

INTELLIGENT ANALYSIS OF DYNAMIC CAPABILITY OF ENTERPRISES WITH REGARD TO COMPETITIVE ADVANTAGES AND INSTITUTIONAL ASPECTS OF REGIONAL LOGISTICS: ANNOUNCEMENT OF RESEARCH

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The paper announced the scientific study of the dynamic capabilities of the enterprises in the development of public-private partnerships and management of forms of property, as well as the influence of regional peculiarities in the organization of inter-firm relationships. A separate aspect of the study is to consider the logistics opportunities in the organization of business, institutional barriers and support capabilities immediate environment and key competitors.

The South Ural region is renowned for its industrial enterprises and is an ideal area for exploring public-private partnership in Russia and its impact on productivity and development dynamics. Exploring organization development peculiarities in institutional environment of a country is an important task because it opens opportunities of understanding profound reasons of organization behaviour on industry market. Nevertheless common theories explaining competitive advantages and organization strategic indexes neglect organization peculiarities of capital nature and share of public ownership. The intellectual data analysis characterizing organization dynamic capabilities of government's public-private ownership with competitive advantages and institutional aspects in countries and regions lets to explore cultural peculiarities of Russian business. Nowadays it is not explored enough and needs system organization and monitoring.

Keywords: intellectual analysis of the data; Dynamic Capabilities; Competitiveness; Public and private property; Forecasting with a supercomputer.

Description of the Scientific Techniques and Methods that will be Used to Accomplish the Project Objectives

The proposed research draws on several scientific components that will enable carrying out the three proposed core activities.

Theory Development & Refinement

Component 1 will develop, refine and advance the overarching conceptual arguments that I have alluded to in previous sections. It will produce understanding of and specify in detail the distinct direct, indirect (mediating), and moderating effects that concern the impact of dynamic capabilities and how such are conditioned by state-ownership and –control as well as institutional and cultural facets. This will be followed by in-depth interviews of relevant managers from Russian firms and detailed case-study based inquiries. The findings from this component will provide a basis for refining and operationalising the concepts and structure of the structural model that will then serve for the empirical assessment. The key purpose is to address issues of model and construct validity and to gain further insights for measurement operationalisation. This component will also include the production of conceptual papers for presentation at international conferences and submission to top tier journals.

Theory Testing

Component 2 will focus on specifying the sample requirements and screening criteria to identify and

involve qualified firms for the survey-based data collection. To capture the conditional effects specified in the structural model, longitudinal secondary data would complement survey-based data. Hence, there will also be a need to identify and purchase suitable secondary data. Then, for the survey-based element, the team will specify those key informants and their titles that have responsibility for 1) managing a business unit or 2) headquarter-business unit relations concerning the firms that will be sampled. This approach ensures that the respondents have sufficient understanding of the business unit or organisation, respectively, and associated processes. As objective data about dynamic capabilities residing in a business unit or firm are not readily available, drawing on key informants' educated, yet subjective, perceptions of the variety of processes that need to be measured is necessary. Respondents will be invited via phone to participate in the survey; with follow-ups by email.

Component 3 will focus on developing the survey instrument: In this study it is proposed to collect all data using an online survey; alternatively, mail-based surveying will be considered. To avoid misspecification of measurement models a-priori techniques in developing measurement models (Diamantopoulos & Winklhofer, 2001) will be applied. Existing models to measure the concepts embedded in the conceptualisation and adapt them to the multi-level structure as required is proposed. This, combined with the insights gained from the in-depth interviews (Component 1),

will provide the basis for modifying existing—or developing new—formative and reflective measurement models respectively and where required second order ones (Gudergan & Gudergan, 2016; Wilden & Gudergan, 2015; Wilden, Gudergan, Nielsen, & Lings, 2013). The measurement instrument will also contain a range of models to capture control factors. The instrument will be pre-tested to examine response rates and measurement model properties. To alleviate concerns regarding common method bias, we will follow standard design guidelines, including utilization of secondary sources from the existing database as specified in Component 2 above. This will be followed with pilot testing and the actual data collection. We will apply CTA-PLS (Gudergan, Ringle, Wende & Will, 2008) to assess the measurement mode; standard analyses will be used to assess the validity of formative or reflective measurement models as well as reliability for the latter. The outcome of this set of activities will be greater insight for the development of the proposed theory, a set of measurement models, a usable online screening procedure, and response rate estimates.

Component 4 will collect and match performance data (ie, inclusion of secondary data). This is a supplementary approach to avoid possible common method issues that can occur when collecting performance data through the same key informants that also report about organisational processes. Also, the proposed project seeks to include lagged performance data following one year from the survey data collection (i.e., performance data from the year of measuring dynamic capabilities and so forth as well as lagged performance data one year later).

Component 5 will entail the application of advanced procedures in partial least squares structural equation modelling (PLS-SEM) (Hair, Ringle, Sarstedt & Gudergan, forthcoming 2016/2017; Sarstedt, Ringle, & Gudergan, 2015) [ie, Gudergan is a leading developer and user of PLS-SEM procedures] to analyse the primary survey and also secondary data collected in order to empirically assess the model with its ensuing hypotheses that encapsulate the effects of dynamic capabilities on firm performance accounting for the conditional roles of state-ownership and – control characteristics as well as institutional and cultural characteristics. This component will also include the production of empirical papers for presentation at international conferences and submission to top tier journals.

Description of the Problem Addressed by the Scientific Research Project Proposed Herein

“State-owned enterprises represent approximately 10% of global gross domestic product. Yet they remain relatively underexplored by management scholars. Firms have often been viewed dichotomously as either state owned or privately owned. Today, however, we encourage a more nuanced view of state-

owned enterprises as hybrid organizations, in which the levels of ownership and control by the state can vary” (Bruton, Peng, Ahlstrom, Stan & Xu, 2015; Page 92). Thus, any examination of how best to develop a firm’s competitive advantage and improve its strategic performance would need to account for such a nuanced view that captures the ownership and control characteristics of hybrid organisations with some or none involvement by the state. This is pertinent across many countries such as Germany, France, Brazil, China and also Russia to name a few [1.3.4].

However, extant theories that explain the competitive advantage and strategic performance of firms neglect to account for such a nuanced view. For instance, a commonly accepted explanation draws on the dynamic capabilities perspective. Accordingly, firms require idiosyncratic and difficult-to-imitate dynamic capabilities to achieve sustainable competitive advantages in fast-moving environments (e.g., Helfat, Finkelstein, Mitchell, Peteraf, Singh, Teece, & Winter, 2007; Teece, 2007). Dynamic capabilities represent the capacity of firms to integrate, build, and reconfigure resources (Teece, Pisano, & Shuen, 1997). A firm’s dynamic capabilities, which allow it to adapt to changing environments (Zahra, Sapienza, & Davidsson, 2006) or develop new business models (Teece, 2010), affect performance by strategically transforming the business (Helfat, Finkelstein, Mitchell, Peteraf, Singh, Teece, & Winter, 2007).

Teece (2007) conceptualizes dynamic capabilities as encompassing three processes: sensing and shaping opportunities and threats, seizing opportunities, and reconfiguring the business enterprise’s resource base. Yet dynamic capabilities function in firm-specific, idiosyncratic ways (Drnevich & Kriauciunas, 2011; Eisenhardt & Martin, 2000). As Pettus, Kor, and Mahoney (2009, p. 189) suggest, even if the processes underlying dynamic capabilities overlap, “...they serve unique and complementary roles to boost the likelihood of operating successfully in environments of significant change.” The processes that constitute dynamic capabilities thus “neither exist uniformly in all firms, nor matter equally in all industries” (Pettus, Kor, and Mahoney, 2009, p. 191; see also Delmas, Russo, & Montes-Sancho, 2007; Winter, 2003) [2.5].

Therefore, effective dynamic capabilities share some commonalities, but the ways firms practice them differ since they are path dependent and subject to organizational inertia and commitment (Eisenhardt & Martin, 2000). In consideration of such firm idiosyncrasies (Winter, 2000), dynamic capabilities reflect firm-specific positions, paths, and processes (Schreyögg & Kliesch-Eberl, 2007) and their performance impacts are not necessarily homogeneous but differ across firms, subject to how they form in those firms. Also, the impacts of dynamic capabilities vary with external conditions (Eisenhardt & Martin, 2000) and are contingent on environmental dynamism (Li & Liu, 2014; Schilke, 2014; Wilden & Gudergan, 2015;

Wilden, Gudergan, Nielsen, & Lings, 2013). Likewise, the latter authors also show that the impact of deploying dynamic capabilities on sales growth and financial solvency additionally is contingent on the firm's internal organizational structure, in addition to the extent of competitive intensity (i.e., the performance impact of dynamic capabilities is stronger when the firm has a more organic rather than a more mechanistic organizational structure and when it faces greater competitive intensity). Similarly, Gudergan and Gudergan (2016) show that certain quality management initiatives that are implemented by firms affect how their dynamic capabilities enable building a competitive advantage and improving strategic performance. Hence, it is totally feasible that the characteristics that come with viewing fully or partially state-owned enterprises as hybrid organizations, in which the levels of ownership and control by the state can vary, also conditions the role of dynamic capabilities. However, current theoretical conceptualizations of the dynamic capabilities view do not account for the state-ownership and institutional aspects that likely condition the impact of dynamic capabilities on how businesses can develop a competitive advantage and improve their strategic performance.

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ИНТЕЛЛЕКТУАЛЬНЫЙ АНАЛИЗ ДИНАМИЧЕСКИХ ВОЗМОЖНОСТЕЙ ПРЕДПРИЯТИЙ С УЧЕТОМ КОНКУРЕНТНЫХ ПРЕИМУЩЕСТВ И ИНСТИТУЦИОНАЛЬНЫХ АСПЕКТОВ ЛОГИСТИКИ РЕГИОНОВ: АНОНС ИССЛЕДОВАНИЯ

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В статье анонсировано научное исследование динамических возможностей предприятий в части развития частно-государственного партнерства и управления видами собственности, а также влияния региональных особенностей на организацию межфирменных взаимоотношений. Отдельным аспектом исследования является рассмотрение вопроса о логистических возможностях в организации деятельности предприятия, институциональных барьеров и поддержки возможностей ближайшего окружения и основных конкурентов.

Южный Урал богат своими промышленными предприятиями и в этой связи является идеальной площадкой для изучения проявлений частно-государственного партнерства в России и его влияния на результативность и динамику развития. Изучение особенностей развития предприятий в институциональной среде страны является актуальной задачей, поскольку открывает возможности понимания глубинных причин поведения предприятия на отраслевом рынке. Тем не менее, дошедшие до нас теории, объясняющие конкурентное преимущество и стратегические показатели фирм, пренебрегают учетом особенностей предприятия в зависимости от природы капитала и доли государственной собственности. Тематика интеллектуального анализа данных, характеризующих динамические возможности предприятий частно-государственной собственности с учетом конкурентных преимуществ и институциональных аспектов в странах и регионах, позволяет исследовать культурные особенности бизнеса России, в настоящее время недостаточно изучена и требует системной организации и мониторинга.

Ключевые слова: интеллектуальный анализ данных; динамические способности; конкурентоспособность; общественная и частная собственность; суперкомпьютерное прогнозирование.

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