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Published version

COOMBES, Philip and NICHOLSON, John (2019). Open Business Models and Practitioner Capabilities: A Regional Strategic Network Perspective. In: 35th Annual IMP Conference, Paris, France, 28-30 Aug 2019. IMP group.

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Open Business Models and Practitioner Capabilities: A Regional Strategic Network Perspective

The 2019 IMP Conference, Paris, France

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Abstract

The purpose of this paper is to provide empirical insight into the operationalisation of the practitioner capabilities that are critical to value co-creation and capture within a public-private sector open business model. The concept of business models is becoming increasingly established in industrial marketing scholarship. However, only a small number of empirical studies have focused on the concept of *open* business models - those business models in which value is created/co-created between practitioners outside the boundaries of a single firm - and research into the dynamic and ordinary capabilities of boundary-spanning practitioners within open business models appears absent. The empirical setting for the study is centred on three firms that form a public-private sector solutions open business model; which also forms a regional strategic network. A qualitative, single case study methodology is deployed to examine the firms as three embedded units of analysis. The data sources consist of twenty-five semi-structured interviews supplemented by archives of publications. We advance understanding of practitioner capabilities in public-private sector solutions open business models within regional strategic networks that are critical to support value creation/co-creation. As a challenge to the predominant static understanding of business models, we also make practical contributions by advancing understanding where it is currently lacking by focusing on the dynamic and ordinary capabilities of boundary-spanning practitioners in open business models, thus breaking with the rhetorical nature of much business model literature. This approach, therefore, addresses partially the under-socialisation of current business model research.

Keywords: dynamic/ordinary capabilities, open business models, public-private sector partnership, regional strategic network, value co-creation.

INTRODUCTION

The purpose of this paper is to provide empirical insight into the practitioner capabilities that are critical to value co-creation and capture within an open business model (OBM). Business models (BMs) in the context of dynamic capabilities were discussed recently in a conceptual paper by Teece (2018) who called for further empirical research into the topic. This OBM is set in the context of a regional strategic network (see Eklinder-Frick et al., 2011) situated in the North of England. The concept of BMs is becoming increasingly established within industrial marketing (IM) scholarship. However, empirical BM research has tended to focus on rather parochial studies at the firm level (Palo & Tahtinen, 2013). We propose here that a BM represents more than just the revenue model of a single firm; we view BMs as a broader, pluralistic concept that has the potential to be used by practitioners in a network context (Nenonen & Storbacka, 2010; Palo & Tahtinen, 2013). The development of BMs often depends on the collaboration of multiple actors, such as customers, suppliers and other stakeholders, i.e. local and national government departments - in other words cross-sectoral collaboration - however such discourse appears lacking in the literature. Therefore, by

examining BMs beyond the boundaries of a single firm, this study takes a broader perspective on BMs. Research into collaborative or *open* BMs - those BMs in which value is co-created between practitioners outside the boundaries of a single firm - is still an emergent area in the literature (Palo & Tahtinen, 2013) and hence empirical elaborations are rare. Furthermore, research into the capabilities of boundary-spanning practitioners within OBM appears absent. By focusing on practitioner capabilities in OBMs, this approach, therefore, addresses partially the under-socialisation of current BM research by making an *early* contribution (possibly the first) by providing insight into the open-looking dynamic and ordinary capabilities of these boundary-spanning practitioners. The structure of the paper is as follows: first a review of some of the leading contributions to the BM literature, including BMs in the context of dynamic and ordinary capabilities is presented. We then position the contributions of the paper from the assimilation of these perspectives. We then offer a description of the research context and case study methodology deployed in this study and finally we move to present and discuss the findings from the study. Conclusions are then drawn.

BUSINESS MODELS, CAPABILITIES AND CROSS-SECTORAL COLLABORATION

The BM concept gained prominence during the dot.com era of the late 1990s (Doganova & Eyquem-Renault, 2009; Klang et al., 2014) and has since become fashionable vocabulary with practitioners (Wirtz et al., 2015). However, whilst the concept is potentially powerful (Zott & Amit, 2008), current research offers few elements of agreement (Osterwalder & Pigneur, 2010) and, as a result, practitioners appear confused about the use of the concept (Shafer et al., 2005). Many of the core conceptualisations of BMs have been argued to remain "somewhat simplified and static" (Palo & Tahtinen, 2013:773) and only applied at the firm level (Mason & Spring, 2011). Whilst BMs enable the creation of new customer value or enhanced delivery of an existing customer value proposition, firms that have adopted *closed* BMs have appeared to consider only internal value creation. In contrast to closed BMs, value creation in collaborative BMs (we adopt the alternative term *open* BMs here) is conceived as being *co-created* between practitioners external to a focal firm (Coombes & Nicholson, 2013; Wirtz & Ehret, 2013). The adoption of OBMs offers the potential for firms to be more pluralistic in the conceptualisation of both the co-creation and capture of value. Antecedents of BM innovation include the presence of dynamic capabilities, knowledge and resource leveraging (Morris et al., 2005). By encouraging firms' practitioners to look beyond their own boundaries, they can potentially bring capabilities and resources to their own BMs (Chesbrough, 2007, 2012). Ordinary capabilities are best practices that typically start in one or two firms and then spread to the entire industry (Teece, 2014, 2018; Teece et al., 1997). On the other hand, dynamic capabilities are either second-order or higher-order competencies that enable firms to strategise and orchestrate resources to create superior firm performance (Eisenhardt & Martin, 2000; Teece, 2018). At this higher-order, dynamic capabilities consist of three clusters of processes, namely sensing opportunities, seizing the opportunities by mobilising resources and transforming by continuously renewing the firm and its associated BM (Teece, 2018). The basic assumption of dynamic capabilities is that core competencies are used to modify short-term competitive positions that can be used to build longer-term competitive advantage. However, the nature of the constituent elements of practitioner capabilities within OBMs is not well understood. Collaboration and partnerships between firms are crucial as value co-creation and capture are always intimately related to the collaborative ties with its stakeholders (Dreyer et al., 2017). However, what is often neglected in BM literature is the development of business that is often dependent on the collaboration of *multiple* actors such as customers, suppliers and other stakeholders, i.e. local

and national government (Kurucz et al., 2017). Such cross-sectoral collaborative working, and more recently collaboration in the context of public-private sector partnerships (PPPs), has been established firmly as a prominent part of the local government landscape (Nicholson & Orr, 2016). The role of boundary-spanning practitioners (see for instance Williams, 2013; Zhao & Anand, 2013) working in the public and private sectors is identified as an extremely important factor in the effective operation of modern public sector undertakings (Nicholson & Orr, 2016). These boundary-spanning practitioners perform a fuzzy role (Jeannot & Goodchild, 2011) where dynamic capabilities are a pre-requisite and possession of which supports these practitioners in taking decisions beyond clearly defined roles. However, whilst boundary-spanners are essential in organisational change processes, research in to the *capabilities* of such practitioners in OBMs appears absent. This paper, therefore, draws on a novel synthesis of business model, boundary-spanning practitioner capabilities and cross-sectoral collaboration perspectives.

RESEARCH CONTEXT

The empirical setting for the study was centred on three firms which formed an exemplar of a supply chain through from upstream supplier to downstream end user - which took in and considered a public-private sector downstream dyadic, an upstream buyer-supplier dyad as well as the broader networked contexts of the three firms in a solutions provision arrangement. The lead firm, we will call Firm A, acts as the hub firm, and the two other individual firms, we will call Firm B and Firm C, act as the supplier firm and the customer firm respectively. Firm A's transactions with Firm B took place within a single industry context. The broad supply chain context of Firm A crossed multiple industry boundaries and the exchanges between Firm A and Firm C crossed a sectoral boundary between public and private sectors. Firm A, as the hub firm of the study, was therefore assumed to be the primary designer of the focal OBM (in the terms used by Storbacka et al., 2012). Firm A is a family-owned independent property development, property management and retail business based in a city-region situated in the North of England. Firm B is an independent building supplies business based in the same city-region as Firm A. Firm C was founded as a special purpose vehicle firm under the United Kingdom's National Health Service (NHS) Local Improvement Finance Trust (LIFT) PPP based in the same city-region as Firm A and Firm B. There was an expectation that this PPP would attract private sector capabilities, finance, resources and innovation to the provision of public sector infrastructure, in particular, health and social care facilities. We posited at the outset of the study that the three firms all participated in an *open* BM because these firms' practitioners all interacted with those of other industry participants, for example, customers, supplier firms and other co-located stakeholder actors. We further posited the OBM actually formed a *regional strategic network* which is defined by Hallen & Johanson (2009:22) as:

A "collaborative project between companies in a region operating with the support of public agencies or other organisations in order to stimulate regional business development."

Therefore, we understand OBMs to be a sub-class of BMs in which *collaboration* between Firm A, Firm B and Firm C are decisive elements of the co-creation and capture of value. The Department of Health launched NHS LIFTs in England in 2000. In particular, NHS LIFTs were a new approach aimed at improving long standing under investment in facilities that housed health care and social care services. The NHS LIFT PPP encouraged the co-location of health care and social care professionals in one building together with a more

integrated approach to primary care. The PPP examined in this study was a contractual relationship between a public sector and a private sector party, in which the private sector party provided a public service or project and assumed substantial financial, technical and operational risk in undertaking the project. A key component of PPP contracts was an exclusivity clause giving the LIFT company the right to build all primary care properties for a Clinical Commissioning Group (CCG) situated within their local authority boundaries. These contracts enabled significant value capture by receiving long-term revenue streams.

METHODOLOGY

The three firms were examined as multiple embedded units of analysis (Yin, 2009) within a single, focal OBM case study context. Case study research is a well-established methodology in IM research (Visconti, 2009) and plays an "important role in theory development within industrial marketing and the industrial networks paradigm" (Wagner et al., 2009:6) so it seems particularly appropriate to deploy these principles to the study of an OBM. The primary purpose of the deployment of this approach was to seek analytical generalisability (Yin, 2009) to the contexts of other OBMs, regardless of sector or industry context. Twenty five semi-structured interviews of between one and two hours duration were conducted with senior and middle managers of the three firms. Additional secondary data sources were also used. The semi-structured interviews provided a deep level of contextual insight and understanding and helped to inform an impression with regard to the three firms. Purposive sampling was deployed which followed the principles of theoretical saturation (Black & Tagg, 2007; Cheung et al., 2007). Following familiarisation with the three firms, the within-case theme analysis was undertaken. This prompted further analysis of the respondents' interview transcripts and then further examination of the themes to ensure that the analysis was thorough and preconceived ideas were not being forced upon the data. In order to aid the coding process NVivo was deployed.

FINDINGS

The notion of dynamic capabilities involves a firm's CEO creating and/or transforming firms and who can add value through their organisation of resources and opportunities. A central practitioner type was the boundary-spanning practitioner. In co-creating the focal OBM, Firm A's CEO displayed certain entrepreneurial capabilities by the creation and development of new boundary-spanning relationships with Firm B and Firm C where value was co-created through the relationships and exchanges between the three firms. This finding highlighted the existence of certain dynamic capabilities within the focal OBM. For instance, Firm A's CEO described one of his inter-personal capabilities himself using the term *maverick*, a dynamic capability. However, although strategy work is mainly associated with the ideas of practitioners at the highest level of the firm, the roles of practitioners at the lower-ranking levels should not be ignored. In contrast, the findings also highlighted the existence of ordinary capabilities within the focal OBM. In addition to Firm A's CEO, the firm's boundary-spanning directors of its various sub-divisions were seen also as the principal practitioners involved the day-to-day management of the firm. These practitioners displayed the existence of more ordinary capabilities to lead teams of people and to co-ordinate other activities and resources. A number of respondents from the firm also reported the firm's head office-based practitioners, who typically specialised in the administrative areas of finance, health and safety, human resources, information technology, procurement and public relations and communications, were also seen as the principal practitioners involved the operation of the firm. These practitioners also provided certain cross-sectoral administrative

support services to Firm C. The notion of *openness* within the focal OBM was displayed by Firm A's CEO who was the practitioner responsible for the systems integration, a dynamic capability, of the firm into new product/service and market areas due to his willingness to take a risk on a PPP opportunity in the city-region.

Firm B's CEO also evidenced the possession of dynamic capabilities. In a similar finding to Firm A, the notion of *openness* within the focal OBM was displayed by Firm B's CEO. This actor was also seen as the principal practitioner responsible for the creation of a resource base in ways that other types of practitioners could not have achieved by converting a new business idea into a successful venture due to his readiness to take risks, and which involved a boundary-spanning relationship with Firm A. However, unlike Firm A, Firm B's CEO was reluctant to accept the label of an entrepreneur. In addition to Firm B's CEO, the firm's senior-managerial-level branch directors, recruited because of their experience and knowledge managing other firms in the same industrial sector as Firm B, also displayed certain entrepreneurial capabilities. These practitioners displayed the existence of ordinary capabilities to lead teams of people and to co-ordinate other activities and resources. In particular, a number of respondents used the term *hungry* to describe the determination of these practitioners to achieve success. However, unlike Firm A's CEO and Firm B's CEO, the branch directors were not required to demonstrate risk tolerance and therefore the risk-taking capabilities normally associated with entrepreneurial practitioners were not evidenced in this case. All of the risk related to the operation of the firm's de-centralised network of branches was borne centrally by the firm. These practitioners' entrepreneurial capabilities appeared, therefore, to be semantically different to the entrepreneurial capabilities of both Firm A and Firm B's CEOs. However, some comments from respondents cautioned on the use of the term *entrepreneur* when describing these branch directors stating that not every branch directors displayed an entrepreneurial vision. In addition to Firm B's CEO and branch directors, respondents from the firm also reported that its head office-based practitioners, who typically specialised in disciplines such as finance, human resources, information technology, marketing and procurement, were also seen as the principal practitioners involved the operation of the firm. These practitioners evidenced ordinary capabilities in terms of the delivery of professional services to Firm B. However, with the exception of Firm B's CEO and branch directors, unlike with Firm A, Firm B's practitioners at the lower levels displayed little evidence of the creation and development of new boundary-spanning relationships with Firm A, thereby demonstrating lower interdependency and lack of *openness* between the two firms.

Firm C's CEO further displayed the possession of dynamic capabilities. Whilst this practitioner did not appear to accept the label of an entrepreneur, this practitioner displayed other innovative and opportunistic capabilities. In co-creating the focal OBM with Firm A, the notion of *openness* within the focal OBM was displayed by the CEOs of Firm A and Firm C who created and developed new boundary-spanning relationships where value was co-created through their relationships and resource exchanges. Firm C's senior- and middle-managerial-level practitioners also appeared to evidence various boundary-spanning business development roles. These practitioners were, typically, property management and development professionals who displayed ordinary capabilities in terms of the management of the PPP contract with Firm A. In addition to support services, which consisted of the administrative areas of finance, health and safety, human resources, information technology, and public relations and communications, provided by Firm A as surrogates, this practice assisted Firm C because the firm was small with a flat organisational structure and a corresponding small headcount of practitioners. The notion of *openness* within the focal

OBM was displayed by Firm C who was also heavily reliant on a large team of external practitioners situated within the platform ecosystem to deliver its value propositions in the market place.

DISCUSSION

The purpose of this paper was to provide empirical insight into the identity of the practitioners and the operationalisation of their capabilities that were critical to value co-creation and capture within public-private sector OBMs. This study has built on only a small body of work in IM literature considering OBMs and presents an *early* (possibly the first) empirical study into practitioner capabilities in the context of a public-private sector solutions OBM. The notion of dynamic capabilities involves a firm's CEO creating and/or transforming firms and who can add value through their organisation of resources and opportunities. A central practitioner type identified was the *boundary-spanning practitioner*. In co-creating the focal OBM, Firm A's practitioners displayed certain open capabilities by the creation and development of new boundary-spanning relationships with Firm B and Firm C where value was co-created through the relationships and exchanges between the three firms. The open capabilities displayed by the practitioners of the three firms presented appeared to be important learning mechanisms for the development of dynamic and ordinary capabilities. We discovered the three firms that formed the focal OBM also formed a *regional strategic network* and have built on the work of Eklinder-Frick et al. (2011) in the context of a public-private sector solutions OBM. We have advanced knowledge of OBMs by the discovery that various practitioner capabilities contribute to the existence of *openness* and *open innovation* within the focal OBM. In particular, the possession of dynamic capabilities and ordinary capabilities by the practitioners of the three firms actually appeared to be *open-looking* capabilities to reflect more accurately the notions of openness and open innovation within the focal OBM and we build on the work of Noble & Jones (2006), and Williams (2013) in the context of a public-private sector solutions OBM. Boundary-spanning practitioner dynamic capabilities were further indicative of the existence and absence of *systems integration* capabilities within the focal OBM and build on the work of Davies et al. (2006, 2007), Hobday et al. (2005), and Jacobides & MacDuffie (2013) in the context of a public-private sector solutions OBM. We have also advanced knowledge of OBMs by the discovery of the importance and distributed nature of both boundary-spanning private-sector practitioners and public-sector practitioners among the actors within the focal OBM. Whilst the primary role of boundary-spanners is concerned with working within collaborative multi-firm and multi-sectoral contexts, such studies have not been set in the context of a public-private sector solutions OBM. We conclude, therefore, the focal OBM needs dynamic capabilities and ordinary capabilities to exist. Thus, the notion of practitioners and their capabilities appeared, arguably, to be important and were considered to form an important value creation domain of the focal OBM. Moving forward, we contend that research into the practitioner capabilities in the context of other regional strategic networks could be a particularly attractive direction for future research. Such other regional strategic networks could include an examination into firms that both compete and collaborate with each other (see for instance Khanna et al., 1998; Lundgren-Henriksson & Kock, 2016). The notion of *coopetition* posits that co-operation and competition function simultaneously in inter-organisational relationships.

References

- Black, I., & Tagg, S. (2007). A grounded theory of doctors' information search behaviour. Implications for information provision, pharmaceutical market entry and development. *Journal of Marketing Management*, 23(3/4), 347-366.
- Chesbrough, H. W. (2012). Open innovation: Where we've been and where we're going. *Research-Technology Management*, 55(4), 20-27.
- Chesbrough, H. (2007). Why companies should have open business models. *MIT Sloan Management Review*, 48(2), 22-28.
- Cheung, M.-S., Anitsal, M. M., & Antisal, I. (2007). Revisiting word of mouth communications: a cross national exploration. *Journal of Marketing Theory and Practice*, 15(3), 235-249.
- Coombes, P. H., & Nicholson, J. D. (2013). Business models and their relationship with marketing: a systematic literature review. *Industrial Marketing Management*, 42(5), 656-664.
- Davies, A., Brady, T., & Hobday, M. (2007). Organising for solutions: systems seller vs systems integrator. *Industrial Marketing Management*, 36(2), 183-193.
- Davies, A., Brady, T., & Hobday, M. (2006). Charting a path towards integrated solutions. *MIT Sloan Management Review*, 47(3), 39-48.
- Doganova, L., & Eyquem-Renault, M. (2009). What do business models do? Innovation devices in technology entrepreneurship. *Research Policy*, 38(10), 1559-1570.
- Dreyer, B., Ludeke-Freund, F., Hamann, R., & Faccar, K. (2017). Upsides and downsides of the sharing economy: Collaborative consumption business models' stakeholder value impacts and their relationship to context. *Technological Forecasting and Social Change*, 125, 87-104
- Eisenhardt, K. M., & Martin, J. A. (2000). Dynamic capabilities: what are they? *Strategic Management Journal*, 21(10-11), 1105-1121.
- Eklinder-Frick, J., Eriksson, L.-T. & Hallen, L. (2011). Bridging and bonding forms of social capital in a regional strategic network. *Industrial Marketing Management*, 40(6), 994-1003.
- Hallen, L., & Johanson, M. (2009). Vad ar regionala strategiska natverk? In Hallen, L., Johanson, M., & Roxenhall, T. (eds.), *Regionala Strategiska Natverk i Praktiken (Regional Strategic Networks in Practice)*, Lund, Studentlitteratur: 11-39.
- Hobday, M., Davies, A., & Prencipe, A. (2005). Systems integration: a core capability of the modern corporation. *Industrial and Corporate Change*, 14(6), 1109-1143.
- Jacobides, M. G., & MacDuffie, J. P. (2013). How to drive value your way. *Harvard Business Review*, 91(7), 92-100.
- Jeannot, G., & Goodchild, B. (2011). Fuzzy jobs in local partnerships: case studies of urban and rural regeneration in France and England. *Public Administration*, 89(3), 1110-1127.
- Khanna, T., Gulati, R., & Nohria, N. (1998). The dynamics of learning alliances: Competition, co-operation and relative scope. *Strategic Management Journal*, 19(3), 193-210.
- Klang, D., Wallnofer, M., & Hacklin, F. (2014). The business model paradox: a systematic review and exploration of antecedents. *International Journal of Management Reviews*, 16(4), 454-478.
- Kurucz, E., Colbert, B., Ludeke-Freund, F., Upward, A., & Willard, B. (2017). Relational leadership for strategic sustainability: Practices and capabilities to advance the design and assessment of sustainable business models. *Journal of Cleaner Production*, 140, 189-204.

- Lundgren-Henriksson, E. L., & Kock, S. (2016). Coopetition in a headwind - the interplay of sensemaking, sensegiving, and middle managerial emotional response in cooperative strategic change development. *Industrial Marketing Management*, 58, 20-34.
- Mason, K., & Spring, M. (2011). The sites and practices of business models. *Industrial Marketing Management*, 40(6), 1032-1041.
- Morris, M., Schindehutte, M., & Allen, J. (2005). The entrepreneur's business model: Toward a unified perspective. *Journal of Business Research*, 58(6), 726-35.
- Nenonen, S., & Storbacka, K. (2010). Business model design: conceptualizing networked value co-creation. *International Journal of Quality and Service Sciences*, 2(1), 43-59.
- Nicholson, J., & Orr, K. (2016). Local government partnership working: a space odyssey. Or, journeys through the dilemmas of public and private sector boundary-spanning actors. *Policy & Politics*, 44(2), 269-287.
- Noble, G. & Jones, R. (2006). The role of boundary-spanning managers in the establishment of public-private partnerships. *Public Administration*, 84(4), 891-917.
- Osterwalder, A., & Pigneur, Y. (2010). *Business Model Generation*. Hoboken: Wiley.
- Palo, T., & Tahtinen, J. (2013). Networked business model development for emerging technology-based services. *Industrial Marketing Management*, 42(5), 773-782.
- Shafer, S. M., Smith, H. J., & Linder, J. C. (2005). The power of business models. *Business Horizons*, 48(3), 199-207.
- Storbacka, K., Frow, P., Nenonen, S., & Payne, A. (2012). Designing business models for value co-creation. *Review of Marketing Research*, 9, 51-78.
- Teece, D. J. (2018). Business models and dynamic capabilities. *Long Range Planning*, 51(1), 40-49.
- Teece, D. J. (2014). The foundations of enterprise performance: dynamic and ordinary capabilities in an (economic) theory of firms. *Academy of Management Perspectives*, 28(4), 328-352.
- Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509-533.
- Visconti, L. (2009). Ethnographic case study (ECS) - Abductive modeling of ethnography and improving the relevance in business marketing research. *Industrial Marketing Management*, 38(1), 25-39.
- Wagner, S., Lukasse, P., & Mahlendorf, M. (2009). Misused and missed use - Grounded theory and objective hermeneutics as methods for research in industrial marketing. *Industrial Marketing Management*, 39(1), 5-15.
- Williams, P. (2013). We are all boundary-spanners now? *International Journal of Public Sector Management*, 26(1), 17-32.
- Wirtz, J., & Ehret, M. (2013). Service-Based Business Models: Transforming Business, Industries and Economies. In Fisk, R. P., Russell-Bennett, R. & Harris, L. C. (eds.), *Serving Customers: Global Services Marketing Perspectives* (28-46). Prahran: Tilde University Press.
- Wirtz, B. W., Pistoia, A., Ullrich S., & Gottel, V. (2015). Business models: origin, development and future research perspectives. *Long Range Planning*, 49(1), 36-54.
- Yin, R. K. (2009). *Case Study Research: Design and Methods* (4th ed.). Thousand Oaks: Sage.
- Zhao, Z. J., & Anand, J. (2013). Beyond boundary spanners: the 'collective bridge' as an efficient interunit structure for transferring collective knowledge. *Strategic Management Journal*, 34(13), 1513-1530.
- Zott, C., & Amit, R. (2008). The fit between product market strategy and business model: implications for firm performance. *Strategic Management Journal*, 29(1), 1-26.