Journal of Business Research 68 (2015) 1118–1126

Contents lists available at ScienceDirect

Journal of Business Research

Decision making in emerging markets: The Delphi approach's contribution to coping with uncertainty and equivocality

Jens Winkler [a,1], Christian Paul Jian-Wei Kuklinski [b,*], Roger Moser [c,d,2]

[a] University of St. Gallen (HSG), Dufourstr. 40a, CH-9000, Switzerland
[b] EBS Business School, An der Burg 8, 70192 Stuttgart, Germany
[c] Research Institute for International Management, University of St. Gallen (HSG) Dufourstrasse 40a, CH-9000 St.Gallen, Switzerland
[d] Strategic & Supply Chain Management, Indian Institute of Management Udaipur (IIM-U) Mohanlal Sukhadia University Campus, Udaipur – 313 001, India

ARTICLE INFO

Article history:
Received 9 September 2013
Received in revised form 12 June 2014
Accepted 3 November 2014
Available online 28 November 2014

Keywords:
Emerging markets
Uncertainty
Equivocality
Delphi
Organizational information processing
Decision theories

ABSTRACT

Firms in emerging markets are particularly challenged by uncertainty and equivocality in their long-term oriented decision making. These markets are characterized by dynamic institutional contexts especially affecting the predictability of future developments in the business environment. Based on the organizational information processing theory (OIPT), we first analyze how widely applied decision theories, organizational as well as procedural approaches contribute to coping with uncertainty and equivocality in emerging markets from a decision-making perspective. Accounting for inherent information asymmetries, we then elaborate the potential of future-oriented Delphi studies to serve as an information processing aid. To demonstrate the applicability of Delphi-based studies in the context of emerging markets we draw on case examples centered on China's and India's automotive industry, India's aerospace and defense industry as well as the health insurance industry in rural India in 2020.

1. Introduction

Emerging markets offer both enormous business potential across industries but also very distinct institutional contexts. This unique institutional environment needs to be well understood when planning, evaluating, implementing and expanding business operations in these markets (Khanna & Palepu, 1997; Khanna, Palepu, & Sinha, 2005). Organizational information processing theory (OIPT) stipulates that managers' information level influences decision making effectiveness and, as a result, firm performance (Galbraith, 1974; Tushman & Nadler, 1978). According to Daft and Lengel (1986), decision makers are challenged by two major information contingencies. First, uncertainty, defined as a lack of information. In our context, uncertainty may occur in different environmental domains and refer to various stakeholder activities (e.g. regulations of the government or competitors' strategic moves). Second, equivocality, or ambiguity, defined as the lack of clarity of available information. In equivocal situations, multiple potential interpretations of the information at hand conflict with each other. Hence, their implications (e.g. for the focal industry or firm) remain unclear (Daft & Macintosh, 1981). Changes in the institutional environment of emerging markets such as political shifts and evolving market conditions challenge managers in their decision making through both uncertainty about which changes might occur and equivocality about how to interpret changes in order to anticipate relevant consequences and interrelations at an early stage (Kuklinski, Moser, & Georgi, 2012). In addition to a significant lack of information that firms naturally face in foreign markets, emerging markets are more dynamic and '*surprise-intensive*' (Root, 1984, p. 22) than most firms are accustomed to from their home markets.

The more adequate the information needs of decision makers are met, the better the effectiveness of their decision outcomes (Galbraith, 1974; Tushman & Nadler, 1978). The information processing requirements of firms in emerging markets are mainly exogenously predetermined due to the dynamic institutional context. Hence, they have little choice but to adapt their information processing capacities in order to manage the information contingencies. Yet, predominant strategic management as well as decision theories directs little attention towards the question of how to actively cope with information contingencies. Managers draw on little guidance how to balance limited information processing capacities with high information processing requirements. In this paper, we focus on the information acquisition of decision-making processes, i.e., the phase of information gathering rather than phases associated with evaluating alternatives and choosing courses of action (Simon, 1960). Although the sequential character of

* Corresponding author. Tel.: +49 711 817 8858; fax: +49 711 888 5094.
E-mail addresses: jens.winkler@student.unisg.ch (J. Winkler), c.kuklinski@gmx.net (C.P.J.-W. Kuklinski), Roger.Moser@unisg.ch, Roger.Moser@iimu.ac.in (R. Moser).
[1] Tel.: +49 711 17 59350; fax: +49 711 7903 5214.
[2] Tel.: +41 71 224 73 54; fax: +41 71 224 24 47.

http://dx.doi.org/10.1016/j.jbusres.2014.11.001
0148-2963/

conceptualized decision phases has been subject to critique, the differentiation allows for a further clarification of the paper's locus from an OIPT perspective. We stipulate that in our particular context future-oriented Delphi studies offer valuable support for the information gathering efforts of managers (Hartman, Lundberg, White, & Barnett, 1995). We assert that properly employed Delphi studies can serve as a promising information gathering aid and enhance the decision making effectiveness in emerging market settings.

Based on organizational information processing theory, the paper focuses on *the information gathering phase of decision making processes, and elaborates the potential of future-oriented Delphi studies as an information gathering aid in emerging markets*. More precisely, the contribution of the paper is threefold. First, we provide a comprehensive overview of potential approaches to cope with the decision making challenges in emerging markets; specifically, we evaluate each approach's potential contribution to reducing uncertainty and equivocality. Second, we elaborate on the applicability of the Delphi-based approach in the context of the organizational information processing theory. Third, we demonstrate the flexibility and appropriateness of the Delphi-based approach in different country and industry contexts through four case examples.

The remainder of this paper is structured as follows. The next chapter outlines key characteristics of emerging markets as well as the resulting decision-making challenges, and introduces the central tenets of organizational information processing theory. Subsequently, we discuss the applicability and effectiveness of procedural approaches, analogical reasoning and extrapolation techniques as well as dominant decision theories with respect to coping with information contingencies in emerging markets. We then introduce the Delphi method and elaborate on the effectiveness of future-oriented Delphi-based information gathering efforts in order to cope with uncertainty and equivocality. We draw on four emerging market case examples: The health insurance, the aerospace and defense as well as the automotive industry in India and the automotive industry in China in 2020 (in total 183 expert panel participants). Finally, we proceed with conclusions, followed by limitations and implications for research and practice.

2. Decision making in emerging markets: an organizational information processing perspective

As opposed to the relatively stable political, social and economic environments in developed countries, emerging markets are portrayed by a dynamic institutional context characterized by opaque regulations and little transparency in decision-making processes of governmental institutions such as courts and other relevant entities (Hoskisson, Eden, Lau, & Wright, 2000). In many instances, emerging markets have arisen from centrally planned economies and undergo an institutional transition towards free(r) market principles and safeguarding mechanisms (Hoskisson et al., 2000; Wright, Filatotchev, Hoskisson, & Peng, 2005). Hence, the institutional framework enabling and regulating economic transactions is rapidly evolving (Hoskisson et al., 2000; Wright et al., 2005).

The considerable dynamics in the business environments of emerging markets can be structured along political, economic, social and technological aspects (PEST). The political environment in emerging markets is characterized by government policies that favor economic growth or liberalization. Still, emerging markets remain comparably regulated and considerable governmental involvement occurs more frequently than in most industrialized countries (Hoskisson et al., 2000; Khanna & Palepu, 1997; Wright et al., 2005). The economic environment is mostly characterized by less developed product and financial markets (Khanna & Palepu, 1997; Khanna et al., 2005). In the social domain, major differences between industrialized and emerging markets concern not only the educational system (e.g. higher illiteracy rates) but also regional and country-specific cultural aspects determining key factors such as customer requirements or the code of conduct during economic transactions (Khanna & Palepu, 1997). From a technological perspective, many emerging markets lag behind in relevant business infrastructure conditions such as communication and transportation systems, energy and water supply or automation of production processes (e.g. Khanna & Palepu, 1997). As a result, we assert two main aspects to be particularly challenging in emerging markets: institutional voids referring to a less-established institutional framework (Khanna & Palepu, 1997; Khanna et al., 2005) as well as difficult-to-predict, often non-linear changes of the institutional context. These challenges along with companies' constrained information processing capacities confront managers with incomplete and ambiguous information.

According to OIPT, organizations are open social systems which process information to complete or coordinate tasks (Daft & Lengel, 1986; Tushman & Nadler, 1978). Following the understanding that uncertainty constitutes some kind of information deficit, Galbraith (1974) suggests information processing as an uncertainty-reduction strategy. If firms acquire sufficient and adequate information, they can reduce and eventually eliminate information contingencies (Sharfman & Shaft, 2011). Thus, larger information requirements demand increased information gathering and processing. The better the 'fit' between the information processing requirements and capacities, the higher is the effectiveness of the decision outcomes and subsequently corporate performance (Keller, 1994).

Firms can align their information processing requirements and capacities by either reducing their information requirements, or taking measures to increase their information processing capacities; both can prove equally effective (Bensaou & Venkatraman, 1995). However, information processing requirements in emerging markets are predominantly influenced by exogenously determined conditions, i.e. the institutional context (Egelhoff, 1991). Firms can only limitedly reduce such information processing requirements (e.g. by lobbying). Accordingly, firms normally have to adapt their limited information processing capacities to the pre-determined level of information processing requirements (e.g. Bensaou & Venkatraman, 1995; Georgantzas & Acar, 1995). In this respect, research suggests a change of organizational structures and designs including process coordination and control mechanisms as well as analogical reasoning and extrapolation techniques (Bensaou & Venkatraman, 1995; Lipshitz & Strauss, 1997).

3. Decision making approaches in emerging markets

3.1. Organizational approaches

In line with both organizational information processing as well as structural contingency theory, researchers stipulate that adapting an organization's structure to the specific environmental conditions forms a prerequisite for organizational effectiveness (e.g. Bensaou & Venkatraman, 1995; Leifer & Huber, 1977). An appropriately adapted "*organizational design can provide information of suitable richness to reduce equivocality as well as provide sufficient data to reduce uncertainty*" (Daft & Lengel, 1986, p. 559). In this context, organismic and mechanistic structures are two commonly distinguished generic options (Burns & Stalker, 1966; Tushman & Nadler, 1978). According to OIPT, organismic structures have greater information processing capacities than mechanistic structures and can cope with higher levels of uncertainty and equivocality; organismic structures can thus be considered better suited for dynamic business environments such as emerging markets.

3.2. Procedural approaches

In order to improve their decision making effectiveness firms need to consider an adaptation of implemented routines and processes (Miller & Friesen, 1983). For example, Milliken (1987) suggests that firms should adapt their strategic planning processes in light of 'state', 'effect' and 'response uncertainty'. In situations characterized by state