

Technology Matters

An Interview with an Experienced Technologist



Edward Enquist has over 20 years of manufacturing, engineering and supply chain management experience. As Manager of USC Consulting Group's Client Technology Solutions, he specializes in business process

improvement and business intelligence. He has previously held positions in product development, engineering management, business process management and management consulting. Mr. Enquist's breadth of technology development experience includes developing applications for medical devices used in both domestic and international applications, and large-scale fluid processing systems for the electronics and pharmaceutical industries, as well as business intelligence applications for the discrete manufacturing, food processing, energy, and mining industries. He has also deployed enterprise resource planning (ERP) systems in a multi-plant environment and developed web-based training programs for the ISO-9000 quality system, Lean manufacturing, and engineering/manufacturing-related elements of the SAP/R3 ERP system. Mr. Enquist holds a Bachelor of Science degree in mechanical engineering from North Dakota State University.

METRICS: *As USCCG's chief technologist, exactly what is it that you do and for whom do you do it?*

EE: As Manager of Client Technology Solutions, I've got three areas of focus: sales, development, and deployment. In the sales role, I help clients make good, educated decisions about the tools they're going to use for process improvement. I'm also responsible for development with overall responsibility for the content and design of our LINCS® suite of business intelligence and tracking solutions. And finally, I've got responsibility to ensure that the technology we select, whether developed internally or sourced through a partner, is successful.

METRICS: *So what do you see as technology's role in management consulting?*

EE: USCCG's mission is to combine subject matter expertise with enabling technologies to drive and sustain superior operational and financial results across the supply chain. Take the example of a pilot. A pilot can't fly a plane to the right destination

unless he has the right training and the right instrumentation to tell him where he is and whether he needs to make a course correction. Technology used in a consulting context works the same way. You can't drive the highest possible value for a client unless you have the right training and the right technology tools to help you determine where you're going and how you're doing. Technology tools are particularly important when selecting, monitoring and managing key performance indicators, whether operational or financial. We usually find a lack of properly selected, readily available KPIs to be among the biggest failures in clients that are experiencing sub-optimal performance.

METRICS: *Is this something new or has technology always been used that way?*

EE: Traditionally, consultants were brought in to improve operational effectiveness and used process-based change management tools to help client organizations get better. In the past, people left technology tools to

continued on page 2

In This Issue

Technology Matters	Pg. 1-5	Shoplogix Collaboration Adds Value....	Pg. 7
Spend Management	Pg. 6		

the IT department or, perhaps, software vendors. There are still some traditional consulting companies that operate with this business model, but I think the more progressive ones understand that business processes and technology tools are intertwined at their core. Let's go back to the pilot analogy. Even if you're the best pilot in the world, you can't fly a modern jet plane unless you have the right technology to guide your actions.

METRICS: *So do you see technology's role in management consulting evolving even more and, if so, where do you see it heading?*

EE: The line between technology providers and consulting companies gets more blurred by the day. Take the example of SAP, and other ERP vendors that are offering consulting services now. And some consulting firms, like ours, are offering technology solutions, in conjunction with process improvement services, as part of a hybrid business model. I think the best consulting companies, those that offer the most value to their clients, are going to be the ones that are backed by great technology offerings either through internally-developed tools or strong technology partner alliances.

METRICS: *Do you think that technology solution providers, or vendors, have the experience to actually help these companies do what you do for them?*

EE: It depends a lot on the company. Many technology companies started out writing code to solve a business problem in a particular industry. The vendor may have a good understanding of how to apply that technology in a given industry but, if they try to apply that same solution in other industries where they don't have deep

process knowledge, that's usually where they fall flat. USCCG's business model allows us to be successful in a wide variety of industries because we focus on understanding process first. We're always seeking to identify and eliminate waste to optimize business performance and create value for our clients. For us, technology is not the end-game. It's just a tool to help us do what we do better.

“The dirty little secret is that ERP solutions are a mile wide and an inch deep.”

METRICS: *So what is the difference between a technology solution and technology per se?*

EE: We're inundated with technology every day. Sometimes technology helps make our lives better and more productive; sometimes it has the opposite effect. If we think back to the early days of ERP, a lot of folks would argue that, in some cases, technology did not help companies get better; it actually made them a little worse, while wreaking a fair amount of havoc in the implementation process.

By definition, a solution solves problems; it does not create them. So, from a solutions perspective, our goal is to give clients a well-accepted tool they can use in the real world to help them make better decisions and get better results at whatever it is they do.

METRICS: *What are the key factors a prospect should consider when looking at a potential technology solution?*

EE: I think that, when selecting technology, the worst thing someone can do is select it in a vacuum. Sometimes IT and Operations Departments can be at odds when selecting these tools. An IT Department wants tools that are easy to support and operations people want tools that are easy to use and deliver information at the right time to the right place. When you select technology tools, you're going to have the best chance of success when both groups are involved in the decision. If you don't consider the needs of both groups, you won't be successful.

Another key factor when selecting technology is to understand what business problem you're trying to solve in the first place. Take dashboards for example. Right now, everyone is enamored with dashboards, but if you don't build them with the intent of trying to solve a business problem, or providing specific information that's actionable, you're likely to create a screen filled with beautiful dials and graphs that provide little in the way of business value.

METRICS: *So what are some of the common misperceptions when it comes to deploying technology in the course of a consulting engagement?*

EE: The honest answer is that a lot of people think that their ERP systems will perform all functions equally well. The dirty little secret is that ERP solutions are a mile wide and an inch deep. Oftentimes, people will perceive themselves as having the right technology tools to solve any business problem because they have an ERP suite but, in reality, they have to consider solutions that are outside of that ERP suite to really get the best possible business value.

One example might be advanced planning and scheduling. Capacity planning and scheduling tends to be pretty industry-specific. I'm thinking of an aircraft maintenance company we work with that performs heavy maintenance on jet aircraft. It's unlikely that you'll find an ERP system that has all of the elements you need to really schedule aircraft operations maintenance well. So, in that case, we developed and deployed a tool that really improved their process by combining and coordinating all aspects of the maintenance visit based on our own first-hand knowledge acquired over decades of working in that industry. It's something they could've never gotten out of their ERP vendor or system.

METRICS: *We frequently hear the criticism that ERP systems exist to meet the needs of the accountants but come up short in supporting the process owners. Is this still the case and, if so, what's being done about it?*

EE: By virtue of SAP purchasing Business Objects and Oracle acquiring companies such as Hyperion and PeopleSoft, these enterprise-level systems are providing more useful information to supervisors and managers. However, that doesn't necessarily mean they're providing the right information or even the best solution.

It's important to remember that the strength of these systems, their universality, is also their biggest weakness. To be widely applicable across many different industries, by definition, they have to be generic. Hence, the example of the aircraft maintenance company I cited earlier. Unfortunately, this is all too common. But, for us, it provides a great opportunity to help our clients because we approach the problem from the opposite perspective.

Based on over 40 years' experience and intimate knowledge we've acquired in nearly every major vertical, we're able to quickly develop, configure, and deploy solutions from the process owners' perspective, putting the information they need to make better fact-based decisions at their fingertips in real time. Actionable business intelligence is where the enterprise-level systems continue to come up short.

“Without the right information in the right hands at the right time, the term ‘business intelligence’ becomes an oxymoron.”

METRICS: *You emphasized the word actionable when speaking of business intelligence just then. Isn't business intelligence by definition 'actionable'?*

EE: Not always. As I said at the outset, USCCG's mission is to combine subject matter expertise with enabling technologies to drive and sustain superior operational and financial results across the supply chain. I could've framed that statement by quoting the old saw that says, “You can't manage what you can't measure.” Within the business intelligence realm, we add value in two basic ways. First, we identify and define the *true* key performance indicators that drive operational excellence for mission-critical processes. That's where our subject matter expertise, acquired over four

decades, comes into play. Then, we determine when and where the information is needed to make fact-based decisions to drive those actions needed to optimize performance. Placing this information in the hands of decision-makers in a timely manner, and in a way they can easily interpret, makes it actionable. Without the right information in the right hands at the right time, the term ‘business intelligence’ becomes an oxymoron.

METRICS: *How does technology facilitate outcomes?*

EE: Over the course of a consulting engagement, you want to have tools that help people make the best possible decisions by making it easy to see where performance falls below what is needed and to identify the root cause of the problem. After the engagement is over, you have to find a way to sustain all the good work that you did together with the client.

Take the example of a billion dollar cabinet manufacturer that used to run its business on spreadsheets. Now that it has a system that helps it make better fact-based decisions, it's seen tremendous operational improvements. It can easily trace root causes of costly scrap and rework and prioritize them for remedial action. As a result, its big box retailer-customers are more satisfied with overall product quality, which has accelerated orders and top-line growth. Without technology firmly intertwined with process improvement, this wouldn't have happened.

METRICS: *What is technology's role in sustainment?*

EE: Technology helps to embed a new way of thinking and doing in a client's process, giving them a framework to sustain the progress they've made with our help, and the ability to make additional improvements on their own. For example, there's a lot of movement in manufacturing companies among the leadership, so if a plant manager does very well, he may be promoted to a regional director role. If you have a supervisor that does well he may be promoted to a plant manager role. Unless you have some way to institutionalize improvements already embedded in your business processes, and not dependent on a specific individual in a particular role, you're not going to sustain them. That's what I like about technology tools. They provide that framework and a constant that will help you sustain those gains.

METRICS: *So what's the best kept secret with respect to technology-based solutions?*

EE: The knock on consulting companies has always been that it's not easy to sustain the results once the consultants leave. To me, technology solutions help to sustain those improvements and generate new ones long after the consultants are gone because those tools are embedded in the way the company does business.

METRICS: *What's different about a technology-enabled solution compared to a normal or process-based solution?*

EE: The difference is that, if you just have a process-based solution, you're going to limit the rate of improvement and your ability to sustain it. If you have the right technology tools in place that are intimately integrated with the process solution, you're going to be able to make change at a much

faster rate because it's easier to make the right operational decisions. And again, once the consultants are gone, you're going to have a way to sustain the improvements that you've made.

“The consulting companies that deliver the best value are the ones that consider business process and technology as part of a hybrid or overall solution.”

METRICS: *Can you give me an example of a process-based solution into which you've integrated enabling technology?*

EE: We've lots of examples, especially in the food industry, where we've worked with companies that did not have technology or computer technology as part of process-based solutions. We've found that, if there are no systemically-sustained results, behaviors typically slip back to where they were before the project started in as few as six months. So what we try to do when we go in is to put in a process solution supported by enabling technology so that those gains are sustained long-term.

A great example is a dairy products client we're working with right now. Their need is to get more capacity from their existing equipment due to a huge volume increase

they're seeing from a big box retailer. Our approach includes combining process-based operational effectiveness techniques with our LINCS® business intelligence tools, as well as real-time data acquisition technology from Shoplogix, one of USCCG's alliance partners. We've seen a sustained 25 – 30% increase in production with no increase in labor. While this is an impressive improvement, our client is even more excited that it now has a sustainable state-of-the-art Management Operating System, backed by reliable technology, that provides actionable business intelligence at every level of the organization.

METRICS: *So what impact can a technology component have on the engagement process starting with the sale?*

EE: It's an advantage for us because it can help differentiate us from other consulting companies. But, for someone reading this article, I think a better way to answer your question is to say that, in the course of the sales process, we try to demonstrate to prospective clients that they can obtain the most value out of an engagement by working with a consultant who understands both the business process side and the technology side of their business. So, even in the early going we're attempting to educate prospects on not only what we plan to do operationally, but also on the technology tools we're going to use to help get there and sustain those results.

METRICS: *So does technology necessarily have to make the engagement process that much more expensive and/or drawn out?*

EE: The way we work, no. USCCG's technology offering is an integral part of our business model. When we engage with a client, we define a value proposition that

continued on page 5

includes a return based both on the operational and the technology elements of our offering. Technology tools and operational processes are installed concurrently so the overall effect is to deliver a much higher return on investment than either a technology solution or a business process solution would alone.

METRICS: *How does a management consulting firm like yours improve a client's comfort level with the technology you typically deploy?*

EE: I think the biggest factor is that we don't just recommend; we also implement. Our operational consultants and our technology consultants are working side-by-side with the client during the course of the engagement to install the recommended solution. This is not a technology solution that's designed in a vacuum; it is something that's configured with the input and help of the client and that of our consultants. It is actually put into use during the course of an engagement, not turned on at the end in the hope that people will understand and accept it. The technology and operational aspects of our approach are intertwined.

METRICS: *So what are some of the other keys to successfully deploying technology in the course of an engagement?*

EE: I'm going to keep coming back to making sure you understand the business problem you're trying to solve when deploying technology. Once you've made that technology selection you have to make sure that you document what you want the solution to do, how you want it configured, and how you want it to interface with the systems that are onsite. This is something that requires people who have done this before who know how to document and

speak the language of the client's IT department so that the correct standards are followed and people know how to maintain the solutions once the consultants leave.

METRICS: *What are the characteristics of a successful technology deployment?*

EE: A successful deployment will have technology solutions that people use in the real world. I've seen people use deployed technology for a couple of months then turn it off and put it back on the shelf. In a successful deployment, people will use the technology long after the consultants are gone.

METRICS: *What is a common mistake when it comes to sourcing technology?*

EE: I think the most common mistake is that people don't consider the needs of the user when they're selecting technology. So, they'll get a technology product that is easy to support but the user can't use or vice versa. Because the tools don't exist, you'll have people out in the business environment embedding their own work-a-rounds, for example Excel spreadsheets and Access databases, that are islands of optimization but don't consider the whole. I think that, in both cases, you're headed for failure.

METRICS: *So can technology and operations management consulting each stand alone or are they inextricably linked?*

EE: Historically management consultants could drive business value using very little in the way of technology tools. As business evolves, the management consulting companies that are going to drive the best value for their clients are the ones that will use technology as a core part of their process.

METRICS: *What is one over-arching message you'd like to convey to our readers?*

EE: In today's business world, technology solutions are one of the keys to success. So, if you want to get the best possible value from a consulting company, make sure that the firm you engage understands how to create business value and uses technology tools to drive and sustain that value.

METRICS: *How would you discern that? Everyone goes out and claims that they do that.*

EE: I think you'd be surprised. In our industry, you've got a lot of consulting companies that still don't get it. Some of our competitors don't always use technology tools as part of their business model. Their clients are the ones that aren't going to see sustained results.

When you're looking to engage a consulting firm, ask how it will ensure that the gains you make together are going to be sustained long-term. Listen to the answers and ask for examples of clients they've worked with. Ask them how, and to what degree, they've been able to sustain those results. The consulting companies that deliver the best value are the ones that leverage technology as a means to drive and sustain operational effectiveness.

Strategic Sourcing and Advanced Procurement Methodologies Can Optimize Spend

Spend management is a frequently overlooked opportunity to improve EBITDA in even the best performing companies. Most companies don't have their total spend completely, or even mostly, under management. A recent survey¹ estimated that *best-in-class* companies averaged 88% of all non-payroll, tax, tariff, and fee-related expense under management while average performers had slightly less than two thirds of these same expenditures under control. Of even greater significance was the fact that the former companies were enjoying an average 8.5% cost savings vs. 5.2% cost savings of total spend for the latter while laggards, with just 23% of spend under management, were saving a mere 3.7% of total spend. The same research has shown that "Enterprises have been able to achieve a 5 - 20% cost savings for each new dollar of spend brought under management."



Spend management is increasingly viewed as a strategic imperative. With so much at stake, companies can ill afford to leave it unattended. Cost reduction and cash flow generation represent major business issues for every senior executive. USC Consulting Group (USCCG) employs a systematic approach to bringing spend under management and implementing identified savings. The goal is to help clients become world class procurement organizations by reducing the cost of purchased goods and services, enabling processes, collaborating with supplier partners, aligning their organizations, and providing tools to ensure compliance.

It starts with a feasibility study during which the firm conducts a category sourcing assessment and an organizational

assessment. The purpose of the category sourcing assessment is to uncover all spend within a company and classify it into categories and family groupings. From there USCCG will analyze outlays, estimate implementable savings, and formulate sourcing strategies by commodity group based on its knowledge of supply markets.

<p>Leverage and Manage Competition</p> <ul style="list-style-type: none"> • Consolidate Spend Enterprise-wide • Go to Market every 2 to 3 years • On-line Bid or Auction Potential • Regional Plays • Rebate Programs 	<p>Strategic Partnership</p> <ul style="list-style-type: none"> • Formal Agreement • LTA / Contract • Value Engineering and Collaboration with Cross Functional Teams • Revenue Opportunities • Marketing Support
<p>Manage Transactions</p> <ul style="list-style-type: none"> • Low Cost Supplier • Sourcing Tools • Automated Transactions / EDI • P Cards 	<p>Reduce Risk</p> <ul style="list-style-type: none"> • Identify Reliable Suppliers • Lock into Multi-Year Agreements



A quadrant analysis is commonly used to determine the best strategy for each category of goods or services to be purchased. Business impact, weighed against a combination of market complexity and supplier availability, determines the need to establish strategic partnerships.

Businesses face many challenges today including rising materials costs, poor supplier quality and/or delivery performance, SKU proliferation, organizational inertia and resistance, and fragmented spend - all of which are exacerbated by an inability to obtain and interpret company-wide information. Under these trying circumstances, USCCG's process provides the structure and tools to achieve material cost-reductions:

- Technologies to automate, aggregate, classify, and analyze spend data;
- Discipline to develop, communicate, and execute project plans and planned key events;
- Standardized metrics and summary scorecard;
- Automated supplier registration, improvement plans, and corrective action;
- Cross-functional and divisional teams to leverage category spend and improve processes;
- Enterprise-wide integrated supply management.

Buyers and suppliers alike benefit from improved sourcing. Buyers are able to more accurately determine true market pricing and availability for the goods and services they want or need to purchase. They're able to identify potential new sources, reduce negotiation cycle time, and consolidate procurement among fewer, more strategic suppliers.

Suppliers, on the other hand, are able to identify potential new customers, get clear and immediate market feedback on their offerings, and, ultimately, reduce their cost of sales. Used properly, strategic sourcing and advanced procurement methodologies can optimize spend enterprise-wide. But in the end, it's a win-win for both parties to the transaction.

¹ Aberdeen Group © 2009

USCCG Partners with Shoplogix to Add Value Based on More Timely, Accurate Information

There's strength in numbers. In that spirit, USC Consulting Group (USCCG) has partnered with Shoplogix™ to create a winning collaboration, bringing even more efficiency and economic value to clients of both companies. Shoplogix is a provider of real-time Performance Management Solutions for sustainable continuous improvement programs in industries including pharmaceuticals, consumer packaged goods and industrial manufacturing.

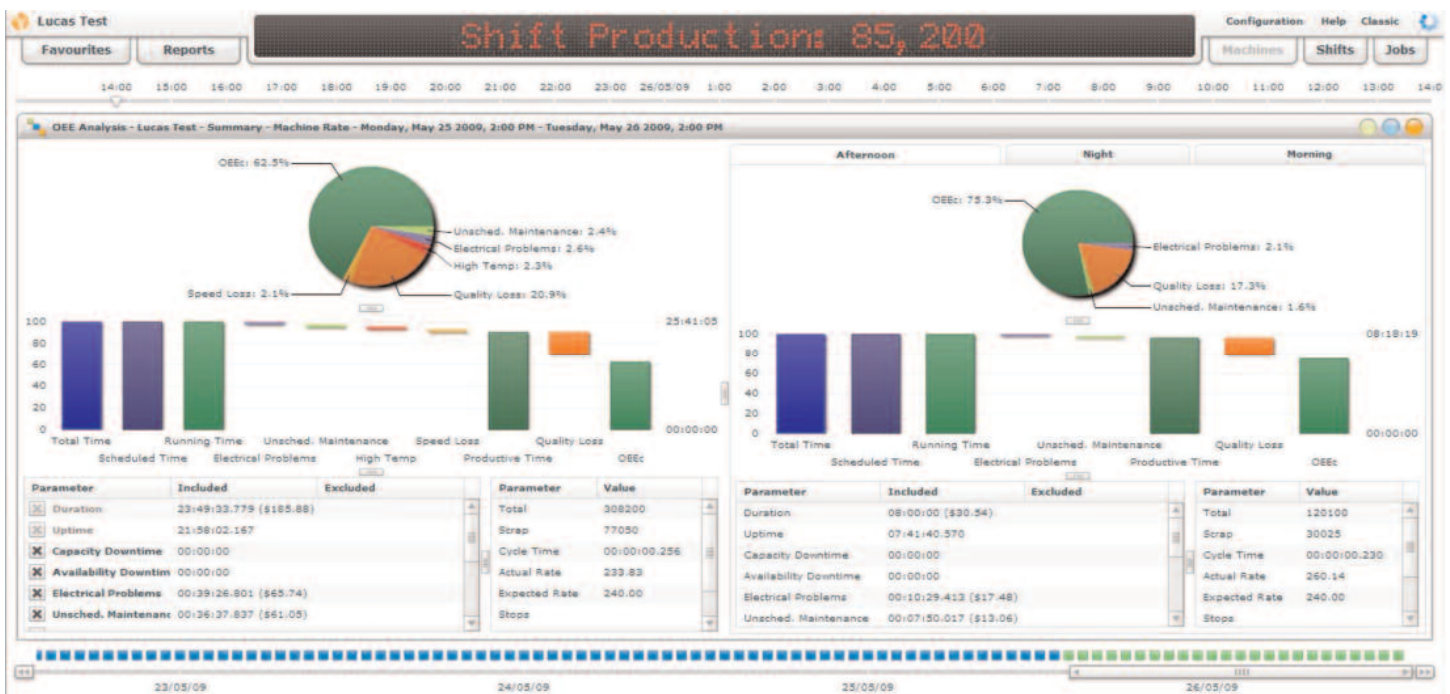
“Our companies both have a history of helping manufacturers become more efficient by reducing costs, identifying areas for improvement and streamlining operations,” says USCCG president George W. Coffey. “Technology is an essential component for optimizing operations and we are delighted to be partnering with Shoplogix and enthusiastic about using their technology to improve our clients’ business performance.”

Shoplogix’ Plantnode® is a patented hardware and software technology solution that automates the collection of plant floor data, providing truthful information, or *Machine Truth™*, on all operational metrics in a manufacturing facility, including run speed, downtime, quality, and job profitability. “In the past, managers relied on estimates and manually-recorded data to gain insight into performance and they lacked good baseline data to direct continuous improvement efforts,” explains Martin Ambrose, president and chief executive officer of Shoplogix. “Our technology increases visibility, providing management with an accurate depiction of what’s going on in the plant so they can identify where they are losing time and money.”

Plantnode is easily configured allowing for rapid implementation within a manufacturing facility where it provides accurate, complete and timely information on asset performance, including which jobs

are profitable and which shifts are the most and least productive. According to Ambrose, “The baseline data produced by the technology to enable continuous improvement is delivered within days or weeks. Manufacturers ‘go live’ quickly so they realize a quick return on their investment.”

Shoplogix’ technology provides the technical foundation for USCCG’s feasibility studies which serve to identify opportunities for operational and financial improvement, such as improving yield, trimming operating expenses and increasing return on assets. “With our new partnership, manufacturing clients can now get a more realistic picture of productivity for their whole plant and make better informed decisions,” says Coffey. “As a result, our clients will be more efficient, more competitive and more profitable.”



OEE analysis of machine performance over a 24-hour period.



First we make it work. Then we make it last.®

For more information contact us at **800-888-8872** or www.usccg.com

Metrics is a publication of USC Consulting Group, LLC, specialists in business performance improvement. In coming months you'll read more about how USCCG works and how we help executives go about the process of significantly improving their organizations.

Produced by Meta Marketing, Inc. Designed by Zelen Communications.

©USC Consulting Group, LLC
Metrics and design is a registered trademark of USC Consulting Group.