## BUILDING HIGHER-ORDER CAPABILITIES: INSIGHTS FROM RESOURCE-SCARCE ENVIRONMENTS

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## **Abstract**

Over the past few years, the discourse in strategic management research has gravitated towards understanding the 'genesis' of firm's competitive advantage. The proverbial pendulum has swung from outside of the firm to its boundaries and now to well inside the firm's processes and manager's mind. The 'microfoundations project', started in the mid-2000s, has been an attempt to explicate the origins of firm's resources and capabilities. The pursuit assumes even greater importance when one seeks to understand the means through which firms create de novo capabilities by overcoming path dependence, and more so while being in resource-scarce settings. With a significant research being performed on and in emerging economies, which are typically characterized as resource-scarce and institutionally-deficient, there remains an imperative to understand how firms operating in such environments build higher-order capabilities. This has remained a relatively unexplored and increasingly pertinent topic. Another concern the scholarly community shares is that the resource based view, or its distributaries, such as dynamic capabilities literature, does not adequately explain the 'role of the manager' on how exactly the managers influence capability creation and, hence, a firm's competitive performance. In the light of these avenues of investigation, the thesis attempts to offer a model of capability creation that explicates the managerial role while contextualizing the process to firm's external environment which is resource deficient. The approach adopted is as follows. Firstly, a conceptual model of capability creation is proposed that builds on the extant research on resource based view and capabilities literature, firm's task environment, and managerial roles. To sharpen the focus, it is aimed to study the creation of firm-specific and higher-order capabilities, such as new product development. Secondly, a logico-deductive approach is adopted to arrive at a capability creation model which comprises of four key managerial activities and a set of firm-level sub-processes under each one of the activities. The four managerial activities are- orientation, acquisition, orchestration and deployment. The orientation refers to 'building the foundation and the enablers for subsequent capability creation', and the four sub-processes are creating a stretch, sensing and shaping opportunities, introducing variation and selection, and implementing learning systems. The acquisition refers to 'seeking constituent resources and competencies from outside the firm', and the three sub- process are picking from strategic factor markets, forging network ties with the proximal environment, and accessing distant environments. The orchestration indicates 'configuring the existing bundle in isolation, or in association with the incoming resources and capabilities, to form newer capabilities', and the five sub-process involved in orchestration are concentrating and protecting, recombining the existing, bundling the old with the new, improvisation, and retirement of assets. Finally, deployment refers to 'leveraging the extant or new competencies to address specific opportunities', and the three sub-processes under this stage are exploiting the existing, replicating across adjacencies, and learning by doing. It is then argued how the 'sequence' of managerial activities and 'salience' of sub-processes change with different firms operating in various environmental conditions, characterized on the basis of environmental munificence (resource-availability), dynamism, and complexity. This leads to five different models, corresponding to the various environmental configurations. Further, propositions are offered on the capability creation process and how it gets influenced by firm's external environment. Next, an empirical model of capability creation is generated by adopting an inductive logic, where six Indian firms across three industries are studied depicting three different environmental configurations. The evolution of a unique firm-specific and higher-order capabilities around new product development are mapped over a twenty-year period in each firm. The three industries are auto-ancillary, IT services and pharmaceuticals, and the respective firms in each are ANAND Group and Tata AutoComp, Infosys and Wipro, and Biocon and Dr. Reddy's Lab. By adopting perceptual measures, the auto ancillary industry is characterized as an environment which is low on both dynamism and complexity, IT services as one being high on dynamism but low on complexity, and the pharmaceutical industry as a highly complex and dynamic setting. A case study based method with replication logic is adopted to study the capability creation process in each of the six firms, and then abstractions are drawn on the sequence of managerial activities and salience of sub-processes for each of the environmental configurations. Over 114 interviews are conducted, and close to 500 artifacts from secondary sources are studied to arrive at the detailed cases and models. Each case is about 40 page long and is coded in-line with the empirical codes generate beforehand. Finally, the two models, the conceptual and the empirical, are contrasted to offer a refined set of propositions on capability creation. The various points of departure between the theoretic predictions and the empirical findings are explained in terms of managerial roles and firm-level sub-processes on how they shape the capability creation process and their contingency with the firm's external environment. The key insights derived from the exercise are as follows. Firstly, capability creation process can be decomposed into specific steps that a manager can influence. Secondly, the process of capability creation changes with the environment, as characterized by its munificence, dynamism, and complexity. Thirdly, there are certain sub-processes of capability creation that are agnostic of the firm's external environment. These include- creating a stretch, accessing distant environments, bundling the old with the new, and learning by doing. These elements are present in all the empirical models, across environmental configurations, albeit a change in sequence. The thesis proposes to make contributions to both the theory of strategic management research and strategy as a practice. As for the conceptual contributions, the first one is to further the micro foundations project by elucidating the process of capability creation, and bringing to fore the role of the manager, as aspects which the field deems as the current research gaps. Secondly, the research brings back the importance of firm's external environment in the discourse on capability creation, which has largely been around dynamism, and not so much on munificence and complexity. On the account of contribution to practice, the cases share several best practices for managing new product development and influencing innovation capabilities which are coming from first-hand insights from industry-leading firms. Further, the study offers actionable insights for practicing managers in emerging economies.