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**Exploring Dynamic Capabilities in Open Business Models:
The Case of a Public-Private Sector Partnership**

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Abstract

The case explores and offers insight into the boundary-spanning dynamic capabilities evidenced by the entrepreneurial CEO of a private-sector family-owned firm from the sensing, seizing and transforming/reconfiguring perspectives during the opportunity identification, evaluation and pursuit of the co-creation of a public-private sector partnership in collaboration with the CEO of a public-sector firm. This partnership, which is situated in a city-region in the North of England, is seen through the lens of an open business model whereby value is co-created and captured outside the boundary of a single firm, and which involves significant financial uncertainty being assigned from the public to the private sector.

Keywords

Boundary-spanners, dynamic capabilities, entrepreneur, open business model, public-private sector partnership, value co-creation.

Introduction

The purpose of the case is to explore and offer insight into the boundary-spanning dynamic capabilities evidenced by entrepreneurs during the opportunity identification, evaluation and pursuit of the co-creation of a public-private sector partnership. This partnership is seen through the lens of an open business model, whereby value is co-created and captured *outside* the boundary of a single firm (Chesbrough, 2007). Boundary-spanners are managers who work *across* firm boundaries (Nicholson and Orr, 2016; Williams, 2013). The case draws on Teece's (2007) dynamic capabilities approach from the sensing, seizing, and transforming/reconfiguring perspectives and focuses on two firms, namely Build Invest and Northern Care Partnership, who came together to form a public-private sector partnership

situated in a city-region in the North of England. In particular, the case explores how David Jones, the CEO of Build Invest, co-created the public-private sector partnership² with Mark Woods, the CEO of Northern Care Partnership. In this case, the two firms participate in an open business model because both firms' employees collaborate to varying degrees. This collaboration also involves significant financial uncertainty (Faulkner et al., 2017) being assigned from the public to the private sector. Therefore, open business models can be understood to be a sub-class of business models in which *collaboration* between firms are decisive elements of the co-creation and capture of value. Business modelling is an activity or process designed to strategize the use of business models (Hacklin and Wallnofer, 2012). Thus, business model innovation is a decision-making activity (Pattinson, 2018). The development of business models 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 (Kurucz et al., 2017). The aim of the case is to offer an in-depth account of the journey that co-created the new public-private sector partnership and the decision-making that took place providing a contextualized exploration of boundary-spanning dynamic capabilities in practice. In particular, the case challenges students to consider the boundary-spanning dynamic capabilities that are evidenced during the co-creation of the new public-private sector partnership as seen through an open business model lens.

Dynamic capabilities and business models

Dynamic capabilities, and the role played by strong leadership, have been crucial in ensuring the ultimate survival of firms (Khan and Lew, 2018). A firm's overall portfolio of capabilities

² Further information about public-private sector partnerships can be found on the website: <https://www.gov.uk/government/collections/public-private-partnerships>

can be understood as working on *two* levels (Winter, 2003). First, dynamic capabilities are higher-order competencies that enable firms to strategize and orchestrate resources to create superior firm performance (Eisenhardt and Martin, 2000; Teece, 2018). On the other hand, ordinary capabilities are habitual practices, such as administration and basic governance, which allow firms to operate (Teece, 2018; Teece et al., 1997). According to Teece et al. (1997: 516), dynamic capabilities are defined as:

'The firm's ability to integrate, build, and reconfigure internal and external competencies to address rapidly changing environments.'

At this higher-order, Teece (2018) conceptualized three clusters of processes, namely *sensing* opportunities, *seizing* the opportunities and *transforming/reconfiguring* (i.e. dynamic capabilities). First, the sensing capability enables the identification and assessment of opportunities and consumer needs existing outside of the firm. Next, the seizing capability explains a firm's innovation-creating process through its reaction to market needs to increase firm value. This involves designing innovative business models and securing access to capital and resources. Finally, the transforming/reconfiguring capability is related to a firm's value-capturing abilities, expressed by the re-alignment of resources and the re-designing of its architecture. This requires that managers constantly streamline, improve, and alter firm practices. Transforming is key to creating innovative and sustainable growth. However, it is recognized that firms might be better at, for instance, sensing opportunities but weaker at seizing and transforming such opportunities (Teece, 2018).

The business model concept gained prominence during the dot.com era of the late 1990s (Klang et al., 2014) and has since become fashionable vocabulary with managers (Wirtz et al., 2016). According to Magretta (2002: 6):

‘Every viable organization today is built on a sound business model, whether or not its founders or its managers conceive of what they do in those terms.’

Whilst business models support the creation of new customer value or enhanced delivery of an existing customer value proposition (Ladd, 2017; Shafer et al., 2005), firms that adopt *closed* business models appear to consider only very internally focused value creation (see Chesbrough, 2007). In contrast, value creation in externally focused *open* business models is conceived as being co-created and captured *between* managers external to a focal firm (Coombes and Nicholson, 2013; Wirtz and Ehret, 2013). The adoption of open business models offers the potential for firms to be more pluralistic in the conceptualization of both the co-creation and capture of value. Antecedents of business model innovation include the presence of dynamic capabilities, knowledge and resource leveraging (Morris et al., 2005) and by encouraging firms to look beyond their own boundaries, they can potentially bring capabilities, knowledge and resources to their own business models (Chesbrough, 2007, 2012).

Cross-sectoral collaboration and business models

The key motivation of open business models is the notion that value creation activities are performed by actors *outside* of the boundaries of the firm. Thus, in public-private sector partnerships, business model design becomes extremely important to understanding the key elements underlying collaboration and joint value creation (Zott et al., 2011). The term *boundary-spanner* was first coined by Tushman (1977) to describe managers who had, or adopted, the role of linking a firm’s internal networks with external sources of knowledge. Boundary-spanners are characterized by their motivation to acquire an understanding of firms

outside their own industry sectors (Williams, 2013). By definition, all firms have some type of boundary-spanning managers, if only at the highest level of the firm (Aldrich and Herker, 1977). Cross-sectoral collaborative working, and more recently collaboration in the context of public-private sector partnerships, has been established firmly as a prominent part of the local government landscape (Torchia et al., 2015). Furthermore, the role of boundary-spanning entrepreneurs (Williams, 2013) working in the public and private sectors has been identified as an important factor in the effective operation of modern public sector undertakings (Nicholson and Orr, 2016).

Background

Public-private sector partnerships have become a common solution to health and social care problems worldwide (Villani et al., 2017). Significant characteristics of these partnerships include the development of mutual products/services, long-term collaborative relationships, and the assigning of risk (Torchia et al., 2015). According to Kivleniece and Quelin (2012: 273), more formally, they are:

‘Long-term collaborative relationships between one or more firms and public bodies that combine public sector management or oversight with private partners’ resources and competencies for the direct provision of a public good or service.’

However, it is *uncertainty* (i.e. unknown unknowns) rather than risk (i.e. known unknowns) that is the concern of entrepreneurs (Faulkner et al., 2017; McMullen and Shepherd, 2006). Following the introduction of the Private Finance Initiative (PFI) in the United Kingdom during 1992, in which private sector firms were encouraged to become more involved in public sector development projects, the Department of Health launched Local Improvement

Finance Trusts (LIFTs) in England in 2000 as a vehicle to develop and regenerate primary health care and community social care facilities to meet the needs of local populations. There was an expectation that the programme would attract private sector investment and resources to the provision of public sector infrastructure, in particular, health and social care facilities. This expectation was achieved through the formation of forty-nine LIFT firms - public-private partnerships combining and complementing the capabilities and experience of the public and private sectors³. This case is centred on two firms that formed one of these public-private sector partnerships in a solutions provision arrangement. The lead firm, called Build Invest, acts as the hub firm, and the other firm, called Northern Care Partnership acts as the customer firm. The dynamic capabilities between Build Invest and Northern Care Partnership cross a sectoral boundary between the public and private sectors. Build Invest, as the hub firm of the study, is therefore assumed to be the primary designer of the open business model (in the terms used by Storbacka et al., 2012).

The case public-private sector partnership

Build Invest was originally founded in the late nineteenth century as a family-owned construction firm based in a city-region situated in the North of England. David, the current CEO, who joined the firm in the late 1970s in what was seen as a difficult economic climate for the construction industry, had an ambition to realign the firm's business model and move the business forward by the offer of new but complementary product/services in new market areas. David's background working in the construction sector meant he had gained the prerequisite capabilities needed to achieve this ambition. This ambition originated from a business model he had seen during a visit to the United States where a construction firm had

³ Further information about the LIFT programme can be found on its website: <https://theliftcouncil.org.uk/about/lift/>

successfully realigned its business model into the offer of new solutions products/services and new markets. David explains further:

‘Our vision involved becoming a developer... I had seen this in the [United] States... where the developer builds the thing, arranges the finance, gets a designer and facility manages the building.’

David’s sensing of new opportunities continued following the introduction of PFI in the United Kingdom in 1992. However, the opportunity to move the business forward wasn’t seized until a number of years later when the firm tendered and won a contract for the construction of a PFI school project in the city-region. This PFI project heralded the beginning of the transformation of the firm because it provided the opportunity to become involved, not only with the financing and construction of a facility, but with its ongoing facilities management. David describes how entrepreneurs seize opportunities to grow their businesses:

‘A business needs an entrepreneur - that’s how I see my role - people to make things better... who advance the business and take it to places they didn’t know there were places.’

However, the nature of PFI projects involves significant financial uncertainty being assigned from the public to the private sector. The entrepreneur being the link between dynamic capabilities and uncertainty. A key concern for entrepreneurs, therefore, is uncertainty balanced with the opportunity for profit (McMullen and Shepherd, 2006). Knight (1921) posits that profit is the reward for those willing to bear uncertainty because, unlike risk, uncertainty cannot be estimated. For instance, in Build Invest, uncertainty is alleviated by the

requirement for financial internal rates of return⁴ to be achieved as well as procuring its health and social care development projects on a design-and-build basis. This approach shifts responsibility for areas such as inappropriate construction design and techniques, flaws in construction materials etc., all of which can result in delays and escalation of costs, to the contractor. David's Finance Director, Simon Smith, discusses the firm's management of such financial uncertainty:

'The one thing we do... do in our business is we monitor risk very, very closely and make sure that if we are in what we perceive to be a higher risk activity that the returns need to match that.'

David explains that entrepreneurs seize opportunities by their willingness to accept uncertainties in the expectation of making profits:

'These guys don't grow the business incrementally, these guys leap and go where angels fear to tread... they are mavericks.'

David's use of the phrase *leap and go where angels fear to tread* and the metaphor *maverick* points to the existence of dynamic capabilities. DeLeon (1996) also evoked an image of entrepreneurs as risk-taking mavericks who solved problems by creating solutions not otherwise achieved by other actors. Following the success of the school project, David felt that the firm had gained enough knowledge and resources to enable it to tender and win further PFI projects in the city-region under the then newly launched LIFT programme. Simon discusses the rationale for wanting to join the LIFT programme:

'We felt we could offer a lot more than the multi-nationals who were there doing it. This was what LIFT was all designed for. The 'L' in LIFT is local, so we felt

⁴ The internal rate of return (IRR) is a financial metric used in capital budgeting to measure and compare the profitability of investments. The higher a project's internal rate of return, the more desirable it is to undertake the project.

this was our... finally... our chance to shine as it were in the PPP market, we bid it [colloquial: tendered], we won it, so we'd won an exclusivity with the CCG for twenty-five years effectively on all their capital projects.'

As a result of winning the firm's first LIFT project, David successfully transformed an already established, albeit stagnant, firm in response to a sensed business opportunity in the city-region and effectively realigned the firm's former business model by the systematic cannibalization of the firm and simultaneously co-created a new *open* business model in partnership with Mark, the CEO of Northern Care Partnership, which was re-focused around its customer's needs, around the firm's new solutions products/services and around the needs of its co-located communities. This finding also reveals similarities to the notion of creative destruction. The term *creative destruction* was coined by Schumpeter (1950:83) to denote a 'process of industrial mutation [...] that incessantly revolutionizes the economic structure from within, incessantly destroying the old one, incessantly creating a new one.' In order to deliver the firm's first LIFT project, a new firm, Northern Care Partnership, was incorporated as a limited liability company to invest in, build and manage health and social care facilities on behalf of the city-region's Clinical Commissioning Group (CCG). As a result of this new boundary-spanning partnership with Build Invest, Northern Care Partnership is only required to hire a small headcount because the firm purchases all of their administrative support activities from Build Invest. The firm is connected to Build Invest by a long-term contract - known as a strategic partnering agreement - to operationalize the LIFT programme within the city-region but more specifically *only* within the boundary of its local municipal authority. A key component of LIFT contracts is a clause granting exclusivity to build all health and social care facilities for their CCGs. These LIFT contracts, which contain the government's formal commitments to provide health and social care solutions in the city-region, enable significant value capture by receiving long-term revenue streams, typically for up to twenty-five years. Build Invest is represented on the board of Northern Care Partnership by David and Simon.

Following the success of the first LIFT project, several further projects followed having been won by the firm. In particular, Build Invest's realigned solutions open business model was based on the firm becoming a property developer that worked with its customer, Northern Care Partnership, as a partnership, not only responsible for the finance, design and construction of a facility, but also for that facility's ongoing facilities management. Simon explains:

'They [the CCG] get us I think and they get the benefit of allowing others to do what they're good at which then allows them to get on with what they want to do and need to do.'

This co-creation of new product/service solutions required David to reconfigure his resource base and boundary-spanning dynamic capabilities were the enabling mechanisms to achieve this. As a result, David created a facilities management division within Build Invest.

The future

Hitherto, Build Invest and Northern Care Partnership have pursued a strategy of organic growth, albeit entirely within the terms of the LIFT programme in the city-region which allowed them to operate only within the boundary of their local municipal authority. However, David and Mark had not set out to be constrained by only operating in the city-region. David explains further:

'We knew we were coming to the end of our pipeline of new building in [city-region]. We wanted, therefore, to create a vehicle to allow us to go outside of [city-region], offer, and undertake the same sort of work.'

When other city-regions started to approach Build Invest and Northern Care Partnership, David and Mark began to recognize the potential to co-create new public-private sector partnerships between the two firms beyond the city-region.

Summary

David and Mark now have an important decision to make regarding the future direction of the public-private sector partnership. Should they continue solely with the current partnership or seek to co-create new public-private sector partnerships and expand beyond the city-region? If they decide to expand, how can they achieve this? The case is helpful in emphasizing the boundary-spanning dynamic capabilities evidenced by an entrepreneur from the sensing, seizing and transforming/reconfiguring perspectives during the opportunity identification, evaluation and pursuit of this new business opportunity, as seen through the lens of an open business model.

Questions

1. How is David's approach to realigning his firm's former business model an example of open business model innovation?
2. What boundary-spanning dynamic capabilities are evidenced by David's decision to establish the public-private sector partnership with Mark?

3. What is the impact of not being allowed to operate beyond the boundary of the local municipal authority in the city-region on the long-term sustainability of the public-private sector partnership?
4. What alternative open business models, if any, might David and Mark want to consider?

Authors' note

This case was made possible through the generous co-operation of Build Invest Ltd and Northern Care Partnership Ltd. The names of these firms and the individuals referred to in the case study have been changed to preserve anonymity and any resemblance to actual firms and/or persons is purely coincidental. The case is intended as a basis for class discussion rather than to illustrate effective or ineffective handling of management situations.

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TEACHING NOTE

1. Summary of the case

The teaching objective of the case is for students to gain an advanced understanding of the boundary-spanning dynamic capabilities evidenced by entrepreneurs, from the sensing, seizing, and transformational/reconfiguring perspectives, during the opportunity identification, evaluation and pursuit of the co-creation of a public-private sector partnership, as seen through the lens of an open business model, whereby value is co-created and captured outside the boundary of a single firm. The case focuses on two firms that co-created a public-private sector partnership for the financing, construction and operation of health and social care facilities situated in a city-region in the North of England.

2. Teaching objectives and target audience

The key issue identified in this case is whether David and Mark should continue solely with the current public-private sector partnership or, alternatively, seek to expand and co-create further partnerships beyond the boundary of their local municipal authority in the city-region. If they decide to expand, how could they achieve this? This case will enable students to understand different approaches to the entrepreneurial decision-making of a private-sector family-owned firm in partnership with a public-sector firm. This case is aimed at both undergraduate and postgraduate students studying strategy and entrepreneurship. There are four learning objectives:

- a) The case provides a starting point for students to engage in evidence-based discussions about how entrepreneurs employ business model thinking as part of the decision-making process.
- b) The case enables students to consider how entrepreneurs develop long-term sustainable open business models.
- c) In particular, the case offers a contextualized exploration of the boundary-spanning dynamic capabilities evidenced by an entrepreneur within a family-owned firm during the identification, evaluation and pursuit of a new business opportunity culminating in the co-creation of the public-private sector partnership.
- d) The case confronts students to engage in a broader discussion about the unique challenges and opportunities presented to entrepreneurs regarding the future direction of the public-private sector partnership.

3. Teaching approach and strategy

This case study can be used as the starting point for students to discuss different approaches to the entrepreneurial decision-making of a family-owned firm. It allows the application of classroom-based theory to be applied to a real-life situation and encourages active participation in the learning process. The main theoretical points to highlight when using the case study centre round the concepts of dynamic capabilities, boundary-spanning entrepreneurs and open business models. The case study places the boundary-spanning dynamic capabilities evidenced by entrepreneurs within the context of a public-private sector

partnership and provides an opportunity for students to gain insights into how entrepreneurs identify, evaluate and pursue new opportunities as seen through the lens of an open business model. The case allows students to engage in a broader discussion about entrepreneurial approaches to strategy building and development in family firms.

Wherever possible, the classroom should be arranged with desks in a semicircle, or a similar layout, that allows students to face each other and work together in small groups. This layout will help to facilitate a direct exchange of views between students. Teaching this case begins by asking students to read and think about the case – either at the start of, or prior to class – depending on the length of the seminar/tutorial. A 5-10 minute introduction to the case by the lecturer might then be useful before beginning any discussion. The introduction should explain David and Mark's dilemma; whether to continue with the current public-private sector partnership within the city-region, or seek to expand beyond the boundary of their local municipal authority in the city-region. The lecturer might wish to present the potential alternatives for the public-private sector partnership and the challenges associated with each of choice. The goal of the case is not to select the correct choice for the public-private sector partnership, but rather to understand the challenges inherent in entrepreneurial decision-making within such a partnership and how managers can alleviate any associated uncertainties.

Once the introduction is complete, the lecturer might wish to break the class up into teams of three to five students, depending on student numbers. The teams should discuss and summarize their answers to each of the questions presented in the case study and choose one representative to present a summary of their team's answers to the class. The lecturer should work to move the discussion past a listing of challenges to an identification of the potential

outcomes of the available choices. To conclude the session, the lecturer might consider asking students to report back – either in their groups or individually – to summarize what they consider being the main learning outcomes of the session. Alternatively, the lecturer could ask them to take a few minutes to summarize their own thoughts about the main points raised in the case. It is also important to ask students to evaluate the usefulness of the case in their studies in order to help students evaluate their own learning as well as to help the lecturer to evaluate the usefulness of the case and make amendments where necessary.

4. Analysis

Students should be reassured that there are no right or wrong answers, but rather the case study provides a springboard for discussion about the main issues raised in the case. However, students are challenged to think about a real-life scenario where entrepreneurial dynamic capabilities, as evidenced by Build Invest's CEO (David), can be analyzed in detail. More specifically, students should consider the following points in their answers to the questions posed:

How is David's approach to realigning his firm's former business model an example of open business model innovation? Students should be able to recognize that David successfully transformed an already established, albeit stagnant, firm in response to a perceived business opportunity in the city-region and effectively realigned his firm's former business model by the systematic cannibalization of the firm and simultaneously co-created a new *open* business model in partnership with Mark, which was re-focused around its customer's needs, around the firm's new solutions products/services and around the needs of its co-located communities. Students might want to explore the government website:

(<https://www.gov.uk/government/collections/public-private-partnerships>) in order to find out more about public-private sector partnerships.

What boundary-spanning dynamic capabilities are evidenced by David's decision to establish the public-private sector partnership with Mark? Students should be able to recognize that dynamic capabilities consist of three clusters of processes, namely sensing opportunities, seizing the opportunities and transforming/reconfiguring. From the case material, students should be able to clearly recognize that whilst David's sensing of new opportunities started during a visit to the United States where a construction firm had successfully realigned its business model into the offer of new solutions products/services and new markets, he didn't seize the opportunity to transform/reconfigure his business until a number of years later when he tendered and won a contract for the construction of a PFI school project in the city-region. Students might also identify that, in recognising the success of the school project, David felt that the firm had gained enough knowledge and resources to enable it to tender and win further PFI projects in the city-region under the then newly launched LIFT programme. Students might want to explore the LIFT programme website: (<https://theliftcouncil.org.uk/about/lift>) in order to find out more about the programme.

What is the impact of not being allowed to operate beyond the boundary of the local municipal authority in the city-region on the long-term sustainability of the public-private sector partnership? Students should be able to identify that the terms of the LIFT programme only allows public-private sector partnerships to operate within the boundaries of their local municipal authorities and the case asks students to consider the impact of this on the long-term sustainability of the partnership in the city-region. Students should be encouraged to consider the challenges inherent in building a long-term sustainable open business model.

What alternative open business models, if any, might David and Mark want to consider?

Students should be able to consider whether there are any alternatives to the partnership's current open business model. New open business models could involve the need to evidence further boundary-spanning dynamic capabilities by the entrepreneur during the opportunity identification, evaluation and pursuit of the co-creation of new public-private sector partnerships in new city-regions. The outcome was that David and Mark identified the opportunity to form a new firm which enabled them, to evaluate and pursue the co-creation of new public-private sector partnerships in new city-regions in the North of England.

5. Feedback

Please take time to reflect and consider how the case worked in different situations (for example, with different student groups, or on different modules). The case has been tested and has been an effective part of teaching entrepreneurship and strategy to a range of undergraduate and postgraduate programmes, including Business Management, International Business Management, Marketing, and Business and Entrepreneurship. More specifically, it has been used to support the teaching of small seminars groups on modules such as 'International Strategic Challenges', 'Entrepreneurial Leadership' and 'International Business: Growth Strategies and Resourcing'. This case could also be used on other programmes of study such as Master's degrees in enterprise, entrepreneurship and/or innovation, MBA courses, or with doctoral students. Potentially, the case is suitable for use as a written assessment or for an examination, role-playing, or for other purposes.

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