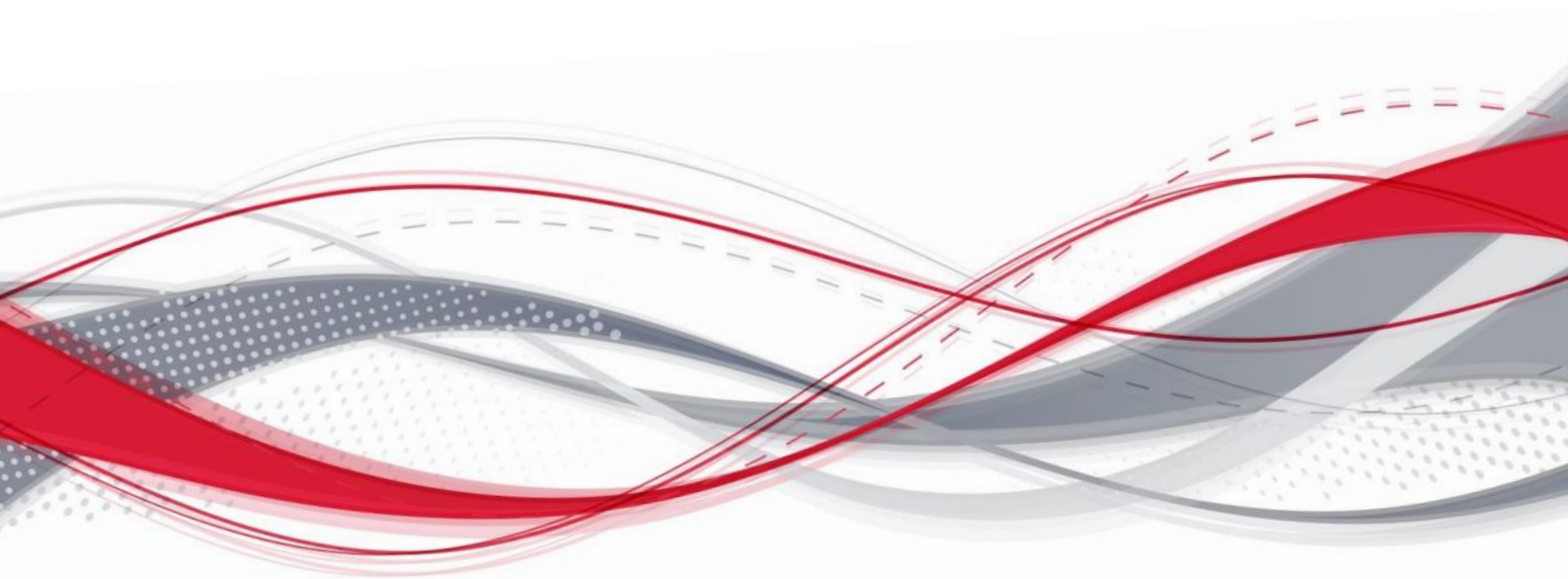




intrafocus

# LEAD AND LAG INDICATORS

An Intrafocus Guide



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## Lead and Lag Indicators

All too often we concentrate on measuring results, outputs and outcomes, why? Because they are easy to measure and they are accurate. If we want to know how many sales have been made this month, we simply count them. If we want to know how many accidents have occurred on the factory floor, we consult the accident log. If however, we want to increase the number of sales in a month or decrease the number of accidents then these measures are of very little help. Yes they provide a benchmark to determine month on month improvement, but they do not help make the improvement itself. This type of measure is referred to as a **Lag** indicator. It is an after-the-event measurement, essential for charting progress but useless when attempting to influence the future.

To influence the future, a different type of measurement is required, one that is predictive rather than a result. For example, if we want to increase sales, a predictive measure could be to make more sales calls or run more marketing campaigns. If we wanted to decrease accidents on the factory floor we could make safety training mandatory for all employees or force them to wear hard-hats at all times. Measuring these activities provides us with a set of **lead** indicators. They are in-process measures and are predictive.

Lead indicators are always more difficult to determine than lag indicators. As they are only predictive, they do not provide a guarantee of success. This not only makes it difficult to decide which lead indicators to use, it also tends to cause heated debate as to the validity of the measure at all. To fuel the debate further, lead indicators frequently require an investment to implement an activity prior to a result being seen by a lag indicator.

What has become clear over years of research is that a combination of lead and lag indicators result in enhanced business performance overall. To provide a couple of specific examples, “satisfied and motivated employees” is a (well-proven) lead Indicator of “customer satisfaction”. “High-performing processes” (e.g. to 6 Sigma levels) is a good lead indicator for “cost efficiency”.

When developing a performance management strategy or system, it is always good practice to use a combination of lead and lag indicators. The reason for this is obvious; a lag indicator without a lead indicator will give no indication as to **how** a result will be achieved and provide no early warnings about tracking towards a strategic goal. Equally important however, a lead indicator without a lag indicator may make you feel good about keeping busy with a lot of activities but it will not provide confirmation that a business result has been achieved. In much the same way a Balanced Scorecard requires a ‘balance’ of measures across organisational disciplines, so a ‘balance’ of lead and lag indicators are required to ensure the right activities are in place to ensure the right outcomes.

There is a cause and effect chain between lead and lag indicators, both are important when selecting measures to track toward your business goals. Traditionally we tend to settle for lag indicators, however, do not underestimate the importance of lead indicators.

## Examples of lead and lag indicators

The following table provides some examples of lead and lag indicators used in the production of a typical business scorecard.

Strategic Objectives	Lead Indicator	Lag Indicator
<b>Financial Perspective</b>		
Usually this section concerns itself with key financial data such as revenue, cost of sale, gross margin, expenses and net profit, however it can also include financial initiatives such as risk assessments and cost-benefit data		
Improve return on investment	Add three more products to the portfolio this year	Return on investment
Broaden revenue portfolio		Revenue growth
Reduce overall costs		Expense costs
<b>Customer Perspective</b>		
The company seen from the customer's viewpoint. Unsatisfied customers will look for other suppliers to meet their needs. Customer satisfaction is in itself a lead indicator that can predict potential future loss		
Increase customer satisfaction	More account management	Customer satisfaction score
Increase company awareness	Number of press articles	Customers call us
Decrease customer attrition	Improved customer service	Number of customers
<b>Internal Processes Perspective</b>		
The ability to determine how well the business is running and whether or not the products and/or services meet the needs of its customers and are aligned to the companies objectives		
Create innovative products	Product development cycle	New product/service revenue
Improve the knowledge base	Number of articles submitted	Knowledge base in place
Reduce operational problems	Hours spent with customer	Product/service error rate
<b>Learning and Growth Perspective</b>		
The main resource in most companies today is its people, it is essential, especially in a climate where technology is changing rapidly, that they grow and learn continuously. Focus has to be on where best to spend ever decreasing budgets		
Development of strategic skills	Service/product cover ratio	Employee satisfaction
Better strategic communication	Information availability	
Alignment of personal goals	Goal alignment	Revenue per employee