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Dynamic capabilities for strategic team performance management: the case of Nissan

Vinh Sum Chau and Barry J. Witcher
University of East Anglia, Norwich, UK

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Abstract

Purpose – The purpose of this paper is to explain how *hoshin kanri* (policy management) is used as a higher order dynamic capability at Nissan. The paper also seeks to examine the role of top executive audits as part of the FAIR strategy execution process to develop core competences as part of team management.

Design/methodology/approach – The research used semi-retrospective ethnographic case summaries recorded by an active manager involved in the implementation process of the researched organizational phenomenon. These documented observations were triangulated against internally published company reports and those made public, and any externally published documentation about Nissan.

Findings – The paper finds that the use of a top executive audit (TEA) as a part of *hoshin kanri*, works as a high-order dynamic capability according to Teece *et al.* . *Hoshin kanri* is premised on a strong reliance on teamwork, and the effectiveness of teams is a major contributory factor to organizational performance. It works well because TEAs are a special form of organizational audit of lower-level operations against top-level strategy (i.e. it is a strategic review framework).

Originality/value – How Nissan's business philosophies and methodologies are managed as core capabilities is explored. TEAs, as a key component of *hoshin kanri*, are examined as a strategic team performance management system.

Keywords *Hoshin kanri*, Competences, Performance management

Paper type Research paper

Introduction

This paper examines the role of dynamic capabilities for the management of team performance that relates closely to top level prescribed strategy. It takes its perspective from the resource-based view of strategy to explore the use of dynamic capabilities at Nissan. The research is the outcome of an in-depth case study, based on the first-hand participant observation, of a senior manager in charge of implementing a major change programme at Nissan. Case summaries were recorded and made available for extended research purposes (Yin, 1984) and to gain an in-depth understanding of the researched phenomenon (Eisenhardt, 1989); these were triangulated against internally and externally published documentation about Nissan.

Dynamic capability theory addresses the lock-in issue associated with the rigidities of firm-specific strategic resources and the formation of core competences. There are few in-depth and dedicated studies of firm-specific dynamic capabilities. We argue that competitive advantage is sustained through complex sets of dynamic capability hierarchies. In particular, we argue that *hoshin kanri* (policy management) is one of these complex sets, within which lower level dynamic capabilities are nested. This

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paper investigates how the executive team at Nissan manages a common set of strategically important business methodologies and management philosophies as the firm's core competences. Following Teece *et al.* (1997) it is this ability of an executive team to reconfigure, develop, and sustain core competences, that defines dynamic capability. Our contribution is to explicate an example of how core competency development works in a large global firm. Specially, we examine the use of the top executive audit (TEA), a form of strategic operational review, and which is used as an integral part of *hoshin kanri*.

Strategic team performance management

A key concern in the emerging strategic performance management literature is the need for organizations to implement systems and frameworks that not only deliver performance improvements (Witcher and Chau, 2008), but also the ability to control them against top level targets (Simons, 1995; Chau and Witcher, 2005a); this remains the case for both commercial and regulated public sector companies (Chau, 2006; Chau, 2009). A number of auditing frameworks are used (e.g. Fitzgerald *et al.*, 1991; Neely and Adams, 2001), but they seem to fall short in their ability to thoroughly and realistically give executives a view of competences at the operational level. This strategy-operations disconnect is noted by Henry Mintzberg, that "many senior managers are removed from the ongoing daily activities of their organization . . . [so] we get grand and gloriously simple-minded strategies . . . [and] we have more and more disconnect between senior management and the rest of the organization" (de Holan and Mintzberg, 2004, pp. 206-208).

It has long been considered important to have a strong interconnection of interactions within the organization (Barnard, 1938). The importance of organizational audits has also been recognised in the performance management and organizational studies literatures, and that employee participation is a strong predictor of organizational performance (e.g. Wagner, 1994; Leana *et al.*, 1992). However, despite the thoroughness such popular business excellence frameworks, as the European Foundation for Quality Management (EFQM, 1999) and the Baldrige Criteria (NIST, 2003), can provide for ensuring quality improvements, they are not designed to facilitate the review of the management of strategic capabilities at the operational level. The concern of an executive team is not to review the effectiveness of operations, but to gain an understanding of how activities at an operational level play their parts in the success of strategy at an operational level. Take the EFQM approach, for example, under the "people development and involvement" category, the intention is to:

> . . . implement the organization's policies, strategies, objectives and plans . . . [to] recruit and develop their people to match these competencies and actively and positively support them throughout . . . to realise and unlock their full potential . . . [and] prepare people to meet and adapt to the changes required of them both in terms of operational changes and personal capabilities (EFQM, 1999, p. 7).

While much is said about the need to ensure that staff develop themselves and to align their capabilities with the organization's top-down policies, there is no allowance for top management to learn how these competency shortfalls should be adjusted for in their formation of strategy (back at the top level). This is a key component in the resource-based view of strategy, where human capital is seen as an important strategic

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resource of the organization in its achievement of competitive advantage (Barney, 1991).

This shortfall is as much to do with team management as it is with review frameworks being able to conduct reviews that are strategic. The literature on general team management has equally overlooked the important relationship of internal dynamics to organizational performance (e.g. Neely *et al.*, 1996; Bititci and Carrie, 1998), and their effective use for *team* performance management (Zigon, 1997; Meyer, 1994). After all, if measuring team performance is essential to team success (Logan, 1995), then equally important must be the identification of team performance gaps – that is, the strategy-operations disconnect – and how to close them (Hacker and Lang, 2000). However, there is now an emerging literature (e.g. MacBryde and Mendibil, 2003; Huusko, 2007; Delgado Piña *et al.*, 2008) on the need to do just that – we refer to this phenomenon as "strategic team performance management".

Dynamic capabilities

The resource-based view of strategy regards strategic (rather than economic) resources as firm specific and difficult for rivals to buy or copy (Nelson and Winter, 1982; Wernerfelt, 1984; Barney, 1986), and which have value to managers in influencing the direction and growth of a firm (Penrose, 1959; Hamel and Prahalad, 1994; Collins and Porras, 1994; Ghoshal and Bartlett, 1997). This view understands strategic resources as tangible and intangible assets that when combined will help to constitute a firm's competitive advantage (Teece, 2007). The softer components of organizational resources, such as staff and skills, and how these are managed in operational teamwork against top-level targets and longer-term strategy, are central to the management of strategic resources.

The resource-based view regards the firm as a cognitive system, which is characterized by idiosyncratic and context-dependent competences that are core to strategic purpose. These are conditioned by hierarchical capabilities, or sets of routines, involved in the management of the firm's core business processes that help to create value. Competences typically involve the development of specialist expertise, and firms may become locked into a trajectory that is difficult to change effectively in the short to medium-term (Tushman and Anderson, 1986; Dierickx and Cool, 1989), which is dangerous if the firm finds itself prey to major external change (Leonard-Barton, 1992).

Prahalad and Hamel (1990) argue risk is manageable if core competencies are used to develop core products (in the form of firm-specific expertise and resources) that can serve unrelated markets. These core areas are managed through core competencies, which they define as the abilities of employees to learn how to develop and manage the integration of technologies through cross-functional management and collaborative working. Japanese firms have a long history of collaborative forms of cross-functional management as part of *hoshin kanri*. *Hoshin kanri* is, in a resource-based view sense, a dynamic capability for the management (and configuration) of core competences over time. Yet, most of the commentary on the Prahalad and Hamel work misses the point that it is not the core products and core competencies that provide the strategic capability, but a higher order dynamic capability (Stalk *et al.*, 1992).

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Teece *et al.* (1997) develop this idea to use the term "dynamic capability" to refer to a firm's capacity to renew competences over time, which an executive uses to achieve congruence with a changing business environment by integrating and reconfiguring internal and external organizational skills, resources, and functional competences, in ways that they strategically fit the requirements of change. Eisenhardt and Martin (2000) define these "ways" in terms of cross-functional routines, giving examples such as: strategic decision making, new product development, co-ordination processes for internal collaborations, knowledge creation, alliance and acquisition processes, and market exit routines. The Teece *et al.*'s view, however, suggests a hierarchical nest of levels of strategically relevant capabilities; so for example, strategic management as a cross-functional process is a higher order capability than its constituent parts, such as the ones identified by Eisenhardt and Martin as dynamic capabilities, including strategic decision making, new product development, etc. For this paper we follow Teece to use "dynamic capability" to mean a high order capability. In other words, we understand dynamic capability as a high-order capability that influences lower-level strategic capabilities and competences. The role of an executive team in influencing lower level capabilities and competences is especially important to strategic management: "because capabilities are cross-functional, the change process can't be left to middle managers [so] it requires the hands-on guidance of the CEO and the active involvement of top line managers" (Stalk *et al.*, 1992, p.65).

Nissan Motor Company

Nissan Motor Company, founded in 1933 as the Automobile Manufacturing Company, had great success with the Datsun model. Nissan competed successfully on quality, reliability, and fuel efficiency; by 1991 it was operating profitability, producing four of the top ten selling cars in the world. However, during the East Asian financial crisis in the late 1990s Nissan incurred sizeable debts from unwise keiretsu and property investment, which led to an alliance with Renault, when a new president, Carlos Ghosn, was appointed; who embarked on a revival plan. This involved a major review of Nissan units including its overseas' plants, and he began to implement changes, including the use of *hoshin kanri* (policy management) in all of Nissan's overseas' plants, which heralded a new corporate-wide approach to middle and shop-floor management. *hoshin kanri* makes use of an auditing approach that enables an executive team to review how company personnel develop their competences for managing strategic objectives at an operational level.

Hoshin kanri

Hoshin kanri is used in Japan by most large firms operating in international markets. Some Western-owned firms use versions and employ their own names, such as "hoshin planning" at the Bank of America, and "policy deployment" at Proctor & Gamble. The details of these approaches vary, but in general they follow a common approach (Akao, 1991). The first recorded use of the term was in 1965 when the Bridgestone Tire Company (now Firestone-Bridgestone) published an internal manual based on practice used by winners of the Deming Prize. It began as a corporate control system for the cross-functional management of strategic objectives to ensure that functional activity worked in accordance with overall strategy.

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A "hoshin" is an annual statement of a top level policy that includes a brief context statement, a desired objective and outlines of possible strategies (or guidelines) to achieve the objective. Hoshins are outlined at the senior level and are passed to the rest of the organization for development and to explore the specific steps needed for working out action plans and timetables (Akao, 1991). "Kanri" refers to the management of hoshins. The full meaning of *hoshin kanri* signifies a methodology for managing direction and alignment. The hoshins take priority in planning over other objectives and strategies. Typically they involve objectives where there is an urgent requirement for the firm as a whole to achieve a breakthrough in a key area of concern. The principle is that if everyone contributes, then this will add up to a significant change that would not otherwise result from normal working. Only a very few hoshins are used, typically firms will use no more than six corporate hoshins. They are normally used to significantly progress objectives in the firm's mid-term plan, and can address an emergent issue, such as new competition, or to enable the firm to make up progress on a key objective. The executive team typically designs the form of the hoshin to encourage innovatory and creative thinking; this is likely to involve re-thinking routines and established processes in daily management.

The hoshins are set by the executive team at the same time as other cross-functional improvement objectives are determined; these latter objectives are more concerned with the health or effectiveness of the firm's organization and are thus more numerous than hoshins (they may number many dozens and typically expressed as annual performance targets rather than as strategic objectives and strategies). The targets are used as incremental objectives to drive improvement on the operational processes and to monitor the core business areas to ensure they remain under control (Japanese firms typically call these targets, control items). The management of the hoshins and targets in daily management makes continuous improvement (or *kaizen*) an important part of Japanese strategic management. Since the executive team decides its hoshins in the general context of the health of the business, so that both the hoshin and the targets are made relevant to the executive's goals, and provide a link between in daily management to corporate strategy (despite its importance, the nature of this link was not fully understood by Western firms when they adopted Japanese quality management ideas: see Lillrank, 1995; Cole, 1998).

The management of objectives in Japanese firms uses a common framework of four sets of perspectives: "quality", which covers customer concerns; "cost", which covers efficiency and financial objectives; "delivery", which includes objectives concerning internal processes, logistics and innovation; and "education", which includes the development of human resources, morale and safety. This grouping of objectives served to provide a common framework for managing objectives firm wide and was developed during the early years of *hoshin kanri* in the 1960s, when executive led cross-functional management teams were established at Toyota and Komatsu to review the progress of strategic objectives in daily management (Koura, 1993). The QCDE scheme is universal in Japanese and many Western *hoshin kanri* companies and its form is very similar to the four perspectives of the well-documented balanced scorecard (Witcher and Chau, 2007), and, in fact, the scorecard was developed from hoshin planning used at Analog Devices (Kaplan and Norton, 1993).

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Hoshin kanri at Corporate Nissan

The annual cycle for *hoshin kanri* starts with a review of the current status of the medium-term plan across the different Nissan companies. This takes into account feedback from the previous year's experience and the current health of the core business areas: those cross-functional business-wide processes that are the primary drivers in delivering customer value to final markets. Since 1999, Nissan has used a series of three-year plans or challenges: the NRP (Nissan Revival Plan), the Nissan-180 (where "1" represents an extra million sales, "8" an operating profit of 8 percent, and "0" zero automotive debt) and, recently, the NV-up (Nissan Value-Up Plan). In terms of its longer-term purpose, Nissan stresses the importance of its Nissan Way; this is a corporate values statement of how Nissan manages, and which emphasises the importance of cross-functional teams, stretch, empowerment and accountability (Ghosn, 2005b). Corporate Nissan's vision is to become the leading auto-maker in terms of brand strength, quality, profitability and performance, in every part of the world and market segment.

Japanese firms in general give at least equal status to value statements as they do to vision; they are two sides of the same coin. The Nissan Way reflects the importance of its employees being able to work in similar ways to be able to communicate and help each other, especially in terms of how everybody plays some part in managing some part of Nissan's core areas. This is central to the executive team's ability to dynamically manage its competitiveness as its business and business environment evolve. Nissan seeks to develop corporate-wide what it calls its business methodologies and management philosophies, to help it facilitate its cross-functionality, so that it can solve problems easily and quickly, modify behaviours as necessary, and to identify and take advantage of opportunities as they arise (Ghosn, 2005a).

The core areas of the business concern cross-functional working that is central to the overall value-adding capability of the firm. Their specification as a set of core processes defines Nissan's business model (Magretta, 2002; Yip, 2004). These areas have to be managed effectively by everyone across the organization and together they define the keys parts of the business where the firm's core competences are strategically most important. Nissan identifies 13 core processes: *hoshin kanri*, fundamental daily management (*nichijo kanri*), production maintenance, standardization establishment, productivity improvement activity, inspection, production control and logistics, personnel and labour management, cost management, quality control (including just-in-time management, process control), engineering capability, parts localization, and purchasing. The inclusion of *hoshin kanri* is significant. It recognizes that how the cross-functional process of objective and strategies management is managed by everybody in operations is itself important.

Top executive audits (TEAs)

A crucial component of *hoshin kanri* is the capability it brings to executive management for learning about the organization (especially the operational activities). This part of *hoshin kanri* is called a top executive audit (TEA). The audit aims to provide an understanding of the way the core business processes, the hoshins, and the improvement objectives being managed, within the context of annual planning and daily management (Witcher *et al.*, 2007). These aims are reflected in Nissan's definition

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of a top executive audit (Nissan uses the Japanese word "shindan" which translates into English as "executive") (Nissan, 2003):

> A top shindan audit is defined as a detailed audit performed to obtain an overview of each activity that is supporting the company's stated strategic goals and objectives. The senior executive of the company always conducts the audit, which is focused on an individual's function and proposed improvement activity.

Nissan specifies seven business methodologies and management philosophies: these are daily control, the determination of hoshins (the review of hoshin related work and set up activity), the coordination of hoshin development and deployment for hoshin/business plan and control items, the establishment of control items, analytical and problem solving abilities, check and action taken, leadership and participation by high-ranking personnel. They constitute the essential attributes that everyone is expected to apply to how they manage work within their teams, especially in the cross-functional core business processes, and as such they comprise Nissan's core competences. Top management teams then make use of these seven competences to audit the firm's management proficiency in the 13 processes that are central to Nissan's capability to deliver and sustain value. There are, of course, other vital competences, but these are more functionally based and are supportive rather than cross-functional and value-centred. Within the audit the seven competences are called diagnostic items. These are mapped out in a management systems framework called the Nissan Plant Management System (NPMS) – see Figure 1 for a simplified explanation, and Witcher *et al.* (2008) for a detailed discussion.

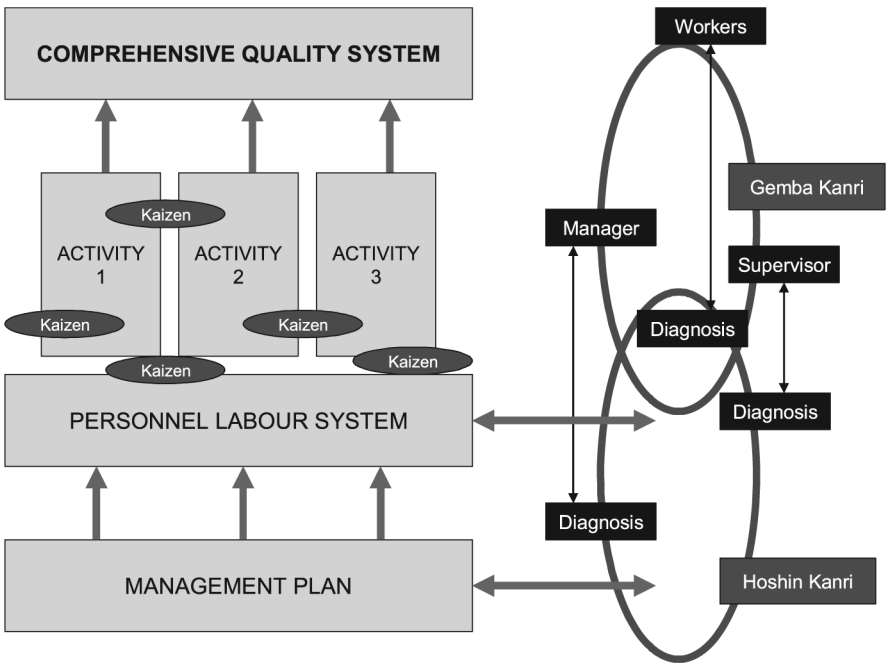

Figure 1.
Nissan Plant Management System (NPMS), simplified

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The map shows how Nissan achieves quality and productivity improvement (through the "comprehensive quality system" marked at the top of figure), which is assisted through the use of benchmarked practices developed by Japanese engineers. Daily management is represented in the figure by the oval at the top and on the right of the figure and labelled in Japanese as "*gemba kanri*". This is controlled by improvement activity linked to the medium-term plan, from which hoshins are derived through *hoshin kanri* to achieve the breakthroughs that are necessary to remain competitive. The overlap of daily management (*gemba kanri*) and *hoshin kanri* is shown in the figure, as documented at Nissan (2003):

> . . . includ[es] all the activities that are necessary to achieve the objectives of the daily duties that have been assigned to a specific department or section . . . entails keeping the PDCA cycle in perpetual motion . . . *hoshin kanri* is used as . . . a company-wide management process for establishing corporate goals and methodologies . . . breaking them down into divisional, departmental, sectional and individual objectives and activity plans . . . achieved by improvement of the systems and processes through which the work is coordinated . . . [and] used for developing the organization's strategic quality, cost, delivery goals.

The audit activity is shown in the figure as "Diagnosis", within the *hoshin kanri* oval at the bottom right of the figure. This involves auditing how the core competences in daily work are managed to drive improvement and are being used to achieve the objectives. This is of course where the TEA activities take place (and each diagnosis item leads directly to a supervisor, manager or worker, for the improvement of individual and team activity). Within the shopfloor level (marked as activity 1, 2 and 3), improvements are made through *kaizen* activities. The audit works to confirm the current status of both the *hoshin kanri* methodology and the strategic objectives. It checks the appropriateness of individual objectives and methodologies to the hoshins and works to gain the required support from lower levels of supervision. The audit compares how methods and results are improving in relation to the seven competences across all the firm's units and determines how they are focused and used on the firm's 13 core cross-functional processes, and relate to Nissan's broader corporate purpose and medium-term plan.

The seven core competences thus provide the investigative framework that is used by the executive team to understand and evaluate the level of competency that is consistent with Nissan's values and the corporate-wide business methodologies and management philosophies. Assessments are made by the executive management auditing team for each of the core business processes on a one-to-five scale of competency. This is when "one", represents an absence of competency and a passive state, through to "five", when a competency is judged to be at full proficiency and behaviour is proactive. In terms of exploitive and explorative learning, "one" represents the exploitive end of a continuum, while "five" is the explorative and other end of the same continuum of competency (March, 1991). This scale is similar to the Crosbyan maturity grid, which offers five stages for the development of company-wide quality management, and which is sometimes referred to as the step-up diagnosis method (Crosby, 1979). The idea at Nissan, however, is to keep the process simple to facilitate a corporate-wide understanding of competence proficiency: so that the five scales used are: "not aware" (stage one), "aware" (stage two), "starting" (stage three), "getting there" (stage four), and "arrived" (final stage). The status of competency is

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judged against a benchmarked series of standards specified through the engineering department at head office in Japan. These standards provide guidance to everybody to suggest how competency in practice should look like for each of the five stages.

The purpose of the auditing activity is to help the executive team to understand how the core business processes are being managed, and how the core competences are developing at daily management lower levels of the firm. This is key to an effective dynamic capability as defined above. The auditing activity stimulates mutual discussion between senior managers and the people who implement the hoshins and improvement objectives at an operational level. The aim is to help employees of all types think strategically in a proactive way and by so doing find more focused and effective means to improve overall and specific team performance. The nature of discussion is diagnostic in the sense it is based on the evidence of current status, but it is not centred on corrective action (this happens routinely in daily management) as rather about how daily management can be used to move the firm forward to sustain the strategic purpose of the firm as a whole.

The auditing activity involves plant tours and walkabouts and general employees can be involved informally in discussions with senior managers. The activity is advisory in character rather than instructive, and specific skills, such as active listening, questioning, probing and coaching, help auditors to build-up a common understanding and consensus on purpose. Kondo (1988) argues the educational character of such audits is considerable, since they offer the best opportunities for top management to grasp systematically the things that reflect on how they should be managing the organization, closing any obvious disconnect between teams and senior management ordinarily associated with other review frameworks. The visible involvement of senior management as auditors also sends messages to other employees about a top level's commitment to its values and strategic objectives. The general involvement of staff at different levels reinforces motivation in relation to broader issues, which otherwise is difficult to achieve in daily management and strategic reviews. The activity also helps to disseminate knowledge more widely across an organization, especially when the findings and associated stories are broadcast through internal communication media and specialist staff networks. Nissan uses an audit theme to sustain relevance and distinguish a current audit from previous ones.

A TEA gives an easily grasped total perspective to everyone of how a firm is being managed in different parts of the corporate whole, but as an approach used by the executive team, to understand how this management is working in the strategic areas of the business, it makes *hoshin kanri* a dynamic capability for closing strategy-operations disconnects between the executive and its strategic team performance management, and other levels, especially in operations. However, the extent to which top managers engage in TEAs in Western *hoshin kanri* varies compared to Japanese practice. In Japan it is routine for the executive at the corporate level to visit a shopfloor, and the audit process is sometimes called there the "President's Diagnosis". The degree to which a board can participate is of course limited, but it is still expected to occur to at least some extent.

Our research on *hoshin kanri* in general indicates that an effective capability depends upon how an executive is able to manage organizational learning through a

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unified system of feedback and review (Chau and Witcher, 2005b; Witcher and Butterworth, 1999, 2001; Witcher, 2003). This is similar to the resource-based view literature, where Barney (1991) and Schoemaker (1990) argue that a strategic capability is unlikely to be enough. Kano (1993) also notes the importance of a management system for realizing those strategies, which require a firm-wide participation and effort.

Conclusion

This paper has drawn on Nissan as an example of *hoshin kanri* which sits easily within the context of the Teece *et al.* (1997) concept of dynamic capability. The defining essence of a dynamic capability is that it is used at the senior level to intentionally develop (if necessary reconfigure) its business methodologies and management philosophies as core competences. We offer our representation of how executive teams at Nissan use TEAs, as a good example of dynamic capability: in terms of our understanding it is a chrysalis whose potential, not yet fully recognised, is in fact the lifeblood of strategic team performance management (a term we name for the interrelationship and proficient management of top and low level strategy, operational teams, and performance) so essential for transforming an organization's ability to manage change to reach great heights.

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Corresponding author

Vinh Sum Chau can be contacted at: v.chau@uea.ac.uk

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