Chapter 3
Model Specification and Hypothesis
Theory Building & Hypothesis

Second Order Hypothesis and Theory Building

Adaptive Capability as a multidimensional construct is considered to

Linking Adaptive Capability, Organizational Slack, Speed of Response, Product Market Response and Performance

The necessity of resources for achieving organizational ambitions is well researched topic. The ambitions of organization should stem from organizational capability and it should be supported by relevant resources. In order to develop valuable market offerings; to make strategic changes, firms must have access to resource slack (Gatignon, Weitz and Bansal 1990). Slack resources enable organizational capabilities to act externally to exploit environmental opportunities than firms with poor resources (Cyert & March, 1963; Meyer, 1982; Chattopadhyay et al., 2001).

It is the degree to which resources can be leveraged into valuable outcomes by using them in conjunction with capabilities that defines the extent of firm performance (e.g. Dierickx and Cool, 1989; Porter, 1996). Capabilities are the organizational processes that transform available resources into valuable outputs (Vorhies and Yarbrough, 1998). Capabilities are based on the coordination and integration of skills, knowledge, and activities (Mo’ller and Anttila, 1987) and occur at multiple levels in the organization (Vorhies, 1998). Through combining available resources with marketing and other functional capabilities the organization is able to develop and execute competitive strategies (e.g. Day, 1994).
So we build our hypothesis stemming from the earlier research on Resources and Capabilities and suggest that Organizational Adaptive Capabilities and functional capabilities emerging as key capability complimented by Organizational Resources in the form of Slack and its sub components form could be a right capability and resources to achieve superior firm performance. We argue that in the event of turbulent environment and complex product market firms make use of its adaptive capability to identify the external opportunities to respond product and services by exploiting its resources Slack to achieve superior performance.

Slack Resources allow organizations to respond quickly to environmental complexities and strategic behavior of firms with lower slack resources. Firms with lower slack resources which suffer from resource constrain perhaps unable to respond quickly even though they wanted, and announced to respond. Though Firms’ Speed of response is
behavioral attitude, but it won’t demands resources. We gain support for this argument from following empirical research:

In the analysis of Influence of Top Management Team Heterogeneity on Firms’ Competitive Moves Hambrick et al, (1996) have found significant role of Organizational slack with Execution speed. Organizations with higher slack resources are prepared to respond faster to environmental crisis than organizations with limited resources (Meyer, 1982; Chen and Hambrick, 1995; Smith et al., 1991; Francisco J. et al. 2005; Chakravarthy, 1986; Cyert and March, 1963; Miles and Cameron, 1977). With respect to internal environment Organizational Slack should be a response factor that could enhances Speed of Response (Oktemgil, 1997).

Further, Organizational theorists suggest Slack Resources can be an agent for top management in initiating and executing strategic experimentation by introducing new products or through innovation in management style (Bourgeois, 1981; Thompson, 1967; Pfeffer & Salancik, 1978).

Empirical research has found evidence for Slack Resources as an internal response factor to achieve Product Market response activities such as Product Modification, Product Diversification, New Product Development, Knowledge Creation in New Product Development, Product exploration and exploitation. (Oktemgil, 1997; YC Chiu, YC Liaw, 2009; Richtner et al, 2006; Richtner et al, 2010; Alessandri , 2014; Voss, G.B. 2008).

From the discussion above with support from literature, we further build this theory by borrowing support from literature, the dynamic interaction of Functional adaptive Capabilities such as Technology, Marketing and Organizational could form adaptive Capability. Each of the functional adaptive capability after meeting the resource constrains requirements to act upon. In order to appropriate the capability accumulated, finally in the
nomological network we identify Speed of Response & Product Market Response (PMR) as an *Ex Post* Adaptive Capability (Francisco J. et al. 2005; Akgun et al, 2012) which further mediates with other functional adaptive Capabilities and Organizational Slack to achieve firm performance.

**H1:** *Adaptive Capability is mediated through Organizational Slack, Speed of Response and Product Market Response is positively related to firm Performance.*

---

**Figure 2.** Second Order Baseline Model.

**Linking Adaptive Capability, Organizational Slack and firm Performance**

The literature argues that Slack Resources are proxy measure to Adaptive Capability (Chakravarthy; 1986) and Adaptive Capability is indifference to Organizational Slack (Oktemgil, 1998) but we contradict with literature that both are contrast as increase in
Organizational Slack would decrease Adaptive Capability. Accumulation of Slack is the outcome of firm performance that would trigger complacency.

We assume that Product Market Response (PMR) and Speed of Response (SR) play a role of value appropriation removing them from the model would impact the relationship between Ex Ante Adaptive Capability and firm performance as these constructs are expected to play a value appropriator role, hence we expect the direct relationship between Organisational Slack and firm performance will be diluted to partial mediation.

In order to establish this value of these constructs and nomological network and clear the air on the relationship between Organizational Slack and firm performance we deviates from baseline model and estimating the nature of relationship between Adaptive Capability and Organizational slack and firm performance without Speed of Response (SR) and Product Market Response.

So we hypothesize,

\[ H2: \text{Adaptive Capability mediated through Organizational Slack is positively related to firm Performance without the presence of Speed of Response and Product Market Response.} \]

**Linking Product Market Complexity, Speed of response, Product Market Response and firm Performance**

As we discussed earlier, firm’s attainment of strategic fit with environment has systematic implication on performance (Venkatraman and Prescott; 1990). Further external environment will influence firms marketing activities (Davis et al.; 1991) in this regard we argue that environment can also influence other adaptive capabilities simultaneously which would further influence Product Market Response (PMR) eventually leads to firm performance. Product Market Complexity as an external factor likely to affect firm
performance through Speed of Response triggered by product market complexity and subsequently honing the Product Market Responsiveness leading to firm performance

**H3. Product Market Complexity mediated through Speed of Response and Product Market Response is positively related to firm performance.**

![First Order Baseline Model](image)

**Figure 3.** First Order Baseline Model.

**First order hypothesis and theory building**

*Non Market Strategy, Organizational Slack, Speed of Response*  *Product Market Response and firm Performance.*
Organizational slack is an important driver of Corporate Political Activity (Meznar & Nigh, 1995; Schuler, 1996; Schuler & Rehbein, 1997; Schuler et al., 2002). Meznar and Nigh (1995) established a positive relationship between resources and a proactive political strategy. Thus previous research on the area linking Slack and Nonmarket Strategy is clearly supports hypothesis linking Nonmarket Strategy with Organizational Slack and firm performance.

So we build this hypothesize as

**H1a: Non Market strategy is mediated through Organizational Slack, Speed of Response and Product Market response is positively related firm performance.**

**H1a1: Non Market strategy is mediated through Human Resource Slack (HRS, Speed of Response (SR) and Product Market Response (PMR) is positively related firm performance.**

**H1a2: Non Market strategy is mediated through Financial Slack (FS), Speed of Response (SR) and Product Market Response (PMR) is positively related firm performance.**

**H1a3: Non Market strategy is mediated through Customer Relationship Slack (CRS), Speed of Response (SR) and Product Market response (PMR) is positively related firm performance.**

**H1a4: Non Market strategy is mediated through Operational Slack (OS) Speed of Response (SR) and Product Market Response (PMR) is positively related firm performance.**

As discussed in the earlier hypothesis **H1a**, Non Market Strategy works in tandem with Product Market Response (PMR) its absence would make this linkages weak and all
benefits the firm generated by practicing Non Market Strategy (NMS) would be capitalized only when firm further respond with Product Market Modification and new product launch by making use of resource slack quickly. In order to understand the role played by these mediators, we further tested with new model by excluding Product Market Response (PMR) and Speed of Response (SR) in the framework. By exclusion, we can expect that the full mediation would be reduced to partial mediation and the magnitude of the relation would be diluted, so we hypothesize,

**H2a: Non Market strategy is partially mediated through Organizational Slack would impact negatively with firm performance.**

**H2a1: Non Market strategy is partially mediated through Human Resource Slack (HRS) would impact the magnitude of firm performance.**

**H2a2: Non Market strategy is partially mediated through Financial Slack (FS) would impact the magnitude of firm performance.**

**H2a3: Non Market strategy is partially mediated through Customer Relationship Slack (CRS) would impact the magnitude of firm performance.**

**H2a4: Non Market strategy is partially mediated through Operational Slack (OS) would impact the magnitude of firm performance.**

**Linking Marketing Adaptive Capability Organizational Slack, Speed of Response, Product Market Response and firm Performance.**

Marketing activities such as promotions, advertisement, customer satisfaction offerings demands Slack resources. Resource slack is positively related to marketing investments. Firm with ample resources are likely to be creative in terms of developing marketing strategies and activities which affects the firm’s market performance (Menon et al. 1999; Oktemgil, 1997). Greater is the slack resources, the greater the proactive marketing in a
recession (R Srinivasan et al, 2005). Resource slack and customer knowledge Development, level of Marketing/Customer orientation, customer service and satisfaction have positive effect (AW Joshi, S Sharma, 2004; Donaldson, 2012; Piercy 1985; Gummesson, 1998). Implementing Information Technology and Technology research is a costly affair which constrains development of information technology, slack may be an enabling factor for the adoption of DBM and other information technology applications which enables better customer interaction. Organizational slack is positively related to the marketing performance of information technology firms (Zhong, 2013).

So we hypothesize

\[ H1b: Market \text{ Adaptive \textit{ Capability}} (\text{MAC}) \text{ is mediated through \textit{Organizational \textit{ Slack}}, Speed of Response and Product Market response is positively related firm performance.} \]

\[ H1b1: Market \text{ Adaptive \textit{ Capability}} (\text{MAC}) \text{ is mediated through \textit{Human Resource \textit{ Slack}} (HRS, Speed of Response (SR) and Product Market Response (PMR) is positively related firm performance is positively related firm performance.} \]

\[ H1b2: Market \text{ Adaptive \textit{ Capability}} (\text{MAC}) \text{ is mediated through \textit{Financial \textit{ Slack}} (FS), Speed of Response (SR) and Product Market Response (PMR) is positively related firm performance}. \]

\[ H1b3: Market \text{ Adaptive \textit{ Capability}} (\text{MAC}) \text{ is mediated through \textit{Customer \textit{ Relationship \textit{ Slack}}} (CRS), Speed of Response (SR) and Product Market response (PMR) is positively related firm performance}. \]
Market Adaptive Capability (MAC) is mediated through Operational Slack (OS) Speed of Response (SR) and Product Market Response (PMR) is positively related firm performance.

As discussed in the hypothesis $H_{2b}$, Market Adaptive Capability (MAC) works in tandem with Product Market Response (PMR) its absence would make these linkages weak and all benefits the firm generated by learning and acquiring these capabilities to understand the customer and market would be capitalized only when the firm respond to market by launching new product and modify the existing products. So in the absence of Product Market Response (PMR) and Speed of Response (SR) the firm generates revenue through Ricardian rent rather than Schumpeterian rent. So in the absence of Product Market Response (PMR) and Speed of Response (SR) the marketing strategy would benefit only with respect to Ricardian rent perspective. By exclusion, we can expect that the full mediation would be reduced to partial mediation and the magnitude of the relation would be diluted, so we hypothesize,

$H_{2b}$: Market Adaptive Capability (MAC) partially is mediated through Organizational Slack would impact the magnitude of firm performance.

$H_{2b1}$: Market Adaptive Capability (MAC) is partially mediated through Human Resource Slack (HRS) would impact the magnitude of firm performance.

$H_{2b2}$: Market Adaptive Capability (MAC) partially is mediated through Financial Slack (FS) would impact the magnitude of firm performance.

$H_{2b3}$: Market Adaptive Capability (MAC) is partially mediated through Customer Relationship Slack (CRS) would impact the magnitude of firm performance.
H2b4: Market Adaptive Capability (MAC) is partially mediated through Operational Slack (OS) would impact the magnitude of firm performance.

**Linking Technology Adaptive Capability, Organizational Slack, Speed of Response, Product Market Response and firm Performance.**

Slack resources enhance firms’ ability to assess, adopt, and assimilate new technologies (Lee and Grewal (2004). There is higher unabsorbed slack in the initial stage of IT adoption, and there is higher absorbed slack in the run-in stage of IT adoption. In the run-in stage of IT adoption absorbed slack of service industry is higher than manufacturing industry. (C Yuanyuan, Q Zhongying, 2011). Use of multiple standards and platforms, compatibility, top management support, good governance and strategy, adequate human and financial resources, vendor support for integration and development tools are all significant factors for a fruitful SOA implementation (E MacLennan, 2014). Wang and Cheung (2004) also found their organizational slack measure to be positively related to the degree of e-commerce implementation after adoption. Potential slack (measured as access to external credit) to be a strong predictor of technology adoption in SMEs by contrast, available slack appeared not to be a significant factor in SME innovation adoption (J Franquesa - 2009). Implementing Information Technology and Technology research is a costly affair which constrains development of information technology, slack may be an enabling factor for the adoption of DBM and other information technology applications which enables better customer interaction (Piercy, 1985)

So we hypothesize

**H1c: Technology Adaptive Capability (TAC) is mediated through Organizational Slack, Speed of Response and Product Market Response is positively related firm performance.**
H1c1: Technology Adaptive Capability (TAC) is mediated through Human Resource Slack (HRS), Speed of Response (SR) and Product Market Response (PMR) is positively related firm performance is positively related firm performance.

H1c2: Technology Adaptive Capability (TAC) is mediated through Financial Slack (FS), Speed of Response (SR) and Product Market Response (PMR) is positively related firm performance.

H1c3: Technology Adaptive Capability (TAC) is mediated through Customer Relationship Slack (CRS), Speed of Response (SR) and Product Market response (PMR) is positively related firm performance.

H1c4: Technology Adaptive Capability (TAC) is mediated through Operational Slack (OS) Speed of Response (SR) and Product Market Response (PMR) is positively related firm performance.

As discussed in the hypothesis H1c, Technology Adaptive Capability (MAC) works in tandem with Product Market Response (PMR) its absence would make these linkages weak and all benefits the firm generated by learning and acquiring technical prowess would be meaningless when the firm fail to capitalize on by not making new products and modifying existing products quickly. By exclusion, we can expect that the full mediation would be reduced to partial mediation and the magnitude of the relation would be diluted, so we hypothesize,

H2c: Technology Adaptive Capability (TAC) partially is mediated through Organizational Slack is positively related firm performance.

H2c1: Technology Adaptive Capability (TAC) partially is mediated through Human Resource Slack (HRS) would impact the magnitude of firm performance.
H2c2: Technology Adaptive Capability (TAC) partially is mediated through Financial Slack (FS) would impact the magnitude of firm performance.

H2c3: Technology Adaptive Capability (TAC) is partially mediated through Customer Relationship Slack (CRS) would impact the magnitude of firm performance.

H2c4: Technology Adaptive Capability (TAC) is partially mediated through Operational Slack (OS) would impact the magnitude of firm performance.

Organizational Adaptive Capability, Organizational Slack, Speed of Response, Product Market Response and firm Performance.

Use of multiple standards and platforms, compatibility, top management support, good governance and strategy, adequate human and financial resources, vendor support for integration and development tools are all significant factors for a fruitful SOA implementation (E MacLennan, 2014).

Organizational adaptive capability such as such as culture, management support, and information flow is not constrained by cost as it is more to do with behavior. So we hypothesize,

**H1d: Organizational Adaptive Capability (OAC) is mediated through Organizational Slack, Speed of Response and Product Market response is positively related firm performance.**

**H1d1: Organizational Adaptive Capability (OAC) is mediated through Human Resource Slack (HRS, Speed of Response (SR) and Product Market Response (PMR) is positively related firm performance is positively related firm performance.**

**H1d2: Organizational Adaptive Capability (OAC) is mediated through Financial Slack (FS), Speed of Response (SR) and Product Market Response (PMR) is positively related firm performance.**
.H1d3: Organizational Adaptive Capability (OAC) is mediated through Customer Relationship Slack (CRS), Speed of Response (SR) and Product Market response (PMR) is positively related firm performance.

H1d4: Organizational Adaptive Capability (OAC) is mediated through Operational Slack (OS) Speed of Response (SR) and Product Market Response (PMR) is positively related firm performance

As discussed in the hypothesis H1d, Technology Adaptive Capability (MAC) works in tandem with Product Market Response (PMR) its absence would make these linkages weak and all benefits the firm generated by learning from customer, employees by allowing them to speak out should be converted in to new products or modification of existing products quickly by making use of Resource slack. By exclusion, we can expect that the full mediation would be reduced to partial mediation and the magnitude of the relation would be diluted, so we hypothesize,

H2d: Organizational Adaptive Capability (OAC) is partially mediated through Organizational Slack is positively related firm performance.

H2d1: Organizational Adaptive Capability (OAC) is partially mediated through Human Resource Slack (HRS) would impact the magnitude of firm performance.

H2d2: Organizational Adaptive Capability (OAC) is partially mediated through Financial Slack (FS) would impact the magnitude of firm performance.

H2d3: Organizational Adaptive Capability (OAC) is partially mediated through Customer Relationship Slack (CRS) would impact the magnitude of firm performance.

H2d4: Organizational Adaptive Capability (OAC) is partially mediated through Operational Slack (OS) would impact the magnitude of firm performance.

35