

# White Paper

# Supplier Metrics



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### Vendor performance improvement through innovative metrics program and tools

#### The Vision

If you were to define a next generation supplier metrics program, what would it do? Clearly it would go beyond today's basic scorecard reporting and enhance supplier performance and management. But what else might comprise an ideal metrics program?

At Lytica, we believe that an ideal supplier metrics program should facilitate improvements to materials security of supply and costs. It should characterize the performance of each supplier, highlight areas of strength and deficiency and convey to the suppliers the business opportunity that you represent. It would bring you closer with enabling suppliers that could make your business succeed. It should strengthen these important supplier relationships while releasing unproductive or misaligned suppliers from service to you. It should bring down costs.

With an ideal program in place the strengths and deficiencies of each manufacturer, representative or supplier would be evident. You would see opportunities, risks, vulnerabilities and exposures. Suppliers would see your business opportunity, know your expectations and understand the corrective actions that must be put in place for them to realize the business potential that your company has for them.

This metrics program would be data driven and assess suppliers on performance dimensions of importance to your company such as technology alignment and operations service. These assessments would be shared with suppliers in a manner that quickly highlights specific deficiencies and acknowledges superior performance. The tools enabling this program should be interactive and accessible to the suppliers to improve communication and follow-up.

Other attributes of this ideal metrics program would be:

- Ability to collate and report on the views and experiences of all stakeholders in the supplier relationship (Technology, Engineering, Operations, Quality...)
- Allow for supplier input
- Identify problem areas quickly and allow drill down to source. It should not hide performance issues through score averaging or blending.
- On line and accessible 24/7
- Able to capture data in real time, and at any time throughout the year
- Allow supplier peer group and year-on-year comparisons

Is this vision a utopian, next generation system or might it exist today?

Lytica's clients can enjoy most of this system today. We also have a technology roadmap that goes far beyond the vision capabilities described. Our metrics model and suite of current and planned integrated, web based applications enable this next generation vision. Our system is made up of the Metrics Model and Vendorassessments applications along with links to Freebenchmarking.com and quotation management tools.

#### The Metrics Model

The Metrics Model is made up of a rating system and a scorecard. The rating system provides a ready assessment of a supplier's performance and the scorecard presents details on the supplier's performance, their business opportunity and actions that are required to improve performance. This scorecard can be a manually prepared Excel spreadsheet (sample shown on page 3) or it can be automatically derived from the Vendorassessments Scorecard application.

For the purpose of this whitepaper, we consider a supplier or vendor to be a manufacturer, representative, distributor or contract manufacturer.

## Supplier Metrics

Lytica uses a multi digit number as a supplier metric score. The Lytica score uses a 5 point scale for each performance dimension being rated. The score, where “5” is best, is expressed as a number string like 343 or 2453 where each digit represents the performance on a dimension and the length of the string depends on the number of dimensions being assessed. For example the 343 score is a “3” for dimension 1, a “4” for dimension 2 and a “2” for dimension 3. The user might have set up the dimensions with dimension 1 being Technology, dimension 2 as Operations and dimension 3 as Financials. In the second example 2453 the user may have set dimension 4, the “3”, to be social responsibility encompassing environmental, human rights equality and other social criteria. In this system a “3” rating represents undifferentiated performance and anything below 3 is cause for concern.

One key point is that the dimension scores are not averaged or blended. Each is presented as a separate digit. With each score, it is clear where the supplier is performing well or otherwise.

Excel Version Metrics Scorecard						
SUPPLIER REVIEW			Meeting Attendees			
Supplier Name		Manufacturer		Name (Manufacturer) Name (Representative) Operations (Company) Technology (Company) Quality (Company)		
Date of Review		16/06/2012				
Supplier Status 2009		Standard	Preferred			
Supplier Status 2008		Preferred	Preferred			
Metrics Score		343	343			
Commodity Type	IC	Discretes				
Total Commodity Spend	\$ 4,924,628	\$ 2,115,766				
Total Commodity Units	149,534,509	27,390,316				
Total Supplier Spend	\$ 423,560	\$ 374,792				
Total Supplier Units	2,971,955	2,007,490				
% of Opportunity Realized - \$	8.6%	17.7%				
% of Opportunity Realized - Units	2.0%	7.3%				
Supplier	Commodity Breadth	Leadership	NPI Support	Roadmap	Technical Responsiveness	Technical Solution Cost Competitiveness
Manufacturer - Linear	3.7	3.8	3.5	3.0	3.4	3.4
Manufacturer - Logic	3.4	3.8	3.6	3.2	3.5	3.4
Manufacturer - Discretes	4.1	4.4	3.8	3.7	4.0	4.0
Metrics Score Legend			Actions and Areas for Improvement			
Three Digit Metrics Score			Need to capitalize on the opportunity to gain business			
1=Low – 5=High			Send Manufacturer a quote package for OFF AVL ICs and Discretes			
1st Digit - Technical Ranking			Need an analysis on the discretes/ic commodity - what qualified on, \$ opps, etc.			
2nd Digit - Operational Ranking			318 items in both commodities qualified			
3rd Digit - Enterprise Ranking			Didn't get an vendor assessments.com-questionnaire back.			
			Didn't receive quote back			
Survey Comments						
Great Job on the FT443 project						

Each individual dimension score is made up from several category scores. A category is an element of the dimension that can be measured or assessed. Each category is rated “1” through “5” and the lowest category score in a dimension becomes the dimension score. As an example, if the rated categories of the technology dimension are technology breadth (3), leadership (4), roadmap alignment (4), NPI support (2) and solution cost (3) then the technology dimension score would be 2. This method of deriving the metric score immediately points to a problem in technology and that the problem lies within NPI support.

Lytica metrics are data driven. Each category has objective criteria against which each score is determined. Alternately, the score can also be determined from a survey of key stakeholders. For example, the determination of the technology leadership score would come from surveying the opinion of designers on the technology of the supplier. In the survey, each category score may be averaged and reported as the average value. If this average is used in a dimension score, only the digit preceding the decimal is shown; there is no rounding up. Lytica's Vendorassessments Metrics application enables such surveys.

It is common for a supplier to serve a client in more than one commodity space in which case they would have more than one metrics score. Each commodity is reported separately on the scorecard. For example, if a supplier is being evaluated on its magnetic products and silicon ICs it may have a score on the first of 2443 and 4443 on the second. In this case the third and fourth digits are common because they are company specific (Financials and Social Responsibility) whereas the first two digits are specific to the magnetics and silicon IC commodities.

Other key information for the supplier which is reported on the scorecard includes business demand information in dollars and units for the total available (company) market of the commodities of interest and the potential business available for qualified components as well as the near term opportunity if known, suitable, unqualified alternative devices from the supplier were qualified. This information is made available to Freebenchmarking.com subscribers if not readily available internally.

A new feature on our technology roadmap that will soon be made available to clients who have supplier quotation information is a win-loss competitiveness analysis. Enabled by Freebenchmarking.com, this analysis

## Supplier Metrics

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shows the market competitiveness of the winning and losing bids received from a supplier as well as that of the successful competitor (unnamed) who won their losses.

This information is useful in guiding your suppliers to the level of pricing required to win the current On AVL and potential Off AVL business. Freebenchmarking.com subscribers also have available to them target prices for each of their worst priced components that represent competitive win level pricing.

The scorecard will also include comments from the survey of key stakeholders to add richness to the supplier feedback.

Another important section of the scorecard will be the actions field where major actions identified during a feedback meeting are captured. Lytica's web based Scorecard will be accessible by suppliers for review of their scorecard and to update an action register. It will provide action aging and follow-up functions such as email notifications so that identified actions will not be overlooked following feedback reviews.

### Vendorassessments

Vendorassessments consists of three applications supporting our supplier metrics program. As of July 2012 these products are in development or customer trials. They are Profile (Trials), Metrics (Trials) and Scorecard (Development). Integration of these applications provides a previously unattainable level of supplier feedback and management.

Vendorassessments applications are web accessed via a secure login. Administration is controlled by the client and includes internal access control as well as set up for supplier access and visibility.

#### **Profile**

Profile is a due diligence application that captures key information about suppliers. The database contains information on many suppliers serving our clients. Profile allows the suppliers to complete the profiling questions once and have the information serve the needs of many customers. This cross company information sharing reduces the data maintenance burden on the client as they can access the information from the central database on all suppliers. The suppliers benefit as they only need to complete or update a single file annually or when significant events occur, not one per customer. This allows for Profile information to always be up to date and complete.

Profile solicits information on a supplier's financials, organization, certifications and policies concerning environmental, quality and social responsibility. This information can be used to derive a metric score for a supplier on those dimensions and categories appropriate to supplier's due diligence. Audit reports on supplier factories will also be available through the Profile application.

#### **Metrics**

Metrics is a web based application that allows key stakeholders in a company to rate the performance of a supplier. Survey participants are able to answer questions associated with the various performance score dimensions chosen to make up the score.

For example, if a supplier is being rated on technology, using the 5 point scale participants would be asked to rate the supplier on categories like technology leadership, technology breadth, NPI support, or solution cost.

## Supplier Metrics

Examples of survey questions are shown in the sidebar. In these technology category questions unsatisfactory would rate a “1” and excellent a “5”.

The survey can be filled in at any time during the year. Users can input to the survey whenever there is an issue with a supplier or when exceptional performance is to be acknowledged. It can be filled in coincident with the completion of a project such as a new product design release or it can be tied to a calendar cycle representing an annual assessment.

## TECHNICAL ASSESSMENT (DESIGN & ENGINEERING)

### 2. COMMODITY BREADTH

- Unsatisfactory - Falls short of expectations most of the time
- Poor - Falls short of expectations some of the time
- Adequate - Meets expectations
- Good - Exceeds expectations some of the time
- Excellent - Exceeds expectations most of the time

### 3. LEADERSHIP

- Unsatisfactory - Falls short of expectations most of the time
- Poor - Falls short of expectations some of the time
- Adequate - Meets expectations
- Good - Exceeds expectations some of the time
- Excellent - Exceeds expectations most of the time

### Scorecard

Scorecard, described earlier in this white paper, will be available via the web and will be populated with information drawn from links to other Lytica applications. These consist of Profile, Survey, and Freebenchmarking.com along with component level quotation information. With this information Scorecard will be populated with the metrics scores, survey comments, information on actual and potential business for the supplier at the commodity total market, On AVL and Off AVL levels, and summaries of action items taken during supplier reviews or of commitments made by the supplier during the year. The application will allow suppliers to log in and see their scores, review open action items and report on their status. The tool will notify suppliers by email of past due actions until the action is closed.

Scorecard will be available online at all times and will act as a superior vendor management tool. All commercial, performance and expectations information will be available in one easily accessible place.

Lytica's tagline, “Streamlining Progress”, applies to our supplier metrics program as it provides significant simplification and value creation in vendor management.