Organizational Capabilities and Ambidexterity in Offshore Wind

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Background

With the increasing maturity of onshore wind as a viable source of energy, the offshore sector has emerged as a different and independent branch¹. This movement has presented many entrepreneurial opportunities for organizations with a variety of backgrounds, as well as the need for innovations that suit the needs of offshore wind.

In this context, offshore wind has attracted attention from a variety of players, also from companies with core activities in a different sector. This is not only because wind is a prominently important renewable energy source, but also because these firms have capabilities and assets that can be effectively put to use in meeting the challenges of this infant branch. Examples are found not only in the expertise of players active in onshore wind, but also in players active in diverse markets, such as oil and gas.

Research question

Moving into offshore wind represents an opportunity for firms to diversify their businesses, along with taking part in the technological path creation of an infant branch. At the same time, firms need to maintain their businesses in their main markets. In other words, firms need a strategy to develop knowledge necessary to enter and operate in offshore wind, while maintaining their strategy in their original markets. This is a problem of keeping a balance between exploration and exploitation^{3, 4, 5}. The emergence of offshore wind provides an important empirical scenario for investigation of these issues.

This process is relevant because it raises questions in relation to how these firms transfer their existing capabilities from the context of their primary markets to offshore wind, and how they manage the apparent paradox of exploration and exploitation for achieving ambidexterity. As a result, the research question that guides this project is:

What is the role of existing organizational capabilities in balancing exploration and exploitation efforts?

Key definitions

Ambidexterity: in the context of organizations, it refers to the ability of managing exploration (innovation) and exploitation (efficiency) simultaneously and in a complementary manner ^{3,6}.

Organizational capability: refers to the knowledge of organizations, especially know-how, in performing various activities. It is expressed in organizational routines². The concept is related to organizational learning, skills and competences.

Methods and data

The focus of this PhD project is at the organizational level, and takes firms as units of analysis. Therefore, a predominantly qualitative approach is expected, with case studies that enable deeper insights in regards to organizational capabilities and the routines through which they are enacted. Survey data with firms in the wind sector in Denmark is available, and could potentially provide an additional outlook for the investigation of issues relevant to this project.

Expected outcomes

This PhD project expects to contribute both for theories of management and innovation, and knowledge useful for the empirical context of offshore wind. On a theoretical perspective, the project aims at advancing knowledge about the exercise of ambidexterity in organizations, in addition to the role of organizational capabilities across various scenarios. Normative advice for management in relation to balancing exploration and exploitation is also a concern of this project. In relation to the offshore wind sector, the project aims at shedding light into the role of sub-suppliers, and their knowledge networks, in the emergence and evolution of the sector.

