HYBRID AMBIDEXTERITY: HOW ELECTRIC UTILITY COMPANIES ENTERED RENEWABLE AND DECENTRALIZED ENERGY TECHNOLOGIES

We investigate how the four largest electric utility companies in Germany have responded to the two subsequent challenges of renewable and decentralized electricity generation. We show that, in line with the literature, electric utilities have used both structural and contextual ambidexterity to enter new technologies. Moreover, we provide evidence that environmental characteristics shape which approach utilities choose and that in some cases “hybrid” forms of ambidexterity may be superior to the use of contextual or structural ambidexterity individually.

Motivation

- Incumbent firms in many sectors face need to make strategic changes in order to address sustainability challenges
- The literature suggests that using the approach of “ambidexterity,” i.e., investing in the simultaneous exploitation of old and exploration of new technologies and business models may be best suited to address challenges
- Two ambidexterity approaches exist: Structural and contextual ambidexterity
- Currently, however, little is known what drives firms’ choice of structural vs. contextual ambidexterity and how firms combine the two approaches in practice

Method

- Used comparative, longitudinal case study of 4 largest incumbent electric utility companies in Germany (“Big 4”)
- Organizations well suited as the sector has been going through two major environmental discontinuities—the emergence of renewable energy and “new downstream”—that required the firms to engage in ambidexterity
- Data analysis using analytical induction (coding and pattern matching) to develop process framework

Results

<table>
<thead>
<tr>
<th>Perceived Number of (Potential) Opportunities</th>
<th>Contextual Approach</th>
<th>Structural Approach</th>
<th>Hybrid Approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large &amp; uncertain</td>
<td>Leverage distributed attention and knowledge of frontline employees to deal with large and uncertain number of opportunities</td>
<td>Separate old and new business to avoid cultural clashes and quickly build new capabilities</td>
<td>Leverage distributed attention and knowledge of frontline employees while separating old and new business</td>
</tr>
<tr>
<td>Small &amp; certain</td>
<td>No Approach</td>
<td>Address opportunities as part of existing routines</td>
<td></td>
</tr>
<tr>
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</tr>
</tbody>
</table>

Implications

- Managers need to consider nature of challenge when trying to integrate sustainable technologies and business models
- Small and certain number of opportunities that require new culture and capabilities favor structural approach (see e.g., electric vehicles)
- Large and uncertain number of opportunities that do not require new culture and capabilities favor contextual approach (see e.g., energy efficiency)
- If opportunities are both uncertain and large in number and require new culture, a hybrid approach seems warranted (see e.g., new downstream energy solutions)

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Research interest
- Strategic management
- Sustainability management
- Innovation management

Lectures
- Einführung in die Betriebswirtschaftslehre (Bachelor)
- Unternehmensstrategien (Bachelor)
- Strategisches Management (Master)
- Corporate Social Responsibility (Master)
- Unternehmen und institutioneller Wandel (Master)

Literature

http://www.uni-oldenburg.de/laub
http://www.uni-oldenburg.de/centos/