

Advanced Benchmarking For Strategic Leaders

NUMBERS CAN TELL MANY STORIES. BUILD YOURS.



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Benchmarks are both common and under-utilized

Benchmarks has been moving in a few decades from a specialty niche hosting rain makers and rare experts, to a broadly used tool available online, with many competing solutions and tools. There are also pseudo-benchmarks which are either barely worth the price of their paper weight, or broker multiple sources to create a benchmark digest with little value added. Little exist in terms of standards and tools however to fully leverage the value of the reports and analysis.

On the customer side, everybody is now using benchmark values one way or another, picking bits and pieces of knowledge to form an opinion. The inevitable bias creates a new version of truth and can overcome deeper analysis with greater formatting.

Technology benchmarks are sometimes based on a recent quarter's data. Some collect thousands of inputs, while others are processing a mere couple of hundred records. Resetting benchmark data from the perspectives of time (how adequate is the data gathering period) and relevance of the sample group (how similar are the companies or businesses being surveyed) is a necessary process to make the best use of the intelligence gathered.

The core value of a benchmark is to provide a numeric point of reference, that can be used to compare with a field value, such as sales, marketing conversion, turnover of goods, IT spend, staffing levels, etc. Well understood, a benchmark is a rich source of analysis and can even become a strategic tool for executives.

Like any tool, the value of a benchmark is in how it is being used. A composite competitive or comparative benchmark index can provide targeted information to match strategic endeavors: competitive performance and how the peer group responds to market changes; specific competitor's numbers and how they compare; how much a strategic initiative or corporate program achieves business value over time. For each application, a specific composite panel can be built and monitored.



Not all strategic leaders and executives are enjoying spending hours in calculations and statistical analysis, especially to find out that nothing of importance is happening. Setting up thresholds of variance that trigger red or green flags is an easy way to take advantage of a composite benchmark dashboard without having to perform in-depth analysis until the threshold is crossed.

Composite benchmarks are a precious tool with a small initial effort and many rewards to collect: make it work for you.

Benchmarks always need perspective... and a bit of math!

A benchmark is in general a snapshot of a specific category of information. The breadth of the source data and the period of reference are the primary reasons how useful a benchmark value is. The breadth and depth of the sample base is a two-sided coin; the more correlated data points, the more reliable the number; but the broader the sample base, the less accurate the number. Confusing, isn't it?

The number of samples is mathematically relevant as it makes an exceptional result within the sample base less impactful. Another option can be to remove uncooperative numbers from the reference base, at the expense of the integrity of the results: altering samples because they do not match with the model leads to

mingling with data and misleading readers. If the sample base is too small and the exception in the distribution is clearly an anomaly, it is possible to remove this value using a sigma variance threshold: beyond a given value of threshold, data points are no longer included. A better process however would be to make sure that all records from sources that meet the sampling criteria are included into the calculations.

If a benchmark value is based on a consistent but small sample base, it can be useful to correlate the results to another, distinct sample base, as long as the core drivers for the benchmark value are coherent and rationalized.

A sample of route performance for trucking companies in Idaho might not provide sufficient sample base to be acceptable; but a correlation with a couple of benchmarks for trucking companies in states which are comparable to Idaho in the factors influencing the collected data might provide good insights on the relevance of the small original sample. The discipline of statistical analysis can be rapidly complex, so here are some basics useful for those who do not plan to spend a few hours crunching equations.

The size of a relevant and consistent sample (proportion) can be used to calculate the percentage of accuracy (aka: error bound ratio). A sample size of 100 is required to get 10% or less error ratio in the distribution; a sample of 400 would get you 95% accuracy and to reduce the error bound to 1%, you will need at least 10,000 samples.

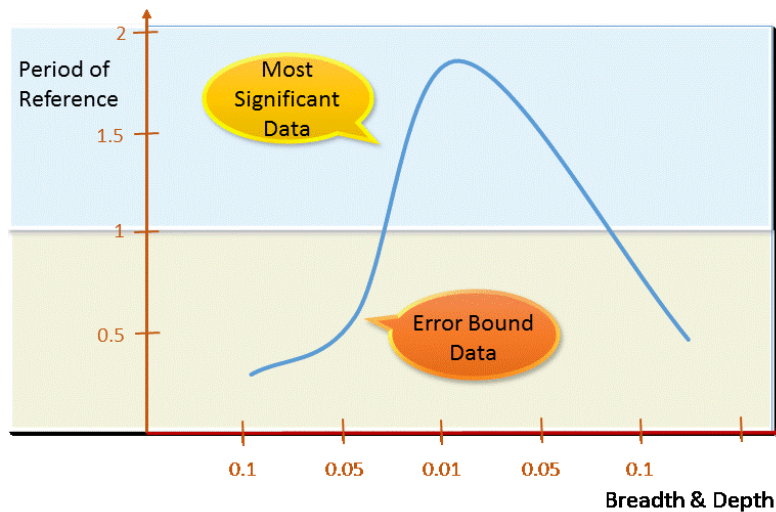
So you have a large sample base, say 650 samples, but the fine criteria for the samples make the number less relevant, such as for instance a whole industry segment is used, such as insurance companies in the continental USA, when the real focus is Property & Casualty / Auto in the Western states. An option would be to use a model based on stratified sampling, and break down the whole set into sub-samples, each using a logical criteria for the division. Establishing series of sub-samples for separate values from the same source can provide more sufficient insights when the granular data does not exist.

So you don't want to become a statistician? Many benchmarks are available for purchase, or can be done on-demand as a special project. In such case, you might still want to think about the sample size and the actual relevance (similarity with your own situation) of the sampled targets before you start making decisions based on these numbers...

Another important factor in the quality of a benchmark is the period of reference. Forrester Research publishes IT Spend benchmarks every quarter, highlighting the MOOSE (KLO) and projects / investments details by industry and size of company. Looking at the latest report, you could easily decide on the IT Spend target you will stamp on the Technology Department budget. But the report is only for one quarter, likely the one before last or older (it takes time to gather and publish after the survey is completed). The quarterly data might include seasonal variations, summer plateau or the new fiscal year's fresh budgeting. If the goal is to establish an annual target, the period of sampling should cover at least a full year, ideally another one or two to separate annual trends from micro-changes.

Some data readily available on the US market at the beginning of 2014 was in fact analysis of 2010 data points: how much would you trust reference data that was from a time just before significant economic changes happened? Does it make a difference in your IT Capital Budget that by then the craze was BYOD and mobility, when the current focus today is investing into virtualization and cloud services?

Whether the benchmark is the result of internal collection or a purchased product, the results should always be placed into a fresh, skeptical perspective, to make sure that the relevance and accuracy of the data is going to match the needs.



Two dimensions: period of reference and the proportion (breadth & Depth) of the sample base, should always be used to validate how much you can rely on the calculated numbers to make decisions. Using a sample base of at least 400 independent points to provide a 95% confidence level, and a period of reference of at least the same duration as the business decision / analysis are acceptable safeguards. They might not ensure the perfect answer, but might help avoid the biggest mistakes.

A reduction of the sample data size is not always a source of error, as long as the sample size remains within acceptable confidence level (10% seems a good threshold), and that the period is not smaller than the target analysis.

Composite Benchmarks that fit your needs

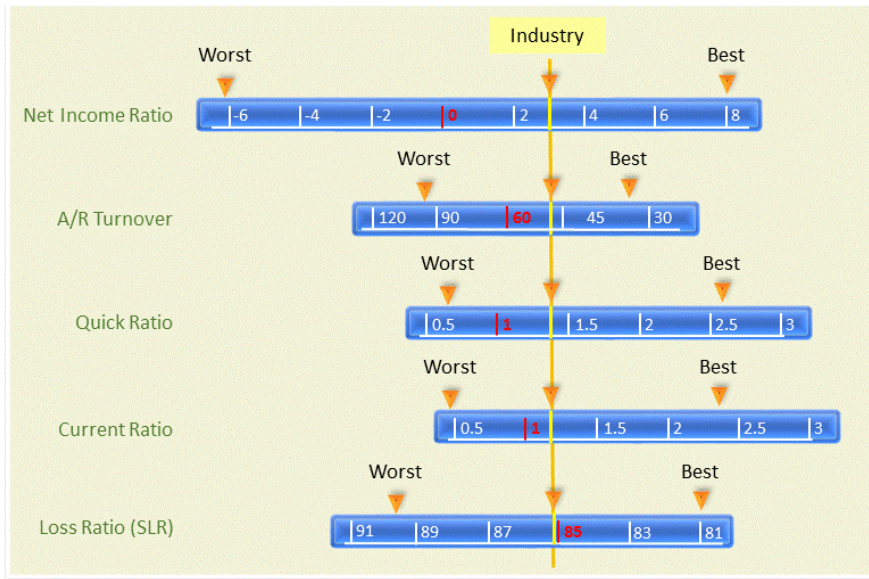
Now that we have a better sense of what makes a good benchmark, let's take a look at how to make the data more relevant. Most benchmarks are used to either compare a business or organization to an industry value (analytical) or to gather insights on performance or other targets which are relevant to the business (prospective).

We want to establish a comparative benchmark of for instance, a CPG company in California. We already checked that the sample base is relevant and that the proportion provides adequate confidence. Most benchmarks start with an industry level analysis, sampling a very large base of companies to provide averages, distributions, means and variances. We need this information to create an industry baseline, useful at analyzing macro-economic factors and how they affect all companies. But how does this information help the company overtake a CPG competitor in its own market?

Many companies can easily plot their position on the competitive map. Some are leaders, and they want to know what the followers are doing. Some are still growing, and want to know what the leaders are doing. All want to know how their direct competitors and peers are faring, in any case. The analysis of performance data in a large sample base can provide scientific means to compare a company to an industry, but creating a composite benchmark narrowed to a limited number of target companies can provide additional and highly valuable intelligence.

The comparative analysis of the performance of a business with its peers is a precious tool to know when and where one is doing better than others, which by itself provides both a goal to achieve and an understanding of the competitive differentiator. A limited number of performance indicators are in general providing a solid perspective of the overall competitive performance: revenue, net profit, turnover, COGS, EBITDA, Gross Margin, SG&A, etc.

Composite Benchmark Illustration



For each business, a specific set of Key Performance Indicators exists which is meaningful, such as the Underwriting Cycle Time or Abandonment Rate in the Insurance industry. The first task is to establish those meaningful metrics, and to define how the metric is affected by internal or external factors. How much is the COGS impacted by a materials or supplier's price change? Once this set of indicators is created, the central value should be the industry average for a given industry or sub-segment. This is the baseline:

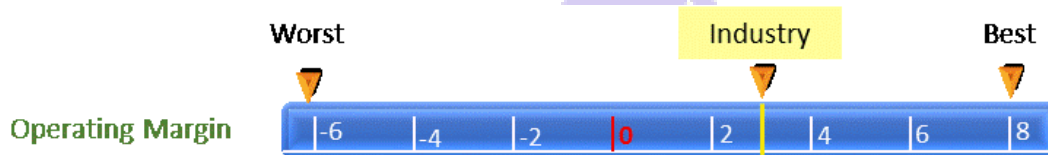
performing at this level means neither better nor worse than average, and all would vary similarly when external factors are changing.

Three additional plotted points can immediately increase the intelligence; these are the performance of:

1. The best performer (s) in the industry,
2. The worst performer(s) in the industry and
3. The business doing the analysis.

The best performer (or short stack of best performers if they are in a tight group) is an indicator of the number to reach, or to be compared to. The worst performer(s) is the case where in similar economic environment, a business is not able to provide an industry level performance.

Excluding startups and exceptional situations (M&A, natural disaster), these values define a span of performances centered on the industry average. The position of the industry average in the spread is an indicator of where the majority of the performance resides, making this average a more meaningful value. Below is an example of a Benchmark Index, providing industry spread and average:



Plot your own performance on this chart and you get your visual and precise competitive performance position, along with a few additional insights on how your peer group is doing. Replace Worst and Best with your top competitors, and you get an immediate read on how and where they perform better or worse.

Adding a small but meaningful number of metrics using the same format gives a better overall picture of the competitive situation, and offers opportunities to identify companies excelling in just one dimension or in multiple ones at once.

The graph below illustrates how such a composite benchmark can provide deep intelligence on a segment of the industry, how it reacts to changes to economic conditions or seasonal changes.

A simple observation of the changes to the Quick Ratio and Current Ratio in a low-season quarter for example, could give a direct read on the Inventory burden and how each company in the selected group is dealing with turnover. This snapshot view does not replace a thorough analysis, and each finding should be carefully vetted and correlated; but over time, strategic leaders will gain precious insights signaling patterns and trends.

That they take advantage of them is a whole different matter, of course.

Targeted and strategic benchmarks

Benchmark, as well as similar analytical data, can be a precious tool to understand how the industry, the competition or a select group of industry peers and competitors are performing, along with their position in the industry ranking. By itself, this is a precious tool for executives and leaders, as long as the data and its limitations are properly understood and brought into perspective.

Strategic Leaders have a bias towards action, however. Composite benchmarks, especially refined to peer groups and specific data points, are a great tool set. Like any tool, the question is how well it is being used.

Taking the earlier example of the CPG Company ABC, which is ranking in the top 5 worldwide, the result of a few global leader KPIs and a number of lower ranking ones. A goal would be to become #1 overall, which means increasing both the size and the performance of the business, simultaneously internally (back office and Gross Margin) and externally (Product features, CSAT, marketing).

For each of these key performance indicators, Product Features for instance, a benchmark index can be built (as seen earlier) that would indicate the ABC Company position, the worst and best performers of the industry and the overall industry average. The next step will be to determine who the industry peers are that perform at an achievable (but stretched) performance level, and understand why they are good at it. This analysis usually requires more intelligence and in-depth analysis than just the numbers, but this is where it starts.



A second, parallel track is to seek examples of companies excelling in the creation and integration of compelling features onto their products. Some companies might be in a comparable reference group, but others should come from completely different industry segments with no particular resemblance with the CPG segment ABC Co belongs to. Performing once again correlation analysis and in-depth intelligence will provide ABC strategic leaders with a unique perspective on the product management and innovation drivers that make their peers excel, but also the drivers that make the most successful companies at innovating and creating new products thrive. An in-depth look into technology leaders, apparel or car manufacturers, for instance might tell a story on how to embed services,

respond to emerging trends, prepare to cater to the next generation. Some of the findings might be farfetched (stop improving your top product; create a new one): this is the highest value from such analysis: how the story behind the data is giving insights on possible avenues to explore.

If there is a path not (yet) highly travelled, then you might be the first to start the journey; the pay-off is a possible competitive jump forward. Two significant differences with a “blue ocean” thinking is that in this case the findings are not necessarily breakthrough (it is OK to just improve your performance sometimes), and that data exist to correlate the new direction, allowing you to build a strategic roadmap with its actual business case and achievement milestones along the way.

If the goal is not an overall competitive performance effort, but a focused effort such as acquiring a business to accelerate inorganic growth, the same approach can be used, actually with little change.

ABC is now looking into making an acquisition, thanks to the increased EBITDA resulting from an earlier performance benchmark analysis effort. What would be the characteristics of an acquisition target? Most acquisitions are driven by a limited and often complementary number of objectives: increase the size to gain scale; remove a competitor; benefit from specific assets or market position; gain market equity. ABC is now looking at a mid-size company which is operating into a strategic niche market. The two main questions are why ABC should acquire this business and how the acquisition will impact its results over time; why would this business accept to be acquired by ABC versus its main competitors?

A Composite Benchmark can be created for each of these two lines of inquiry, carrying each specific and highly relevant Benchmark Indexes. The simple analysis of operational performance and a few strategic KPIs such as market penetration, CSAT, brand equity can provide both a view of what constitutes the future economic value of the acquisition, in the same time it responds to the question of what in the business to be acquired is operating at the same level as ABC and what is not in alignment. The analysis might show that some operating performance data indicates that ABC could improve the gross margin of the new business, or the other way around (both are net benefits on the long run). Here again, knowing why the numbers are such provides a unique, substantiated look into the inner engine of the business to be acquired. In the absence of other sources of information, this data is critical in making the decision; if a body of knowledge has been gathered already, this data can correlate or raise a flag on what was so far perceived as facts. Either way, the composite analysis is an invaluable tool for diligence.

Building a slightly different composite index from the angle of the company to be acquired is a whole new game where the winner is going to be the most desirable suitor. Knowing how you compare with other potential dates is a healthy reality check, but also contains the information that will be needed to make an effective pitch to the desired acquisition. Areas where the acquiring company can provide performance improvement to the target company, or areas where the acquiring business should learn from the target are key discussion points in M&A initiatives. They can make the difference between a pure business transaction and a business deal between willing partners, in the doing possibly undermining the perceived advantage of another suitor (never let fringe benefits go wasted).

Knowing what to expect from the business integration, and what makes the value of the acquisition for both parties, as well as for potential competing acquirers are valuable help to make M&A's extensive efforts with many moving parts more successful both regarding the acquisition and the subsequent successful integration.

Using trends and variances to create intelligence

Over time, benchmark gathering and analysis offers a view into market trends and into a company's variances against its peers and the industry. There lays a whole new discipline: competitive performance intelligence.

The observation of for instance the relationship between Quick Ratio and Current Ratio, the evolution of the Claims Ratio against the Insurance Industry average after a new regulatory change, or the post summer days of inventory turnover compared the changes in Cost of Goods Sold are examples of performance indicators that can provide precious information by just looking at the trends and plotting the most current value. This analysis can be done for a business itself (organic view), to appreciate and understand any variance from past data points. A variance can be the result of a performance improvement, a new competitive pressure or market conditions. Positive or negative, a variance shows that the business no longer performs the way it did in the past; this alone is worthy of executive attention.

Observing the operational results weekly and monthly to monitor key indicators enables catching an emerging trend early. Over time, a trend being confirmed after filtering out exceptional conditions and process related errors (wrong data collected), presents leaders with an opportunity to correct course in near real time, or to

get to the root of the performance improvement and turn it into a new best practice or model for the entire company, if applicable.



The same process can be used to watch the core competitors and understand when they are getting stronger or when they are stumbling. In the performance wars, both are calls to action to take advantage of a moment of weakness from competitors, or to counter a surge before it creates market differentiation. The nature of the means and variance in industry benchmarks is that all members of the industry (reference group) are operating within a historical level of variance. One member deviating beyond this statistically significant threshold becomes an immediate object of attention, as it can mean a business breakthrough or a major event.

A benefit of using repeatable processes and mathematical and statistical tools to create composite indexes and dashboards is that once set up, there is little to do except monitoring the variances and doing periodic sanity check reviews. When doing the analysis described earlier every time for every indicator could be a daunting task for anybody, managing by variance allows to only “double click” when a variance reaches or passes the threshold or statistical and business significance. In most cases, the monthly and quarterly dashboard are a simple collection of minor variations, without particular bearing on strategic decisions. When they pass the critical value or become a confirm trend, strategic leaders spring to action and start drilling down through the data to capture the root cause and prepare timely decisions.

A last use of this framework is on the impact of strategic and corporate initiatives, projects and programs. Fundamentally strategic programs are designed to achieve a certain quantity of strategic value (e.g.: Future Economic Value, Equity, or Market Share). The actual performance achievement of such efforts is generally shrouded in clouds, not to say hot air vapor. It can be convenient to declare strategic success and move on to the next initiative at once, and many strategic business cases do not have the details to enable a rigorous metrics program to be tied to them. But most are hinting at enterprise level performance targets that are declared to be reached once the initiative is deployed operationally. Sounds familiar?

Here are the good news: enterprise performance as well as strategic performance are most likely falling into known and measured performance indicators, the majority of them might very well be recorded and published, at least by industry associations and analysts. Building a composite comparative performance index using in-house, industry and peer companies as a reference group can provide – almost - the same results as a complex metrics effort associated with the strategic program.

Strategic Programs can measure their performance through the aggregate impact of all deployed or built components in their charter (artifacts, products, marketing efforts, organizational change). Eventually, the strategic momentum they are gaining will reach the targeted strategic or business value of their original charter. Because the aggregate value is a bottoms-up calculation, it is only after all of the projects and actions defined into the Program are completed and over time that the final picture emerges. It makes the benefits realization complex and expensive.

Another way to get to the aggregate view is to use a top-down approach leveraging a composite benchmark. If the program is any successful, it will alter one or more of the overall performance indicators. Moreover, this impact will only happen after deployment or delivery, and with a modelled ramp-up. From there, it becomes a straightforward thing to build the composite benchmark in preparation for the observed impact.

The period before deployment becomes the baseline value to compare to, and the reference group of the industry the tool to eliminate changes that would not be organic, such as seasonal changes, market or regulatory pressure for instance.

Make it work for you

Advanced use of composite benchmarking can be a precious source of dynamic analysis and confirmation of impact for the strategic leader, with relatively little investment up-front besides the procurement of base data. Some of this data is accessible through industry associations for a moderate or no cost, some is accessible through industry analysts (e.g. Dun & Bradstreet, Gartner, and Forrester Research) and many other firms offering standard or personalized benchmarking data.

All you need is a good pocket calculator and a dose of analytical skills, to take advantage of such tool. Add strategic intent or a long term goal to the mix, and you have all you need to make it work for you, while you look into your next strategic target.

