The Third Team: Linking Boards And Organisational Performance

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Introduction

The defining links between the performance of boards and their ability to influence organisational performance have been debated by commentators, directors and researchers alike. There is general agreement that understanding how boards influence organisational performance is important.

The accepted view is that poor-performing organisations (both corporate and not-for-profit (NFP)) have poor-performing boards and, conversely, a high-performing organisation is credited with being led by a high-performing board.

What follows is an insight into ground-breaking research that identifies how boards influence the performance of their organisation. Individual and group characteristics of boards and executives of high-performing organisations are compared with those of poor-performing organisations.

It is the combination of behavioural characteristics and attributes of the board and executive, operating as a 'Third Team' which allows the board to influence the executive who in turn impact organisational performance.

Limitations of the Existing Knowledge

Previous research has generally relied on a single theory (for example, agency theory, stewardship theory, resource dependency theory) and the identification of either single or multiple components of a board's function, behaviour or structure (for example, composition, size or CEO/chair duality) in seeking a connection between the board and organisational performance.

This type of research has resulted in a raft of prescriptive regulations or rules, such as a stipulated number of independent directors or increased reporting requirements intended to improve organisational performance.

Unfortunately, better organisational performance has not been the outcome. Instead, there have been more systemic failures (for example, the collapse of the New Zealand finance industry and, more generally, the global financial crisis) and poor organisational performances within both the corporate and NFP sectors.

Past approaches have ignored the complex relationships and interactions between the board and an organisation's executive, while also neglecting a core principle of governance – it is only through the executive that a board can influence the performance of an organisation.

Executives are the critical component that other research has overlooked. Executives are in fact the gatekeepers between the board and organisational performance.

The term "executive" in the present context includes the CEO and all members of the management team of an organisation that attend formal and informal meetings with the board and/or directors.

What We Do Not Know

Some fundamental questions in governance studies have so far remained unanswered. These include how boards influence organisational performance and what characteristics boards of high-performing organisations have that the boards of poor-performing organisations do not; and what setting makes it more likely the board will influence the executive, who in turn impacts organisational performance. The research addresses and answers these questions.

Breaking down these questions, so they can be answered individually, yet collectively, sharpens the focus and gives a greater understanding about the differences between boards of high-performing organisations and poor-performing organisations. The main question and those that follow are:

- *What is the link between boards of directors and organisational effectiveness?*
    - *Are there three top management teams in an organisation: board, executive team and a "third team"? And which of these has the most influence on the board?*
    - *What are the means by which the board influences "the end", that is, the performance of the organisation?*
    - *Within the third team, what are the mechanisms by which the board influences the "end'?*

As a result of examining these questions, this report presents three propositions:

1. *It is through the third team that a board influences organisational performance.*

2. *The constructs of leader-member exchange, knowledge sourcing and team effectiveness the mechanisms by which the board influences the "end"? (See Appendix 1 for explanations of these constructs.)*

3. *The board's intellectual capital and its components (human, social, structural, cultural) are the "means" by which the board influences the performance of the organisation. (See Appendix 1 for an explanation of intellectual capital.)*

Boards, and the directors who constitute them, are equally capable of governing high-performing organisations. Indeed, metaphorically speaking, just as our genes determine our physical traits, the genes of a board and executive determine if they are capable of influencing the performance of an organisation so that it achieves high performance. Drawing from the literature, the research on which this report is based suggested that:

1. When analysed, multiple constructs – namely intellectual capital and its components, and knowledge sourcing, team effectiveness and leader-member exchange – reveal the characteristics (genes) that determine high-performing and poor-performing organisations.

2. When combined inside a new vehicle (model) called the "third team", the positive influence of a board and executive's genes on organisational performance can be maximised.

The research adopted a dual-country (New Zealand and Australia) and dual-sector (corporate and NFP) approach to establish a research sample. New Zealand and Australia were selected because of their long history of co-operation in business. Directors are often simultaneously on the boards of, or work in, organisations in both countries, and the regulatory, business and NFP environments in the two countries are similar.

From a governance perspective, the corporate and NFP sectors are often viewed as being homogeneous. Including them both in the one study enabled the research to determine if these different sectors are as homogeneous in their approaches to governance and practice as common wisdom has tended to assume. This dual-country and dual-sector approach provided an opportunity for comparison between sectors both within and across the two countries.

Selection of the corporate and NFP organisations used a two-step process to filter the population: 1) corporate organisations needed to be listed on the ASX or NZX top 50 indices; and 2) they had to have been listed on that index continuously for more than 10 years (the close-off date was December 2009).

NFP organisations were required: 1) to be affiliated with their international federation; and 2) to have been registered as an incorporated society continuously for more than 10 years (the close-off date was December 2009). Once selected, the financial data for the corporate and NFP organisations for the 10 years ending December 2009 was collected and analysed. The analysis used a range of financial measures (see Appendix 2) tailored to each sector. Based on these financial statistics, the organisations were separated into high-performing and poor-performing groups for analysis. To be classified as high-performing, an organisation must have exceeded the 10-year average for each of the measures. Failure to outperform on any one measure resulted in the organisation being classified as poor-performing.

The analysis identified 13 of the total 64 organisations (covering both sector groups and countries) as high-performing organisations; the rest were classified as poor-performing. Participants from each organisation selected for inclusion in the research were the chairperson, CEO, directors (minimum of two) and executive staff (minimum of two).

Analysis Method

From the selected constructs, 97 characteristics (board 60 and executive 37) were analysed using fuzzy set qualitative comparative analysis (fsQCA). This analysis method bridges the quantitative and qualitative approaches to measurement by allowing both case and variable oriented studies.

A key benefit in choosing this method of analysis is that fsQCA allows the researcher to analyse complex causation, which is defined as a condition where an outcome may follow from several different combinations of causal conditions (causal recipes). Traditional social science research uses correlation analysis, including multiple regression or structured equation modelling. The use of fsQCA tested for a connection between cause and effect.

Importantly, the research analysis determined if the characteristics contained within intellectual capital, leader-member exchange, knowledge sourcing and team effectiveness were either sufficient or necessary to achieve the outcome (high/poor performance).

A cause is both necessary and sufficient if it is the only cause that produces an outcome, and it is singular (that is, not a combination of causes). A cause is sufficient but not necessary if it is capable of producing the outcome but is not the only cause with this capability, while a cause is necessary but not sufficient if it is capable of producing an outcome in combination with other causes and appears in all such combinations.

With sufficiency, instances of the causal condition (intellectual capital, leader-member exchange, knowledge sourcing and team effectiveness) constitute a subset of instances of the outcome (high/poor performance); with necessity, instances of the outcome are a subset of instances of the causal condition (Ragin, 2009).

This method of analysis allowed the individual characteristics within intellectual capital, leader-member exchange, knowledge sourcing and team effectiveness to be analysed not as independent variables but as "potential collaborators" in an outcome. The key point is not which "ingredient" is strongest, but which of the various combinations of ingredients (causal recipe) are capable of being necessary and/or sufficient in producing the outcome (Ragin, 2008; see Appendix 3 for more detailed information on fsQCA).

Data for the research was collected through surveys administered electronically to all participants. Three hundred and fifty-four invitations were sent to the selected participants in both sectors, with a response rate of 38.98%. The second stage involved conducting semi-structured interviews with selected members holding one of the four organisational positions (board chair, director, CEO, executive). The interview data informed the analysis obtained from the survey data.

A New Frontier of Understanding

As noted above, the aim of this research was to gain insight into how boards influence organisational performance. The results confirm the existence of the developed model, called the “third team” (see Figure 1), which provides the context in which the board interacts with the executive. The research suggests that the store of directors’ intellectual capital provides the means of influencing organisational performance and that leader-member exchange, knowledge sourcing and team effectiveness are the key constructs that facilitate the interactions among the members of the third team in achieving that performance.

The research confirmed that it is through the third team that the board influences the executive, which in turn influences organisational performance. The results also support the proposition that a board’s intellectual capital is the means by which it influences organisational performance through the executive, with the constructs of leader-member exchange, knowledge sourcing and team effectiveness facilitating the board’s influence within the third team.

Synergy, trust and confidence are the defining attributes that separate high-performing third teams from poor-performing third teams

The third significant finding is that “synergy”, “trust” and “confidence” are the defining attributes of high-performing third teams. These three attributes are a synthesis of all the individual characteristics within the identified causal recipes (mix of characteristics). All three are present in the third teams of high-performing organisations, whereas one or more are missing from the third teams of poor-performing organisations.

The results argue against the widely accepted and unwritten rule that the CEO is the only point of contact the board has with the organisation. The research found instead that organisational performance improves when boards take a proactive approach to developing and maintaining good interaction with the wider executive group within the context of the third team.

The implications of this research for practitioners are significant, and the findings can be generalised to a wide range of organisations. The results provide insight into the types of characteristics (genes) within each of the constructs required by third teams of high-performing organisations. These clearly differ from the characteristics displayed by the third teams of poor-performing organisations.

Critically, the results demonstrate that corporate and NFP boards are not homogeneous. In fact, the two sectors differ significantly in the third-team characteristics they require. This suggests that future practice should not treat them as if they require the same governance models or structures.

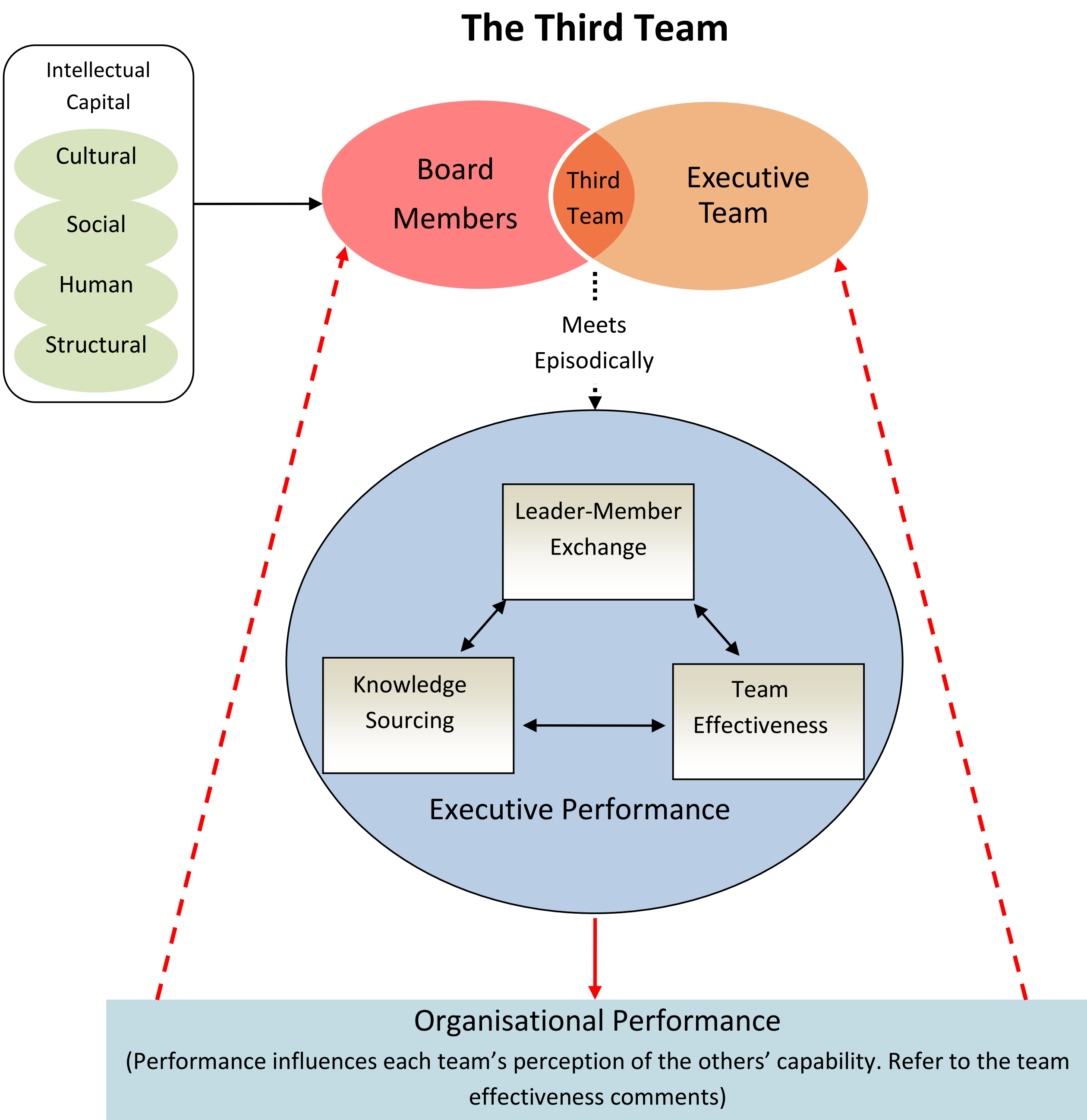

Figure 1: Original conceptual framework

Proposition 1 of this research asked whether there was another model that defined the top leadership team within an organisation, which for this research has been termed the "third team".

The third team was identified as forming the nexus of interaction between the board and executive and is therefore the mechanism through which the board influences the executive and, through them, organisational performance (see Figure 1).

The research findings confirm the existence of the third team. This finding is consistent with literature that supports the idea of the board/executive collaboration and functioning as a team (Kozlowski & Bell, 2003; Langton & Robbins, 2007; Payne, Benson, & Finegold, 2009).

The findings show that organisational performance is enhanced when the board has a wider influence and greater interaction with senior executives other than just the CEO. Furthermore, they identify the board as having a responsibility to ensure it does interact with the executive and not just the CEO. It is through this interaction that the board influences the performance of the executive and, through them, the performance of the organisation.

The development of a strong third team (board and executive) provides two principal benefits. First, it enables the board to develop a deeper understanding of the assumptions and thinking used by the executive in their decision-making, putting it in a better position to guide and oversee executive actions. Second, the executive members gain better access to the individual and collective tacit and explicit knowledge of directors.

Resources in the form of intellectual capital (particularly elements of social capital and human capital) are a key component of the value the directors bring to the third team. These resources are transferred through knowledge sourcing by the executives, who in turn adapt, innovate and/or replicate this knowledge for the benefit of the organisation. This supports the resource dependency theory view of the board.

Agency theory is a dominant framework in corporate governance. Its focus is on how the owners (that is, the principal) can minimise agency costs. This means minimising or eliminating managerial opportunism and expropriation of shareholders' returns by controlling the executives (management), who are the agents. The focus on control, central to the agency perspective, is not reflected in the causal recipes of the corporate or NFP sectors in either New Zealand or Australian high-performing organisations. In fact, the results show that collaboration and teamwork are critical to performance. These results contrast with agency theory's reliance on the master (board)-servant (CEO) relationship.

Stewardship theory holds that the executives are altruistic; that is, they are interested in seeing the organisation succeed. The theory suggests that this interest extends beyond their tenure. Davis et al. (1997) stated that executives viewed this longer-term organisational success as a personal reflection of their own success or failure. This notion suggests that, from the perspective of both the executives and those outside the company, the executive and the company are regarded as one; that is, the success of one directly reflects the success of the other or, conversely, the failure of one is seen as the failure of the other.

The results of this research show that the executives are not the only third-team members who subscribe to this notion. Directors also share the view that their professional success is linked essentially to the organisation on whose board they serve. This is evident in the high-performing corporate and NFP organisations in both New Zealand and Australia. The characteristics identified within the construct of team effectiveness highlight the directors' belief that their roles include bolstering the company image in the community, building networks with strategic partners and enhancing government relations. All these aspects of a director's role require putting at risk their standing in the community (business and social), which would be unlikely if they did not feel a strong degree of stewardship duty (as per stewardship theory) towards the organisation.

The defining attributes of "synergy", "trust" and "confidence" are shown in Figure 2 below as overlapping, because they are inseparable – without one, the others will not facilitate high-performance in an organisation.

Identifying these three critical attributes was only possible through the identification of individual characteristics within each construct. The combination of synergy, trust and confidence with the individual characteristics in each causal recipe does not relate to a single theory. It thus represents a fresh approach to researching governance practices that provides a more comprehensive analysis than agency theory, stewardship theory or resource dependency theory.

The characteristics encompassed by these attributes are present in each construct, either separately or jointly. For example, trust is a key component in human capital, social capital (internal and external), while confidence is a key component in structural capital and team effectiveness.

Identifying these three defining attributes aligns with the central premise of this research: that it is this *combination of characteristics (within: intellectual capital, leader-member exchange, knowledge sourcing and team effectiveness)* that enables a board to influence organisational performance through the executive in a relational space defined as the third team (see Figure 2).

The third-team model is a new conceptualisation of corporate governance, as well as coalitions of teams combined for specific tasks. In particular, the model conceptualises these third teams as comprising an amalgamation of two teams rather than individuals. Importantly, the third-team model recognises that each team within the newly formed third team retains its unique team culture and history.

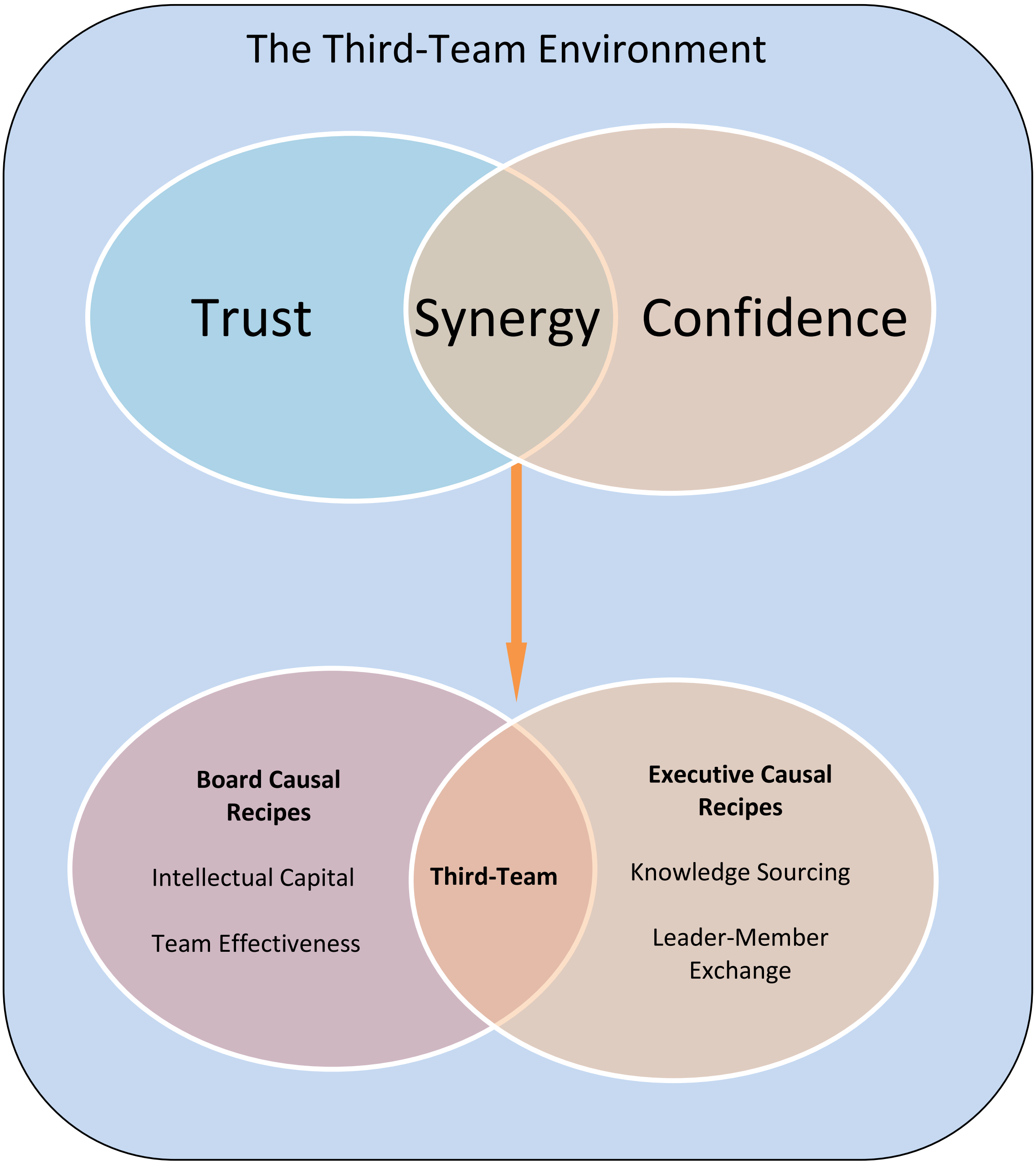

Figure 2 Model for high performance

Intellectual Capital

Intellectual capital is an overarching construct that incorporates human capital, social capital (internal and external), structural capital and cultural capital (refer to Appendix 4 for details of each component). The intellectual capital of directors is what determines whether they will make a worthwhile contribution to the third team. Intellectual capital is represented as a board-only construct in Figure 2. The research shows that it is a particular mix (causal recipe) of characteristics that separates the board members of high-performing third teams from those of poor-performing third teams.

To be able to influence the executive, the board needs the right balance of characteristics. Crucially, there are only a few similarities between the causal recipes identified for high-performing organisations and those of poor-performing organisations. This lack of similarity emphasises the second proposition of the research: that a board's intellectual capital is the "means" through which the board influences the "end", that is, organisational performance.

Identifying if characteristics are available or missing is critical to understanding whether a board has the appropriate mix with which to influence organisational performance through the executive. However, intellectual capital on its own is not enough; it needs facilitators that allow the knowledge to be transferred and used.

The research has identified the individual characteristics contained in leader-member exchange, knowledge sourcing and team effectiveness that act as these facilitators, allowing the intellectual capital of directors to influence the executive in the third team. This supports the second of the three propositions.

Leader-member exchange and knowledge sourcing are located on the right-hand side of the overlapping circles at the bottom of Figure 2, and are thus third-team constructs. Team effectiveness, however, is on the left-hand side, as this is a board-only construct, along with the board's intellectual capital. The area marked "Executive" in Figure 2 indicates that the mix of characteristics within each of the constructs influences executive performance. The results confirm that leader-member exchange, knowledge sourcing and team effectiveness jointly facilitate the board in influencing the "end" (organisational performance).

Importantly, the results firmly establish that knowledge sourcing is important in facilitating the exchange and transfer of ideas and knowledge between the board and executive. This characteristic of executive behaviour is just as important as leader-member exchange, even though it relies on the latter to facilitate the learning that results from knowledge sourcing. When one exists without the other, the necessary flow and interaction identified as essential to high-performing third teams will not be present.

High-performing organisations consist of a complex mix of collaborative, unique and complementary characteristics existing in the environment of the Third Team

It is also critical that the board functions effectively as a team within the third team. Otherwise the role of leader-member exchange, knowledge sourcing and team effectiveness in influencing the board is weakened. Cohesion and planning ability, specifically as it relates to succession planning for both the board and executive, are critical characteristics of high-performing boards. It is important to note that this interdependence between the constructs is a significant finding. No one construct on its own is strong enough to enable the board to influence organisational performance. It takes the combined strengths of each characteristic within the causal recipes of the different constructs to achieve the outcome.

For example, in the New Zealand context, corporate characteristics include strategy implementation (team effectiveness), third-team members' understanding of the respective teams' roles and responsibilities (within the third team), and the way the board communicates its level of satisfaction or dissatisfaction with performance to the executive (leader-member exchange).

These characteristics are notably absent from the NFP sector's causal recipe. The characteristics of high-performing Australian organisations include: reliance on directors having general business knowledge and experience (human capital), and a focus on leadership and strategy (team effectiveness). These are absent from the poor-performing organisations' causal recipes in Australia.

The implications for both practice and theory are significant. The results show that the two sectors (corporate and NFP) are not homogeneous and therefore research and practice should not treat them as if they were.

The findings also dispel the myth that identifying a single characteristic (gender diversity, independent directors, etc.) is sufficient to improve organisational performance. Clearly, high-performing organisations, however they are measured, have a complex mix of collaborative, unique and complementary characteristics that all coexist in a relational space (third team) that the board and executive of organisations inhabit.

Implications for Organisations

Comparing the two sectors and countries, the differing characteristics and their respective emphases have significant implications for practitioners, regulators and government. The current drive for a "one size fits all" approach to regulation does not account for the uniqueness of the different sectors.

The two critical and unique findings:

1) Identification of the third team and its influence on organisational performance.

2) Identification of the unique characteristics that differentiate high-performing organisations from poor-performing organisations.

When developing policy, the corporate and NFP sectors should be treated separately; for example, standards of practice for the NFP sector should not blindly emulate those of the corporate sector.

The characteristics identified in each construct (causal recipe) allow third teams to influence the organisation's performance, for better or worse. The implications of these results for organisations and their boards and executives are significant; some of these implications are outlined below.

The Third Team

The third-team model should influence board decisions about how, and when, executive members of the organisation participate in the third-team environment. Furthermore, the assumption that the CEO is the only employee/executive with whom the board should have direct contact (as implied in agency theory) fails to use the board and its intellectual capital as a strategic resource. Recognising that the combination of the board and executive as the third team adds value to the organisation has implications for many aspects of what are considered normal board processes and procedures.

The implications for reviews and assessments of board effectiveness are significant, given that the boards of poor-performing organisations consistently overestimated their effectiveness when compared with the executives' assessment. In contrast, the boards and executives in high-performing organisations were consistent in their assessment of the board's effectiveness.
This disparity between the assessments of a board's effectiveness by the boards and executives in poor-performing organisations compared with the agreement displayed by the boards and executives in high-performing organisations is significant. It highlights that including the executives' view of board effectiveness is critical to understanding the third team's overall performance and its influence on organisational performance.

Performance reviews of boards should therefore be restructured to ensure the views of the executive members of the third team are included.

The findings identify the attributes of synergy, trust and confidence within the third team as critical to organisational success (recall that these attributes result from the combined characteristics within each construct's causal recipe). Board culture was identified as an important contributor to these attributes. The results provide strong evidence that boards of organisations that take a proactive approach to including the executive within the third-team environment outperform those that do not. This highlights the importance of the executive and director interactions in both formal and informal settings.

Critically, the model of the third team identifies that the board and individual directors have a far wider sphere of influence than just the CEO. This influence extends to all executives who have regular contact via both formal and informal situations. This argues against the unwritten rule that the board has only one employee and only one point of contact with the operational side of the organisation – that is, the CEO. The level of interaction between the board and executive team (other than just the CEO) should therefore be reviewed.

The CEOs of organisations must also realise that their senior executives, and through them organisational performance, benefit from exposure to and interaction with the store of knowledge held within the board. Therefore, limiting access, as some do, is counterproductive to increasing organisational performance.

Knowledge sourcing is an important aspect of high-performing organisations; however, it needs to be combined with other key characteristics (for example, collaboration, trust) before it can influence the executive and impact on organisational performance.

Characteristics of the Third Team

Three distinct types of characteristics/attributes were identified in the causal recipes of third teams:

1) Those associated with the board and individual directors (team effectiveness and intellectual capital).
2) Those associated with the third team (knowledge sourcing and leader-member exchange).
3) Those that are the result of these individual and collective characteristics (synergy, trust and confidence).

The combination of these characteristics of the board (collective and individual intellectual capital), which are accessed by the executive through the third team (through knowledge sourcing and leader-member exchange), forms the nexus of influence and power within the organisation.

It is the recipe of characteristics mixed within the model of the third team that creates high levels of synergy, trust and confidence. These then allow the board to positively influence organisational performance through the executive. Identifying the characteristics that were absent from the high-performing teams and present in poor-performing teams is also an important outcome of this research. These characteristics include:

- <u>Human capital</u>: high-performing NFP organisations identified *sufficient <u>trust</u> to use director capabilities*, whereas this characteristic was missing from poor-performing organisations.
    - This identifies a lack of trust between the board and executive – the executive does not trust the motives of the directors.

- <u>Team effectiveness</u>: high-performing corporates prefer boards that are *effective at shaping and monitoring long-term strategy,* whereas poor-performing corporates prefer their boards to be good at managing crises.
    - The need for crisis management by poor-performing boards may result from the lack of involvement in shaping and monitoring strategy.

- <u>Cultural capital</u>: Australian high-performing boards identified *meeting preparedness (behaviour, planning and participation)* as essential, whereas for New Zealand corporates the board's willingness to discuss organisational values was essential in their recipe of characteristics.
    - This highlights differences in cultural expectations between New Zealand and Australian high-performing boards and confirms that, even though governments may view the two as homogeneous, they are not.

The cultural and social capital (internal and external) of boards is an important contributor to board performance. However, it is the characteristics within these constructs that indicate a board's likely hood of leading a high-performing or poor-performing organisation. For example, poor-performing corporate and NFP organisations in Australia identified board members sharing values, norms and beliefs (cultural capital) as essential in their recipe, whereas high-performing organisations did not.

The importance to boards of shared values, norms and beliefs is often reflected in director recruitment, with candidates being shoulder-tapped from within a director's inner circle of acquaintances. This ensures the prospective director is a good fit with the current social and cultural mix of the board. Unfortunately, this limits the gene pool, resulting in "inbreeding" (directors with the same basic ideas, contacts, etc.).

The social and cultural characteristics of the board and individual directors influence the third team's ability to use its directors' human capital (innate and learned abilities, expertise and knowledge). Limiting executive access to this human capital limits the executive's ability to access and then adapt, innovate or replicate the knowledge to improve the organisation's performance.

Selection processes that perpetuate the development of vanilla boards reduce diversity in skill sets and intellectual rigour, and result in the executive not seeing much value in accessing the board's intellectual capital. This indicates that, before director recruitment begins, the current board's particular characteristics in relation to its intellectual capital (human, internal social, external social, cultural and structural), leader-member exchange, knowledge sourcing and team effectiveness need to be identified. This process should include the executive, as they form the key link between the board and organisational performance.

Aligning the skill sets of the board more closely with the organisation's changing strategic circumstances improves the value a board can add to organisational performance. This is reflected in the executive's ability to use the directors' tacit and explicit knowledge.
When board recruitment processes are based on the belief that inbreeding provides superior selection outcomes, the eventual decline in board performance, and a corresponding decline in organisational performance, is inevitable.

Concluding Remarks

The third-team model challenges a range of closely held beliefs within governance circles. These beliefs result in the failure of executives to use the board's intellectual capital as a strategic resource for the benefit of the organisation.

Contrary to popular belief, defining the combined board and executive as the third team does not imply the destruction of organisational hierarchy. In fact, the third team facilitates the continuing existence of hierarchies and structures; it defines how the boundary between board and management is bridged, enabling the board's intellectual capital to improve organisational performance. And surely that's what they're there for?

As long as hierarchy and structure add value to performance, there will be a need for the relational space defined as the third team to span these boundaries.

A board's ability to influence the performance of the organisation it governs ultimately depends not on one single characteristic but on a complex mix of multiple characteristics and multiple genes. Importantly, the research identified that it is *specific genes that produce the characteristics that are important in facilitating the board's ability to influence organisational performance*. This has led to the understanding that it is the *board and executive combined as the third team whose behavioural governance influences organisational performance.*

Organisations that want to understand how the findings of this research can be applied to and benefit their third team and its performance can contact the author:

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Appendix 1: Constructs Used in This Research

Intellectual Capital

Nicholson and Kiel (2004) defined intellectual capital as the collection of knowledge, information, experience, relationships, routines, procedures, culture and teamwork that a board can employ to create value (influence performance). These attributes sit within four principal categories: human, social, structural and cultural capital. These categories have also been called knowledge and information; experience and relationships; routines and procedures; and cultural and team capital respectively. The individual elements within these groupings fit together in a pattern of behaviour, which then influences the way a board carries out its role.

This conceptualisation of the board as a mixture of attributes that contribute to board effectiveness is of particular interest as it allowed this researcher to move away from the constricting views of a single theoretical perspective (for example, agency (monitoring and control) or resource (access to outside resources), etc.). The removal of the single-theory roadblock allows a multi-faceted understanding of how boards may influence executive performance.

Leader–Member Exchange

The leader-member exchange theory of leadership focuses on the two-way relationship between supervisors and subordinates. Graen et al. (1975) developed leader-member exchange theory, which Graen (1976) then extended. The findings of Graen and Uhl-Bien (1995) support a central tenet of this research, that the interactions (relationships) between the board (leader) and executive (follower) are central to organisational performance. The findings of Northouse (2001) add credibility to the inclusion of the executive staff in this research, as it was found that these interactions have an impact on attitude, motivation, commitment, loyalty, etc. – all of which are important components of executive performance. While it is not the only anchor for organisational performance, leader-member exchange is clearly an important ingredient in the causal recipe that contributes to the executive team's performance, which has been well established as an antecedent to organisational performance.

Knowledge Sourcing

Knowledge sourcing is a precise construct that describes the efforts of individuals to find and access knowledge produced by other individuals that is not available elsewhere. "Knowledge" in the context of this research means expertise, opinions, insights and experience (Gray & Meister, 2004).

By the very nature of their work, individual directors absorb and collect knowledge from many different social and work environments. This absorbed and collected knowledge adds to a director's existing knowledge and experience, becoming their tacit and explicit knowledge respectively. This allows executives of companies they are directors of to access this knowledge (knowledge sourcing).

Team Effectiveness

The relationship between boards and team effectiveness is a relatively new area of investigation. A few studies have sought to understand boards from a team perspective, and the influence these teams have on organisational performance (Forbes & Milliken, 1999). An issue facing researchers in all facets of board behaviour is the inability to gain access to what actually occurs within the boardroom. While the reticence of directors and boards to allow access is understandable, it means the researcher usually has to treat the boardroom as a theoretical "black box" (Daily, Dalton, & Cannella Jr, 2003).

Forbes and Milliken (1999) described the effectiveness of boards (team effectiveness) as being dependent on social-psychological processes, particularly those that relate to group participation and interaction (leader-member exchange), the exchange of critical information (knowledge sourcing exchange), and critical discussion (leader-member exchange).

Appendix 2: Financial Measures

The measures and their means of calculation are presented below. Unless otherwise stated, all measures are taken from Ritchie and Kolodinsky (2003).

Not for Profit Measures

Index Public Support

1. Total contributions (gifts, grants, and other contributions) divided by total expenses
2. Total contributions (gifts, grants, and other contributions) divided by total assets
3. Total contributions (gifts, grants, and other contributions) divided by total revenue

Fiscal Performance

4. Total revenue divided by total expenses (Siciliano, 1996, 1997)
5. (Total revenue minus total expenses) divided by total assets
6. Total revenue divided by total assets
7. (Total revenue minus total expenses) divided by total revenue

Corporate Measures

Dividend Yield

Dividend Yield (DY) shows the total a company pays out in dividends each year relative to its share price. In the absence of any capital gains, DY is the return on investment for a stock.

The formula for DY:

$$\frac{\text{Annual dividends per share}}{\text{Price per share}}$$

Return on Assets

Return on Assets (ROA) indicates the level of profitability relative to organisational assets. ROA indicates the earnings generated from invested capital (assets). Assets comprise both debt and equity.

The formula for ROA is:

$$\frac{\text{Net income}}{\text{Total assets}}$$

Earnings per Share

Earnings per Share (EPS) is generally considered to be a significant variable in determining a share's price and is a component in the calculation of the price-to-earnings valuation ratio.

The formula for EPS is:

$$\frac{\text{Full year profit}}{\text{Shares on issue}}$$

Appendix 3: Fuzzy Set Qualitative Comparative Analysis (fsQCA)

Ragin (2005) explains that fuzzy sets are simultaneously qualitative and quantitative as they incorporate both kinds of distinction in the calibration of the degree of set membership. The use of fuzzy sets allows membership to be scaled, enabling partial (fuzzy) membership. A membership score of one shows full membership in a set, whereas scores less than one but greater than 0.5 (for example, 0.8 or 0.9) show strong but not full membership. A score between 0 (zero) and 0.5 (for example, 0.1 and 0.4) indicates that an item (or "case") is more "out of" than "in" the set as defined, but is, nevertheless, still a member of the set. A 0 (zero) indicates full non-membership in the set. Therefore, it can be seen that fuzzy sets are a combination of both qualitative and quantitative assessment: 1 and 0 are qualitative assignments ("fully in" and "fully out" respectively). The 0.5 score is also qualitatively anchored, for it indicates the point of maximum ambiguity (fuzziness) in the assessment of whether a case is more "in" or "out" of a set.

Fuzzy membership scores address the varying degree to which different cases belong to a set rather than how cases rank relative to each other on a single dimension of open-ended variation. This allows fuzzy sets to highlight the qualitative measure of membership, while also allowing varying degrees of membership. Fuzzy sets can be seen as a continuous variable, calibrated to show the degree of membership (fully in–fully out) in a defined set. Such calibration is possible only through the use of theoretical and substantive knowledge, which is essential to the specification of the three qualitative breakpoints: full membership (1), full non-membership (0), and the point of maximum ambiguity regarding membership (0.5) (Ragin, 2005). Substantive knowledge in this context refers to the author's decades of business and governance experience, which were drawn upon to translate the Likert scales of the survey into calibrated fuzzy sets. For example, one survey question asked for a rating of the overall effectiveness of the board, and the Likert rating of "ineffective" was translated into a fuzzy set score of .20 (nearly fully out).

Appendix 4: Intellectual Capital Components

<table>
<tr><th>Components</th><th>Resides In</th><th colspan="2">Key Dimensions of Each Element</th></tr>
<tr><td>Human Capital</td><td>Individual Directors
Innate and learned abilities, expertise and knowledge</td><td colspan="2">a) General knowledge
b) Industrial experience
c) Organisational experience
d) Board experience
e) Company-specific knowledge and experience
f) Functional knowledge and experience
g) General business knowledge and experience</td></tr>
<tr><td rowspan="2">Social Capital</td><td rowspan="2">Individual Directors

Implicit and tangible set of resources available through internal and external social relationships</td><td rowspan="2">a) Network of organisational contacts – resources and individual contacts
b) Relationship(s) with CEO and executive both as a board member and as an individual
c) Relationship between the board members</td><td>Internal: Ties/relationships within the firm, mainly other directors, dense/small network, few structural holes, firm specific, once important contacts leave/lose power – value of social capital decreases

Function: Facilitating trust, collaboration, enhancing teamwork, impacting director selection decisions</td></tr>
<tr><td>External: Ties/relationships with outside organisations and contacts, sparse and large networks with many holes, not firm specific, and individuals with high social capital will be distant from other dominant coalition partners

Function: Bridging, providing additive information, co-option benefits to the holder and organisation</td></tr>
<tr><td>Structural Capital</td><td>Board
Explicit and implicit codified knowledge (policies, etc.)</td><td colspan="2">a) Documented board policies, charters and guidelines
b) Board culture
c) Implicit board procedures and norms</td></tr>
<tr><td>Cultural Capital</td><td>Individual Directors
Identify with the implicit and tangible resources sanctioned through the dominant group (norms, values and rules)</td><td colspan="2">a) Individual work
b) Individual morals
c) Individual motivations</td></tr>
</table>

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