SKF

The way to drive real sustainable profit to the bottom line

How savvy procurement professionals take true costs away from their business to help their companies become more profitable.



"Getting a reduction in price is an immediate gain, while buying on total cost is a long-term proposition. Anyway, most times the savings suppliers claim from total cost buying are all smoke and mirrors."

"I'm only evaluated on unit price reduction. Total cost reductions impact other departments – they get the credit, not me."

"The purchase price is such a large part of the equation, why go through the effort of calculating total cost? You can't measure it accurately anyway."

Do these comments sound familiar? Anyone responsible for purchasing materials and components from outside suppliers has probably said or thought these sentiments more than once.

Buying on total cost, or Total Cost of Ownership (TCO), has become an industry mantra in the last decade. But, despite the ability to deliver significant cost reductions and efficiencies, many companies have found the reality to be much less tangible.

Part of the problem has been that many supplier companies have been trying to claim the benefits of TCO without doing the hard work necessary to accurately measure results.

"Nearly every supplier coming in the door now claims he will save me money.

It's a wonder I have any costs at all!" one purchasing professional told James Anderson, professor at the Kellogg School of Management at Northwestern University in Chicago, and along with James Narus of Wake Forest University, a pioneer in developing TCO.

"The concept has been around since the late 1960s, but has never been widespread," Anderson says. "Today, the greater availability of data makes it more attractive as a progressive, practical approach."

What Anderson and Narus developed to make TCO a reality – and what many leading companies around the world now practice religiously – was a methodology, a roadmap if you will, for defining those things that a customer values above just the purchase price, and that directly affect profitability.

But the process doesn't stop there. They detail how to accurately project – in monetary terms – exactly how much those value elements deliver to the customers' bottom line results.

"If you look at the cost of a product you're producing, 50 to 75 percent of that cost is likely due to what you're purchasing," explains Anderson. "People are looking at TCO to find ways to cut large parts of these costs or to get some advantage working with their suppliers or customers. Maintenance, repair and operating supply providers are also trying to get their customers to notice these overlooked cost elements to discover the real cost drivers."

A changing paradigm

Many companies still prefer to work with supplier salespeople who practice feature-, friendship-, and price-based selling. But as the purchasing function becomes increasingly sophisticated, the focus has shifted from "buy from the seller that I like who has a good product and competitive price," to "buy from the seller who presents the best total solution and terms that maximize the economic benefit to my company. And, who can back up those benefits with real numbers so I can prove it to management."

And while individual purchasing decision influencers each have their own needs and priorities, buyers – and certainly purchasing committees – are becoming more aware of the total impact of their decision on the company's bottom line.

A 2007 study by Strategic Account Management (SAMA) found that customers rank Total Cost of Ownership nearly two times as critical as price. Purchasers are beginning to realize that price is just one sub-component of TCO.

One of the most common metrics for evaluating a company's financial success is gross profit margin, the difference between net sales and cost of goods sold (variable expenses). The assumption is that the easiest way to reduce cost of goods sold (and increase gross profit margin) is to reduce the purchase price of the materials and components you buy. And, that is the strategy many purchasing departments have followed.



Price is only the easy-to-see part of the picture. The key element here is obtaining objective numbers that accurately project cost savings.

But this approach can be self defeating. As suppliers become squeezed on price, quality can go down, increasing warranty costs. Or, a supplier is making so little off a customer's business that their orders get pushed back, making delivery of critical components or materials impossible to forecast. (Interestingly, in a 2008 survey, readers of *Purchasing* magazine rated "availability" ahead of "price" in the criteria they use to select suppliers.)

Also, component price reductions may not be sustainable – chances are at

People use the term "TCO", but do they really understand what it means and how to apply it? Total Cost of Ownership includes three sub-areas: Acquisition, operation and end of life (disposal). All need to be considered to make the right business decisions. Although acquisition is often the focus, this is only a small part of a product 's total cost.





Customer priorities (according to customers) A 2008 study by the Strategic Account Management Association (SAMA) reveals that plant managers are recognizing the importance of a TCO purchasing approach. some point in the not too distant future, the supplier will be forced to return prices to their original level.

Think for a moment about how attractive your business is to a supplier who also offers valuable knowledge and resources to help you solve problems. When the "supplier/customer" relationship is seen as a true partnership, the supplier will be motivated to spend these limited resources with partners, not customers who haggle over price.

In place of "squeezing" suppliers for lower material or component prices, companies are now looking to partner with a select few suppliers who have the expertise to look at the complete picture; suppliers who can see how their products or services impact their customer's operations, and make specific recommendations for improvement. The value of these improvements can add substantially to the bottom line – much more than the relatively small gains from price concessions.

"Companies are in business to create value for their customers and, in doing so, capture a share of that value in terms of profits," says Kamran Kashani, Professor of Business Programs, International Institute for Management Development (IMD). "If no value is created, or what is created is perceived to be less than value capture, the buyersupplier relationship breaks down. The "A 5% annual total cost reduction program is 2.5 times more valuable than a 5% price reduction over a 5 year period. Why? Because price reductions are one-time benefits that only last for a set period of time, whereas TCO is ongoing, incremental and sustainable... Contracted prices are beneficial for only a set period of time – but once your staff is taught how to maintain pumps, they will always be maintained better."

Todd Snelgrove, 2009 Annual PMAC The Purchasing Management Association of Canada (PMAC) National Convention.

same happens when the supplier isn't able to capture sufficient value to justify its creation.... In reality, when the buyer and supplier join forces to create value together, the pie is bigger and there is more to go around for both parties. Unfortunately, the spirit of joint effort for joint benefits is rarely the buyerseller modus operandi. But companies are beginning to see the benefits. SKF is one example of a company that is able to demonstrate that when they partner with willing customers, the relationship is a profitable one for both and, as such, and a lasting one too."

In the recent 2009 report from AberdeenGroup, a leading consultant in the procurement field, "identifying cost savings" was cited as the number one driver of chief procurement officers.





"In today's global business environment, customers are perceiving more and more products as commodities. Therefore, it is vital for a company to be able to prove why its products and services are able to deliver REAL VALUE. One of the most important tasks we have today throughout the SKF Group is to create, deliver and document the value that our products and solutions bring to our customers."

Tom Johnstone, President and CEO, SKF Group, from Value Merchants.

"An interesting dynamic emerges when you compare the perceptions of most business customers and the reality. Lowest unit price is often assumed to be desirable. In fact, firms that are convinced to buy on value exhibit higher repeat purchase rates, which suggest that they are far more satisfied with the results."

Mr. Marco Bertini, Assistant Professor of Marketing, London Business School.

The language that management understands

Consider the example of a manufacturing company with €100 million a year in sales that has a net profit margin of 10 percent, or €10 million. A supplier comes in and demonstrates that through TCO strategies, they can save the company €100,000 in variable costs (lower repair costs, less machine downtime, energy savings, less material wastage, etc.). While not appearing to be a large amount on its own, consider that it would take a one percent increase in gross sales, or €1 million, to net the same bottom line gain. And, unlike price reductions, these savings generally are sustainable year to year.

It is results like these that are attracting the attention of purchasing professionals and CFOs alike. Purchasing professionals are starting to learn that the best way to justify their benefit to the company is to express it in the language that management understands: money. To offer a total cost solution, a supplier must be able to show concrete results on a customer's financial profit and loss statement in four typical places:

- 1 Revenues. Can downtime be reduced, production rates increased or time to market for new products reduced?
- **2** Expenditures. Can scrap or rejects be reduced, thus impacting raw material costs? Can repairs be reduced, thus impacting the cost of replacement parts? Can energy usage be reduced, lowering manufacturing costs?
- **3** Personnel. Can maintenance time be reduced, thus freeing up employees to do other things?
- **4** Assets. Can cost of ownership of a machine or plant be reduced? If machine speed can be increased without increasing wear, can capital expenditures on additional machines be reduced?

The key element here is obtaining objective numbers that accurately project cost savings. Tim Underhill, a former professor from Texas A&M University and now a consultant in TCO says, "TCO is not effective unless it is used properly, however, and this takes time, patience and persistence. A lot of people grab a number out of the air," he says. "They say, 'We're probably worth €40,000.' That works for a while, but more and more customers are trying to find out what's real and based more on fact than guess work."

Measuring bottom line results

Purchasing magazine noted in a story on MRO (maintenance, repair and oper-



ations) buying that most purchasing operations – and MRO suppliers – routinely track such metrics as price, inventory levels and process improvements.

But many suppliers also provide services that can help significantly reduce costs for purchasing. Identifying and monitoring these savings, however, is not always easy.

"When I work with clients, the first thing I want them to understand is that these costs exist," says Underhill. "I take something from their operation that is real to them – a steam leak, bearings, stock-outs – and walk them through where the costs are and what a potential solution could look like."

"SKF's suppliers have an important role to play in our demand chain, reflecting our high quality brand image. SKF Demand Chain has a goal to develop a world class supplier base. That means identifying and developing suppliers that add the most value to our operation in terms of quality, cost, delivery, innovation and management capabilities. We have a very rigorous process that helps to determine who can truly help us lower our Total Cost of Ownership, and that the benefits will be sustainable over a long period of time, so that SKF will continue to be a best in class supplier to our customers."

Bo-Inge Stensson, Senior Vice President, SKF Group Demand Chain. The big challenge is developing a methodology to calculate these types of costs that both the customer and supplier agree provides accurate results. "You must be able to prove to your customers that, based on their own customized operating parameters, they'll save money by implementing these things," says Underhill.

Underhill says that in some companies the primary driver being measured today is simple reduction in price, such as switching from brand A to brand B and reduced freight costs. However, customers are finally realizing that this is not enough. Many companies are now not allowing brand/supplier switching to count for price reductions in purchasing departments, realizing that simply switching to a lower priced supplier may actually not save money when the total cost is considered.

TCO makes visible a wealth of other, more hidden savings. One of the main cost drivers commonly not measured on large supply contracts, for instance, is the technical support provided at the local level.

"Every time a supplier solves a problem or finds a better solution for a given problem or application, it should be documented," Underhill says. "But this is very rarely done or measured in any way by the sales team. Therefore, the corporate offices don't know what's actually happening down in the field in terms of savings. They can't measure it, and the field doesn't know how to measure it."

As a result of this lack of documented savings, the company may consider buying from a lower price supplier in the future – a supplier who would actually cost the company more in total cost.

Finally, the sooner that measurements are added to the equation, the better. "The greatest value improvement potential exists at the need definition and specification stage, when earlier supply and supplier involvement can reveal major savings opportunities," explain P. Fraser Johnson and Michiel R. Leenders in their article, "Minding the Supply Savings Gaps"

SKF Documented Solutions Program

Almost 20 years ago, SKF developed a programme based on the realization that factors beyond the quality and design attributes of a bearing had a major impact on the life expectancy of that bearing. These factors include the maintenance the bearing receives, the environment the bearing operates in and how the bearing is installed.

In implementing a programme to provide customer support in these critical areas, SKF was able to see the bottom line savings the customer received. Machine uptime was increased, resulting in higher production levels. More efficient bearings were installed, resulting in lower energy costs. Better installation techniques were taught, reducing the manpower requirements for a plant. Machines lasted longer, reducing annual capital expenditures.

Based on this experience in over 19,000 businesses all over the world, in a variety of industries, SKF developed its own "SKF Documented Solutions Program" software to help its customers predict – then measure – the real world, annual savings they could realize from using SKF products and services. Because of the large quantity of data that has been collected, SKF is in a unique position to be able to quickly and accurately project the monetary return on specific initiatives.

"We can prove to potential customers that, based on their own customized

operating parameters, we can save them money by implementing the strategies we recommend," says Todd Snelgrove, SKF Global Manager, Value.

The SKF Documented Solutions Program is web-based software that calculates the expected value of a solution, whether in gearboxes, pumps, motors, fans, machine tolls, conveyors, cranes, or industry specific machinery. The program allows you to see how offerings from the five SKF technology platforms – bearings and units, lubrication systems, mechatronics, seals, and services – can benefit your unique situation.

With SKF's Documented Solutions Program, to which customers have access as part of the partner relationship, total cost reductions are shown in areas such as reducing energy, lubrication, inventory, warranty costs, manpower, machine life, reliability, output and quality, downsizing equipment, and over 250 other factors.

"Customers need to visually see that the price premium for some SKF products or services is really an investment in their bottom line and that it will have a payback and return on investment that is difficult to find anywhere else in their operations," says Snelgrove.

To find out how SKF can take cost out of your business, contact todd.c.snelgrove@skf.com, or your local SKF representative.



Maximizing value with specific targets

The SKF Client Needs Analysis program compares a company's own operating information to a global best practices library to identify areas with the most potential for improvement. Specific solutions for the targets identified by the analysis can then be generated using the SKF Documented Solutions Program.



Bearing life cycle

Factors that contribute to the life expectancy of a bearing were identified, support provided, and bottom line savings documented.

10 signs to look for in a real TCO supplier

- **1** A process to find cost-cutting opportunities.
- 2 A team that is able to implement a program to achieve promised savings, including a Value Manager to drive the latest TCO initiatives.
- 3 A tool that can measure the expected and actual impact of cost-saving initiatives.
- 4 A corporate culture that embraces value initiatives, not a marketing gimmick.
- 5 The willingness to enter into agreements where pay is based on true value created.
- 6 An ongoing pipeline of innovative, problem-solving solutions.
- **7** A well-used reference of best practices by industry and application.
- 8 A log of solutions applied and the results, including financial impact.
- **9** A proven record of buying by value, not by price.
- **10** Value propositions presented with HARD dollar impact, not soft benefits with no impact on operating profit.

Customer Case Histories

The SKF Documented Solutions Program has helped thousands of companies around the world achieve significant savings by 1) reducing operating costs and, 2) increasing productivity:

Reduced energy

By installing the correct seals, replacing old bearings with new SKF Energy Efficient (E2 design) bearings and the proper type and amount of lubrication, plus instituting proper installation, alignment, and maintenance practices, one company saved 247,500 US dollars annually.

Reduced design costs

By using advanced SKF design simulation software to model design changes, one OEM saved 146,000 euros.

Reduced unplanned downtime

Through the use of SKF condition monitoring technology and services, one company increased production by 12 percent in the first year of implementation, saving one million euros.

Reduced scrap

By installing new greased-for-life bearings, one food producer reduced scrap, and the associated grease contamination problem, by 18 percent, resulting in 745,000 Argentinean pesos of annual savings.

Reduced repair time

By utilizing SKF's maintenance tools, training and techniques, one customer saved 362 maintenance man-hours annually and increased machine life by 10 percent, with over one million yen in savings.

Reduced machine repair costs

By using SKF repair and refurbishment services, one company saved 700,000 euros in annual costs.

Reduced warranty cost

By using quality SKF parts in their products along with proper installation procedures and tools, one OEM manufacturer reduced warranty costs by 11 percent, or 4 million rupees.

Reduced inventory expense

Working in conjunction with their SKF authorized distributor, one company was able to implement more accurate planning, reducing inventory levels by 400,000 Canadian dollars.

Reduced lubricant usage

By using SKF lubrication systems to make sure the right amount of grease and oil is delivered to the right place at the right time, lubricant usage was reduced by 18 percent, with an annual savings of 450,000 British pounds. in lubricant and disposal costs.

Increased uptime

By using proper bearing mounting processes, and SKF tools and training, along with high quality SKF Explorer performance class bearings, one company saved over 569,000 Australian dollars annually.

Reduced water consumption

By using the SKF Dry Lubrication system, a juice producer eliminated the need to spray thousands of litres of water and soluble lubricant on one conveyor, saving 15,700 euros in one year.

Increased machine speed

By upgrading to solution bearings and implementing proper maintenance practices, one manufacturer was able to increase annual production 4 percent and save 19 million rubles.

Increased quality

By installing SKF Super precision bearings, variation was reduced, increasing quality by 1 percent while saving 3.25 million yen.

Increased manpower efficiency

By accurately planning maintenance activities and taking proactive action based on machine life information obtained from SKF condition monitoring solutions, manpower availability was increased by 9 percent, saving 875,000 rand.

Increased product benefits

By adding an SKF solution product to an application, one OEM was able to claim superior product benefits to its customer, leading to a 3 percent net profit improvement, or 870,000 euros.

Why SKF?

An effective partner in achieving Total Cost of Ownership purchasing benefits must have the products, services, tools, knowledge and capabilities to take a comprehensive approach to your entire operation. SKF has proven itself up to the challenge time and again, in a diverse range of industries, on every continent of the globe. Consider these credentials:

International company

SKF has 100 manufacturing sites worldwide and sales companies in 70 countries. Having a global perspective means we have a strict adherence to global standards.

Five areas of product expertise

SKF isn't simply a bearing company. We are also leaders in seals, lubricants, mechatronics and services. No other company brings this combination of expertise to the marketplace. The combination of these technologies results in highly effective solutions that generate greater profitability for our customers.

Research and development

With multiple facilities in various parts of the world, SKF engineers are continuously at work developing more advanced solutions. In fact, SKF applies for, on average, at least one patent every other day.

ISO standards

SKF established new ISO standards for bearings with the development of the SKF Explorer performance class.

Six Sigma

Using the Six Sigma methodology and tools enables SKF to reduce costs and improve the services and products that we provide to our customers, including the reduction of waste (time, resources, materials). Increased production and improved product quality. shorter lead times, reduced returns under warranty and better availability are also benefits offered as a result of using this approach to continuous improvement.

Industry-focused solutions

SKF has always been a customer-driven company and that means our R&D commitment is focused on specific industries. Our goal is to anticipate the needs of our customers and develop solutions accordingly.

Engineering support

SKF offers a complete range of engineering consultancy services, including advanced modeling technologies (i.e. BEAST, ORPHEUS).

Engineers

SKF has the industry's largest dedicated staff of engineers (10,000 total), including field service and application engineers that work hand-in-hand with customers.

Product distribution

Our customer service is only as good as our local presence. That's why SKF has a network of 15,000 distributors and dealers, each extensively trained to help your operations perform smoothly. The SKF authorized distributor network is the largest of its kind globally.

SKF Logistics Services

SKF has the industry's broadest global logistics network.

Acquisitions

SKF continues to acquire leading companies to expand its knowledge in its five competency areas.

Racing technical partnerships

In the high pressure environment of highperformance motorsports, SKF has proven itself to be a valuable partner to some of the top names. SKF has a 60+ year relationship with Scuderia Ferrari, the longest running technical partnership on the Formula One circuit. We have a long-standing involvement in NASCAR and a technical supplier relationship with Richard Childress Racing. SKF has a product development relationship with Ducati in the Moto GP world championship.

Sharing and growing knowledge

By offering training for SKF employees (SKF College), SKF distributor partners (SKF Distributor College), and end-user customers alike (Reliability Maintenance Institute), SKF shows its commitment to increasing value by sharing knowledge.

Environment

Green initiatives are a global, corporate commitment, and a driving force in everything we do. SKF was among the first international companies to receive worldwide certification to the environmental standard ISO 14001.

SKF Energy Efficiency Solutions

We have introduced a new family of products that bring potential for energy savings in virtually every industrial sector.

SKF Maintenance Products

Realizing that better maintenance meant lower total costs, SKF introduced a line of products over 30 years ago that bring greater efficiency and productivity across all industries.

SKF Condition Monitoring Technologies

Preventing and eliminating unplanned downtime can save companies significant operating expense. SKF is the world's largest manufacturer of condition monitoring equipment, with a range of hardware and software products – plus services – to help companies realize greater overall equipment effectiveness.

SKF Asset Management Services

SKF Client Needs Analysis, Root Cause Failure Analysis and Reliability-Centered Maintenance are just a few of the many services available from SKF to help organizations realize optimum performance from their asset management initiatives.

SKF Remanufacturing/Refurbishing Services

Comprehensive services are available for many products (bearings, bearing units and spindles) that optimize product lifecycles and reduce operation costs for customers.

SKF Certified Rebuilder Programme

Certifying repair shops in the correct rebuild methods help end-users achieve enhanced equipment performance and increased profitability.

SKF Nova Consulting

This global consulting practice offers specific competence in the bearing industry. It helps customers become more successful by identifying and addressing opportunities and challenges arising from market developments, technology shifts and efficiency demands.

Field experts

SKF's broad range of knowledge is in part due to our many field experts such as Professor Stathis lonnides, winner of the Tribology Trust's Gold Medal, internationally recognized as the highest honour in tribology research and application – an area of science focusing on the study of friction, wear and lubrication. loannides is also the main developer of the ISO standard for calculations of bearing life, used today by all bearing companies in the world since 2007.

Developing knowledge

Initiatives such as the SKF University Technology Centre for Steels and Heat Treatment at Cambridge University, led by the world expert in bainitic steels, Professor Harry Bhadeshia, extends research capabilities to students and fosters new developments.

World leader

SKF is the undisputed technology leader in ball and roller bearings, with the SKF brand ranked number one in surveys worldwide.

Works cited

Anderson, James C., and James A. Narus:

"Business Market Management: Understanding, Creating, and Delivering Value," *Prentice Hall*.

Anderson, James C., Nirmala Kumar, and James A. Narus:

"Value Merchants: Demonstrating and documenting Superior Value in Business Markets," Harvard Business School Press, 2007.

Bartolini, Andrew:

"The CPO's Agenda 2009, Smart Strategies for Tough Times," *AberdeenGroup*, *April 2009*.

"Buyers: Keep it simple when tracking savings." *Purchasing, 15 January 2004.*

Johnson, P. Fraser and Michiel R. Leenders:

"Minding the Supply Savings Gaps." MITSIoan Management Review, Winter 2010.

Stoller, Jacob:

"Bearings: Looking beyond unit price." *Purchasing B2B, June 2008.*

Studebacker, Paul: "Monetizing Maintenance."

PlantServices.com 25 September 2007.

2008 Distribution Performance Survey, Purchasing 2008.

2010 Strategic Survey, State College, Pa.: Institute for the Study of Business Markets (ISBM).



The Power of Knowledge Engineering

Drawing on five areas of competence and application-specific expertise amassed over more than 100 years, SKF brings innovative solutions to OEMs and production facilities in every major industry worldwide. These five competence areas include bearings and units, seals, lubrication systems, mechatronics (combining mechanics and electronics into intelligent systems), and a wide range of services, from 3-D computer modelling to advanced condition monitoring and reliability and asset management systems. A global presence provides SKF customers uniform quality standards and worldwide product availability.

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