Customer Manufacturing Group

How Mid-Market Companies Can Leverage Enterprise Grade Analytics Tools Cost Effectively
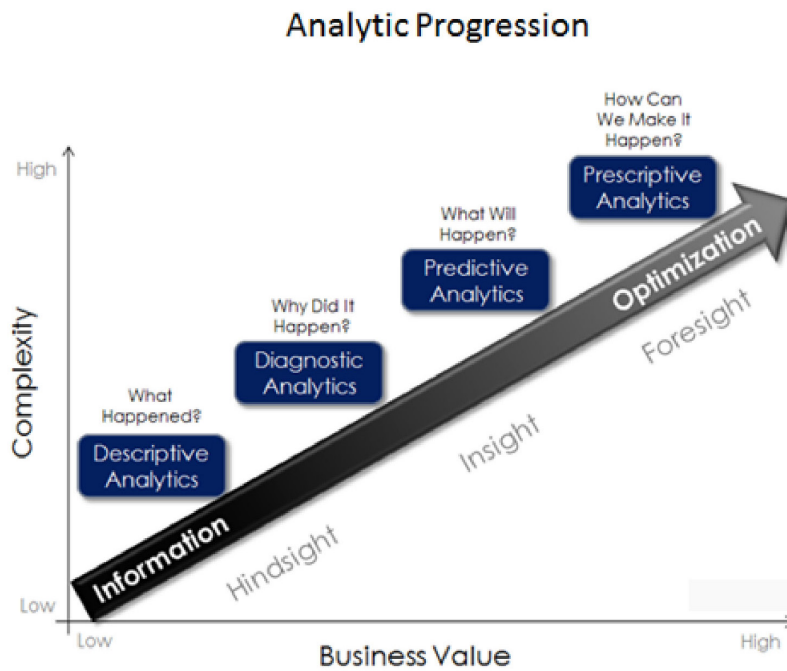
It's No Longer Cost Prohibitive To Use Advanced Tools to Make Better Decisions

The reality in today's world is that if mid-market companies are not using these tools they are at a disadvantage

While remaining strong believers in making sure Marketing professionals spend plenty of time out with customers, the reality in today's world is that mid-market companies must acquire and learn to use analytics tools to help make better decisions. Fortunately, enterprise-grade tools are now available to mid-market companies at an investment that can return a positive ROI and a short payback period. This paper discusses the current state of affairs.

Mid-Market companies have historically been at a disadvantage to their larger competitors when it came to data analysis. Advanced analytics tools were beyond the economic wherewithal of all but the largest mid-market companies. That has changed. The reality in today's world is that if mid-market companies are not using these tools they are at a disadvantage to not only their larger competitors but also to those mid-market competitors who understand the costs of these tools, and that the skills to use them have dramatically changed.

An excellent framework to understand the progression available in analytic tools is the Gartner Analytic Progression graph shown below. Most mid-market companies are still stuck in the lower left portion of the graph and many do not realize that moving to the upper right is not only a competitive requirement, but also quite economically viable. Let's review the Gartner Model and put it into a real-world perspective for the mid-market company.

The paper was written by adapting content provided by Lityx and Data Informed and is done with permission.

Descriptive analytics typically takes the form of reports, charts, and dashboards. It often starts as a high level, one-dimensional view of history, for example sales by region. But even within the category of descriptive analytics, an organization can achieve more sophistication by progressing toward what historically is referred to as Business Intelligence. BI tools allow drill-down, multi-dimensional views of historical results, for example, sales by region, SKU, and time of day. This is often the jumping-off point to the next area of progression (diagnostic analytics). Tools in this category today can range from Excel to MicroStrategy in the $150 - $600 price range.

Diagnostic analytics are next. Beyond simply reporting what happened, this level of analytics attempts to analyze why it happened so action can be taken. BI tools often are a starting point for going down this path, as are classic statistical tools that can identify patterns and correlations in data. For example, perhaps a descriptive analysis identified sales of a particular SKU in a region to be lagging behind other regions. That's interesting, but while descriptive analysis answered the question "What happened," you need diagnostic analytics to answer the question "How can we fix it?"

Further analysis of additional metrics, such as on-hand inventory and warehouse shipments, may find, for example, that on-hand inventory was zero on many days in the region. Further drill down might show that shipments to the regional warehouse were not being made for a two-week period. Now we have some root causes and can fix them. Notice that the amount of effort to drill down and identify an issue in this way can range from simple and quick, to long and pain-staking. Generally, you have to know where to look — a lot of hunting and pecking. However, there are a myriad of BI tools available to help with the task.

Tying the first two areas of analytic progression together, we see the move from descriptive analytics to diagnostic analytics as somewhat natural and obvious. It's not often that an organization will report metrics without looking further into root causes. The big difference is the tools involved, and the willingness to look deeper and deeper into multi-dimensional views, as is often necessary in diagnostic analytics. In fact, sometimes — perhaps even mostly — the root cause of business results can be very complex and not even easily found simply through diagnostic analytics. This can be thought of as the "so-what" problem, where you end up with a lot of insights but are left without any clear conclusions from which to take action.

While Excel can possibly do some of this analysis, it rapidly becomes impractical. Modern tools in this category include software such as Tableau in the $2,000 price range.

Predictive analytics attempts to find the complex reasons that a business result has happened in the past, translate those reasons into a concise mathematical model, and then use that model to accurately predict the result in the future. The level-of-sophistication leap from descriptive and diagnostic into predictive analytics is large. There are two main reasons for this additional sophistication: the complexity of the data and the complexity of the tools and skills required to manage them. If these can be managed, however, the added value and ROI in moving to predictive analytics can be substantial.

This is where things have really changed in the last few years. Firstly, the tools required to do this kind of analysis such as LityxIQ, have become cost effective and the user interface has lessened the skills needed to make good use of them by non-analytics trained users.

There are many software vendors in the Predictive analytics space. Pricing is hard to compare because some vendors offer do-it-yourself barebones "kits," and others offer full service solutions that includes the tools and tailoring it for the customer's needs. Bottom line is it is above $10K and likely, (for mid-market companies) below $50K. We can be helpful in working with you in this area to find the best solution, if desired.

The last step in Gartner's view of analytic progression is **prescriptive analytics.** This is a closely related follow-on to predictive analytics. It is the ability of an organization to create a detailed, optimal plan to execute against that accounts for all known business factors and constraints. In fact, this is really about Business Optimization. The leap in sophistication is still great, as the techniques,

> **Predictive analytics attempts to find the complex reasons that a business result has happened**

tools, and skills required are often quite technical and require complex mathematical modeling. This level of progression is still beyond the skills of most mid-market companies, but that will likely change rapidly.

There are few prescriptive analytics vendors and those that exist are primarily for the enterprise client and cost six figures. There are some good niche providers that can do this for less if you know where to look. We can be helpful in working with you in this area to find the best solution, if desired.

This Need For Data

Aside from the availability of tools (now quite cost effective), to make use of these more advanced tools requires data. One of the key inhibitors for many companies in making the move up and to the right on the Gartner chart is data … including its granularity and accuracy.

As an example, from the perspective of data, predictive analytics often requires much more granular data to be effective. Datasets that drive descriptive and diagnostic analytics are often high level, rolled-up views of history. For predictive analytics, as an example, large databases of transaction-level data with accompanying databases describing products, customers, locations, and so on are all joined together to create a highly multi-dimensional, detailed view of history. The amount of effort to create such a view that is ready for predictive tools cannot be understated. It's not easy and often requires outside assistance for an organization to get there initially.

An organization should move into and through new types of analytics in steps instead of all at once so that their investment comes over time. Importantly, the ROI that is achieved does not have to wait until the end though. It can be achieved at each progressive step so that the payback period isn't a long-term proposition. A thoughtful progression can achieve strong ROI at each baby step along the way.

Final Thoughts

Analytics are not a substitute for human understanding and observation. They are an important compliment. Relying exclusively on analytics has mislead many larger companies. Trying to make critical decisions without the insights from analytics can cripple a company's success. Knowing what the best options are for optimizing the future is absolutely enhanced by modern tools. Those tools are now well within the economic reach of virtually all mid-market companies.

More Information About Customer Manufacturing Group

If you would like more information about how to apply a process to improve your marketing/sales function, simply contact us and we'd be happy to help you get started. From sweeping marketing/sales management process strategies to specific branding or product launch services, Customer Manufacturing Group can help.

If you'd like to learn more about Customer Manufacturing Group, or for a complimentary subscription to *Customer Manufacturing Updates,* give us a call at (800) 947-0140, fax us at (408) 727-3949, visit our website at www.customermanufacturing.com, or e-mail us at info@customermfg.com.

We have offices in major cities in the United States, and our experts travel extensively throughout the world. If you'd like to schedule a meeting when we're in your area, just let us know.

> **An organization should move into and through new types of analytics in steps instead of all at once so that their investment comes over time.**