Winning the Solar Soft Costs Battle With the Right Tool for the Job

Solar Installers Can Improve Productivity and Profitability Using An End-to-End Solution Specifically Optimized for Their Businesses
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As public awareness of the benefits of clean energy grows and the economics of solar continue to improve—the average payback period for a residential installation is now between 6-8 years—the demand for solar energy installations is soaring. With an average annual growth rate of over 50% over the last decade and the number of solar installations projected to grow from 2 million in 2019 to 4 million by 2023, US solar installers are poised for a period of unparalleled opportunity, growth and industry competition, according to the Solar Energy Industries Association.

With hardware costs (panels, inverters, racking) continuing their rapid decline even as efficiency improves, the primary challenge for installers now is figuring out how to reduce the myriad “soft costs” of installation that have not fallen nearly as fast. Defined as the non-hardware costs associated with going solar, soft costs include permitting, financing and installation services, as well as the expenses solar companies incur to acquire new customers, pay suppliers and cover their bottom lines. These solar soft costs account for as much as 64% of the total cost of a new solar system, according to the Department of Energy (DOE), and make up the largest component of any installation.

Blu Banyan has developed SolarSuccess, a NetSuite application for residential and commercial solar installers that helps them address these costs.

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This white paper explores the key impacts that soft costs have on solar installation businesses and shows how an end-to-end solution from Blu Banyan and NetSuite provides reliable, real-time visibility over acquisition costs, cash flow, per project profitability, sub-contractor monitoring, milestone payments and other functions key to a solar installer’s success.

Huge Growth Potential + High Soft Costs
The amount of solar energy connected to the electric grid has increased more than 20-fold since 2008, as millions of Americans choose the economic benefits of clean technology to power their lives. “Technology development, commercialization and manufacturing scaling have contributed significantly to rapid reductions in solar hardware costs,” the DOE points out.

Reducing installation soft costs has proven much more difficult, in part because of a fragmented regulatory environment. In the U.S., there are 18,000 jurisdictions and 3,000 utilities with different rules and regulations for how to go solar, according to the DOE, which says that “the same solar equipment may vary widely in its final installation price due to process and market variations across jurisdictions, creating barriers to rapid industry growth.”

It’s easy to see why reducing soft costs is the number one priority for most solar installers. And while this goal sounds straightforward enough in theory, the problem is that soft costs actually come from many different sources including:

- Incompatible software programs
- Data entry errors
- Inventory mismanagement
- Procurement issues
- Inefficient labor utilization
- Project management fumbles
- Changing customer acquisition costs
- Missed milestone payments
- Unexpected “adder” costs
- Delayed and erroneous invoicing
- Inconsistent and late reconciliations
- Shifting tariff rules

When a solar installer runs its business using multiple incompatible applications that don’t “talk” to each other—and when each area of the business has its own specialized software programs—the errors and soft costs can add up pretty quickly. Conflicting, incomplete and out-of-date information flows between departments, for example, can impede management’s ability to respond in a timely and informed way to new challenges and opportunities.

Why Widely-Used Programs Can’t Effectively Reduce Soft Costs
To scale profitably, most installers find that popular yet incompatible “point” applications like QuickBooks (accounting) and Salesforce.com (CRM) or Sighten (proposals) all eventually have to be replaced—at ever-greater financial and disruption costs—by integrated management solutions that support all the core company functions like:

- Accounting
- Finance
- Project management
- Inventory and procurement
- Sales and marketing
- Human resources

Without reliable, real-time data providing visibility across all company operations (i.e. a “single source of truth”), scaling productively and profitably is next to impossible.

The problem is that many installers continue to use a mix of incompatible entry-level or specialty programs to run their businesses, even as they scale up to meet the growing demand for solar installations. Because QuickBooks doesn’t “talk” to Salesforce.com—and because Salesforce.com isn’t integrated with job-costing tools—an installer’s procurement, accounting and sales teams are literally working from different playbooks. This siloed approach simply doesn’t cut it in today’s flat, collaborative world, where both internal and external partners need common technology platforms.

Going a step further, that visibility must be based on real-time data that’s both accurate and trustworthy. Using an end-to-end, fully-integrated software suite that was literally built for the solar industry, installers can effectively meet the demands of growing customer bases while also keeping soft costs to a minimum—the core capability to ensure profitability and growth for the installer.

“When you’re working with incompatible, incomplete or out-of-date data, it can turn into a nightmare pretty quickly. To improve efficiency, productivity and profitability, solar installers must have reliable visibility into their entire end-to-end businesses.”

Jan Rippingale, CEO, Blu Banyan

Making the Right Connections

The leading cloud-based business management solution, NetSuite integrates directly with Blu Banyan’s premier end-to-end solar solution to give installers a software stack that’s specifically optimized for their needs. A NetSuite application optimized for residential and commercial solar installers of any size, SolarSuccess helps installers to successfully leverage the rapid decline in hardware costs over the last decade with soft-cost reduction to improve organizational efficiency.
Used by companies as diverse as Sunpro Solar, Altair Solar, West Coast Solar and Titan Solar, SolarSuccess provides:

- A single data source across company operations
- Unified accounting, project management, CRM/sales and inventory management
- Real-time insight into project status, costs and profitability
- Real-time inventory availability, pricing and purchasing from distributors
- Visual timelines and project milestones that trigger accounting events
- Rich team chat to optimize internal company communications
- Synchronization of project bills of materials (BOM) on sales orders
- Project-specific document management with revisions
- Solar-specific financial templates
- Solar-specific key performance indicators (KPIs), dashboards and alerts

With SolarSuccess, all aspects of an installer’s business—sales pipeline management, CRM, accounting, purchasing, installation project management (including project costing and profitability), inventory and warehouse management, customer invoicing, universal financier connectivity, and business intelligence—share data from a single source. The solution provides real-time end-to-end visibility of the key functions necessary to a solar installer’s success.

“When you’re aggregating a group of point applications—and regardless of how good each of those programs is individually—you really need them to be able to talk to one another,” said Rippingale. “The only way to make that happen is with an integrated or unified application suite.”

Ideally, that software suite will be based in the cloud, incorporate accounting functionality as its foundation, include solar-optimized functionality across all departments and support a range of optional third party integrations. “That’s really the only effective solution to reducing the soft costs identified by DOE,” Rippingale added.

**Shifting from Foundational to Transformative Competence**

All potential SolarSuccess clients get a complimentary, one-hour business software consultation/audit, including assistance in mapping their own business against the Solar Operations Value Chain, identifying specific areas to make a priority, recommendations for phased implementation if preferred, and shifting from foundational to transformative competence.

The consultation can also be customized to address:

- Costs/benefits of point applications vs. integrated suites
- Onsite vs. cloud solutions
- Incompatible vs. unified data sources
- Facilitating change management
- Delayed vs. real-time data
- Key metrics to watch out for
- Measurable productivity gains (MPGs)
- Gotchas to avoid
- Solar-leading practices regarding:
  - Revenue recognition
  - Warehouse management
  - Milestone tracking
  - Sales and project funnel visibility
The consultation can be combined with a 30-minute SolarSuccess demo, or the demo can be a separate offering and recorded for later review by the company’s internal team. The SolarSuccess webinar addresses both current and future versions, with a roadmap of planned new features (e.g., what-if cash flow analysis) and additional integrations (more distributors, site design, Orange Button Registry, customizable training tools and so forth).

**Meeting Industry Demand for Solar**

Acknowledging that the solar industry is relatively new and that it has experienced explosive growth over the last 10 years, Rippingale said the supply chains that support the industry are still evolving, and there is not yet a standardized data format for the energy sector. That makes exercises like soft cost management difficult in a world where those expenses can eat up more than half of an installer’s project costs.

The fact that many installation companies are now doing 50-100 projects per month (versus 10-20 just a few years ago) only exacerbates the need to control soft costs.

“Much of that project volume is being created by supportive policy initiatives, ranging from automating the permitting process to the proposed five-year extension of the solar Investment Tax Credit (ITC) and initiatives in states like California,” said Rippingale, “where all new residential buildings, three stories and under, must be solar-powered starting in 2020.”

To accommodate that growth, installers will need unified systems that bring together their accounting, supply chain management, project management, CRM, marketing and fulfillment systems under one umbrella. Only then can companies see their cash flows and measure efficiencies across multiple areas. The solution also alerts them to specific areas of deviation from plan so that they can then zero in on problem areas or opportunities to maximize revenues—be it soft costs, hard costs or any other revenue-related measure.