Every sourcing and procurement department has limited resources to execute on realizing productivity (cost savings). In practice, a large portion of organizations simply schedule yearly pricing negotiations with their main suppliers, and do not deviate from that approach unless there is a very large swing in the underlying commodity. Using cost data gleaned from previous quotes and SAS Enterprise Guide, we can put in place a program and methodology that moves the practice from “gut instinct” to quantifiable and justifiable models that can easily be updated on a monthly basis. From these updated models, we can print a report of suppliers or categories to approach for cost downs, and suppliers or categories that we should work to hold current pricing. By having all cost models, commodity data and reporting functions within SAS EG, we are able to not only increase the precision and effectiveness of our negotiations, but also vastly decrease the load of repetitive work that has been traditionally placed on the supporting analysts. Now the analyst can execute the program, send the initial reports to the management team, and be leveraged for other projects and tasks. Moreover, the management team can have confidence in the analysis and the recommended plan of action.

The goal of this project was to have a program that an analyst or manager could run on a monthly basis with minimal work, while still maintaining a high level of flexibility in the input data. To accomplish this, we constructed the program entirely within Enterprise Guide. This includes all data transformations, manipulations and cleansing. With this architecture our analyst can simply update two excel files (in orange), and then enter EG and run the program.

A simplified view of the flow of the program:

With those two files updated, the program can then join all supplier data to its relevant commodity data and currency data. For commodities or cost drivers that are not contained in the commodity file, the program either imputes the value based on the nearest commodity value based on date, or assigns it a constant that will not effect the end result.

Once all values are assigned, the program then locates the starting date values for each individual supplier (in our case varying between October 2013 and May 2015), and computes the percent change for each cost driver from that start date. The same process is also completed for the change in currency exchange rate.

Finally with all percent changes computed relative to each supplier’s date baseline, the new cost structures are recalculated, and outputted as a stacked bar chart by date.

Figure 1. Supplier Cost Build Input (snippet)

Figure 2. Commodity Data Input (snippet)

Figure 3. Full Program Process Flow
RESULTS

The output of the program are clear, concise, up-to-date total cost builds for each included supplier. When this program was implemented in industry, the results table was also tied to the annualized spend for each supplier, and an estimated saving figure was calculated and outputted. Four sample outputs are shown below in figures 4 through 7.

CONCLUSIONS

As demonstrated in the results, the output of the program is a simple to understand visualization of how market forces have impacted the “should-cost” of a supplier’s products. Last December these same builds were used as the backbone for annual negotiations with all strategic suppliers. During the negotiations, 41 cost builds were compiled, which are analogous to the four shown on the right (Figures 4-7). The build time was two weeks using excel. For that same build, the construction of this Enterprise Guide program took less than two days, and outputs up-to-date graphs in seconds. In the fast-paced environment of modern industry, that time difference is nearly priceless.

While these cost builds are not overly sophisticated, they have proven to be extraordinarily effective in negotiations. In the aforementioned negotiations they helped net a 200% increase in savings from what was projected, and led to annual savings number before the year started. These simple builds netted millions of dollars to the company’s bottom line, and have laid the foundation for further data driven decisions.

Net takeaway?

- **SAS EG**
- **Saves Time**
- **Saves Money**

Leads to BETTER Decisions