## DOCTORAL PROGRAMME

DISRUPTIVE PUBLIC POLICY: CHALLENGES IN IMPLEMENTATION

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## DOCTORAL PROGRAMME

## DISRUPTIVE PUBLIC POLICY: CHALLENGES IN IMPLEMENTATION

By

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# **Abstract**

More often, public sector innovation refers to a limited change in Government processes and technologies that happens over some time, almost imperceptibly. There are many barriers to a bureaucratic organisation adopting innovations. However, of late, there is an increased pressure on public sector organisations to become more innovative, even embracing disruptive innovations, to overcome the shortage of resources and expand the reach of quality public services (Eggers et al. 2015). There are no standard models for adopting disruptive innovation in Government, and the learnings from the private sector may not always be adequate (Christensen et al. 2006, Sahni, Wessel, and Christensen 2013).

Disruptive innovation is a new technology, process, procedure or idea that has specific features. Functional limitations constrain the usage of disruptive innovation. It is often demanded only in a small segment of consumers, appeals to lower-end customers who need an inexpensive, simple, quick solution to their problems. When the innovation is new, there may not be any existing market due to its novelty; soon, the innovation transforms itself into the mainstream over time. Successful mainstream organisations do not promote a disruptive innovation due to many factors, but most importantly, due to a lack of requisite organisational capabilities. The existing organisational capabilities, namely its resources, processes, and values (collectively called RPV), are not compatible with the innovation. A fully autonomous unit or start-up is likely to pilot a disruptive innovation successfully (Christensen et al. 2006, Christensen and Overdorf 2000, Christensen, Raynor, and McDonald 2015).

Our study examines the challenges a public sector organisation has to overcome while adopting a 'Disruptive Public Policy', a public policy that includes a mix of disruptive or radical innovations and sustaining or incremental innovations. Our interest is to understand the feasibility of translating research on private sector innovation to public sector management, as there is a debate on the former's suitability in a public sector context (Thomas 2006, Nutt and Backoff 1993, Allison Jr. 1996, Boyne 2002). Our study uses the case of the agricultural marketing policy of the Karnataka state, unveiled in 2013 (Government of Karnataka 2013). The disruptive innovations under consideration are Quality Assay, Online Payment to farmers and Warehouse-based Sales. We used both primary survey data and administrative data in this study.

Successful implementation of Disruptive Public Policy depends on the acceptance of disruptive innovations by the stakeholders. Stakeholders from different backgrounds and with conflicting agenda will be under the influence of disparate social forces. Therefore, stakeholder acceptance depends not just on an objective evaluation of the innovation but also on their socioeconomic context. We model the implementation challenges of a Disruptive Public Policy to understand the choice of actions available to the policy manager facing opposition from stakeholders. We include the three disruptive innovations mentioned above and two social factors - Power and Complexity in the model. Understanding the equilibrium result of the forces acting on the stakeholder will enable the policy manager to make the right decisions in implementation. We have used the modelling technique of Analytical Network Processing (ANP) for reducing the dimensionality of the implementation problem situation. The main stakeholders in this context are farmers, traders and commission agents. In the steady-state, commission agents and traders resist the innovations more than farmers, which suggests the policy is not antagonistic to farmers. The advantage of social factors provides ammunition to the stakeholder opposition. Warehouse-based Sales was the least resisted innovation. Specific features of each innovation have also contributed differently to their acceptance. The results are consistent even when the distribution of priorities changes by 10%.

In our second study, we further explored the stakeholder perceptions and cooperation for adopting the policy. Involving stakeholders in the implementation process is critical for any public policy success, especially when it disrupts stakeholders' activities. A lack of awareness of the policy and ambiguity distorts the perceptions of the stakeholders. We observed that stakeholders exhibited different levels of awareness. Further, we tested the hypothesis that ambiguity increases support and find a significant positive association between support and ambiguity. We also examined the role ambiguity plays in shaping the primary stakeholders' support for the policy, focusing on the mediating role played by the ambiguity. Our results suggest ambiguity may or may not mediate the support of causal variables. We developed a decision matrix called Ambiguity-Support Mediation (ASM) matrix for comprehending various action possibilities. In the case of causal variables that directly support without the mediation of ambiguity, the policy manager can make use of them for creating support structures. When causal variables are significant for ambiguity but are related to support, they can be used to mitigate ambiguity.

When a causal variable has significant direct and indirect (through the mediator) effects, mitigating ambiguity results in loss of indirect effect, but the direct effect remains. When a causal variable has only a significant indirect effect, mitigating ambiguity will result in a total loss of support. In the absence of direct support from any other causal variable, the policy manager needs to strategise his actions in the latter cases.

In the third study, we attempted to analyse the implementation of disruptive policy reforms using the Structure-Conduct-Performance (SCP) framework. The evaluation is limited to those components of the public policy implemented so far, like the ICT driven UMP and not the other three disruptive innovations. Our database is the lot wise trading data of one commodity (red chillies) from one market (Byadagi APMC) for 2010, 2011 and 2015. India is the largest producer of red chillies in the world, and exports are up to \$3 billion per year. Byadagi is an important hub of the red chilli economy. The market is very competitive and has evolved over the decades.

We first estimated the entry and exit of market participants, the market power and the market concentration measures and observed their changes over the years. We then attempted to establish a relationship between structure and conduct, using strategy measures like the number of bids and commodity lot price. We observed that a commodity lot fetched a higher price when the number of traders increased but decreased with the number of commission agents. Prices also have increased with the increased market concentration of commission agents but fell with increased traders' market power.

The implementation has been successful in many aspects; there has been no increase in the entry and exit barriers despite new licensing norms; the traders' market power has come down, and the commission agents' market concentration has gone up.