

Outsourced Metering & Collections Services

A framework to consider benefits & issues



Options for distribution reform

A different path is needed

Without improving the power distribution sector, upstream investments will not lead to universal access to 24x7 power supply.

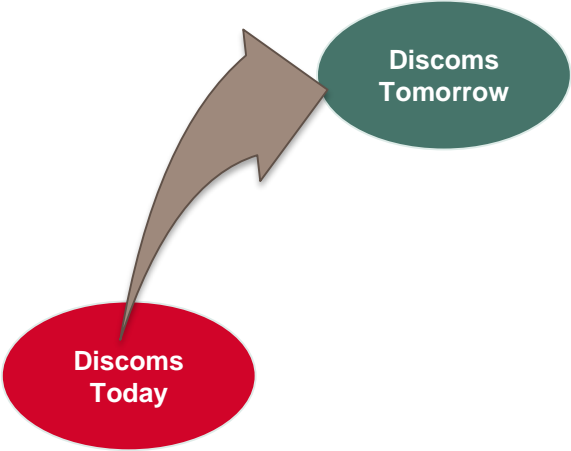
Many years of investments funded by Government of India have failed to improve both financial and physical performance. Centrally driven policy action is well intended but is rarely based on ground realities.

The financial state of the distribution sector in Rajasthan is among the worst in India, With a new government in place, there is clear political will to reform power distribution. It clearly recognises the role of 24x7 power supply in inclusive economic development. Two options, viz. urban licensees and urban franchisees are being considered. An evaluation is presented here.

Urgent distribution sector reforms are critical.

Ideas on urban PPP though attractive, will make the remainder Discoms unviable.

	Input Franchisee	Urban Licensee
Customer impact	In area; Positive Out of area: No change	In area; Positive Out of area: No change
Impact on discom revenue	In area: Reduces slightly (based on input prices bid); assured and regular. Out of area: No change	In area: No revenue Out of area: No change
Impact on AT&C loss	In area: Reduced Out of area: No change	In area: Reduced Out of area: No change
Impact on financial losses	Losses same but increase as % of revenue	Losses much higher as % of revenue
Demography of Discom	Worse – gains from high revenue areas lost.	Much worse – revenue and gains lost

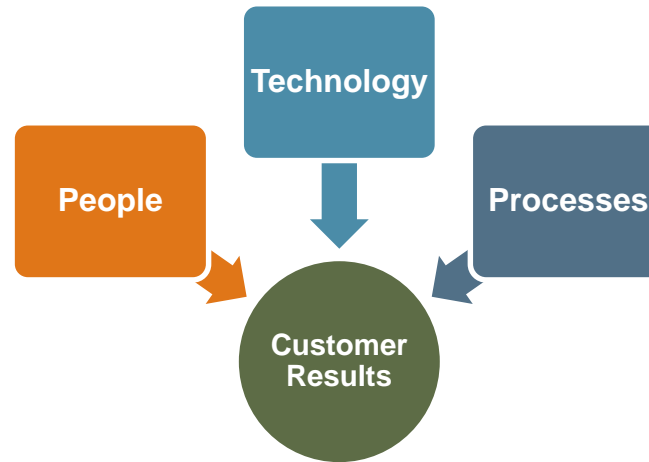


The root cause of problems

Without addressing people & process, Discoms cannot improve

An analysis of the people, processes and technology in use by the Discoms shows that the root cause of their financial difficulty is people & processes. All the technology needed by a Discom is available indigenously. People & processes impact not only selection of the right technology but also its effective deployment and use.

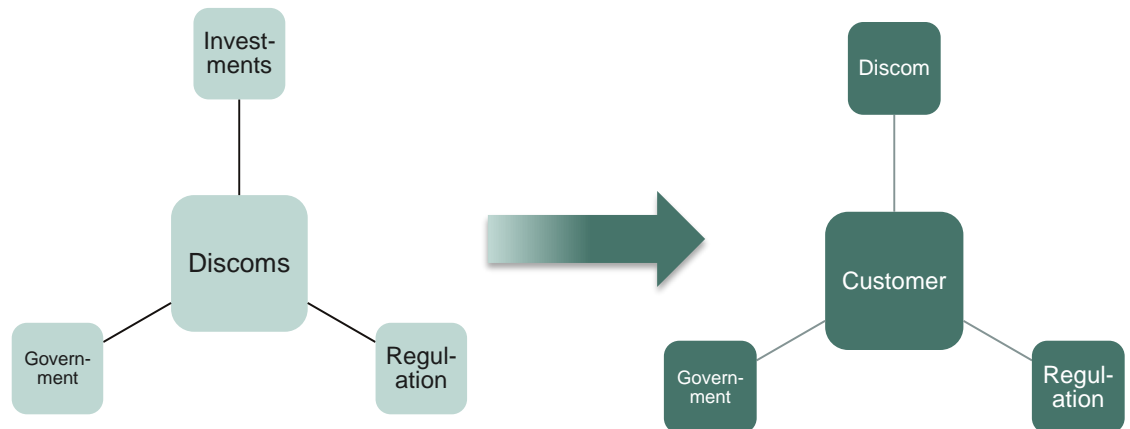
In any organisation, people and process problems are relatively hard to solve and take time. Consistent and good leadership however, can drive the necessary changes and excellent results can be obtained.



The surest long term solution is to focus on customer service. This can only be done by improving people & processes. Investments in technology alone will continue to fail.

Over the last many years attempts have been made to improve the performance of Discoms, the situation however, has not improved. The key reason for this has been that all improvement actions have been Discom focused and have ignored the interests of the Discom's customers.

Any commercial operation needs to be fundamentally focused on delivering good customer results to become and remain profitable. A customer centric approach to Discom improvement will create a lot of goodwill and trust with the public at large.



Outsourced customer impact services

A different path – better long term results

The present work culture within Discoms is a serious impediment to excellence in customer service. Excellence in customer service demands the organisation and the people within it to place the customers' fair interests before everything else. Such an attitude change within the public sector is hard to achieve. Involving the private sector, a different PPP approach, to bring in this culture can be a viable option.

There are only three core areas where Discoms have direct contact with customers viz:

1. Metering, billing & collection including billing disputes
2. Release and activation of new connections
3. Fault repair and restoration of supply after breakdowns

While the first two have a big and direct impact on the revenue of the Discom, the third only has an indirect impact on revenue.

The different path proposed here tackles the first two areas giving a positive effect both to customers and the Discom.

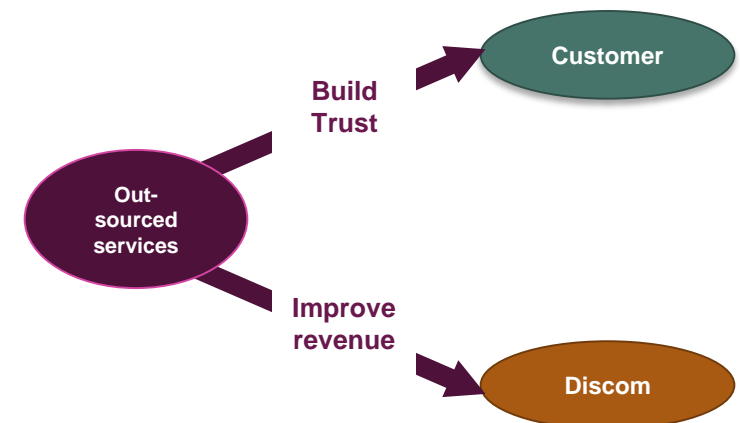
Outsourcing all customer facing services will not only increase customer trust but also improve the Discom's financial health.

Done on BOOT basis, it will also be politically easy.

Outsourcing customer services should keep two key goals paramount – building trust for the customer and improving revenue for the Discom. Any and all services that help achieve these goals should be considered for outsourcing.

Metering services, including the procurement, installation and maintenance of meters; reading and billing services including the speedy resolution of billing disputes; identification and prosecution of energy theft; processing and release of new connections are all services that can effectively contribute to building customer trust and improving the Discom's revenue.

These services should be considered for outsourcing to private players. Since the service provider will make big capital investments, a Build, Own, Operate and Transfer (BOOT) model can be adopted.



Outsourcing and technology

Better technology choices

Present processes for the selection and procurement of products, particularly technology intensive products such as meters etc. are based on Discoms specifying exactly what is required and then buying based on the L1 bid against a tender. The Discom's experience in specifying for the tender on the one hand and bidders' propensity to confirm everything specified without a application of mind both distort the end result. Ultimately the Discom buys the cheapest product not the best quality or most reliable or with the lowest cost of ownership over its lifetime.

Buying quality and reliability in the procurement on IT systems and / or services is even harder. The 'specification' itself tends to be inadequate because success in these areas depends on the organisation 'pull' which is impossible to document without considerable expense.

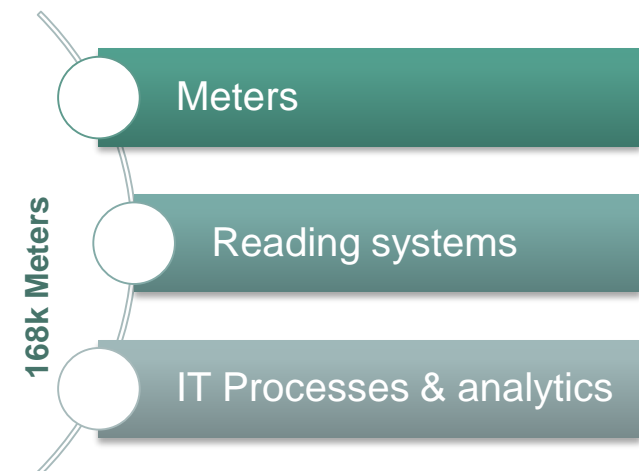
The net result is that technology deployed by Discoms is poor quality, tends to have a short life span and technical capabilities are never fully utilised.

Equipment, IT systems and processes are all provided by the outsourcing contractor. Since the contractor is responsible for maintenance and replacement of defective equipment for a period of 10 years, he cannot compromise on quality or reliability.

Metering technology appropriate to the revenue levels of the customer / metering application will be deployed. Remote meter reading for high value customers will allow a daily oversight of those customers. Prepayment meters for intermediate revenue levels have a proven business case. High reliability credit meters read electronically will ensure correct readings.

All operating processes will be driven by IT systems to ensure complete transparency. Revenue completeness and protection analytics will help identify and curtail theft.

Service outsourcing will bring to the Discom better technology. This technology will be deployed quicker and will be fully used.



Outsourcing and customer experience

Building customer trust

Today, the electricity supply companies think of their “customers” as “consumers”. All Discom processes are designed for the convenience of the Discom and not that of the customer. Discom processes therefore tend to be complex and are definitely not known to the customer. Even though a customer charter is published, Discoms routinely fail to meet it and the customer, fearing retribution, rarely has the courage to complain.

The customer experience in routine interaction with the Discom is a poor one. Opaque processes, delays, frequent visits, discourteous responses etc. all contribute to severe lack of trust.

Most customers do not understand the relationship between their use of energy and the bill they receive. Events designed for customer education and on-line help to better understand this link will improve trust. More comprehensible information on customer bills will also help.

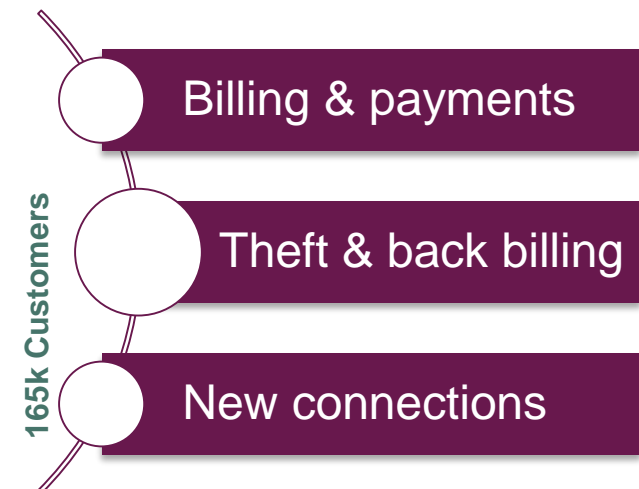
An accurate, timely and hassle free customer service will reduce corruption and increase customer trust.

Greater customer engagement will both reinforce the trust and improve the service.

All customer contact will be through a central customer contact center. Customers may reach this center by post, email, telephone, SMS etc. for any need relating to billing and new connections. This service will be available at times of customer convenience.

Billing queries can be resolved within a day, back-billing and arrears settlements and release of new domestic connections can all be done within a week. Customers who doubt their meters can get their meters tested within two days. Such speedy processes will eliminate the hassle and the opportunities for corruption.

Cases of energy theft, once identified need to be speedily processed to settlement or prosecution. The fear of action must be used as a strong deterrent.



Outsourcing and loss reduction

Solving the core problem

Discoms today have no effective means for combining the data from energy flows within the network and the energy flow to customers. Where network metering is deployed, incomplete metering and process gaps in data collection make that technology useless.

Discoms also do not have good quality customer databases and very few have assigned customers to various branches of their network. The few that have, find it impossible to keep that data up-to-date.

Despite having deployed meters with the capability of electronic reading, >90% of the readings are eyeball reads, prone to errors. Without electronic reads it is not possible to get even basic information about meter tamper.

All the above factors make it impossible to get systematic information about theft.

Revenue completeness, a new dimension in revenue protection, is a system designed to effectively combine information from network energy flows with energy flows from revenue metering. This system provides information about all sources of revenue leakage, by area and thus allows effective action.

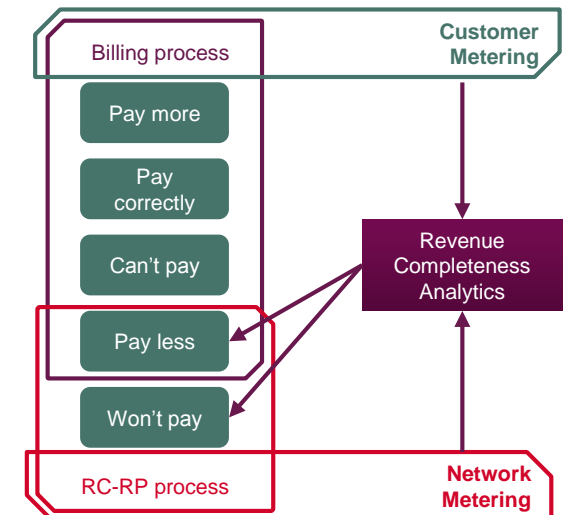
Using an experience based analytics engine, it is possible to focus the utility's revenue protection field force to the extent of its capacity to maximise revenue realisation.

Customers paying a fair charge to the Discom is the goal of a customer centric service. It must not get paid more, nor must it be harsh on those customers who cannot pay because of they do not have the money. At the same time, those who pay less, either because of the Discom's errors or because they steal energy and those that steal and just do not want to pay for energy, should be made to pay.

Loss reduction first requires actionable information produced by good analytics.

Speedy action with full traceability must follow from such information.

Acting on theft itself is a big deterrent.



Outsourcing economics

Real cost savings are possible

A preliminary feasibility estimate was done to assess the core idea of BOOT outsourcing. This estimate is based on public information about Udaipur City and knowledge within Secure.

Our estimates of the Discom's current capital costs (including a 12% cost of funds) are higher even though the Discom purchases meters at a cheaper price. This is because the average life of the procured meters is ~4 years. Thus, over a 10 year period 2.5 meters will be used per customer. The Discom does not have much by way of network metering.

Our estimates of the Discom's operating costs are based on an estimate of the number of people deployed for equivalent operations in Udaipur and the average salary levels which are in the public domain. Some billing related work is also contracted out and estimates of these costs are based on market pricing / tender pricing information for similar services.

ALL THESE ESTIMATES SHOULD BE VALIDATED BEFORE MAKING DECISIONS.

Compared to present Discom costs, outsourcing seems cheaper by ~35%.

The economic case is strengthened by the major qualitative gains for the customer and the Discom.

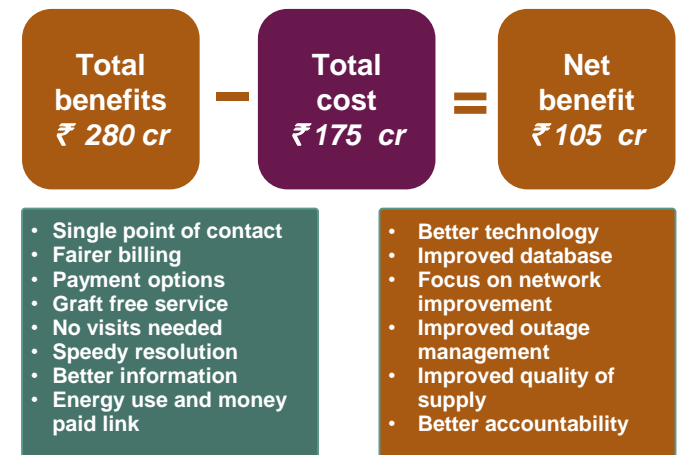
PLEASE VALIDATE

A preliminary feasibility estimate shows that Discom's costs today for Udaipur City are higher by about 35%. This is because:

- better quality meters which will last in circuit for ~15 years will be used
- IT supported services give higher productivity

A very conservative estimate of revenue improvement of 2.5% per year has been considered. This number is the collective judgment (without any due diligence) of the team at Secure.

In addition to the quantifiable cost savings, there are a number of unquantifiable but tangible benefits that will be delivered by the outsourced service.



Outsourcing challenges – buying the service

Processes for procurement need careful thought

Present practices for procurement used by the Discom (QR, two-part tender etc.) are just not suitable for procuring a service as extensive as is proposed here.

It must also be recognised that any procurement process will be opposed vigorously by all affected parties.

Nevertheless, an unimpeachable process, acceptable under all public sector procurement norms should be followed.

Procurement of this basket of services by the usual process of public sector / Discom buying is difficult.

Choose a procurement methodology suited for this purpose and select only good contractors.

This BOOT proposal needs some careful assessment particularly in making it a practically viable option.

There are a number of service procurement models used by governments in developed countries that are designed to procure the right service quality and capability. Generally these processes are designed with probity in mind and are able to build competitive pressure. Where technology is central to such service (in our example, it is) different models are used.

The procurement process needs to be designed to suit the nature of the procurement and must be operated with full probity.

Outsourcing challenges – the transition

Getting off to a good start

Transition from Discom's operation to the outsourced service is a critical challenge. Not only must meter reading, billing etc. continue as normal but also the contractor needs to take on these responsibilities.

The transition of an area from Discom to operation to outsourcing contractor must be carefully handled.

The transition plan needs to be jointly owned by the Discom and the contractor.

A transition plan for the outsourcing contractor should be jointly drawn up and this plan should derive strength from the contract.

To achieve minimal customer disturbance, it is best to commence the outsourced service, area by area. As a customer is under new metering, his service also moves. This will allow all issues from legacy metering to remain with the Discom and all new issues to come to the outsourced service.

The transition plan must include a joint public relations campaign to inform customers of the impending change.

Outsourcing challenges – running the service

Delivering results

In operating the outsourcing service there will be a number of touch points between the contractor and the Discom. This contact will be on a daily basis and will relate to time and revenue critical issues. Without strong process management on either side, these touch points can become an impediment to efficient customer service.

One big challenge is trusting the contractor with Discom funds and ensuring that the entire trail of financial transactions past the test of internal financial controls on the one hand and government audits on the other.

Another big challenge is to ensure that the outsourcing contractor does not indulge in graft and customers actually experience the promised service levels.

Outsourcing is a long term option and only simple and workable contracts can deliver the desired service quality results.

Operating procedures covering the process touch-points and agreed service levels between both parties will be essential to ensure delivery of the expected results. Such operating procedures also need to derive strength from the outsourcing contract.

Complete transparency in financial dealings with end-to-end reconciliations between the two parties will be essential. Appropriate banking facilities that allow the contractor to make only credit transactions will also be needed.

The contractor must operate to strict codes of conduct for its staff and all breaches must be enforced. Any revenue leakage from graft, once established, must be compensated by the contractor.

