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Starting Up or Slowing Down? A Multi-Level Dialectical-Paradox Lens for Top Management Team (TMT) Strategic Decision-Making in a Corporate-Venture

Abstract

This paper aims to critique the process of corporate-owned, high-tech start-up strategizing through an inductive, longitudinal, case-study of 'UK-Research-Tech'. Insights are given through the combined 'dialectical-paradox' concept, thereby focusing on where 'dialectic' and 'paradox' theorising overlap. Our linked iterative, 'dialogical-dialectic' research approach also reflects CEO/TMT start-up dynamics over time. These foci fill important gaps that impede our better understanding of dialectical, dialogical and paradoxical forces within strategic decision-making. As an interpretative tool, they illuminate CEO/TMT strategizing and changing inter-relationships, affected by broader, volatile, techno-economic contexts, and parent-company influences on ventures. In this case-study, it was found that the CEO's relatively autocratic, parent-framed approach combined with TMT members' contradictory reactions to create 'dialectical-paradox' oppositional forces, eventually only resolved through 'eleventh hour' business strategy changes to rescue the venture. This research contributes to more nuanced understandings of corporate-constrained ventures during early business development from start-up strategic decisions at parent-company level to subsequent conditions of more independent dynamic equilibrium. The 'dialectical-paradox' conceptual lens contributes an innovative critique of processes affecting strategic decision-making dynamics. Another important contribution is the empirically-inspired conceptual model, developed for use both to guide subsequent case-study research analyses and as a reflective tool for CEO/TMT strategic decision-making, especially within corporate inspired start-ups.

Keywords: corporate-venture, start-up strategies, CEO-TMT interactions, dialectical-paradoxes

Introduction

‘... dialectic without paradox would be suspect...’ (Kainz, 1988, p.vii).

Strategy can be deliberate, rational, planned, or emergent, improvised, practical (Burgelman, 1983, 1991; Mintzberg and Waters, 1985, 1990; Mintzberg, 1987); formed through intrapersonal functional unity/diversity and CEO/TMT inter-temporal dynamics (Cannella, Park and Lee, 2008; Carpenter, Geletkanycz and Sanders, 2004; Jarzabkowski and Wilson, 2002; Nielsen, 2010); and shaped by broader *contexts* (Pettigrew, 1992; Van de Ven, 1992; Whittington, 1996). This paper aims to explore strategising in a corporate-venture, UK-Research-Tech, through dialectical theorising (Di Domenico, Tracey and Haugh, 2009; Mason, 1969) combined with paradox (Smith and Lewis, 2011; Cuhna, Clegg and Cuhna, 2002), to highlight empirically and theoretically the innovative combined concept of ‘dialectical-paradox’.

Smith and Lewis (2011) have built ‘the foundation of an integrative model’ (p.386) of paradox, but also state that there remain ‘gaps that thwart a more cohesive understanding of paradox’ (Smith and Lewis, 2011, p.385). We aim to fill such empirical and theoretical gaps which we identify. Smith and Lewis (2011) distinguish ‘dialectic’ with ‘contradictory elements (thesis and antithesis) resolved through integration (synthesis), which, over time, will confront new opposition’ (p.387), from ‘paradox’ with ‘contradictory yet interrelated elements that exist simultaneously and persist over time’ (p.382). They state that ‘dialectics prove paradoxical when the contradictory and interrelated relationship between thesis and antithesis persists over time’ (p.387). This overlap is focussed upon and labelled in this paper

as ‘dialectical-paradox’, an innovative combined concept, which enriches both paradox research/theorising and the literature on TMT strategic decision-making.

This paper also explores the overlap between ‘dialogical’ (Morin, 2006) and ‘dialectical’ processes of management inquiry. Although both emphasise thesis-antithesis antagonisms, ‘dialogical’ oppositions continue without synthesis/resolution (Montuori, 2004). Morin’s theorising on complexity (e.g. 1992; 1999; 2007a) reveals its logical core as ‘dialogical.’ This is not a response to paradoxes but rather consideration of their ‘complementarity antagonisms’ and vitalising ‘productive play’ (Morin, 2007b). Our innovative ‘dialogical-dialectic’ approach again considers the interaction of both for, although ‘dialectical’ synthesis is the goal, value is added by ‘an inquiry into the dialogical and recursive relationship between subject and object, self and other, head and heart, an ongoing invitation to, and navigation of, the paradoxical nature of the creative process’ (Montuori, 2003, pps. 253-254).

Longitudinal qualitative data on CEO/TMT start-up strategising processes were collected over two years, following two years observing the corporate-parent. CEO/TMT, ‘top executives who have a direct influence on the formulation of a firm’s strategy’ (Nielsen, 2010, p.305), make strategic choices in business developments directed by previous choices (Festing and Maletzky, 2011). They are affected by organizational cultures (Giddens, 1984), ‘tacit organizational understandings... that contextualize efforts to make meaning, including internal self-definition’ (Hatch and Schultz, 2002, p.996). When parent-corporate values downplay innovative management in volatile environments, tensions decrease TMT participation, preventing positive strategic developments (Mantere and Vaara, 2008).

Dialectical-paradoxical tensions in corporate-formed ventures are neglected in showing how CEO/TMT strategising processes operate in multi-level contexts (Nielsen, 2010). Extant literature focuses upon CEO/TMT strategic responses to external macro-environmental pressures, neglecting ‘dialectical-paradoxical’ internal processes. Engaging with internal/external contextual configurations, we inductively explore longitudinal interplays between *contexts of action*, strategic decision-making and emergent ‘dialectical-paradox’ tensions in the corporate start-up to better understand TMT dynamics (e.g. Yamak et al., 2013). Iterative dialectical (Berniker and McNabb, 2006) and dialogical movements (Montuori, 2003; Paulus, Woodside and Ziegler, 2008; Wegerif, 2008) locate this ‘dialectical-paradox’ approach within ‘the dynamic equilibrium model which is very close to the dialectic’ (Van den Berghe, 1963, p. 704).

Our dialectical-paradox model follows iterative dialogical-dialectic movements between literature and CEO/TMT frames (Goffman, 1974). Longitudinal analyses provide empirical evidence, highlighting theoretically-informed understandings of CEO/TMT dynamics in parent-venture strategising contexts. Our lens reveals dynamic interplay where ‘dialectical-paradoxes’ interweave through strategy processes.

Literature framing the research

Dialectical-Paradoxes of Strategic Decision-making and Organizing

Successful strategy relies increasingly on flexible structures (Nohria and Ghoshal, 1997; Ghoshal and Bartlett, 1998; Osborn, 1998; Whittington *et al.*, 1999). Corporates sometimes allocate strategies to different units through spatial separation (Poole and Van de Ven, 1989;

Siggelkow and Levinthal, 2003), although constrained by parent 'corporate-culture' (Hatch, 1993). Strategic decision-making cannot ignore such strategy formation contexts (Pettigrew, 1992) where 'culture-carrying' corporately-owned ventures require decision-making speed (Bourgeois and Eisenhardt, 1988; Eisenhardt, 1989a) and information access (Huff and Reger, 1987).

In such ambivalent, complex contexts (Mintzberg, Rasinghani and Theoret, 1976), strategising is envisaged as rational, top-driven, CEO-led, after option assessment (Hendry, 2000; Keck, 1997; Noda and Bower, 1996; Mintzberg and Waters, 1985) of appropriate structures for strategic achievement (Burgelman, 1983, 1991; Noda and Bower, 1996). However, changing circumstances slow-down rational decision-making processes (Mintzberg and Waters, 1990; Pettigrew, 1990a; 1990b), requiring ongoing improvisation (Montuori, 2003; Orlikowski, 1996) and strategy through practice (Whittington, 1996). Reality construction, responsive to cumulative micro-events (Chia, 1996), leads to reweaving 'webs of beliefs and habits of action to accommodate new experiences obtained through interactions' (Tsoukas and Chia, 2002, p. 567). Revolution-causing events are 'punctuated events' within a 'punctuated equilibrium model' (Gersick, 1991). Dialectical two-way processes develop, with oft-opposing, mutually acknowledged, viewpoints interlocking (Canales, 2012).

The 'deliberate-emergent' paradox continuum along which real-world strategies fall (de Wit and Meyer, 2004; Mintzberg and Waters, 1985, p. 3) reflects strategising conforming to neither extreme (Eisenhardt and Zbaracki, 1992). Decision models remain persistent empirical foci of TMT practices (Chakravarthy and Doz, 1992; Pettigrew, 1992; Sminia,

2005), even in complex, emergent, fluid processes (Styles, 2001). Strategising interweaves external and organizational forces ‘produced and reproduced through the interplay between actors and their organizational context over time’ (Jarzabkowski and Wilson, 2002, p. 366). Organizational cultural values impact on strategic decisions directly or indirectly (Hatch, 1993; Johnson, 1987; Schein, 1992), through organizational learning (Williams, 2001). Dialogic communication helps participation-promoting strategies (Hatch, 2006), where skilled management of strategic contradictions and alternatives enhances organizational learning (Andriopoulos and Lewis, 2009; Smith & Tushman, 2005). Dialogical-dialectic processes involve communicative interactions between top-down and bottom-up discourses providing different strategic paths with alternatives challenging dominant discourses (Mumby, 2005). Resulting tensions ‘characterize the strategy field and should be taken seriously in research’ (Mantere and Vaara, 2008, p.356).

‘Dialectical-Paradoxes’ of CEO/TMT Unity/Diversity

Quantitative, cross-sectional investigations outnumber qualitative analyses of TMT strategic dynamics (Nielsen, 2010), especially of entrepreneurial ventures (Eisenhardt and Schoonhoven, 1990; Kor, 2003). TMT research neglects smaller ventures, focusing on larger companies (Escriba-Esteve, Sanchez-Peinado and Sanchez-Peinado, 2009; Huse, 2000), and how TMT abilities influence organizational performance (Lubatkin, Ling and Veiga, 2006; Patzelt, Zu Knyphausen-Aufseß and Nikol, 2008). Venture performance analyses neglect TMT dynamics (Ensley, Pearson and Pearce, 2003), and ‘in-depth inquiries into antecedents of TMT composition and the multilevel contextual influencesare still needed’ (Nielsen, 2010, p.301). We respond to this call.

Studies on TMT composition (Carpenter, Geletkanycz and Sanders, 2004) show CEO dominance, and TMT diversity/interaction levels affect strategic decision-making (Papadakis and Barwise, 2002). Functionally heterogeneous TMTs may prevent quick responses to external environmental changes or adopting unconventional, alternative solutions (Keck, 1997). Greater diversity of TMT perspectives (Hambrick and Mason, 1984), competing for dominance over strategic formulation and implementation (Pfeffer, 1981), can become counterproductive, dysfunctional, with cognitive-affective conflict (Amason, 1996; Amason and Sapienza, 1996); preventing communication and novel ‘frame-breaking’ ideas (Finkelstein and Hambrick, 1996); blocking strategic achievements; decelerating decision-making in high-speed environments (Eisenhardt and Schoonhoven, 1990; Wagner, Pfeffer and O’Reilly, 1984). Paradoxically, diverse expertise, knowledge and specialist skills can contribute interpretative, intrapreneurial solutions improving decision-making quality (Carpenter, Geletkanycz and Sanders, 2004; Finkelstein and Hambrick, 1996; Kickul and Gundry, 2001; Milliken and Martins, 1996; Pitcher and Smith, 2001; Williams and O’Reilly, 1998). Recent research (Souitaris and Maestro, 2010) argues that innovative technological environments require TMT polychronicity with members engaging in multiple, diverse functional tasks simultaneously; reaching strategic decisions faster with less analysis; improving organizational performance. Diversity, combined with increased levels of TMT purposive interaction can foster debate, novel ideas and successful solutions (Cannella, Park and Lee, 2008; Kickul and Gundry, 2001); with team effectiveness improved ‘through appropriate process choices’ (Edmondson, Roberto and Watkins, 2003, p. 297). Successful early venture developments are team-based, with direct leadership, open communication and social integration positively relating to team viability (Foo, Sin and Yiong, 2006).

Such paradoxical theories about TMT diversity-leadership-viability (Nielsen, 2010) highlight CEO potential to ‘neutralize both beneficial and debilitating composition effects’ (Jackson,

1992, p.371). Autocratic CEOs' rigid management styles, roles, processes and practices hinder TMT debate, creativity and novel solutions. CEO-dominated models involve issuing 'instructions to the remainder of the executive team' (Talaulicar, Grundei and Werder, 2005, p. 520), with TMT decision-making restricted to making sense of ambiguous, unstructured information from the external environment (Hambrick, 1995). In practice, strategic choices rarely involve TMT members equally, with CEO plus core, influential sub-group making major decisions (Roberto, 2003). Such fault-lines are powerful predictors of TMT dynamics/performance and decision-making (Lau and Murnighan, 1998; 2005; Nielsen, 2010). Strong fault-line settings hamper important strategic innovations requiring TMT communication and consensus (Barkema and Chvyrkov, 2007).

'Dialectical-Paradoxes' in Action

Inherent socially-constructed 'opposing yet interrelated dualities are embedded in the process of organizing *and* are brought into juxtaposition via environmental conditions' (Smith and Lewis, 2011, p.388). 'Dialectical-paradox' processes encourage TMT responses entailing iteration among strategies and their impacts.

TMT roles are important in corporate-ventures (Kuratko and Audretsch, 2013). Organizational identities and leadership styles significantly influence intrapreneurship (Covin and Slevin, 1989; 1991; Moriano et al., 2011; Miller, 1983) innovativeness, risk-taking and proactiveness (Ireland, Hitt and Sirmon, 2011; Kreiser, Marino and Weaver, 2002; Morris et al., 2007; Wiklund and Shepherd, 2005). However, individuals face tensions when adopting new top-management roles (Ibarra, 1999; O'Mahony and Bechky, 2006; Smith and Lewis,

2011). Working through organizational paradoxes (Luscher and Lewis, 2008) challenges managers whose previous practices and organizational identities create obstacles to change (Dutton and Dukerich, 1991), and adoption of improvisation (Montuori, 2003) and ‘bricoleurial’ mind-sets (Di Domenico, Haugh and Tracy, 2010).

Such ambiguities lead to dialectical interpretations of power-relationship and process paradoxes (Smith and Lewis, 2011; Spicer, Alvesson and Kärreman, 2009), observable ‘in-action’ at TMT board-meetings (Samra-Fredericks, 2000). In volatile environments, CEO/TMT-generated micro-level tensions, reflecting corporate-venture dynamics (Bligh, Pearce and Kohles, 2006), eventually propel strategy change through structural changes in TMT composition and catalytic TMT board-meeting dynamics (Brundin and Nordqvist, 2008; Machold et al., 2011), involving strategic contradiction management (Smith and Tushman, 2005).

Dialectical interpretations can help interpret organizational phenomena (Benson, 1977; Lourenco and Gildewell, 1975; Seo and Creed, 2002). Dialectical standpoints involve tensions, contestation, opposing forces tending toward negation, in turn being negated by higher order processes, often allowing preserved aspects of originally negated positions (Di Domenico, Tracey and Haugh 2009). Dialectical tensions thus engender transformations of arrangements and processes (Benson, 1977). Lourenco and Glidewell’s (1975) longitudinal study of interactions between local television station and company headquarters utilised dialectical analysis of manifest-latent tension balancing of multiple power-bases. Our ‘dialectical-paradoxical’ lens views interplays between inherent systematic parent-venture tensions and CEO/TMT social constructions through on-going experiences (Ashcraft, Kuhn

and Cooren, 2009; Clegg, Cuhna and Cuhna, 2002). Organizations are ‘inherently paradoxical since they are defined by boundaries between self and other, individuality and collaboration, and ingroup and outgroup’ (Smith and Lewis, 2011, p.385). However, individuals create paradoxical tensions within particular times or spaces (Poole and Van de Ven, 1989), sometimes through ‘doublethink’ mechanisms (El-Sawad, Arnold and Cohen, 2004). The gap in paradox research reflected in this ‘ontological disparity’ (Smith and Lewis, 2011, p.385) is explored here through the combined ‘dialectical-paradox’ concept, allowing for pluralistic TMT standpoints challenging increasingly diffused, CEO-led authoritarian framing contexts (Denis, Langley and Rouleau, 2007; Jarzabkowski and Sillince, 2007). Evolving action contexts change understandings for actors struggling with conflicting needs (Luscher and Lewis, 2008), and team roles and power distribution (Jackson, 1992). Power relating to TMT leadership and status differences explains inconsistent research findings (Jackson, Joshi and Erhardt, 2003). Thus, ‘dialectical-paradox’ views of changing CEO/TMT power relationships are developed in this case study to explain strategic change.

Methodology

The research aimed to explore how parent-company, corporate-based constraints on CEO/TMT entrepreneurial start-up orientations encouraged/discouraged TMT strategy formulation and participation in strategic decision-making. The ‘dialectical-paradox’ forces thereby released explain subsequent strategic change. Our objective was to examine CEO/TMT shaped venture strategy from inception until two years afterwards. Parental organizational and environmental contexts, observed for two years previously, provided corporate strategising antecedents. Access to parent-company executives who later joined the

venture was given before launch, aiding our understandings of event evolution and parental influences on strategy.

Our qualitative research was rigorously conducted, presenting opportunities for theory building (Eisenhardt and Graebner, 2007; Myers, 2009), allowing ‘analytical generalizations’ (Tsoukas 1989) about those processes that encourage/discourage participation in strategic decision-making. The interpretivist, longitudinal approach, comparing ‘emergent concepts [and] theory with the extant literature’ (Eisenhardt, 1989b, p. 544), encouraged iterative movements from research context to literature during the study. It became apparent that dialectical pressures and developing tensions within changing CEO/TMT configurations, propelled processes toward strategic change (Van de Ven, 1992). Dialectical theory conceptualized TMT power relationships (Benson, 1977), though originating from complex, internal-external, CEO/TMT paradoxical dynamics. Emerging processes of ‘conflict, paradox, [and] mutual interaction’ (Zeitz, 1980, p. 73) ‘best-fitted’ the developing context leading to the ‘dialectical-paradox’ concept. The research’s evolved ‘dialectical-paradox’ theoretical frame positions its theory-building properties (Suddaby, Hardy and Huy, 2011; Zahra and Newey, 2009), pluralistically exploring dialogues at ‘the intersection of various theoretical perspectives’ (Ridder, Hoon and McCandless Baluch, 2012, p. 5). Our ‘iterative dialogical-dialect’ method thereby explored tension-oriented dialogues empirically and theoretically (Ball, 1979; Poole and Van de Ven, 1989).

Method and Research Approach

The longitudinal case-study of ‘UK-Research-Tech’ aimed to explore strategy formation *in context*, investigating CEO-TMT relationship dynamics, structures and strategy

implementation. We explored the start-up's development from uncertain inception until second year post-launch, when original strategies were refocused. We proposed to understand how strategic decision-making processes were (re)shaped by CEO-TMT structures, interactions and contexts. Our inductive longitudinal research approach allowed for theoretical ideas emanating from research developments, with timely *in context* exploration of TMT dynamics and structural/strategic decision-making processes through data engagement and accounts construction.

UK-Research-Tech was selected for several methodological and practical reasons. It allowed for an in-depth, 'revelatory' case-study (Yin, 2003), exploring the under-researched small, corporate-owned, start-up context. It was a 'critical' case, empirically resonant of theoretical claims that start-ups in volatile, uncertain environments are structured to facilitate rapid, nimble strategic decision-making. It was practically feasible as high-level access was granted, albeit with considerable prior negotiation with the Marketing Director, and subsequently CEO, facilitated by a researcher being employed during the previous two years as a parent-company consultant. Exploration from venture inception allowed account construction around decision-making dynamics, structures and processes to discover whether they enable or constrain strategic action.

Triangulation occurred with multiple types, sources and methods of data collection (Denzin, 1970), including recurrent interviews, *in-situ* observations and conversations and organizational documents. Our triangulated approach, with collation of various data from different primary and secondary sources, enhanced the internal reliability of researcher interpretations and developed a full picture of events. Table 1 shows the triangulated data

with details, such as source, types, collection frequency, participants, time period, duration etc.

INSERT-TABLE-1-HERE

Primary data included several focussed in-depth interviews with key participants – CEO and all five TMT members (Directors of Operations, Marketing, IT, Finance and Sales). The interviews involved sets of three or four interviews with each TMT member and CEO, conducted over relevant time periods as reflected in Table 2. This provides a break-down of number of separate interviews conducted, their duration, and the time period covered for each key research participant. Recurrent interviews were generally between 30 to 60 minutes long, all being recorded and transcribed verbatim soon after being conducted. Direct quotations are from interview transcripts.

INSERT-TABLE-2-HERE

These interviews elicited each person's perceptions, accounts and interpretations about roles in development, strategy and decision-making. The main focus when conducting interviews was on TMT actions in developing strategy. Internal validity was strengthened through maintaining this focus during interviews, supported by interview protocols (Yin, 2003; 2009). Tables 3a and 3b provide the interview protocol used for TMT Directors and CEO respectively, with guiding questions and themes covered. These flexible, inductive 'aides-mémoire' were adapted when necessary. Themes/questions were probed further where pertinent during subsequent interviews/conversations with participants. The interview protocols reflected those themes discussed with the CEO and other TMT members to guide ethnographic conversations. This approach enhanced internal validity by ensuring interpretative rigour, data corroboration, reliability and field penetration and triangulation through cross-referencing to other evidence sources, thereby building more detailed and

nuanced case narratives. Table 4 outlines the descriptive demographics/background details of CEO and TMT, facilitating depictions and understandings of ‘UK-Research-Tech’ TMT dynamics, helping inform case narrative and interpretation development.

INSERT-TABLE-3a-TABLE 3b-AND-TABLE-4-HERE

A researcher-observer *in-situ* attended formal monthly TMT meetings commencing the second year, and informal meetings involving different TMT members, including CEO, throughout study duration. Observation of ‘water cooler’ and ‘coffee-room’ interactions occurred at least monthly over the research period. ‘Embeddedness’ was achieved through first-hand organizational ethnographic observations/conversations (Van Maanen, 2011; 2002), allowing data saturation, immersion and understanding (Kunda, 1993), unobtainable through interviewing alone (see Table 1). Additional research notes and observations, meticulously captured in a field diary, pertained to conversations and other naturally occurring phenomena, important for meso-level research necessitating both individual-level and group/team-level data collection (Bligh et al., 2006). In addition documentary data were obtained from both publicly accessible annual reports and confidential documentation, such as meeting minutes and strategy papers written by TMT members for pre-decision discussions. They helped situate the interview material within wider interactive contexts (see Table 1). For all primary and confidential secondary data collected, consent was given and anonymity assured in accordance with approved ethical practices.

Analysis

Data collection followed an ‘open’, inductive approach. Research rigour and interpretative reliability stemmed from data triangulation and in-depth research-setting immersion, consistently framing data construction and analysis (Eisenhardt, 1989b). Interpretations and

theoretical developments grounded in the data, were based on emergent dialogic understandings involving both researchers comparing research insights with relevant literature iteratively throughout the analysis. The in-depth interviews, naturally occurring conversations, and observations were combined with secondary documentary evidence and TMT papers. This involved multiple close readings by both researchers of various textual data, followed by thematic analytic coding (Miles and Huberman, 1994). Rigorous, in-depth data familiarization and immersion conducted through repeated data readings, involved iterative interpretation of participants' own socially-constructed understandings. Thematic coding, used to compare and reduce data into meaningful segments, involved collated text being marked and grouped. The analysis process achieved data reduction/interpretation through thematic-coding and inter-textual comparison, with themes identified, and segments apportioned within these categorizations.

Table 5 shows our thematic coding scheme that emerged during the course of the analysis and constituent sub-themes and codes used for data reduction/comparison. We found that collated evidence could be reduced and grouped according to three coded themes highlighting the change sequences identified over the research course. These are: A. case narrative: parent-company influences and business start-up; B. CEO/TMT dynamics: pressures and tensions; C. strategy change: decision to focus on vertical markets. Each of these thematic codes contains a number of sub-codes (seven in total) as reflected in Tables 5 and 6. All data excerpts presented here result from this process. As two researchers were involved, in order to ensure reliability and consistency, data coding was undertaken by each researcher and then reviewed by the other by 'code-checking' with constant discussion of emerging interpretations (Miles and Huberman, 1994). This was chosen as the preferred approach to coding validation (e.g. rather than more standard double coding). It best suited and enabled

the analysis process to be more closely interwoven with the emerging conceptual frame and longitudinal methodological approach, by being conducted in a continuous, discursive and iterative-dialogic fashion. Inter-coder agreement was thus high, supported by our use of constant comparison, discussion, interpretative memos and regular checking of each other's coding. In addition, the original text was regularly examined in its fuller context (Miles and Huberman, 1994), in terms of sources and overall case in order to decide upon categorization.

INSERT-TABLE-5-HERE

In line with the inductive approach, our findings reflect our analysis and theorising whereby our analytical critique and emerging theoretical lens are presented. The next section sets the narrative scene, providing for discussion interwoven with data interpretations. Thematic codes identified during our analysis (see Tables 5 and 6) are used to provide structure for presenting our interpretative findings, permeated by the overarching concept of 'dialectical-paradoxical' forces in action. To provide for fuller reading of our findings and transparency of data interpretations, the coding scheme containing emerging codes and sub-codes and corresponding illustrative empirical examples of coded data from triangulated evidence is provided in Table 6. Examples cover parent-corporate influences on the start-up, dynamic interactions and pressures/tensions within the CEO/TMT, and strategy change decision-making dynamics. We provide indicative original examples to show how data triangulation was conducted.

INSERT-TABLE-6-HERE

Our later discussion critiques and extends the earlier literature analysis highlighting our conceptual path, through ideas generation and follow-up literature 'threads' indicated by emergent data interpretations and empirically-derived arguments developed through our inductive analysis.

UK-Research-Tech case-study findings: Telling it ‘as it was’ through the accounts of the CEO and TMT Directors

Case Narrative: Parent-Company Influences, Launch and Business Start-up

Inductive research encourages timely discovery of key processes and patterns, changes and continuities, within the developing case narrative, facilitating appreciation of crucial triggers, mechanisms, decisions, significant challenges and evolving/resolving events (Pettigrew, 1990a). The case narrative time-line matrix, verified by two interviewees for member checks (Stake, 1995), is shown in Table 7.

INSERT-TABLE-7-HERE

‘UK-Research-Tech’, an internet technology-based telecommunication company venture, was started to provide automatic identification solutions to diverse industries, from manufacturing and retailing to defence, characterised by intense manual data capture, large numbers of mobile assets and extended supply chains. Five months before its launch, the ‘investor community’ within the corporate-parent appointed a dedicated two-member project team of external consultant and internal representative, tasked with exploring new business ideas through workshops, seminars, and ‘group brainstorms’ across parent company and key customers. They outlined twenty-five ideas, subsequently reduced to six, all previously explored by the parent-company. After three months, two ideas remained: 1) developing/providing ‘point-of-sale’ software to retailers; 2) radio frequency identification (RFID) technology with many potential business applications. The project team argued that RFID technology was sufficiently robust to be applied extensively within various industries.

A dedicated team of CEO and five directors was planned to shape the venture's future strategic direction. However, only two executives from the parent, the CEO and Marketing Director, also from the project team, were recruited for the launch, both interested from the venture's inception. The CEO confirmed the project team's approved proposal to the parent-company's investor community. The venture was launched around RFID technology to various industries, apparently the least risky strategy. The CEO described himself as an incremental, risk-averse leader for implementing this strategy: *"I try to be steady...I like the analogy as a long distance runner who just keeps a steady pace. Lots of steady sort of rational decisions"* (CEO). He hired the IT Director externally a month post-launch, although the latter had earlier worked for the parent-company. He was given the specific formal brief of examining the technology architecture development. In actual fact, he spent his first year mainly supporting sales. Two months later, two other parent-company executives joined the TMT as Operations and Finance Directors, respectively responsible for delivery and implementation of projects to customers, and setting-up commercial and legal agreements. In May of the venture's second year, the TMT was expanded again with the Sales Director's external appointment without prior parent-company history.

TMT members had come together largely serendipitously despite parent-company history, albeit in separate business areas. Prior to UK-Research-Tech recruitment, neither work nor social relationships existed amongst them. According to the Operations Director, TMT formation was *"pure luck"* with TMT members having high levels of specialised functional knowledge. Apart from the Marketing Director's involvement in the project team, and subsequently with the designated CEO, no other TMT member was directly involved in the strategic decision to pursue RFID technology-based future business directions across various industries. Initial UK-Research-Tech developments focussed around business design, mainly

planning operational aspects and related resource allocation, changing subsequently to actual business growth through broadening and increasing sales activities.

TMT Dynamics: Pressures and Tensions

The CEO continued the strategy of exploiting RFID technology in various industries. The CEO/TMT orientations became mainly dictated by short-term priorities – i.e. obtaining parent-company financing, getting started, and securing successful deals.

“So there was a lot of ... communicating the design and aspiration to fairly senior people within the parent-company to secure funding. Having got that funding, the role then shifted... recruiting people, building a team, building technology which is core to our business and selling the concept without actually having anything to sell!” (CEO).

He aimed to keep the venture and team initially small to keep costs down rather than developing more entrepreneurial orientations towards business developments:

“ I don’t want to create a big human organization yet because I can’t guarantee the returns to support those fixed costs... an explicit principle originally to keep overheads fixed, costs to a minimum, which means a small team” (CEO).

CEO time was mainly spent on day-to-day management, business design, identifying functional priorities, recruiting employees. The simple functional organizational structure he planned enabled delineating and designing directors’ roles.

“... I’m probably fairly traditional in the design that is where you can separate the commercial from marketing, from sales, from technology operations.” (CEO).

Keeping costs down, in the first year no Sales Director was appointed. The directors covered sales and did not participate in formal strategic processes, merely implementing the CEO’s autocratic decisions. Formal team meetings were not convened regularly, with only *ad hoc* meetings communicating information about CEO decisions. *“...there was so much going on that they [meetings] just never happened... you know [the CEO] didn’t have time...” (Operations Director)*. The CEO consulted informally mainly with the Marketing and IT Directors.

“Normally ideas and strategic initiatives tend to get talked about...until the point where either me or [the CEO] writes down a page - this is what we think - which then gets circulated ...until finally the CEO takes the decision ...he tends to listen to the IT Director and to me a lot..” (Marketing Director).

The Operations and Finance Directors, although not included in the CEO’s inner circle, shared information with each other. Both felt that *“...the danger of not communicating regularly enough is that you may end up... away from some points...” (Operations Director)*. The Finance Director said that they were unhappy because of poor communication and tensions among TMT members. However, all were occupied spending their first year securing successful deals, responding to emerging business opportunities and providing bespoke business solutions for various industries. In the Operations Director’s words, *“We*

just carried on!” Nonetheless, despite poor communication, lack of decision-making participation and no formal regular meetings, the venture’s small size and TMT members’ close physical proximity meant they found out, at least informally, what was happening.

“So what tends to happen... if the CEO and the Finance Director are here, I can have a conversation with them and, then, if the CEO and the Marketing Director talked over the similar conversation, the elements of information are passed on...” (Operations Director).

In the first year, directors’ tasks did not exactly match their job descriptions although they continued to maintain their core functional roles.

“I am the chief technology officer, responsible for building the IT architectures. In truth most of my time is... a pre-sales role ... [customers] need to be convinced that we know what we’re talking about so I’ll go out and do a technical pitch to get some credibility.” (IT Director).

The CEO followed parent-company strategic direction, directly controlling strategy execution through a flat functional structure.

“...everyone has direct access to me which is really important. Again this is a control thing but we are sort of forming ourselves as a brand so I want to make sure I have some control

over what that brand is. I don't want people going off and behaving in a way that is not sympathetic with the brand as I perceive it" (CEO).

This structure also enabled response to the adopted strategic direction toward embracing customer-led emerging opportunities as the CEO stated, *"I wanted a relatively flat team. I don't want hierarchies at this stage because I want everybody to be customer facing..."* This was dictated by increasingly bespoke business activities. By the second year it was necessary to expand. Numbers increased from twenty to thirty, including the Sales Director's external appointment. Individual tasks became more specific and TMT members found it harder to know all that was happening. Similarly lateral communications became increasingly difficult and TMT members decreasingly involved, formally or informally, in venture business and decision-making.

"In the past... I pretty much knew what was going on day-to-day and I would actually keep an action list for everybody and everybody's actions. Now I don't do that ... As the business is growing... jobs have now been narrowed... In the very early days my operations fellow... would be involved in sales and marketing, he'd be involved in technology decisions, commercial decisions everything and now he's not because I've said you've got all this stuff to deliver and you're gonna get more to deliver, you deliver, deliver, deliver... The other factor is the business is growing and we're expecting to hire a few more people. His reaction to that narrowing, of course, is wanting to build an empire... you make decisions without consulting other people and you literally build something you own and dictate. So the manifestation of that mindset, having come out of this kind of where we did everything to oh I only do this bit, is... he feels devalued and therefore he's not communicating" (CEO).

The directors felt increasingly less involved in decision-making processes for the whole venture, and more in executing CEO-allocated functional tasks. Direct TMT involvement in decision-making became restricted to functional areas within their direct control with less lateral communication. Despite the venture's growth, the overall organizational structure was kept flat to keep the business moving, overhead costs down, and remain customer-facing. The titles/roles of TMT members and others still mirrored those of the parent-company, despite the venture's comparatively small size. With uncertainty over future potential business growth, this structure still fitted CEO lack of intrapreneurialism and parent-company mindset. Tensions increased with pressures for change. Formal monthly meetings were put into place in the second year, facilitating communication. Nevertheless, all thought initially they made things worse in lacking flexibility and openness in bringing new ideas forward. The CEO saw them as mechanisms for communicating his decisions, rather than systems allowing directors formal participation in decision-making processes: *"We have a monthly team-meeting, it's very one way... It's not an effective mechanism for having dialogue. It's good for monologue"* (CEO). The Sales Director, displeased with meeting structure and conduct, said that with *"...regular management meetings, we try and cover things... in reality we will go round the loop several times."* (Sales Director). Communications dried-up and initial venture dynamism slowed-down with unresolved external environmental pressures, mainly spiralling sales costs, building up tensions internally. This put the CEO under pressure to relinquish daily micro-managerial tasks. *"The CEO who is more driven now ... is very much looking after the big stuff... and not micro-managing the people who work for him"* (IT Director). These pressures would force change in the venture's strategic direction.

Strategy Change: Decision to Focus on Vertical Markets

Having secured several successful bespoke deals and established the full TMT, meetings gradually changed in tone and substance, becoming more participative with members putting the CEO under pressure to consider strategy change. This was partly inspired by the Sales Director's appointment, as during the six months following this event, due to changed TMT relationships, directors began to encourage CEO focus on strategic planning rather than execution. The CEO responded to these pressures:

"So I have now a full management team... I'm less day-to-day involved... increasingly thinking well of next year or the following three years... a more strategic view so I can make strategic decisions" (CEO).

The changed strategy to focus on vertical rather than varied markets was a deliberate decision made by the CEO following an extraordinarily frank, catalytic TMT meeting in December of the second year since start-up inception. TMT appreciation of existing business problems increased mainly through day-to-day interactions and constantly dealing with customer requirements. The directors realised that continuing to provide bespoke applications of RFID to broad customer ranges from unrelated industries was highly problematic. Indeed, this *modus operandi* placed much pressure on key venture activities, such as marketing, sales, operations, and delivery times. Additionally, overall business growth slow-down required developing business solutions replicable across various companies (customers) supplying an industry. These considerations about increasingly experienced pressures were brought-up in TMT formal meetings.

“We found that the market wasn’t quite ready so we’ve to adapt our offerings and our approaches... One of the CEO’s visions was that we would have a very small lean management team... managing a lot of outsourcing but also doing a lot of repeatable business. We actually haven’t achieved that because the market is demanding dissimilar solutions so we’ve been flexible enough to react to that and come up with solutions... while still trying to lean towards the visions...” (Operations Director)

TMT concerns about initial strategy were debated particularly in one crucial formal CEO/TMT meeting, shaped strategy change to focus solely on vertical markets. Given the autocratic style of management created by the CEO-model adopted, the formal decision to focus on vertical markets was taken to, and eventually driven from, the top, with the CEO being persuaded at the meeting. It was *enabled* by ongoing day-to-day TMT practices in relation to the external environment, and informal relationships that still existed, between CEO and TMT members such as the Marketing Director.

The CEO/TMT finally decided two years after inception to change the venture’s future market orientation from bespoke business solutions for customers in any industry, to focus on a particular industry and inter-linked supply-chains (companies). The CEO himself took the decision to focus on a particular vertical market, aerospace, after engaging in discussion with TMT members. Although, formally discussed in the catalytic TMT meeting, documents outlining the reasons for focussing on vertical markets had been produced and circulated by TMT members such as the Operations Director who explained the evidence for shifting focus:

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“I have raised this [problem] at one of the management meetings and I wrote a paper on it and said to my colleagues look this is not just me moaning, this is a problem that we’re building up...” (Operations Director)

The Sales Director’s views had been crucial to this decision, for as the Operations Director stated, continuing with bespoke solutions would affect sales:

“...to be doing unique solutions, then we should address ourselves that way, we should structure ourselves that way, and recognise that the costs of doing that are greater... we may be less successful, which obviously gives our sales director concern because if it’s more expensive, it’s harder for him to sell it...” (Operations Director).

Not all the directors had been in accord, the issue about whether to specialise in vertical markets or continue to provide bespoke solutions involving everyone in lengthy debates. Thus the Marketing Director argued with the IT Director who was finally persuaded, agreeing the need to specialise in vertical markets. *“We had a very strong argument, myself and the IT Director about whether we should now verticalise and I felt very strongly that it should be verticalised...”* (Marketing Director). The CEO was also finally persuaded after arguments continued and advice was sought from external consultants. *“The CEO was not sure... we also got some advice from consultants who were pushing us very strongly in that direction”* (Marketing Director). The Finance Director described the crucial TMT meeting as involving a long debate based on each director arguing from their own functional perspective:

“The Marketing Director is looking at the market saying ‘there’s not enough going on in the market for us to keep doing what we’re doing’; the Sales Director is sitting there saying ‘you guys got to give me more prospects otherwise I can’t sell anything’. ...The IT Director is saying ‘I’m an IT guy I want to build more software’... the Operations Director saying ‘...I can’t do everything bespoke because, you know, it’s a nightmare from an operations perspective’... The CEO put out ... He goes away... He takes it away and thinks offline... I have to say he makes... decision[s] at the strategic level... he is an introvert thinker... he makes up his mind before or after. He won’t necessarily in a meeting say ‘ok this is the way we’re going.’ So he will either have decided before the meeting... or he’ll take on board the comments, think about it and then make a decision (Finance Director).

However, despite praising the CEO’s strategic capabilities, TMT members felt that his eventual decision to focus on vertical markets was influenced by the TMT meeting ‘show-down’, and should have been taken much earlier. The period of indecision, slow-down and final debates, supported by external consultants’ advice, lasted long. It fortunately just avoided, endangering the venture’s success.

Discussion: Through a dialectical-paradox lens

This two-year longitudinal study, contrasting with ‘point-in-time’ snapshots, has clear strengths, critiquing ‘punctuated-events’ (Gersick, 1991) and ‘micro-event processes’ (Chia, 1996). Emerging narrative realities in this research were shown through triangulation (see Table 6). The corporate-cultural mind-set was first highlighted as having been imported into the start-up from the parent-company. It effectively ‘slowed-down’ strategic decision-making from the start. Our data analysis then increasingly showed how CEO/TMT relationships and

developing tensions harnessed alternative views/debates among TMT members; and how change to previous venture strategy resulted from these built-up tensions as ‘patterns in a stream of actions’ (Mintzberg and Waters, 1990). Our triangulated data sets showed the constant re-occurrence of internal/external pressures on venture development; resultant tensions within the TMT counter-balancing CEO autocratic positioning; and eventual TMT/CEO engagement in new, pertinent ‘strategic-change’ thinking.

Our perspective views strategy as complex, ongoing adaptation to change (Pettigrew, 1990b) grounded in ‘ongoing practices of organizational actors...’ (Orlikowski, 1996, p.65). We explain strategic decision-making in UK-Research-Tech’s TMT through emergent dialectical-paradox tensions embedded within dynamic equilibrium frames (Smith and Lewis, 2011). CEO/TMT tensions harnessed alternative viewpoints and debate among members, eventually creating new conditions of dynamic equilibrium, compared to threatening destructive disequilibrium, where unresolved tensions could endanger the venture. Thus, ‘dialectical-paradox’ forces permeating the case narrative’s interpretative-dialogic understandings of our complex empirical findings, required ‘complexity thinking’ and triangulation rather than more standard approaches (Morin, 2007a; 2007b; Tsoukas and Hatch, 2001).

Although autocratic, the CEO, as ‘implementer’ rather than ‘bricoleur’ (Di Domenico, Haugh and Tracey, 2010) did not develop clear future strategic directions, but stuck to the parent company’s ‘vision’. He did not convince how this parental vision would be achieved or consider issues through two-way communicative, open exchanges within the TMT. He did not welcome possible viable alternatives (Mantere and Vaara, 2008; Mumby, 2005), despite his rational, deliberate approach (Noda and Bower, 1996). The newly formed TMT became

divided, with parental culture, lack of diversity (Nielsen, 2010) and TMT fault lines preventing members speedily implementing alternative strategic directions when the original 'vision' proved inadequate (Barkema and Chvyrkov, 2007; Lau and Murnighan, 1998; 2005; Roberto, 2003).

The simple, CEO-designed, functional structure, outlining each director's job roles and responsibilities, accords with 'deliberate strategy' characteristic of 'machine bureaucracy', where a 'leader in personal control of an organization guides it according to his/her vision' (Mintzberg and McHugh; 1985, p.162). However, autocratic 'CEO-modelled' management style (Talaular, Grunedi and Werder, 2005) implemented the parental vision. Thus, the CEO did not 'strategise' but rather 'organized', attempting to guide the venture towards the parentally envisioned future: designing the business, developing systems, recruiting people, and defining TMT managerial roles. After venture launch, attempts responding to and/or filling gaps created by specific customers' needs, resulted in some successful deal conclusions concerning bespoke applications of the RFID technology. This led to growing numbers of contracts signed with customers from different industries putting the TMT under considerable pressure and raising doubts about UK-Research-Tech's ability to deliver the promised RFID bespoke solutions efficiently and profitably. The venture became increasingly disequibrated with unfolding events triggering increasing TMT tensions, TMT critical meeting 'show-down', and eventual return to dynamic equilibrium with the CEO/TMT's changed strategy focus on vertical markets. Thus, CEO/TMT interactions with the external environment and 'dialectical-paradox' tensions set-up within CEO/TMT configurations led to eventual, although tardy, strategic change.

The organizational culture and implementation of the CEO/TMT model with defined functional groupings were key elements constraining eventual speedy strategy change. Whilst allowing for slow growth and specialisation, they created 'lower-order' tensions among groups as roles became more defined, allowing for less flexibility, creating 'invisible boundaries' and functional as opposed to venture-level affiliation. TMT directors' job-titles reflect corporate-parent cultural norms encouraging tension-generation and creation/escalation of 'dialectical-paradox' forces. These overt symbols signal corporate-parent cultural exportation, clashing with innovative, flexible approaches more suited to a 'bricoleurial' venture (Di Domenico, Haugh and Tracey, 2010). Another key facet of UK-Research-Tech's culture was reflected in CEO risk-aversion. He looked for slow, incremental change and long-term business growth. The CEO-model of 'risk-averse leader' doubly restricted the speed of strategic decision-making, especially in the context of a technology start-up where speed and risk-taking should have been likely expectations. Consistent with Talaulicar, Grundei and Werder's (2005) study of TMTs in high tech-start-ups, this venture's CEO eventually needed to listen to the TMT before making strategy changes to focus business on vertical markets. His slow, late response to the tensions generated by the inefficiencies of earlier CEO-corporate-imposed decision-making processes, created dangerous tensions eventually resolved in strategic direction change. The slow, deliberate decision-making processes reflected the parent's where most directors came from. This common cultural trait represented a CEO/TMT contextual and historical tie. Respect amongst TMT members also reflected this and the high professional corporate competence that each member perceived in others. In other words, perception of 'skills and competence in the domain of interest' (Meyer and Gavin, 2005, p. 874) was critical to the respect that directors had towards each other. However, they were paradoxically also required implementers of CEO strategic decisions, thereby creating further tensions. However, when it came to

questioning the original strategic decision in the catalytic formal meeting, this respect helped strengthen the hands of TMT members enabling them to persuade the CEO to be less intransigent, to listen, and change strategic direction. All these considerations are rooted in the parent context that had such a strong influence on the venture, from the emergence of initial strategy onward. Characteristics of the parent context help us understand how the TMT drew upon specific socio-cultural elements in constructing strategic action for the new venture (Jarzabkowski and Wilson, 2002). At UK-Research-Tech, prior parent-embedded decisions about strategy and structure created dialectical-paradox tensions ‘strait jacketing’ subsequent decisions about strategy.

Figure 1 develops a model of our ‘dialectical-paradox’ conceptual framework that emerged through our iterative ‘dialogical-dialectic’ interpretations of the case-study empirical findings, and the CEO/TMT dynamics which led to strategic change.

INSERT-FIGURE-1-HERE

Conclusions

This paper used the ‘UK-Research-Tech’ case of a corporate high-tech start-up, to offer new insights into strategising issues. It contributes to ongoing theoretical debates through combining ‘dialectical-paradox’ dynamic equilibrium interpretations of themes around ‘deliberate’ versus ‘emergent’ strategy, and ‘strategising’ versus ‘organizing’, and how they are intertwined. The analysis focused on the *context* of the unfolding strategic decision-making process, the interactions between actors (i.e. CEO and TMT directors) and internal/external contexts. The critical discussion built upon the findings by further elaborating on the iterative empirical/theoretical interpretations. These related to the identified analytic themes as presented in the methodology, and found during the inductive

analytic process. As a result, we argue for an augmented conceptual dynamic equilibrium frame embracing a dialectical-paradox lens. This emerged during the course of data analysis causing extension of our original lens with interpretations that speak to the nuances found in the case narrative. As well as empirical field insights, this provides new conceptual contributions and a model (Figure 1) for both researchers and practitioners aiming to understand strategy contexts in corporate start-ups.

This narrative case's theoretical framework can be applied to develop understandings of socially-constructed strategic action. It provides insights into relationships linking parent and venture organizations to strategy processes. Ongoing debates continue on 'deliberate' versus 'emergent' strategy and whether 'organizing' follows 'strategising' or the latter the former. However, complexities prevent over-simplification (Morin 2007a; 2007b). The theoretical lens of critiquing 'strategy-as-ongoing-practice' (Jarzabkowski and Wilson, 2002; Whittington, 1996) in terms of micro-level, meso-level and punctuated events, in relation to dialectical-paradox forces/tensions, proved useful for interpreting strategising dynamics at UK-Research-Tech. We argue that this 'dialectical-paradox' lens helps us understand the dynamics shaping strategic change.

The study contributes to literature on strategising by focussing on CEO-TMT interactions, supporting claims that such an approach provides a reliable view of evolving strategy dynamics (Papadakis and Barwise, 2002). In this case, strategy was enacted through CEO-TMT interactions and the evolving external environment. The study shows that organizational context in terms of prior structures and culture constrains strategy formulation. According to the extant literature (Lewin and Stephens, 1994; Papadakis and Barwise, 2002),

centralised functional organizational structuring is the preferred design of risk-averse CEOs in that it enables them to achieve high degrees of control through direct supervision. The UK-Research-Tech case shows that, despite such a controlling context, informal as well as formal processes are important arenas for actors' interpreting strategic problems and making strategic decisions. However, informal interactions are more likely to occur with certain individuals and in the early stage of business development when each TMT member's roles are relatively broad and ill-defined. As business grew and roles became more sharply defined, formal meetings initially served merely to facilitate CEO-monologic information provision to TMT members (Eisenhardt, 1999; Gioia and Thomas, 1996). Parent-inherited culture constrained subsequent strategic venture decisions. However, formal TMT meetings became later key arenas for facilitating strategic change. These could be further focussed upon in subsequent research to explore the importance of 'dialogical' positioning within them as vitalising 'productive play' (Morin, 2007b), even without dialectical resolution.

In summary, this parent-venture case-study fills a gap in start-up analyses which have long-neglected TMT dynamics and contexts (Ensley, Pearson and Pearce, 2003; Nielsen, 2010). We show that the CEO's lack of risk-taking intrapreneurialism and imposition of TMT roles and structures better suited to the larger parent-company constrained and slowed down necessary change processes especially in terms of the formulation of new strategic decisions. Decisions about structure and roles created a strait-jacket for subsequent decisions about strategy change, causing business 'ground-loss' in a rapidly changing, competitive environment. The resultant 'dialectical-paradox' pressures eventually forced through change. The resultant more disruptive strategic change, although involving active participation of TMT members, is ultimately CEO-dictated. At UK-Research-Tech, it was possible to observe how the deliberate start-up parental strategy was reinforced by setting-up rigidly structured

deliberately defined roles, whilst ignoring emergent dialogical-dialectic forces which should have led to earlier required flexibility and, if necessary, changed strategy. However, the ‘dialectical-paradox’ tensions created, through eventual upheaval, successful strategic direction change.

This paper has important implications for future research and theorising as well as for managers and practitioners. Researchers can build upon these findings to better understand the importance of considering dialectical-paradox to interrogate alternative strategies and broader organizational contexts. We need more longitudinal case-studies embracing a dialectical-paradox lens to understand better with immediacy the dynamics of TMT strategic decision-making. Whilst this paper has focussed upon the corporate start-up, future studies could explore this within alternative contexts such as independent start-ups (i.e. non-corporate-owned spin-outs) and within larger organizational settings. From a practitioner perspective, the research and conceptual model can help explicate for strategic decision-makers, especially CEOs, that quality and speed of processes benefit from understanding, not just functional diversity of team composition, but also sources of potential and present dialectical-paradox tensions. These emerge particularly where ventures are corporate-owned start-ups, but are present in all systems. Nonaka and Toyama (2002) see the firm ‘as a dialectical being’. Leadership must also support ‘dialogical’ oppositions, harnessing their constant, unresolved tensions, thereby enabling the venture not merely to survive but improve and succeed.

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Table 1. Approach to data triangulation during longitudinal field work study of UK-Research-Tech*

Method	Data Sources/ Empirical Examples
1. Interviews: In-depth interviews with key participants	Total of twenty focussed interviews conducted onsite with the CEO and individual TMT members at regular intervals during the study (i.e. January 20Xa – December 20Xb).
2. First-hand ethnographic observations/ conversations: data captured in field diary using researcher-generated research notes	Attendance and observation at formal monthly TMT meetings at start-up; frequent observation of informal meetings/ conversations between different members of the TMT, including CEO (i.e. these were unplanned in-situ events captured whilst visiting the start-up for data collection – at least monthly over the two year period); observation of interactions at the water-cooler and in the coffee room also occurred frequently (i.e. at least monthly over the two year period).
3. Organizational documents and other background sources of information informing case analysis	Parent company's annual reports and web pages; minutes of monthly TMT meetings attended at start-up; papers, documents and diagrams written by CEO/TMT members to inform strategy; e-mails and other correspondence from CEO/TMT members.

*The organizational pseudonym and inclusion of indicative dates, and of job roles rather than individual names, protect participant and case identification.

Table 2. Details of in-depth interviews with CEO and TMT Directors, UK-Research-Tech*

In-depth interviews with key participants			
Research participant	Time period over which interviews conducted	Number of interviews	Duration of each interview
CEO	May 20Xa – December 20Xb	4	First interview: 60 minutes; second interview: 35 minutes; third interview: 40 minutes; fourth interview: 45 minutes.
Director of Marketing	January 20Xa – December 20Xb	4	First interview: 30 minutes; second interview: 40 minutes; third interview: 45 minutes; fourth interview: 35 minutes.
Director of IT	June 20Xa – December 20Xb	3	First interview: 40 minutes; second interview: 45 minutes; third interview: 45 minutes.
Director of Operations	August 20Xa – December 20Xb	3	First interview: 45 minutes; second interview: 33 minutes; third interview: 40 minutes.
Director of Finance	August 20Xa – December 20Xb	3	First interview: 30 minutes; second interview: 40 minutes; third interview: 35 minutes.
Director of Sales	May 20Xb – December 20Xb	3	First interview: 30 minutes; second interview: 33 minutes; third interview: 40 minutes.

* The organizational pseudonym and inclusion of indicative dates, and of job roles rather than individual names, protect participant and case identification.

Table 3a. Interview protocol and guide: TMT Directors

Interview Protocol and Guide (for the Directors of the TMT)
Interviewee demographics/ job-role details
<ul style="list-style-type: none"> a) Tell me about yourself, your background and your role within ‘UK-Research-Tech’. b) How are initial ideas generated by the TMT? c) How are the ideas discussed and progressed? d) How do you generally interact with the CEO? e) How do you generally interact within the team? f) How does the whole team interact with the CEO? g) What is the frequency of meetings? How is this decided? h) What is the communication like within the team and between the CEO and the other Directors? i) How would you describe the leadership style of the CEO and how have you found working with him? j) How has the initial strategy of the ‘UK-Research-Tech’ start-up evolved over time? k) How are final decisions achieved? Who drives them? l) What is the decision-making process like? m) What are the drivers of/barriers to the decision-making process?

Table 3b. Interview protocol and guide: CEO

Interview Protocol and Guide (for the CEO)
Interviewee demographics/ job-role details
<ul style="list-style-type: none"> a. Tell me about your background and your experiences as CEO of ‘UK-Research-Tech’ b. Where do you find insights from when developing business ideas? c. Do you generally discuss your first impressions, ideas or plans (openly) with the rest of the TMT? d. How do you generally interact with the other members of the TMT? e. How does the TMT as a whole interact with you? How do the individual directors interact with you? f. What is the frequency of meetings? How is this decided? g. What is the communication like within the TMT? h. How would you define or describe your own leadership style? i. Which factors impacted on the evolution of the initial strategy of ‘UK-Research-Tech’ over time? Has the parent company got an influence on it? If so, in what way? j. How do you make a final decision? k. What is the decision-making process like? l. What are the drivers of/barriers to the decision-making process?

Table 4. Research participant demographics/ background - TMT/ CEO

UK-Research-Tech Research Participant Demographics - CEO/TMT				
Position/ role in corporate start-up	Age at joining corporate start-up	Gender	Ethnicity/ nationality	Length of time working for the parent company before transferring to work for the corporate start-up
CEO	39 years	Male	White/ British	15 years
Director of Marketing	37 years	Male	White/ British	10 years
Director of Operations	43 years	Male	White/ British	13 years
Director of Finance	35 years	Female	White/ British	9 years
Director of IT	40 years	Male	White/ British	11 years - appointed externally*
Director of Sales	44 years	Male	White/ British	0 years – appointed externally*

* Director of IT and Director of Sales appointed by UK-Research-Tech TMT via external competitive recruitment. The Director of Sales had never worked for the parent company. The Director of IT had previously worked for the parent company for 11 years prior to gaining alternative employment elsewhere and subsequent appointment in the start-up.

Table 5: Emerging thematic coding scheme – constituent codes/ themes for analysis, reduction and comparison of triangulated data evidence leading to subsequent identification of overall empirically derived interpretative framework

Inductive Analytic Coding Scheme Used to Inform Evolution of Interpretative Lens	
Attributed code label and constituent sub-code labels for data categorization/ comparison	Code description - Inductive themes and sub-themes identified which emerged during fieldwork and data analysis
A. CN:PIS	Case Narrative: Parent-Company Influences and Business Start-up
a. PCC	Parent Company Culture
a. ILS	Inception, Launch and Start-up
B. TMT:PT	CEO/ Top Management Team Dynamics: Pressures & Tensions
b. RvP	Reactive versus Proactive Approaches to Driving the Business Forward
b. EvM	Entrepreneurial versus Mechanistic Approach
b. RTvRA	Risk Taking versus Risk Aversion
C. SC:VM	Strategy Change: Decision to Focus on Vertical Markets
c. SBP	Shifting Business Priorities Over Time
c. PE	Punctuated Events (Key Events Causing Disruption to Equilibrium)

Table 6: Coding scheme containing emerging codes and sub-codes and corresponding illustrative empirical examples of coded data from three key sources of triangulated evidence

Attributed code label for data categorization/ comparison	Code description - inductive themes and sub-themes identified which emerged during fieldwork and data analysis	Illustrative empirical examples of coded data from three key sources of triangulated data evidence: 1. – Example of interview excerpt; 2. - Example of observation/ field diary excerpt; 3. – Example of excerpt of notes made from review of documentary evidence
A. CN:PIS	Case Narrative: Parent-Company Influences and Business Start-up	A. Empirical Examples/ Data Excerpts
a. PCC	Parent Company Culture	<p>1. <i>“The [parent company] struggled because it’s very process driven...you know, give me a report, let’s analyse it, let’s get fifteen people to analyse it, let’s distil it, what’s the answer...oh yeah well the decision is obviously this...but we should have made it a year ago because they’ve just spent a year thinking about it...”</i> (Operations Director, Interview).</p> <p>2. <i>“The parent’s senior managers tend to be cautious and analytical before investing in new areas due to their strong identity with the established brand and company’s heritage and desire to preserve them.”</i> (Field Observation, Divisional Office, Jan 20Xa, Parent Company).</p> <p>3. <i>“The company, proud of its telecommunications legacy, attaches great value and importance to its long and rich historical heritage.”</i> (Annual Report 20Xa, Parent Company).</p>
a. ILS	Inception, Launch, Start-up	<p>1. <i>“...for any new venture within [the parent company] in order to get support, it would have to, if you like, buy into the corporate views and vision...”</i> (Operations Director, Interview).</p> <p>2. <i>“The CEO pointed out to the Marketing Director the need to cross-check market figures on a particular industry with the Marketing Division of the parent company.”</i> (Field Observation, UK-Research-Tech, May 20Xa).</p> <p>3. <i>“It is projected that the growth of the RFID technology in the next 5 years will provide [the parent company] with significant additional revenue.”</i> (TMT Internal Strategy Document, May 20Xa).</p>
B. TMT:PT	CEO/ Top Management Team Dynamics: Pressures	B. Empirical Examples/ Data Excerpts

	& Tensions	
b. RvP	Reactive versus Proactive Approaches to Driving the Business Forward	<p>1. <i>"We actually haven't achieved that [the CEO's vision of lean management structure, doing lots of outsourcing and repeatable business] because the market is demanding dissimilar solutions so we've been flexible enough to react to that and come up with solutions that meet their [customers'] requirements ..."</i> (Operations Director, Interview)</p> <p>2. "At the monthly meeting, the CEO outlined the number of deals that the Team was able to bring to success in the previous month; he underlined their reliance on those deals in order to fuel future growth" (Field Observation, UK-Research-Tech, May 20Xb).</p> <p>3. An e-mail circulated by the Operations Director to the rest of the Team prior to the monthly meeting under the subject heading "Business Risks" listed a number of potential failures: one of them was "inability to respond to Customers X, Y, Z' s specific queries". (TMT Internal Document, e-mail, Aug. 20Xb).</p>
b. EvM	Entrepreneurial versus Mechanistic Approach	<p>1. <i>"[The Marketing Director] thinks I should be out talking to potential customers...talking at conferences and being a CTO...In his head what a CTO should be like is not what is in my head...and I think it's mainly because I come from this [background] ...having come from a large corporation and then going in the entrepreneurial development of a small company".</i> (IT Director, Interview).</p> <p>2. "In informal conversation with the Marketing and Finance Directors ...the IT Directorunderlined the slow pace at developing new technology in order for them to be able to lead the market and be the first". (Field Observation, UK-Research-Tech, April 20Xa).</p> <p>3. "An internal document issued by the Finance Director outlined the parent's policy on sales: sales people should have fully observed the parent policy before completing negotiations with customers. This policy was very much concerned with pricing and liability. Both elements had to be verified internally by the parent company." (TMT Internal Document, Sept 20Xa).</p>
b. RTvRA	Risk Taking versus Risk Aversion	<p>1. <i>"Every time you have to do something new there is a high risk factor of getting it wrong... then you end up with a supportability problem because you have to support that new solution... If you sell unique solutions like what we are doing at the moment... that's obviously a problem in my area because I'm delivery focused."</i> (Operations Director, Interview).</p> <p>2. "At the monthly meeting the CEO underlined the need to limit their risk by focussing on companies that had already had an established relationship with the parent company". (Field Obs., UK-Research-Tech, April 20Xb).</p> <p>3. An illustrative diagram drawn by the CEO compares Microsoft with Apple; UK-Research-</p>

		Tech sits in-between the two, where Microsoft is seen as an incremental innovator and Apple as radical innovator. The diagram also shows the trajectory move of UK-Research-Tech towards a positioning similar to Microsoft; the bullet points of “volume, speed and risk reduction” are the criteria guiding the intended trajectory shift. (TMT Internal Document; Diagram provided by the CEO during an interview, in April 20Xb).
C. SC:VM	Strategy Change: Decision to Focus on Vertical Markets	C. Empirical Examples/ Data Excerpts
c. SBP	Shifting Business Priorities Over Time	<p>1. “...the [CEO] is looking at...almost like we have to move from being one type of organisation to being a totally different type of organisation... We’re trying to do both just now because we’re starting initiatives that are making us more structured but at the same time we’re still running very fast at the front we’re trying to fuel the market piece. So I think that’s going to be an interesting challenge...” (IT Director, Interview)</p> <p>2. “At the monthly meeting, the CEO emphasised the need to grow the business whilst still remaining lean without building too many hierarchical layers in order to be able to quickly respond to market changes.” (Field Observation, UK-Research-Tech, June 20Xb).</p> <p>3. An e-mail circulated by the Sales Director to the rest of the Team posed a specific question: Will we start to focus on specific markets only? (TMT Internal Document, e-mail, Sept 20Xb).</p>
c. PE	Punctuated Events (Key Events Causing Disruption to Equilibrium)	<p>1. “The venture started, if you like, more focused on delivery and bespoke solutions than actually the sales side....There was some debate about whether the venture would actually need a sales function because [initially] they tried to sell through the existing [parent company]’s sales force and leverage that...It has become apparent we do need some focused sales...quite distinctly ... so I was brought in to effectively set that operation up. [The parent company] sells products; we sell services and solutions, quite different.” (Sales Director, Interview).</p> <p>2. “At the monthly meeting, the Sales Director provided the figures about the dramatic sales increase in just one industry - the aerospace industry – in the previous month. He emphasised the support provided by the concept of “shared benefit” amongst the players populating the same industry”. (Field Observation, UK-Research-Tech, Sept 20Xb).</p> <p>3. A joint document written by the IT and Sales Directors outlined the need to look at the entire supply-chain in specific markets, with the purpose of “linking the dots amongst the players via the sharing of the same infrastructure and data” (TMT Internal Document, Oct 20Xb).</p>

Key Dates					
	January 20Xa	January – April 20Xa	April - May 20Xa	May 20Xa	June -- August 20Xa
Key Events	Initial impetus from the parent company to launch start-up leading to the appointment of a dedicated 2 member project team 5 months prior to the launch of the venture. The project team consisted of an external consultant and an internal representative who later became the Marketing Director of the corporate start-up.	Exploration of key ideas by the new 2 member project team. This was done via meetings, workshops, seminars and ‘group brainstorms’ run by the project team both across the parent company and also externally with some key customers. The 2 member project team outlined 25 business ideas, subsequently reduced to 6, all of which had been previously explored by the parent-company.	<p>After three months, 2 ideas out of the six remained: 1) developing/providing ‘point-of-sale’ software to retailers; 2) radio frequency identification (RFID) technology with many potential business applications.</p> <p>The project team argued that RFID technology was least risky for the venture and sufficiently robust to be applied extensively within various industries.</p>	<p>Launch of corporate start-up. The first two TMT members of the start-up comprise the CEO (transferred from the corporate parent) and Marketing Director (the latter being one of the 2 member project team from the parent and so familiar with initial deliberations).</p> <p>Formal approval from the parent company’s investor community is received to launch venture, after the CEO formally proposes focus on RFID technology for various industries as the least risky strategy.</p>	Expansion of TMT membership through appointment of the IT Director (externally hired in June 20Xa although with prior experience working for the parent), Finance Director and Operations Director (appointed in August 20Xa from parent). These directors helped cover sales, along with the IT and Marketing Directors. They did not participate formally in strategising. Formal TMT meetings not convened with only <i>ad hoc</i> meetings held. All TMT members implementing the CEO’s strategic decisions.
Key Triggers	Parent’s desire to re-invent itself and enter new markets	Parent interest in the start-up enacted and supported.	Increased confidence about the venture within the parent company: RFID technology previously tested and deemed least risky in various markets.	Obtaining approval for strategy by the investor community within the parent company.	Need to expand TMT in order to help secure the first successful deals, convince important customers and continue on strategic path.

Key dates (cont.)					
	August 20Xa- March 20Xb	March – May 20Xb	May 20Xb	May – December 20Xb	December 20Xb
Key Events	Increasing number of deals secured and delivery of bespoke solutions for different industries increased through combined TMT-venture efforts.	Lack of sufficient sales through bespoke solutions over a broad range of industries. Inability to achieve sales targets becomes apparent to CEO. Discussions of these issues with TMT at formal and regular monthly TMT meetings started then.	Appointment of the Sales Director externally and consequent increased size of TMT membership due to his appointment.	Increased concerns about business slow-down due to problems about delivering bespoke solutions to various customers. Formal TMT meetings and aside informal meetings held by other TMT members; with internal strategy papers, emails and memos written to this effect. External consultants called in also by CEO to give advice.	Crucial monthly TMT meeting held in Dec 20Xb where strong opinions were expressed by TMT members putting the CEO under a lot of pressure to consider strategy change. This, along with consultancy report, led to the CEO's decision to make a key shift, changing the start-up's strategy to focus on vertical markets in the aerospace industry.
Key Triggers	Responding to emerging business opportunities as and when they happened and the desire to increase sales, in which all members of TMT were involved.	Formal schedule of monthly meetings set up because of need to improve communications amongst TMT members, and with CEO, and especially to discuss issues related to not achieving planned sales targets.	Inability of TMT members to cope with increasing sales on top of their other duties. The need to increase sales by the volume of sales having to be professionally managed by a specialist recruited externally was recognised by the CEO and TMT in a decision taken in a formal TMT meeting in March.	Continuing slow-down of business and building-up of tensions in the TMT, involving the CEO and the other Directors in heated debates regarding strategic direction of corporate start-up. Increasing tension also in response to the leadership of the CEO in terms of the type/means of strategic direction adopted.	Increasing tensions between CEO and TMT members on strategic direction of start-up – partly due to on-going change in their relationships following Sales Director's appointment in the previous May; partly due to further drop in sales; and partly due to TMT meeting discussions being bolstered by report of the external consultants supporting strategy change.

Table 7: Timeline matrix/ case narrative - key dates, events and triggers emerging from 2 year longitudinal fieldwork involving 5 months with the 2-member project team in the corporate parent prior to launch of the start-up through to the decision to change strategy at the end of the second year*.

*The case narrative write-up was verified by the interviewees for member checks. Two of the informants (the CEO and Marketing Director) checked the chronological accuracy, inferential accuracy, and comprehensiveness of key dates, events and triggers. These two informants read, revised and validated the case narrative time matrix independently. After three reiterations of this verification process with the CEO and Marketing Director, the case narrative time matrix form was agreed and deemed an accurate description of the key dates, events and triggers and the decision-making process and strategic change that took place at UK-Research-Tech during the observed period of time.

Figure 1: Conceptual Model of the Multi-Level Dialectical-Paradox Lens for TMT Strategic Decision-Making in Corporate Start-ups