Calculating Total Value of Ownership for the OEM

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Building reliable, productive machinery is important for OEMs -- however, they also are driven to produce equipment that sets them apart from the competition. While technology is one variable OEMs often use to differentiate themselves, time-to-market and total cost of ownership pressures are forcing them to look beyond just the initial purchase price of automation components. Now they need to consider variables such as operational equipment efficiency (OEE) as well as other long-term performance metrics.

The Emergence of Total Value of Ownership

Traditionally, OEMs have used tools like Return on Investment (ROI) and Total Cost of Ownership (TCO) to calculate possible cost savings. While considered effective, absent from TCO appraisals are an accurate measurement of any overall long-term business impact or revenue-enhancing effects that result from TCO methodologies, such as purchasing or using a particular solution or service.

Today, delivering benefits beyond the initial purchase price is critical to an OEM becoming the customer's true "value-add" partner and signals the emergence of another important variable -- Total Value of Ownership (TVO). Within this paper, we'll explore some of the primary ways OEMs can calculate, improve and measure Total Value of Ownership.

Deliver Products and Services that Reduce TCO

Although many OEMs currently employ TCO methodologies to their products, missing from their assumptions is the calculation of how to determine the total impact or 'value" earned at all levels of the organization.

While much of the focus of Total Value of Ownership is on the tangible value of an offering, it also assigns value to intangibles, like the value derived from a supplier or distributor partnership and is a means to measure and validate the "total value" earned at all levels of the organization from incremental TCO programs implemented.

Whether through manufacturers or distributors, OEMs can deliver value to end users in many ways; by way of products, services and relationships. OEMs leverage manufacturers for their focus on product features and benefits (i.e. ease of installation, life cycle costs, reduced change-outs, impact on TCO, etc.), while distributors play a vital role in the value-add equation by providing important services, such as repair, parts management, maintenance and technical support.

In order for the OEM to be considered a value-add partner by the end user, they have to demonstrate the ability to meet the end user's most urgent demands. To do so, the OEM must determine the product features or services that will have the greatest impact on reduction of their customer's TCO and deliver it in way that emphasizes benefits and value. The following are some recommendations for delivering value in four general categories:

- *Assets*— Demonstrate ability to reduce an end user's total cost of ownership as ownership costs often account for 15-35 percent of the customer's total assets. For example, suggest reducing inventory costs by adopting a more standardized component and control platform.
- *Processes*— Demonstrate ability to reduce a customer's process costs by highlighting product capabilities of change management solutions.
- *Purchasing*— Demonstrate the ability to reduce expected annual purchase cost requirements. To do so, offer total machine content discounts or the possibility of eliminating substitution costs.
- *Revenue*— Demonstrate impact on end user's revenue stream. To do so, look to time-saving automation approaches that help increase utilization of existing personnel. For example, traditional control system installation is seldom simple because there are a lot of possibilities for mistakes with so many hard-wired connections. Using wiring modules and quick disconnects, as well as moving industrial controls and hardware closer to the application or on the machine, have proven to save considerable design and installation time.

Emphasize the Benefits of Standardization

When evaluating suppliers and vendors, OEMs typically employ one of two primary approaches to gain a cost competitive advantage. The first is the "multi-vendor" approach, where an OEM switches or "jumps" from one supplier to another in order to find the lowest

component price. Although this sounds simple in principle, it typically leads to more complex, higher cost systems. This is due to the higher levels of engineering, parts management, assembly, troubleshooting and support/warranty requirements needed in the long run to effectively integrate the different technologies selected. In addition, using a multi-vendor approach often leads to conflicts and confusion whenever an on-site technical issue arises.

The second, more effective approach is to adopt a standardization program. A true standardization program requires an OEM's commitment and discipline to focus on applying common technologies in conjunction with using best practices and standard designs to deliver value at all levels. By reusing engineering efforts, standardization drives shorter design cycles, helps simplify technical issue resolution and more importantly allows the engineering staff to focus on core competencies that lead to a competitive advantage. Standardization also plays a key role in the OEM's ability to maximize Total Value of Ownership because it reduces service and support costs, streamlines upgrades and simplifies asset management for better OEE.

In addition, standardization enables OEMs to differentiate themselves from the competition by designing machines to be compliant with industry standards and regulations. Therefore, OEMs who are educated and involved in standards organizations enjoy faster time to market and demonstrate value to their end users.

Urge Consideration of Long-Term Ownership Cost of Technology

An OEM's ability to deliver value can be greatly impacted by how it accepts and leverages new technology. End users today are increasingly moving toward integrated control platforms and architectures, realizing that these solutions allow for more simplified software development and design and reduced time to market. The OEM's most challenging role is to urge the end user to consider the long-term ownership cost of technology, and steer them away from short-term cost evaluation driven by consumer demands.

Total Value of Ownership: Steering Away from Cost-Only Comparisons

OEMs today are beginning to realize that cost calculations of individual parts are not the only variables in evaluating automation and control technology. Absent from cost only

calculations are any consideration of the value earned that results from a strong supplier partnership along with an integrated control architecture or solution that can be rapidly implemented, and the inherent benefits of standardization.

Building on the importance of calculating TCO by adding in the calculation of Return on Investment (ROI), the emerging Total Value of Ownership approach captures total cost considerations as well as performance advantages to enable the OEM to create value for its customers. It may not be an intuitively obvious solution, but it's one that will offer long-term benefits far beyond just calculating cost.

By delivering products and services that reduce TCO, focusing on standardization and considering the long-term ownership cost of technology, OEMs can achieve and calculate Total Value of Ownership. It is then that the OEM can become the customer's true "value-add" partner.