sachdeva 1984; Pfeffer 1992) have been suggested as two prominent sources of power in organizations. It was argued that an organization unit that owns prominent resources (Hickson, Hinings et al. 1971; Salancik and Pfeffer 1974) that are not possessed by other organizational units may be considered as having more bargaining power than the rest of the organization. The value of the resources may varies, based on the perception of key actors within organization (Frooman 1999). The resources may range from infrastructure, capital, business expertise, working experience, distribution networks etc. Meanwhile, an actor’s (or an entity's) position in the hierarchy of the organization may serves as a source of authority that enables the actor (or entity) to exercise command throughout the organization (Pettigrew 1973; Pfeffer 1992; Aswicahyono, Hill et al. 2010). It is suggested that these sources of power are interdependent of each other (Astley and Sachdeva 1984).

2.2 Theories and Practices of Power for IS

Typically, the conception of power as it appears in IS research were established from and drawn from more mature field of studies such as politics or organizational change. For instance, the multi perspective analysis suggested by Bradshaw-Camball and Murray (1991) to understand power and organizational politics was then used by Jasperson, Butler et al. (2002) to overcome the lack of technology lenses’ ability in addressing power in deeper societal structures within IS organizational context. Similarly, Cendon and Jarvenpaa (2001)’s investigation of power use in organizational change was adopted by Azad and Faraj (2011)’s to explore the meaning power in IT project implementation. In a similar vein, in order to investigate the relationships between entities in corporate groups and how power plays a significant role on those relationships, this research needs a conception of power that explore such relationships appropriately.

The Power Dependence concept regards the power relation between parties as a two-ways transaction, for instance whenever A dependent to B, it potentially enhances B’s power over A (Emerson 1962; Pfeffer and Salancik 1978; Frooman 1999). Herein, dependence is generally vested in “motivational investment” that accommodated by B, and hardly provisioned outside the A-B relation (Emerson 1962). Therefore in order to achieve A’s goals, the relation should be maintained (Bode, Wagner et al. 2011). The conception of power also considers third party’s influence, whereas two parties’ relationship might be affected by the third party’s influence. Therefore the group dynamics are likely intended to preserve the balance of power for the entire group. On this regard, the Power Dependence conception of power offers four strategies that may be applied to overcome threat to the
condition. They are by simply avoiding further involvement, by cultivating another sources of provision by the worst impacted, by strengthening coalition of all parties, and the last is by embedding status recognition that potentially be in the form of gratifications or monetary status to the most powerful member (Emerson 1962; Smith, Jost et al. 2008).

While many conceptions of power flourish IS research over time, interestingly, the word ‘power’ may not be clearly stated as power per se in contemporary research. For example, a research investigating relationships between customers and producers prompted that producers tend to build a specific capability which is irreplaceable by other suppliers, which at the end would generates customers’ loyalty (Scheer, Miao et al. 2009). On this regard, power is articulated as customers’ dependency toward their suppliers. Another example is a research stream that advocates to obtain organization’s competitive advantage based on resources that are specific, considerably valuable, not easily imitated, and not strategically substituted by other resources (Barney 1991; Santhanam and Hartono 2003). Given that organization’s competitive advantage is a value creation strategy that if being implemented would not be easily imitated/duplicated by any of organization’s competitors (Barney 1991), obviously the organization would likely occupies a certain power due to its value compared to the other organizations.

3 THE EMPIRICAL INVESTIGATION

Case study is adopted as the main research method in this research. As an exploratory research strategy that examines a phenomenon in its natural environment (Eisenhardt 1989), it is well suited for our intention in exploring the concept of power in the relationships between entities in a corporate group environment.

Our research participants belong to an Indonesian corporate group which shall be referred to as Publishing-Group (PG). The parent company and three subsidiaries agreed to participate in this research.

In order to gain a comprehensive view of the corporate group environment, particularly the relationships between entities and the power dynamics of the relationships, we interviewed Managing Director, CFO, IT Manager, and Business Analyst of the parent company as well as the subsidiaries’ Managing Director, Business Managers, and IT Managers. The interviews were conducted in the participants native language (i.e., Bahasa Indonesia). When needed, follow-up interviews were held to clarify and to further explore interesting issues. The interviews were then transcribed. Analysis of the transcripts were conducted using qualitative content analysis method. It is important to mention that the analysis was conducted on the Bahasa Indonesia transcripts (i.e., analysis was not done on the English-translated transcript) to capture the rich data and nuances provided by the participants in their native language (see Nikander (2008)).

3.1 The Research Context: Publishing-Group (PG)

To clarify the context of the research, we conceptualized our organizational entities and their relations in Figure 1. The oval (Ba) represents the holding/parent company, while the circles (Bb, Bc, Bn) represent the subsidiary companies. In each of the entities (or the organization), there is an established IT department. The roles of the IT department (Ita) of the parent company differ from those IT departments (Itb, Itc, Itn) of the subsidiaries. Ita is responsible for the development and maintenance of the corporate group’s ES, it provides ES support for all the subsidiaries’ IT department, liaise with the key business stakeholder of the parent company (indicated in Figure 1 as P(a)a, and it is responsible to liaise with key business stakeholders of the subsidiaries in gathering ES requirements (indicated in Figure 1 as P(a-b), P(a-c), and P(a-n)).
In most cases, the subsidiaries' relation with the holding company normally reflects a business to business reporting (Kiel, Hendry et al. 2006). In our context, in addition to business reporting, the subsidiaries may also get involved in the requirement gathering stage of an ES development ($P(a-b)$), $P(a-c)$, and $P(a-n)$). The subsidiaries' IT department ($ITb$, $ITc$, $ITn$) in this corporate group only acts mainly as a helpdesk support (although in some cases the role may include developing new workaround solutions) for the subsidiary.

In summary, in this particular context, certain decisions on Enterprise Systems were made exclusively by the holding/parent company. This may present some challenges that could affect how the subsidiaries’ conduct their business (Boersma and Kingma 2005). In order to obtain corporate objectives, it will be necessary for the holding company to exercise its power (Bloomfield and Coombs 1992). This "interplay" between the "exercise of power" and Enterprise Systems as well as its impact and implications to the business is the key interest of this research.

3.2 The Development of ES in the Publishing-Group (PG)

The current state of power in PG was a result of a multitude of inter-related aspects throughout the decades of the development of the group. It is pertinent to describe the history of the PG to gain a better appreciation as to the nature of the business, the environment it was operating in, the principles it was built on, and its general progression (i.e., growth) over the years.

3.2.1 1950-2001: Towards Viability & Sustainability

Founded as a family business in 1950s, PG's main business was text books publishing and printing. Over the next four decades the family-owned company grew from just a single hand-operated printing machine into a large business which include product distribution coverage across the Java island (Java is the most populated island in Indonesia). When PG was formed on 2001, there were four companies owned by the family, all of which were books-related ventures such as book publishing, book printing, and book retailing. Despite the effect of the 1997-1998 crisis which resulted in the country's economic contraction (Aswicahyono, Hill et al. 2010), in circa 2001, PG made a significant investments to modernize its machineries, infrastructure, and other business-related assets.

The corporate group was established with the intention to foster a healthier growth amongst the four existing businesses (the businesses became the subsidiaries in PG's corporate group's structure). The rationale was to hire directors with the requisite skills from multi-national companies to grow the businesses further. By doing so, PG's original owner hoped that the entire group would be more viable and sustainable by adhering to good corporate governance principles, avoiding personal interest of
family members that do not conform with the well-being of the business, and operate on measurable performance parameters.

3.2.2 2001-2005: The Development of Enterprise Systems

By the end of 2001, a corporate restructure was carried out at the core business; the Publishing and Printing Company was segregated into Publishing & Printing Co. and Books Distribution Co. In mid-2002, to cater for the emerging need of the new entities and in response to the inadequacy of the existing system, a new project to provide new Enterprise Systems capabilities to the Publishing & Printing Company was initiated. With the exception of the Books Distribution Co., this project was then extended in 2003 to the rest of the group.

The Books Distribution Co. opted to retain its legacy IS inherited from the marketing division of the Publishing and Printing Company. Its IT department developed updates and applied patches to the system to keep up with new and expanded requirements of the business.

3.2.3 2005-2011: Emerging Enterprise Systems Issues

By mid-2005, the food distribution arm of the retail subsidiary (although the retail subsidiary predominantly dealt with books, it had been diversifying into food distribution business) was then separated into an independent Food Distribution Company (FDC) owned partially by the retail subsidiary of PG. Since its operation as a subsidiary, the Food Distribution Company modified its own retail’s software to assume more control over its operations. Hence, by this time, there were at least 2 subsidiaries insisted on using their own ES.

With a growing concern, the holding company wanted the fast growing subsidiaries to use the PG-sanctioned ES. PG regarded the use of ES as important to control every aspects of its business, such as minimizes potential losses from inefficiencies, bad debts and frauds. In 2006, the holding company's IT department began developing a "Distribution Information Systems" based on the current PG's distribution processes. The new system was designed to be capable of exchanging data directly with PG's corporate group's ES. Ultimately, PG intended to mandate the Food Distribution Company to implement this system to replace its current system.

The development of the "Distribution Information Systems" was met with a strong opposition by the FDC’s Managing Director (FDCMD). The FDCMD regarded the business as a new venture with plenty of opportunity to grow, and hence its ES requirements and capabilities ought to reflect its core business. There was a concern that the new system was being built without using the know-how and understanding of food and food distribution business (it is important to remember PG's main business is book-related products and activities).

When the "Distribution Information Systems" was implemented, the FDCMD’s concerns were founded. The new ES was not responsive to the business demand of the Food Distribution Company. This was compounded by the issues of miscommunication, software bugs and error handling issues, business processes misinterpretation and other technical problems related to project. Effectively, the new ES (from the point of view of the FDCMD) was not only counter-productive but it could potentially hinder the growth of FDC. This led to the FDCMD to reviewed a number of possibilities, including inviting an external consultant and/or software vendor to develop FDC's specific ES.

4 PRELIMINARY RESULTS AND ONGOING WORK

The narrative of the PG case in 3.2 provides us with the background required for the analysis. From the preliminary result of the analysis, we could surmise four scenarios comprising distinct power use and influence over/on ES (and vice versa, i.e., on how ES can be influential in the dynamics of organizational power).
4.1 Domination Scenario

The use of ES (or Information Systems) as a control mechanism is quite prevalent in the literature (see Burns 1961; Eisenhardt 1985; Orlikowski 1991; Bloomfield and Coombs 1992; Doolin 1999). The intention of Ba as a parent company with regards to the implementation of its PG-sanctioned ES throughout the group (as presented in 3.2.2 and 3.2.3) was quite indicative of an intention to control and dominate the subsidiaries through controlling the standard of their operations. Particularly in the case of FDC, the imposition of a type of ES developed by ITa as mandated by Ba was a clear attempt to force the subsidiary into operating under specific distribution process prescribed by Ba.

There seemed to be a lack of consultative process regarding the specific needs and requirements in this scenario. Particularly in the early years of PG's establishment where there seemed to be a unidirectional communication in terms of ES where Ba (through ITa) dictated the capabilities and construct of ES the subsidiaries would have (with the exception to allowing 1 subsidiary in retaining its own legacy system). This is a typical scenario where the parent company decides to demonstrate its authority and exercise its power through the imposition of specific ES.

The impact learnt from this scenario could be in the form of involuntary change of business (i.e., the subsidiary) operations as the business needs to (potentially) adjust its processes and business conduct to meet the requirements and/or standards of operations and/or processes prescribed by the ES. However, this strategy of domination by the parent company may incite a resistance of the subsidiary as discussed in 4.4.

4.2 Consultative Scenario

In this scenario, although the parent company still exercises much control over the type of ES it imposes on the subsidiaries, a more consultative approach was taken to ensure the specific needs and requirements of the subsidiaries are met. This approach may be extended in terms of determining the future design of the corporate group's ES.

The power is still predominantly held by the holding company. The involvement of the subsidiaries in setting the direction of the group's ES may have a positive impact to the power base of the parent company as it is seen as being inclusive.

4.3 Empowerment Scenario

In the case of PG circa 2003 (see 3.2.2), PG (or in this case Ba) seemed to have allowed the Books Distribution Co. to not only retained its own ES, but to allowed the subsidiary's IT department to continue developing updates for the ES. It would seem that at this stage (the ES was just recently been
introduced and the separation of Publishing and Printing Company into two entities) the ITa acted as support for the subsidiary's IT department. The initiative to develop addition to and maintain the legacy system fell on the Books Distribution Co.'s IT department. There seemed to be a willingness (we could not conclusively determined whether it was voluntary or due to certain constraints) by theBa to relinquish and/or delegate some power to the subsidiary and empowered it to take a more active role in developing its own ES.

The holding company authorises its subsidiaries to develop specific ES capabilities and/or modules/features, based on their particular needs and based on the availability of resources (i.e., IT skills) of the subsidiary. ITa's (or Ba) role is to act as a background support, provide an overarching guidelines and high-level oversight related to subsidiaries' development, use, implementation, and management of ES.

“...If we have specific requirements, those that are not necessarily required by the other subsidiary,...we will develop them ourselves...” (IT Manager - Subsidiary)

The implication of the above scenario is for the parent company, through its IT department, to exercise an oversight role and provide guidelines that need to be followed in terms of ES.

4.4 Incitement Scenario

Although the parent company has the right to exercise control over and influence every aspects of its subsidiary's operations (Bonbright and Means 1932; Fitzgerald and Speck 1963; Herring and Santomero 1990) which may include the imposition of ES (see 4.1 Domination Scenario), there could be a potential rift as a result of this imposition. If no action was taken, the rift may develop further and it may result in the subsidiary's attempt to reduce its dependency on the parent company. Ultimately, in the case of PG and one of its subsidiary (FDC; see 3.2.3), the FDC might be tempted to commission the development of a new ES specific to their business to replace the PG-sanctioned ES. If this went ahead, a number of issues may emerged, such as the issue of alignment between FDC, the parent company, and the rest of PG subsidiaries.

The subsidiary may react strongly to resist attempts to dominate by the parent company in imposing certain type of ES.

Depending on the resources (or ownership of / access to resources), capabilities, nature of the leadership, roles and position in the corporate group, and legal/regulatory environment, a subsidiary may try to exert its own power against the parent company and adopt a different ES it deems more suitable.

The parent company-sanctioned ES may act as an cathartic agent to "rebel" against the parent company's authority.

5 CONCLUSION

In this paper, we have presented the preliminary analysis of our case study. Based on the result of the Publishing-Group case study, four plausible scenarios were highlighted and the implication and/or influence of power on the corporate group's ES was discussed. One notable aspect of the discussion was the potential of ES as a catalyst for the subsidiary to resist the power of the parent company. At this early stage of our research, we acknowledge a number of limitations to the result of the analysis. However, we would also suggest that with further empirical data gathering and further analysis of the data, more insights into the relationship between power and ES in a corporate group environment could be gained.
References


