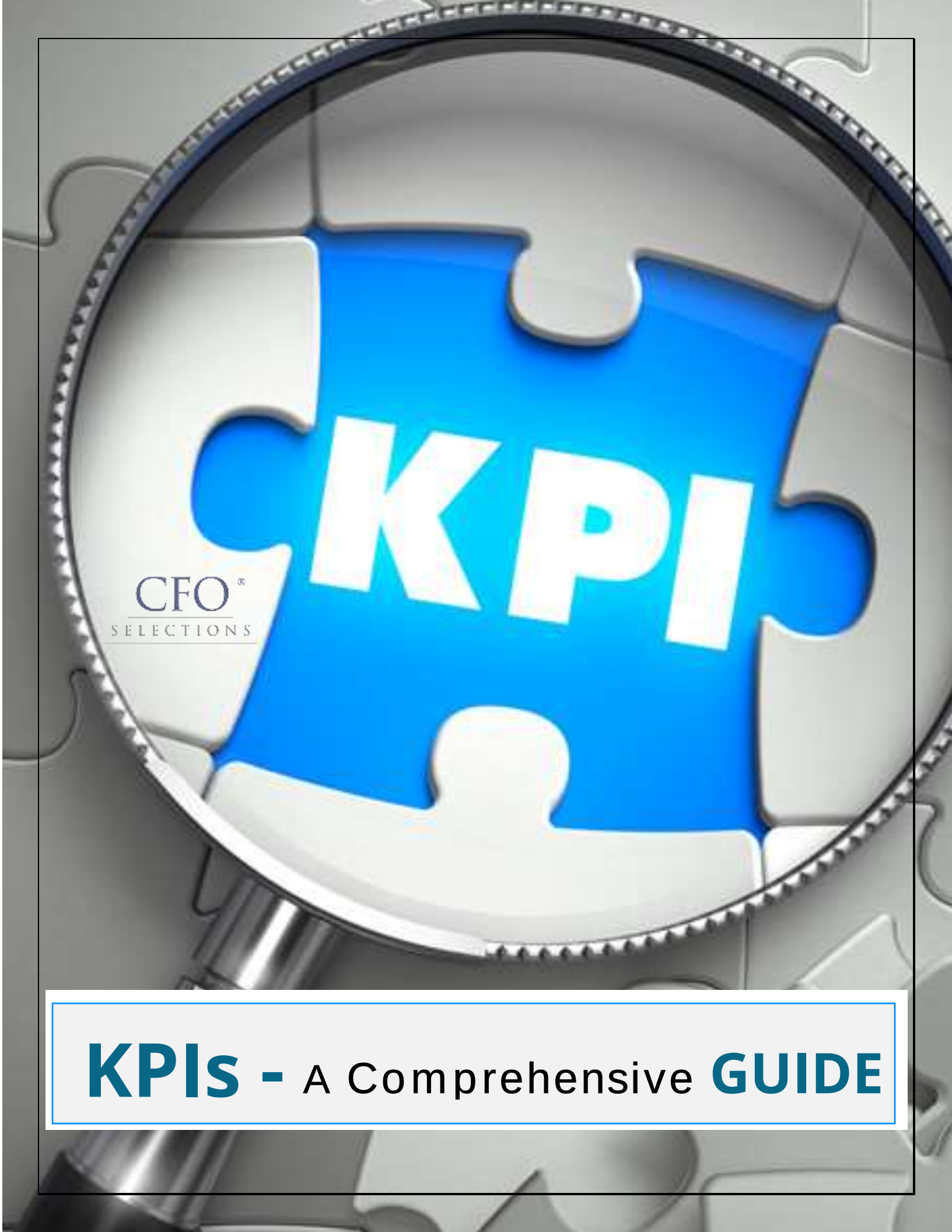




CFO[®]
SELECTIONS

KPIs - A Comprehensive GUIDE

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Whether you're an aspiring manager or a seasoned executive, the KPI metrics outlined in this eBook will provide key insights to better understand key performance indicators. For emerging professionals, think of these key performance metrics as the foundation of your analysis. For chief executive officers, think of this guide as your annual analytics checkup.

What is a KPI?

To begin, KPI is an acronym, short for Key Performance Indicator. We're sure it's now abundantly clear what qualifies as a KPI, right? More likely, you're still in the dark about what a KPI is, and how it relates to your organization.

First and foremost, understand that a KPI is simply a generic term to describe a metric or measure of *something* in your business that helps you decide how your business is doing.

A KPI is simply a generic term to describe a metric or measure of something in your business that helps you decide how your business is doing.

Many believe KPI's are financial metrics, of which there are many. And they most certainly are often KPI's. But the world of KPI's is much larger than that, including operational aspects of your business, human elements, as well as more unique measures of performance that are quite often industry and company specific.

Given that, there's simply no way to craft a complete list of KPI's for any organization. What we can do, however, is offer several common KPI's that are relevant to a variety of companies. Beyond that, we've included a variety of KPI examples. They may be relevant to your business (we've tried to highlight where we humbly believe they're applicable) but more likely, they serve as an illustration of the kinds of creative metrics you might craft for your own organization. If you need any insight into what might be appropriate for your company, we're happy to help!

Balance Sheet KPI's

Let's start with the basics.

Every company has a balance sheet. And many balance sheet elements are common among businesses - Cash, Accounts Receivable, Inventory, Accounts Payable, Equity.

How a business is viewed by third parties, like banks and other lenders, is often informed by Balance Sheet KPI's. A few common examples follow:

Solvency Ratios

Quick Ratio

Quick Ratio = (Current Assets – Inventories)/Current Liabilities

The quick ratio measures a company's ability to meet its short-term obligations with its most liquid assets. The higher the quick ratio, the better the position of the company.

Current Ratio

Current Ratio = Current Assets / Current Liabilities

An even simpler variant to the quick ratio and is used to determine the company's ability to pay back its short-term liabilities. You'll see this balance sheet ratio everywhere.

If the ratio is below 1, it raises a warning sign as to whether the company is able to pay its short-term obligations when due. It doesn't mean the company will go out of business. But it is something that should be looked at. If a company has a low current ratio year after year, it could be a characteristic of the industry where companies operate and high debt levels.

Debt/Equity Ratios – Part 1

Total Debt/Equity Ratio = Total Liabilities / Shareholders Equity

Long Term Debt/Equity Ratio = Long Term Debt / Shareholders Equity

Short Term Debt/Equity Ratio = Short Term Debt / Shareholders Equity

There are different variations of debt-to-equity ratios, but the objective of these financial ratios is to determine how a company has been financing its growth.

A high ratio means that the company has been growing due to debt, or *leverage*. Not all debt is bad, but if the number is exceedingly high, remember that at some point the company has to pay off the original loan as well as interest payments.

An important factor to consider then is to determine whether the returns generated from the debt exceeds the cost of debt (i.e., interest).

Activity Ratios

Activity financial ratios measure how well a company is able to convert its assets in the balance sheet into cash or sales. By analyzing the activity ratios, you can see how efficient and well run a company is.

These financial metrics aren't just for the company, but also measures the people behind the business and how well they are running the show.

Days Sales Outstanding (DSO)

Days Sales Outstanding = (Receivables / Revenue) x 365

Cash is king and a business capable of converting its receivables into cash quickly is a great sign of health and efficiency.

A low DSO number means that it takes a company fewer days to collect its accounts receivable. A high DSO number shows that a company is selling its product to customers on credit and taking longer to collect money.

Days Inventory Outstanding (DIO)

Days Inventory Outstanding = (Inventory / COGS) x 365

This financial ratio is used to measure the average number of days a company holds inventory before selling it.

This ratio is industry-specific and should be used to compare competitors. A company like Boeing will have vastly different DIO than a company like Amazon where inventory turnover is high.

Days Payable Outstanding (DPO)

Days Payable Outstanding = (Accounts Payable / COGS) x 365

Days Payable Outstanding shows the time in days a business has to pay back its creditors. On the flip side, it also shows how long the company can utilize the cash before paying it back.

The longer a company can delay payments, the better.

Cash Conversion Cycle

Cash Conversion Cycle = DIO + DSO - DPO

Putting DIO, DSO and DPO together, you get the cash conversion cycle.

The entire cash conversion cycle is a measure of management effectiveness. The lower the better, and a great way to compare competitors.

For a full explanation as well as company comparisons and examples, [check out the article on cash conversion cycle](#).

Turnover Ratios

Receivables Turnover

Receivables Turnover = Revenue / Average Accounts Receivables

The receivables turnover ratio is one that is categorized as an activity ratio because it measures the company's effectiveness in collecting its credit sales.

Inventory Turnover

Inventory Turnover = COGS / Average of Inventory

Inventory is money. It costs money to buy, it costs money to hold it because it takes up a lot of overhead if it isn't cleared out. You waste shelf space, the product gets old, and it may have to be sold at a fraction of the price just to get rid of it.

Inventory turnover is important for companies with physical products and is best used to compare against peers. After all, the inventory turnover for a retailer like Costco is going to be very different to that of an auto manufacturer.

Average Age of Inventory (Days)

$$\text{Average Age of Inventory} = \text{Average of Inventory} / \text{Revenue}$$

The average age of inventory is the inverse of Inventory Turnover.

One is not preferable to the other. But it is easier to visualize the inventory age in days. Let's say that the inventory turnover for a grocery store is 10. But it just makes it easier to visualize the inventory when it is described as 36.5 days instead of a turnover ratio of 10.

Intangibles to Book Value Ratio

$$\text{Intangibles to Book Value} = \text{Intangibles} / \text{Book Value}$$

This balance sheet metric is helpful in checking quality and health.

Unless a company holds a lot of valuable intellectual property or well-known brands, I like to see intangibles kept low. This is a simple balance sheet analysis to show how much of the company's value is built on intangibles.

Inventory to Sales Ratio

$$\text{Inventory to Sales} = \text{Inventory} / \text{Revenue}$$

A rather simple and less used ratio. It is mostly useful when you track it year over year or every quarter.

The objective is to see how inventory is being managed as it will signal potential problems with cash flow.

An increase in the inventory to sales ratio can indicate that

- your investment in inventory is growing more rapidly than sales
- or sales are dropping

Vice versa, if the inventory to sales ratio drops, it could mean that

- your investment in inventory is shrinking in relation to sales
- sales are increasing

This is a high-level balance sheet ratio, but it will point you in the right direction when you need to dive deeper into inventory trends.

Capital Structure Ratios

Capital structure is looking at the company's debt and equity. The following ratios all help to show you how much a company is using debt to run the business.

These are easy balance sheet ratios to understand and offer a quick check for red flags.

LT-Debt as % of Invested Capital = Long Term Debt / Invested Capital

ST-Debt as % of Invested Capital = Short Term Debt / Invested Capital

where,

Invested Capital = Shareholders Equity + Total Liabilities – Current Liabilities – Excess Cash

Debt to Equity Ratios – Part 2 – Trends

Watch how these ratios have trended to understand whether the company is in a difficult situation or not. If a company operates with high leverage and has maintained a high debt ratio, it is not as alarming as a company with a low debt ratio suddenly showing a spike in the debt ratio.

LT-Debt to Total Debt = Long Term Debt / Total Debt

The long-term debt ratio is an indicator that the company does not have enough cash to run future operations. Look into the deal for the debt, what the interest payments are, what level of operation the company is required to achieve to remain within the debt covenant.

ST-Debt to Total Debt = Short Term Debt / Total Debt

If the short-term debt ratio is high, this is a big warning sign. The debt payment is coming due

and will need to be re-negotiated or paid off with a new loan.

There are situations where a high short term debt ratio will cause high levels of uncertainty and the stock to sell-off.

Total Liabilities to Total Assets = Total Liabilities / Total Assets

A broad ratio to show the level of liabilities on the balance sheet compared to the assets.

Price to Working Capital = Price / Working Capital per Share

where,

Working Capital = Current Assets – Current Liabilities

Working capital is the absolute lifeblood of a company. Most fast growing and successful businesses fail due to a lack of working capital. That's why most companies who go public do so; to get more working capital from the public market.

A high working capital ratio shows whether the business can continue to operate without troubles.

For retailers, you would want to subtract inventory from the working capital equation to get a better picture.

Variations of Balance Sheet Ratios

There are a variety of creative ways to view Balance Sheet elements. The following are a few creative examples of how you might view and evaluate balance sheet information:

Inventory Health

It's kind of an inventory turns measurement but combines inventory aging with sales velocity at a SKU level. Amazon drives it and the measure is critical for how much a retailer can place in AMZN warehouses and thus sell.

Liquid Unrestricted Net Assets (LUNA)

Generally used in Not-for-profit organizations, these are the amounts of cash, receivables, and liquid investments that an entity has on hand that are not designated for specific purposes. This may or may not include board designated funds, based on accessibility.

Debt Service Coverage (DSC) Ratio

This is a measurement of a company's available cash flow to pay current debt obligations. DSC is important to know when negotiating loans or lines of credit.

Cash Burn (a.k.a. Runway)

As a wise sage once said... "Cash is King!" And with respect to what you need to make your business go, cash is more important than any other commodity. Cash Burn is often used in pre-revenue companies, as they have no way to replenish cash. But it's relevant for any company. Understanding your overall costs and the amount of cash necessary to keep operations afloat is always a good idea.

Profit and Loss KPI's

Beyond the balance sheet, the Income Statement (aka, Profit and Loss Statement, P&L) is by itself a KPI. The ultimate measure of performance in for-profit entities is whether you're making any money. Within the P&L, however, there are a variety of meaningful measures that may give insight into your company's performance.

Revenue KPI's

Revenue growth – Y-over-Y; CAGR (by division/location/product line as appropriate for the business)

Cash conversion cycle – target range/trended

Revenue per client

Revenue Year To Date and Month To Date, including year over year

Recurring annual revenue as a percent of total revenue

Sales breakeven based on total fixed expenses and variable cost margin

Margin KPI's

EBITDA Margin - target range/trended

Gross Margin - target/trended

Margin health - This one focuses on gross margins, but also factors in returns so that you can see deeper into how a particular SKU is performing down the line. So, if a product has a decent margin but frequently breaks in shipment and gets returned and destroyed, then it might not be a product we'd like to continue to sell, or we have to evaluate what is going on when the product is packed/shipped to change some of those processes.

Expense KPI's

Operating expense categories as a % of revenue that are relevant to the business (payroll, facilities, marketing, R&D, etc.) – target based on industry benchmarks/trended.

Shipping expense/revenue ratios. In an environment where free or flat rate shipping becomes more the norm than the exception, this one evaluates the net costs of outbound shipping and how it impacts margin. We constantly evaluate shipping costs to sales to produce a ratio and use this to analyze outbound shipping charges and how aggregate geographies for flat rate shipping.

Net Excess Investment Income - This monthly metric measures the amount of investment an endowment earns after investment fees and normal operating draws. Some months it's a positive number, some months it's a negative number. Hopefully, there are more of the former over time, hence the endowment is sustainable.

Variations of P&L Ratios

Fundraising ROI - Generally, for Nonprofit organizations, divide your total costs of an event, or for the entire organization, by the total funds raised.

Cost to gain a donor by fundraising type - Compare the amount spent on fundraising compared to total funds raised by each fundraising strategy.

Profit & Loss by funding source - Measure profitability by each individual funding source, including fully burdened overhead. This helps to evaluate with grants/contracts are paying for themselves vs. those that need supplemented by other sources of revenue.

Business Operations KPI's

Metrics that measure elements that drive performance outside the P&L are arguably some of the most powerful and insightful indicators of any business. The most notable aspect of operational KPI's is that they come in all shapes and sizes. And while some have applicability across industries and organizations, most are developed for your business, and at least some component of them is unique to each company, at least with respect to what information trends suggest.

For many of these, benchmarks with other companies, or benchmarks for specific industries, may be useful. But the specific relevance and information you may derive from these is for you to interpret.

In no particular order...

Windshield Time to Revenue Zone Time

This is a measure of the time that field service techs spent driving to a customer's site vs. the time they spent on site doing billable things. The data is sourced from payroll records. Focusing on this metric highlights the importance of getting better dispatch software and shortening trips between customer calls. It is amazing to see the difference in profitability between having techs do 4 calls/day vs. 3 calls/day.

Revenue per Square Foot by Location

This metric was developed for a multi-site manufacturer who had too much space at a couple of his sites and didn't want to downsize to reflect current and projected sales volume. This metric helped him understand the cost of keeping extra space (and very obsolete inventory that had built up there) "just in case" sales spiked, which they never did.

Inbound Referral Above/(Below) Target

Kinderling uses this metric to gauge the need to hire new therapist teams. It's the number of medical referrals from pediatricians vs the annual plan. It helps them adjust the hiring pipeline to reflect their operational needs in 1-2 months.

Community Satisfaction Bonus

For each Community an employee manages that receives at least a 4.0 average annual satisfaction rating from Community event attendees, sponsors, and committee members, the employee will receive \$250. For each Community an employee manages that receives a 4.5 or greater average annual satisfaction rating from Community event attendees, sponsors, and committee members, the employee will receive an additional \$250.

New Membership Bonus

For any new membership account sold worth \$1,000 or more, the employee will receive \$100 per account closed, up to 10 accounts in a fiscal year.

Client churn

New leads/prospects – target range/trended

ROI on any significant initiatives/investments – target range over time

Customer concentration (percent of total revenue from 10 customers)

Supplier concentration (percent of total CGS from top 10 suppliers)

Order backlog (i.e., "guaranteed sales" that need inventory)

Staffing Metrics

Tech utilization rate

A staffing firm client who had techs at MSFT and other clients paid techs on salary even when they weren't billing. The staffing firm never made much money because they had a lot of unbilled tech time. This ratio helped them understand the need to offboard techs quickly when a gig ended, and then bring them back when a new gig started up. Not surprisingly, this one didn't make me very popular with the techs, but the staffing firm owner loved it.

Account Executive close rates

One client has a team of Account Executives ("Aces") and the rate at which they close engagements is a direct predictor of future revenues and cash flows. The Aces book engagements up to 6 months in advance, and so we measure how many engagements are closed on a weekly basis by each Ace to fill out the forecast calendar. This identifies underperforming Aces very quickly and leads to enhanced training PIPs. Underperforming Aces leads to stranded capacity and kills margins.

Daily labor variance to standard costs

In a manufacturing environment, where we look at production efficiency on a daily basis, this helps us to understand how the mix of products and batch capacity impacts productivity and labor efficiency as measured by standard costs in the BOMs.

Number of Beneficiaries Served

The number of targeted beneficiaries you served through your programs and activities over a specific period of time.

Employee Retention Rate

Number of employees who stayed at the company for the whole time period/# employees at the start of the time period X 100.

For professional services firms

- Billed consulting hours/week or month
- Average bill rate/week or month
- Average hours per consultant

Total revenue per consultant or total revenue per total headcount

- Team member turnover
- Operating expense per headcount
- Number of employees/Revenue per employee
- Utilization

Digital Marketing Metrics

Many metrics related to digital marketing – Google PageRank; Organic click-through; paid click-through; new visitors; pages per visit; etc.



We'd Love to Hear from You!



At your convenience, we will be happy to schedule a complimentary consultation to discuss your needs and business challenges.

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