Case Study: After Sales Service Costing

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**After Sales Costing:** SELCO’s After-Sales Costing analysis was an important strategic exercise undergone to evaluate real cost of solar PV system servicing. Since SELCO inherently bundled energy sales and services, this analytical tool allowed the company to evaluate the sources of cost in its service business and compare service efficiency across branch unit profiles. The analysis remains fundamental for solar, and energy companies at large, to design and offer a sustainable service model. More broadly, the financial framework presented here remains a valuable and important tool for operational structuring, financial accounting data harnessing, strategic growth decisions, and correct pricing or cost coverage of the after-sales service.

**Identification**

-The analysis was proposed by the After-Sales Service team, to verify how accurately previous internal cost estimates captured the full cost of service. The analysis took several months of research and discussion of key employees involved in service accounting, managing and operations.

**Problem Statement**

The costing exercise was deemed an important internal process, of use to the company and energy service ventures at any stage of growth or maturity.

**Service Cost Design**

Comprehensive analysis of after-sales services required capturing the following data components:

- Cost of service with/out material cost; and including overhead costs of head office
- Contribution to cost of service (operational and overhead expenses; technical and non-technical roles)
- Average costing of materials (subject to products or technology offered)
- Branch unit trends: average number of services completed by technician per month, average installations by technician per month, average technician salaries, office administration costs per service, technician travel.

SELCO looks at after-sales servicing holistically, as a marketing opportunity to better know the client and her needs, attract new customers and build its brand. After-sales service has proven to be key to maintain trust of financial institutions and partners, and create a quality energy Service Company. In turn, service costing reflects the organizational structure and resources that go into servicing. With the growth and development of SELCO Solar, it has become important for the company important to differentiate sales and after-sales servicing to remain committed to its mission of service and long-term customer relationships; the after-sales service costing analysis directly supported this effort. Over time, the service structure grew with the maintenance and repair needs of its growing client base, and its ranks include senior-most technicians that harness experience and learning, and prioritize service and complaints.

This accounting exercise assumed a unit (branch, team, or similar vertical) & head office; as well as a Customer Service Department or team, and a warehouse; although it remains flexible to any energy company’s supply chain and operations structure. The analysis first identified three representative units of different profiles (size, location and performance) which captured the after-sales experience across the company’s varied units.

The service cost components were identified as operational, overheads and material cost; although material cost was analyzed separately because it remained highly variable depending to the specific product being serviced and the range of maintenance, replacement or repairing. Within each cost component SELCO outlined specific categories of cost, such as labor, travel, wage incentives, transport and warehouse; monitoring, management and head office costs; products and individual repair parts, respectively.

With general data of profit/loss statement, installations, services and salaries, and the cost of materials; the analysis moved to bridge gaps in data. Where service information remained partially manual, partially automated, or sales and service costs were bundled, the team compensated by allocating an estimate percentage to service based on observation and discussion across the company.

The different types of assumptions outlined below allowed SELCO to allocate expenses to among service and sales; however some energy companies may have outsourced servicing, and thus the allocation and accounting of service may be simpler.

Thus, the after-sales service costing utilized both top/down (per unit cost of service) and bottom-up approaches (range of component costs to compose unit cost of service). This combined method created more accurate, comprehensive results, and accounted for gaps in service expenses information in the company’s accounting.
The SELCO team also verified these assumptions by choosing a month of accounts and comparing the realized service and sales expenses. The analysis then moved to calculate the average cost of service across the three selected branches units; average material cost for each product servicing; highest contributions to cost of service in real terms and as a percentage of service; as well as branch units trends.

The key benefit of doing this analysis it to create a holistic understanding of service components and service price and costs. More broadly, financial management, and the tracking of costs across the solar enterprise allows it to correctly price its products and services, and to understand where the business may require higher efficiency or restructuring. This analysis can be done if the cost of technicians is increasing, or to understand the service cost consequence of an inflationary component of service; or as a benchmark analysis every year or several years, to update prices and costs.

Limitations:
Allocation rates are defined through study observations & opinions. Difficult to obtain objective rates – can be improved upon thorough observation.
Lack of precision: calculations may vary on unit-by-unit, case-by-case basis, making it difficult to give precise calculations.

Strengths:
Variables are defined, can be changed to suit calculation purposes, and adapt to company structure.
Identifies highest cost components
Set ‘organization benchmark’ and compare cost of service from data from various units to benchmark, to compare unit efficiency, identify problems, and monitor improvements.
Figure 2. Two vertical, complementary structures: Service (in green) and Sales (in blue)