

An introduction to management

Analytics support management decision making.

But is it the data or the people that count?

Case evaluated: *Enhanced policy implementation for gender equality in education*

Intervention context:

1. What is the situation or problem context?

Stated as increasing the enrolment ratio of girl students (Pudhumai Penn, 2022) with additional detail of the scheme identifying 3 x objectives (p46).

- Increase gross enrolment ratio
- Reduce early marriage
- Bridge gender gap through bringing inclusivity

Challenge is the effective implementation of financial incentive scheme. This requires **cooperation**, whilst the focus blocks development programme encourages **competition**.

2. What people are involved and who do the analysts engage with during the intervention?

3 different departments:

- Social Welfare and Women Empowerment Department
- School Education Department
- Higher Education Department

Nambiyur block is also one of 50 blocks in the Focus Blocks Development Programme in which competition between the blocks is encouraged.

3. What sort of data is available?

Actual enrolment figures, which show variation across districts.

“The cooperation between the three departments is operationalised first through the convergence of data from the Educational Management Information System (EMIS) database of the School Education Department, payment database of the Pudhumai Penn portal and the University Management Information System (UMIS) database of the Higher Education Department.” p48

Translation from business problem to analytics problem:

4. What is the problem that is being addressed?

Need to motivate and implement cooperation between three different government departments.

5. What sequence of methods or tools is used?

Game theory motivated the cooperation and was followed by tech-based integration of datasets that supported implementation.

6. What is the main analytic technique?

Game theory motivates data sharing as the three departments cooperate to support the block within the competitive environment of the Focus Blocks Development Programme.

Delivery and evaluation:

7. Can you describe the rational, systematic approach taken?

The results section describes how the merging to databases enabled targeted, direct telephone contact with eligible students.

The database also delivers administrative benefits around eligibility verification, linking bank accounts with unique resident identity numbers and faster appeals resolution.

8. What type of output is produced and what does it enable the users to do?

The first output is figure one – the game theoretical illustration of the benefits of cooperation.

The second is the consolidated dataset – the means of enabling targeted phone calls.

The third is yet to come – achieving agreement to and implementation of a proposal to integrate the three databases at a state level.

9. How well is the output received?

It is interesting that this is not directly addressed, perhaps it was felt that the figures spoke for themselves – an “improvement in the enrolment [...] from 20% to 88%” (p48).

10. How successful do you think the project was?

Figure 2 shows that the intervention resulted in an increase in enrolled beneficiaries. Whilst this is still not 100%, it is an increase of 68%.

At page 48 it is recorded that the project was one of few selected from the 38 districts of Tamil Nadu for presentation at a Best Practices Seminar.

11. If you were the analyst, what might you do next or how might you improve your output?

Whilst the article states that “the Indian State of Tamil Nadu introduced the Pudhumai Penn scheme... focusing on increasing the enrolment ratio of girl students from the government schools” (p46) there are two other objectives stated. The longer-term test of the policy is whether it can be demonstrated as playing a role in the second and third objectives – to reduce early marriage and bridge the gender gap to bring inclusivity to all levels of education.

It might also be worth investigating what the reasons might be for the remaining 12% gap. Was any data gathered regarding why this remaining 12% of eligible students declined the opportunity to continue their studies?