



# IBM Cognos Forum

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## *Get Your Shelf ware on the Scorecard*

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**Information Management**

**Cognos.**  
software

## ***Agenda***

- The Motivation for today's talk
- Discuss the basics of Balanced Scorecard
- What makes a good KPI
- The Importance of Target setting
- TDWI's 9-step process for implementing Balanced Scorecard in your organisation
- Discuss Data Loading approaches for IBM Cognos Metric Studio
- Demonstration of how to get started

## ***Motivation for today's talk***

- Commonly heard statements:

*“We’ve purchased Metric Studio, we have the CDs, but it hasn’t been installed yet”*

*“We’ve got Metric Studio installed, but we’re not sure what it does so we’ve disabled it”*

*“We’ve heard Metrics is a pain in the \*^% to set up, and difficult for users to learn it”*

*“Excel is a better tool for Scorecarding”*

*“Cognos Metrics Manager 2.2 wasn’t integrated so we abandoned our plans for Metrics”*

*“Metric Studio is just Shelf ware”*

## *The reality*

*Many of our customers who have rolled out Metric Studio discover that Business Users find the content so compelling that they make Metric Studio their 'entry point' into their Business Intelligence applications*



## ***The realisation of benefits***

*“If all the KPIs on my scorecard are green, I can go and do my day job”*

*“If I find KPIs that are yellow or red, I can use Metric Studio features to easily delve into my cubes or reports to explore further”*

*“By analysing KPIs in Metric Studio first, our users are getting answers before putting query load on back-end systems. It’s efficient”*

*“Metric Studio notifies me automatically if a status of a KPI on my watch list changes colour, or someone annotates it”*

*“I can do commentary against my performance, which is stored to a database that I can then report-off any way I like”*

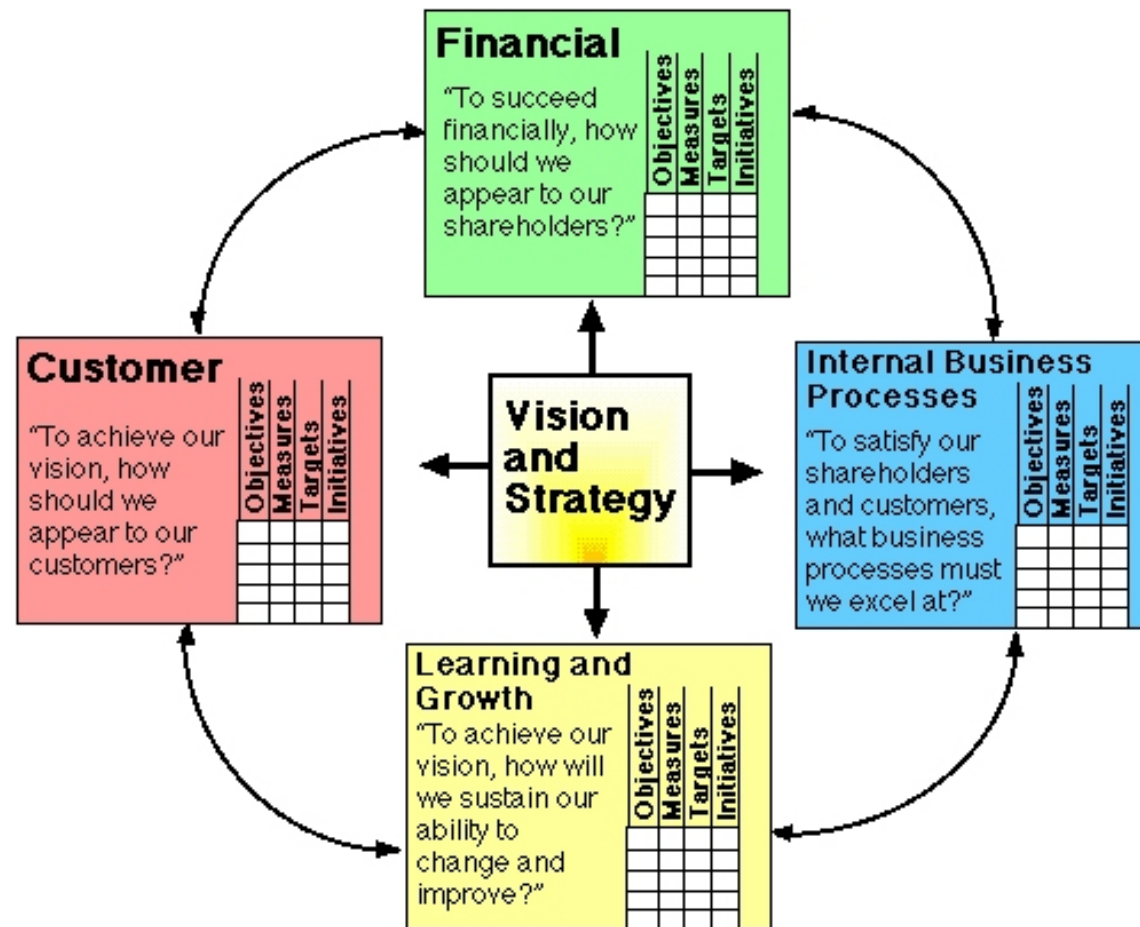
*“The new Cognos 8.4 Portlets let me place Metric Studio objects in my portal landing page with minimal fuss”*

## ***Balanced Scorecard Basics***

- Originated by Robert Kaplan and David Norton as a performance measurement framework
- Added strategic non-financial performance measures to traditional financial metrics to give managers and executives a more 'balanced' view of organisational performance
- Designed to drive alignment between business activities, and the vision and strategy of the organisation
- Helps improve internal and external communications
- Monitors organisation performance against strategic goals
- It has evolved over time, from a simple performance measurement framework, to a full strategic planning and management system. From reporting results in key areas, to defining the actions and initiatives that are needed to drive greater alignment between behaviour and strategy.
- Helps Planners identify what 'should' be done, and what 'should' be measured.
- An enabler for Senior Managers to 'execute their strategy'

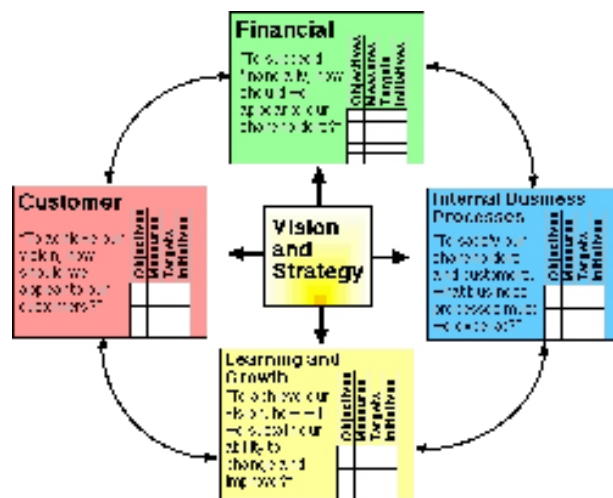
## Balanced Scorecard Basics - Perspectives

- Common Balanced Scorecard Perspectives



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- Common Balanced Scorecard Perspectives

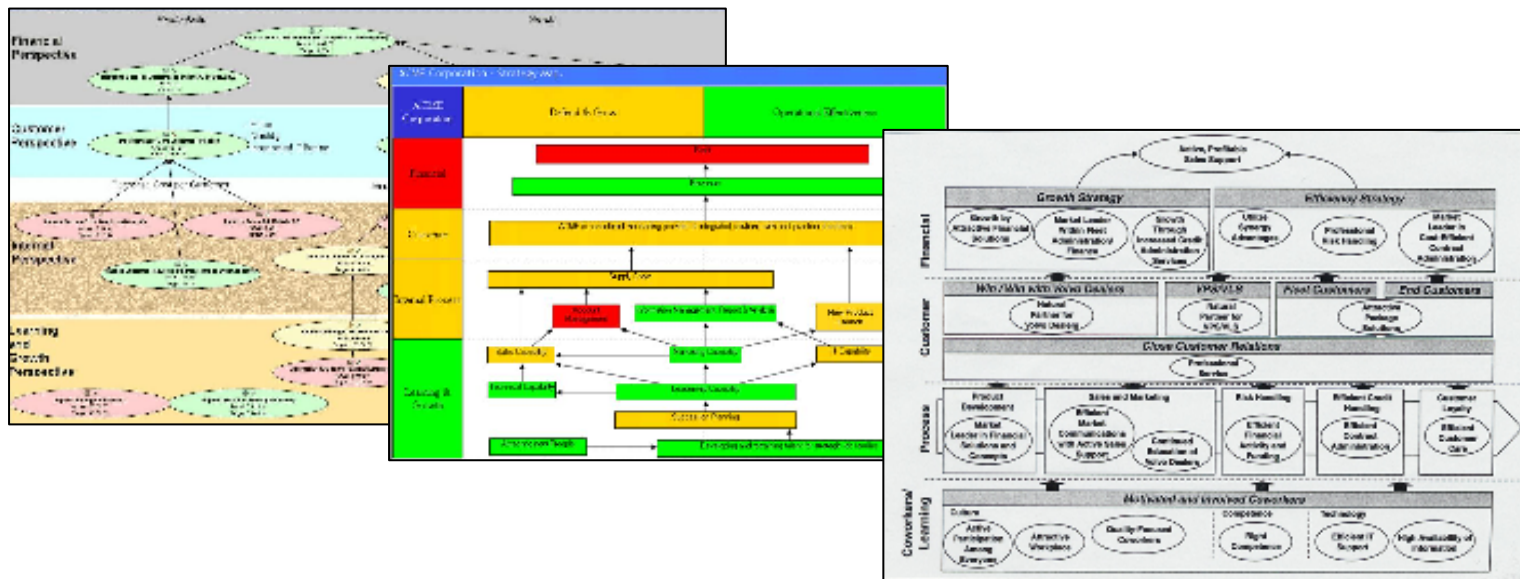


- 1) Financial Perspective:** Timely and accurate financial data will always be a priority, and managers will do whatever necessary to provide it.
- 2) Customer Perspective:** Customer focus and customer satisfaction is crucial in any business. These are leading indicators: if customers are not satisfied, they will eventually find other suppliers that will meet their needs.
- 3) Internal Processes:** Metrics based on this perspective allow the managers to know how well their business is running, and whether its products and services conform to customer requirements (the mission).
- 4) People, Learning, & Growth:** This perspective includes employee training and corporate cultural attitudes related to both individual and corporate self-improvement. In a knowledge-worker organisation, people -- the only repository of knowledge -- are the main resource. Learning and growth constitute the essential foundation for success of any knowledge-worker organisation.



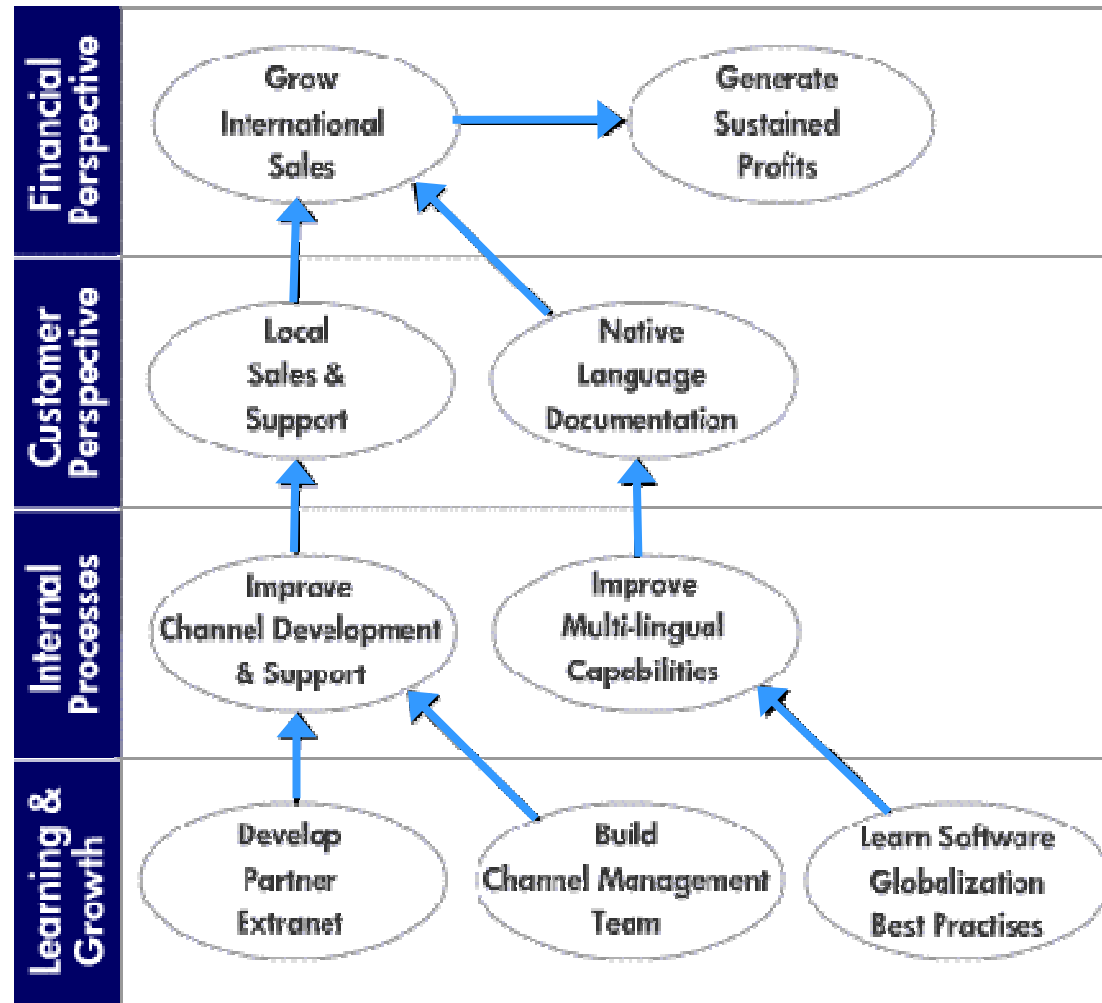
## Balanced Scorecard Basics – Mapping the Strategy

- Strategy maps are communication tools used to tell a story of how value is created for the organisation.
- Show the logical, step-by-step connection between strategic objectives in the form of a cause-and-effect chain.



- Generally speaking, improving performance in the objectives found in the Learning & Growth perspective (the bottom row) enables the organisation to improve its Internal Process perspective Objectives (the next row up), which in turn enables the organisation to create desirable results in the Customer and Financial perspectives (the top two rows).

## Balanced Scorecard Basics – Mapping the Strategy



## ***What Makes a Good Key Performance Indicator?***

- Business Intelligence developers need to be careful to ensure visual metaphors available in current software (gauges, charts, indicators) don't take precedence over understanding what constitutes a good KPI that delivers long term value to an organisation
- Many use the terms 'metric' and 'KPI' interchangeably, which is not correct. A KPI is a metric, but a metric is not always a KPI.
- **Key Difference:** A KPI always reflects strategic drivers whereas metrics may represent the measurement of any business activity.
- **Key Difference:** KPIs are also commonly derived from base metrics.
- The Data Warehouse Institute has identified 10 characteristics that good KPIs possess

## ***What Makes a Good Key Performance Indicator?***

### **10 Characteristics of a good KPI**

- 1. KPIs represent Strategic Drivers**
- 2. KPIs are Defined by Executives**
- 3. KPIs Cascade throughout an Organisation**
- 4. KPIs are based on Corporate Standards**
- 5. KPIs are based on valid data**
- 6. KPIs must be Easy to Comprehend**
- 7. KPIs are always relevant**
- 8. KPIs provide Context**
- 9. KPIs Empower Users**
- 10. KPIs lead to Positive Action**



## ***What Makes a Good Key Performance Indicator?***

***“KPIs are communications vehicles. They enable top executives to communicate the mission and focus of the organisation and grab the attention of employees. When KPIs cascade throughout an organisation, they ensure everyone at every level is marching together in the right direction to deliver the most value to the organisation as a whole.”***

## *The Importance of Target Setting*

- Let's remind ourselves what a KPI is comprised of:

### **Sample KPI: Overtime Hours Worked**

**Actual: 125**

**Target: 100**

**Tolerance: 10%**

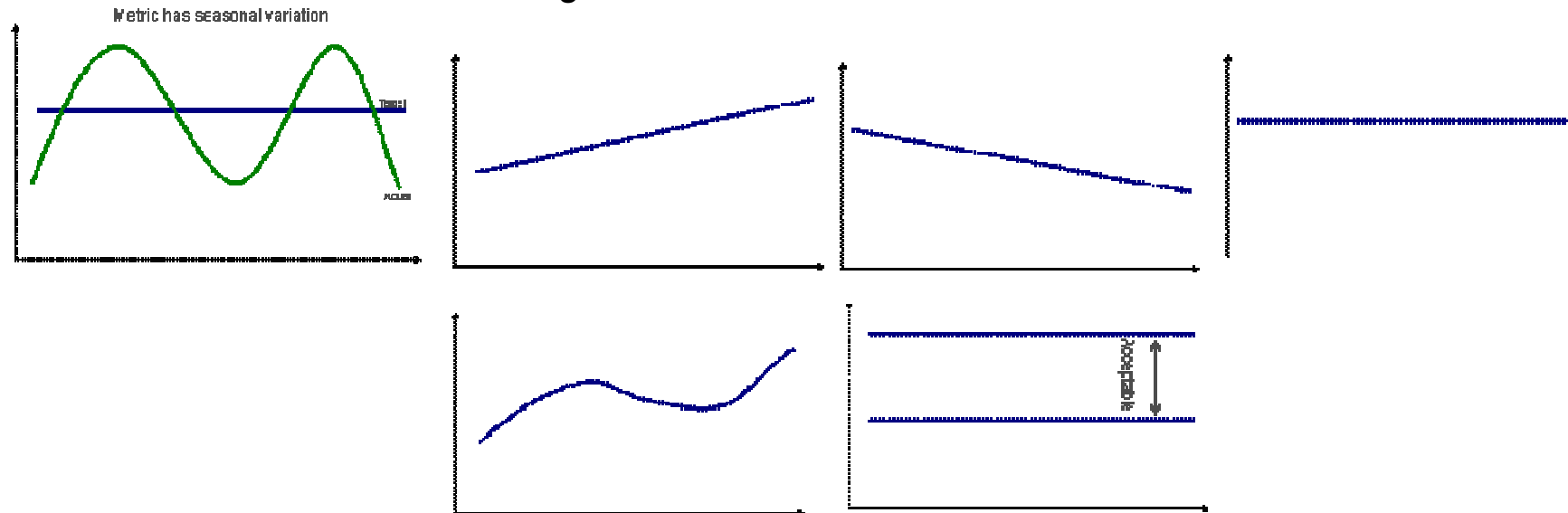
**Performance Pattern: Below Target is Positive**

**Status: **

- Target setting is not an activity to be taken lightly – a poorly defined target fails to meet the very thing it strives to create – a focus on Performance

## Target Setting

- Considering Target Variation:
  - Setting your targets takes some analysis to understand the picture of the data
  - The target needs to follow a realistic pattern.
    - Using a flat trend line to track cyclical data may result in the wrong behaviors.
    - A seasonal fluctuation that may artificially cause the metric to turn 'green' or 'red' will cause people to respond when there is no need to respond, or worse yet, ignore the fact that they need to respond.
  - Planning Tools are also available that can help understand the seasonality of past actuals, to drive future target trends



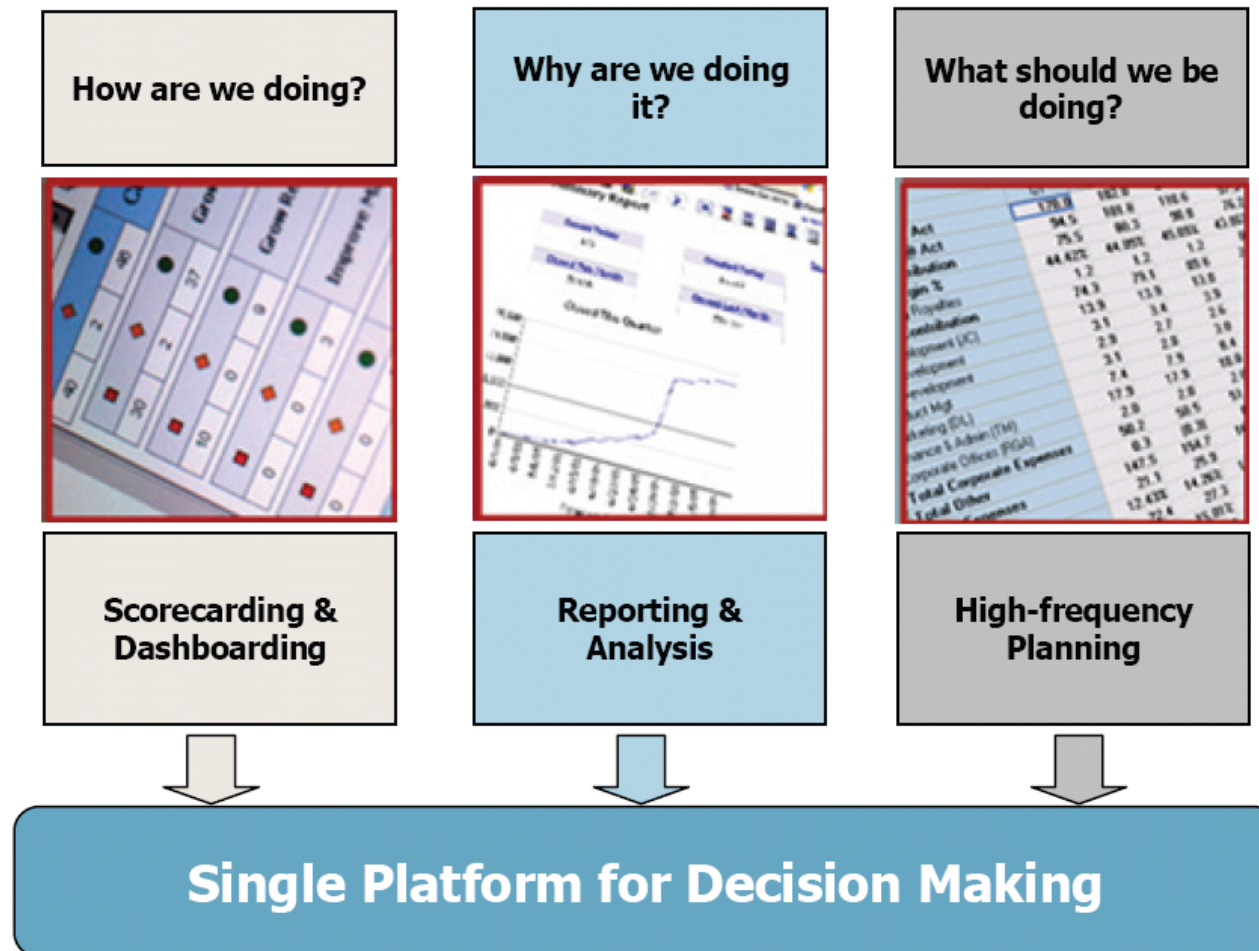
## ***Target Setting***

*“Target setting should become a strategic tool used by an organisation to help deliver focus while communicating the goals and objectives throughout the organisation. Annually, or at least on a formal periodic basis, targets should be set to make sure the KPI still has relevance and value to the organisation. Loosely defined targets can send a message that mediocrity is acceptable. By creating a formal target-setting practice, not only are you thinking your plans through, you are forced into an exercise that will naturally filter the metrics that have less importance.”*



## Target Setting

- IBM Cognos' Performance Management capabilities support informed target setting that can be controlled by workflow processes:



## ***9-steps to Implementing a Balanced Scorecard***

*Courtesy of the Balanced Scorecard Institute*

- The Balanced Scorecard Institute have developed an award-winning, 9-step practical approach for implementing a strategic planning and management system based on the Balanced Scorecard
- The benefit of the process is that it provides organisations with a framework to 'connect the dots'



## ***9-steps to Implementing a Balanced Scorecard***

*Courtesy of the Balanced Scorecard Institute*

- **Step 1 – Assessment**
- **Step 2 – Strategy**
- **Step 3 – Objectives**
- **Step 4 – Strategy Map Creation**
- **Step 5 – Performance Measures Identified**
- **Step 6 – Initiatives**
- **Step 7 – Automation**
- **Step 8 – Cascade through the organisation**
- **Step 9 – Evaluation**

## Refining the 9-step Process for Technology



Observation: Technology comes into play quite late in the process!

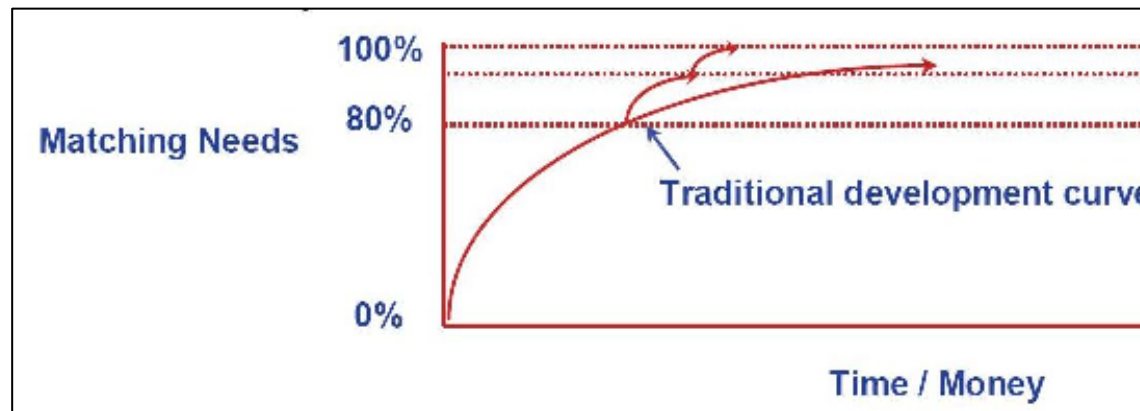
### Key Risks:

- Lack of preparedness could delay the 9-step process
  - No infrastructure ready
  - Tool of choice not identified
  - Training Users/Change Management takes time
- User's Expectations of tool capability not managed
- Difficult to determine effort required in Step 7 if no due diligence performed on the technology side
- Time-squeeze results in less time for considering integration with existing Business Intelligence environment (e.g. context sensitive drill-through, custom reporting)

} Often results in Excel being used

## Refining the 9-step Process for Technology

- For Business Intelligence Implementations, it is recommended to utilise an iterative approach



- Benefits of the Iterative approach:
  - More time and cost efficient process of aligning requirements with deliverables
  - Users are involved in the development process; greater ownership; and helps remove political barriers to adoption
  - Prototyping mitigates risk by uncovering the unknown unknowns early
  - Improved overall readiness for 'project proper' organisational initiatives, such as Balanced Scorecard implementations

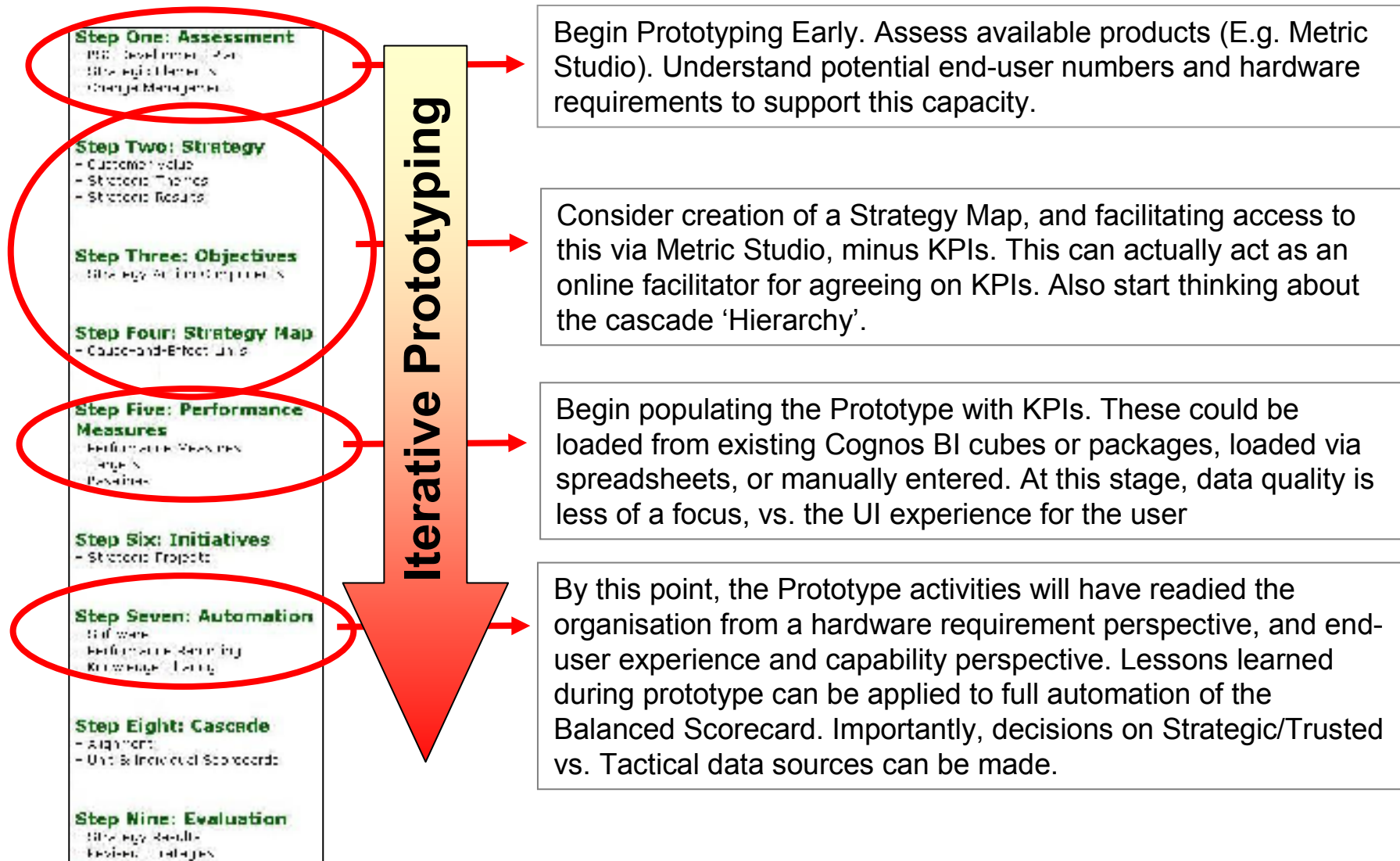


## ***Refining the 9-step Process for Technology***

- **Key Recommendation – Progressively Prototype your Balanced Scorecard application well before Step 7 of the 9-step process.**
  - Keep it simple
  - Tactical approaches for loading data are ok
  - Reuse existing Business Intelligence assets where possible to demonstrate data loading and presentation capabilities (e.g. load from existing Cognos packages into Metric Studio)
  - Understand the limitations of the tool (note the intention is not to limit strategy based on what the technology offers)
  - Gain an appreciation of effort required
  - Plan-out the level of complexity into phases in line with the 9 step process
    - E.g. Develop the Strategy Map and automate this piece on its own to explore user access methods

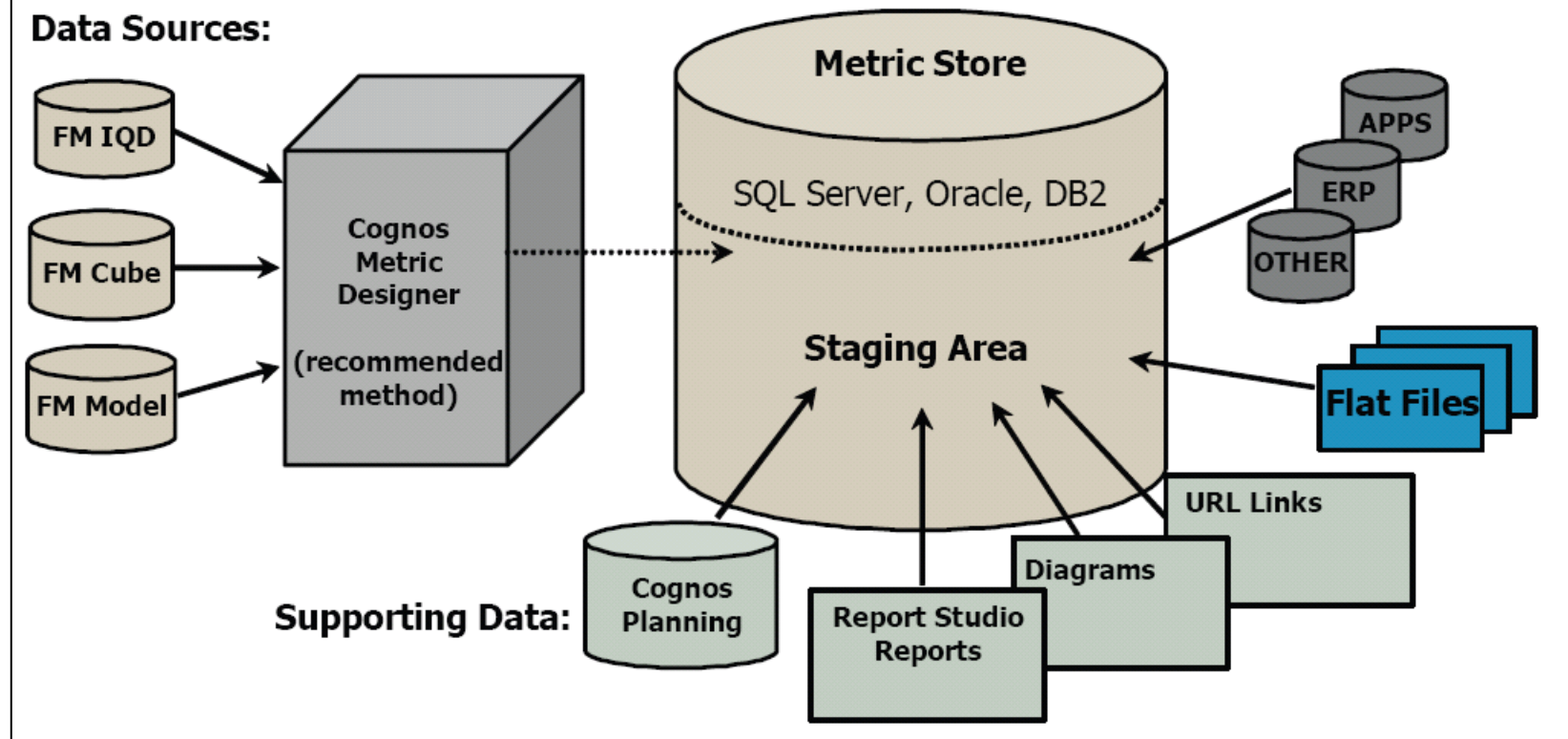


## Refining the 9-step Process for Technology



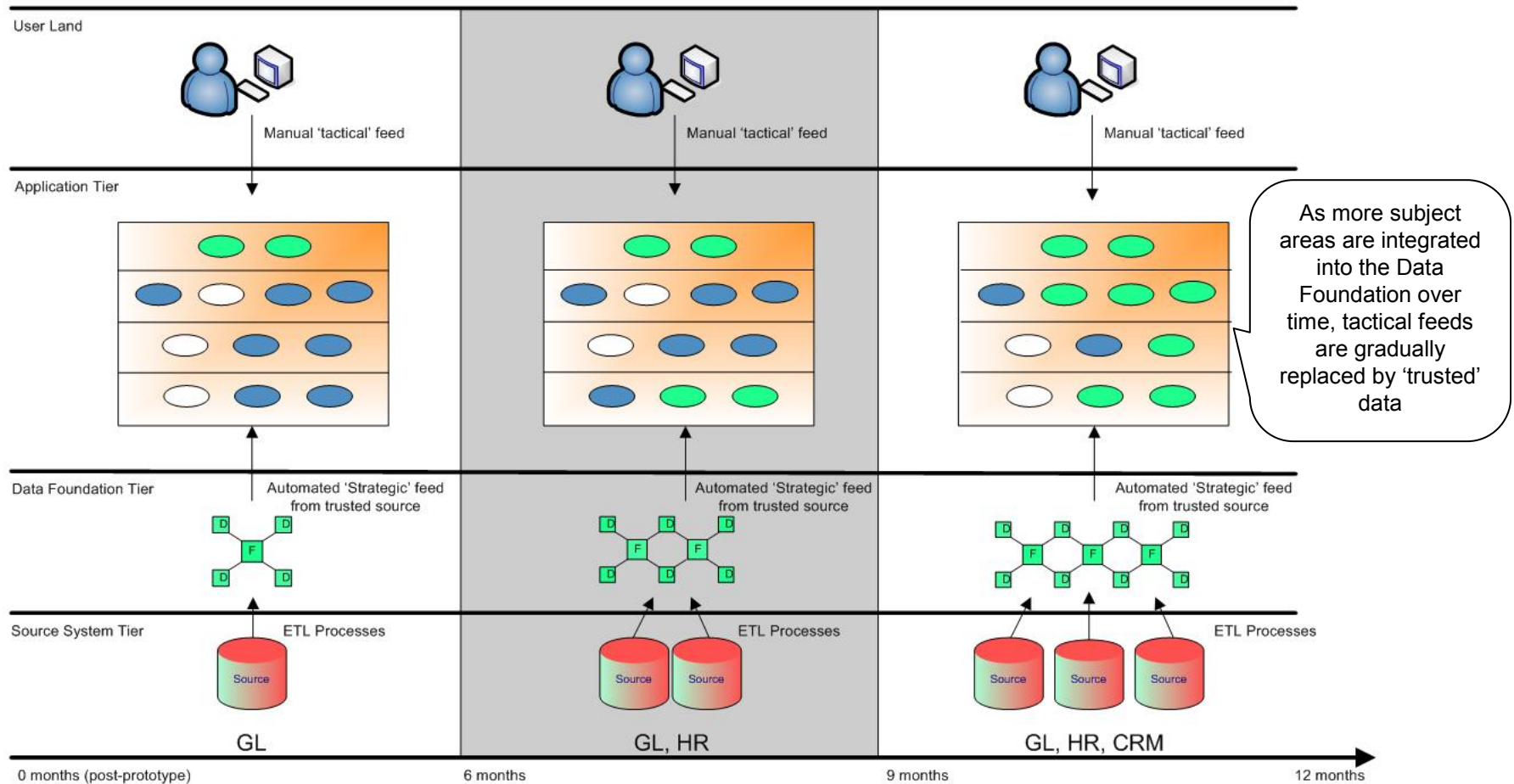
## Information Architectures for Loading Data

- Cognos 8 Metric Studio is built on an open architecture that can access data from multiple sources.



## Information Architectures for Loading Data

- Strategic Approach for Rolling Out Metrics Studio



- Demonstration of Cognos Metrics Studio and Metrics Designer

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- Q&A

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- [Michael.Taylor@au1.ibm.com](mailto:Michael.Taylor@au1.ibm.com)

## Detailed Discussion Appendix

## ***Balanced Scorecard Basics***

- Based on the notion that Financial KPIs alone can be a misleading indicator of organisational health

*"The balanced scorecard retains traditional financial measures. But financial measures tell the story of past events, an adequate story for industrial age companies for which investments in long-term capabilities and customer relationships were not critical for success. These financial measures are inadequate, however, for guiding and evaluating the journey that information age companies must make to create future value through investment in customers, suppliers, employees, processes, technology, and innovation."*

*The Balanced Scorecard, Kaplan and Norton*

- Balanced Scorecard suggests the creation of a number of different perspectives (commonly, but not limited to 4) from which to view the organisation, and track measures against

## ***Balanced Scorecard Basics - Perspectives***

### ■ **Common Balanced Scorecard Perspectives**

- 1) **Financial Perspective:** Timely and accurate financial data will always be a priority, and managers will do whatever necessary to provide it. The point is that too much emphasis on financials leads to the "unbalanced" situation with regard to other perspectives.
- 2) **Customer Perspective:** Customer focus and customer satisfaction is crucial in any business. These are leading indicators: if customers are not satisfied, they will eventually find other suppliers that will meet their needs. Poor performance from this perspective is thus a leading indicator of future decline, even though the current financial picture may look good.
- 3) **Internal Processes:** Metrics based on this perspective allow the managers to know how well their business is running, and whether its products and services conform to customer requirements (the mission). These metrics have to be carefully designed by those who know these processes most intimately; with business' unique missions these KPIs can rarely be developed by outside consultants.
- 4) **People, Learning, & Growth:** This perspective includes employee training and corporate cultural attitudes related to both individual and corporate self-improvement. In a knowledge-worker organization, people -- the only repository of knowledge -- are the main resource. In the current climate of rapid technological change, it is becoming necessary for knowledge workers to be in a continuous learning mode. Metrics can be put into place to guide managers in focusing training funds where they can help the most. In any case, learning and growth constitute the essential foundation for success of any knowledge-worker organization.

## *What Makes a Good Key Performance Indicator?*

10 Characteristics of a Good KPI:

### **1. KPIs represent Strategic Drivers**

KPIs reflect and measure key drivers of business value. Value drivers represent activities that, when executed properly, guarantee future success. Value drivers move the organisation in the right direction to achieve its stated goals. Examples of value drivers might be “high customer satisfaction” or “excellent product quality.”

In most cases, KPIs are not financial metrics. Rather, KPIs reflect how well the organisation is doing in areas that mostly impact financial measures valued by shareholders, such as profitability and revenues. As such KPIs are “leading” not “lagging” indicators of financial performance. In contrast, most financial metrics (especially those found in monthly or annual reports) are lagging indicators of performance

### **2. KPIs are Defined by Executives**

Executives define Strategic Drivers in planning sessions which determine the short and long-term strategic direction of the organisation. To get the most from these value drivers, executives need to define how they want to measure their organisations’ performance against these drivers. The adage “You can manage what you don’t measure” is fitting.

## *What Makes a Good Key Performance Indicator?*

10 Characteristics of a Good KPI:

### **3. KPIs Cascade throughout an Organisation**

Every group at every level in every organisation is managed by an “executive” whether or not the person carries that title. These executives may be known as “divisional presidents,” “managers,” “directors,” or “supervisors,” among other things. Like the CXOs, these “executives” also need to conduct strategic planning sessions that identify the key value drivers, goals, and plans for the group. At lower levels, these elements may be largely defined and handed down by a group higher in the hierarchy.

In the majority of cases, each group’s value drivers and KPIs tie back to those at the level above them, and so on up to the level of the CXOs. In other words, all KPIs are based on and tied to the overarching corporate strategy and value drivers. In this way, top-level KPIs cascade throughout an organisation, and the data captured by lower-level KPIs roll up to corporate-wide KPIs. This linkage among all KPIs, which can be modeled using strategy mapping software, supports flexible analysis and reporting at any level of granularity at any level of the organisation.

### **4) KPIs are based on Corporate Standards**

The only way cascading KPIs work is if an organisation has established standard measurements. This is deceptively hard. It can take organisations months if not years to hash out the meaning of key measures or entities, such as “net profit” or “customer.” Top executive support is required to overcome the political obstacles associated with standardising definitions for commonly used KPIs.



## *What Makes a Good Key Performance Indicator?*

### 10 Characteristics of a Good KPI:

#### **5. KPIs are based on valid data**

Most executives find it easy to create KPIs for key value drivers. Most industries already have a common set of metrics for measuring future success. Knowing what to measure and actually measuring it are two different things. Before executives finalise a KPI, they need to ask a technical analyst if the data exists to calculate the metric and whether it's accurate enough to deliver valid results. Often, the answer is no. In that case, executives need either to allocate funds to capture new data or clean existing dirty data. Or they need to revise the KPI. Providing cost estimates for each approach will help executives decide the best course of action.

#### **6. KPIs must be Easy to Comprehend**

One problem with most KPIs is that there are too many of them. As a result, they lose their power to grab the attention of employees and modify behavior. KPIs must also be understandable. Employees must know what's being measured, how it's being calculated, and, more importantly, what they should do (and shouldn't do) to positively affect the KPI. This means it is not enough to simply publish a scorecard; you must train individuals whose performance is being tracked and follow up with regular reviews to ensure they understand and are acting accordingly.

## *What Makes a Good Key Performance Indicator?*

10 Characteristics of a Good KPI:

### **7. KPIs are always relevant**

To ensure that KPIs continually boost performance, you need to periodically audit the KPIs to determine usage and relevance. If a KPI isn't being looked at, it should probably be discarded or rewritten. When first introduced, the KPI energises the workforce and performance improves. Over time, KPIs lose their impact and should probably be revised.

### **8. KPIs provide Context**

Metrics show a number that reflects performance, whereas a KPI puts that performance in context. It evaluates the performance according to expectations. The context is provided using

- 1) Thresholds (i.e. upper and lower ranges of acceptable performance), or
- 2) Targets (i.e. predefined gains, such as 10% new customers per quarter), or
- 3) Benchmarks, which can be based on industry-wide measures or various methodologies, such as Six Sigma.
- 4) In addition, most KPIs indicate the direction of the performance, either "up," "down," or "static."

## *What Makes a Good Key Performance Indicator?*

### 10 Characteristics of a Good KPI:

#### **9. KPIs Empower Users**

To be effective, KPIs must be reinforced with incentives. Almost 40 percent of organizations surveyed by TDWI say they restructured incentives systems when implementing KPIs. However, it's important not to link incentives to KPIs until the KPIs have been fully vetted. Often, KPIs must be tweaked or modified before they have the desired effect.

It's also critical to revamp business processes when implementing KPIs. The business process needs to empower users to take the appropriate action in response to KPIs. The last thing you want is informed but powerless users. That's a recipe for disillusionment and poor morale. Forty percent of organizations said they modified business processes when implementing KPIs, according to TDWI research.

#### **10. KPIs lead to Positive Action**

KPIs should generate the intended action, to improve performance. Unfortunately, many organisations allow groups to create KPIs in isolation. This leads to KPIs that undermine each other. Another problem is human nature. People will always try to circumvent KPIs and find loopholes to minimise their effort and maximise their performance and rewards. Good KPIs are vetted before deployed and closely monitored to ensure they engender the intended consequences.

## ***9-steps to Implementing a Balanced Scorecard***

*Courtesy of the Balanced Scorecard Institute*

- **Step 1 - Assessment**

Assessment of the organisation's Mission and Vision, challenges (pains), enablers, and values. Also includes preparing a change management plan for the organisation, and conducting a focused communications workshop to identify key messages, media outlets, timing, and messengers.

- **Step 2 - Strategy**

Elements of the organization's strategy, including Strategic Results, Strategic Themes, and Perspectives, are developed by workshop participants to focus attention on customer needs and the organisation's value proposition.

- **Step 3 - Objectives**

The strategic elements developed in Steps One and Two are decomposed into Strategic Objectives, which are the basic building blocks of strategy and define the organisation's strategic intent. Objectives are first initiated and categorised on the Strategic Theme level, categorised by Perspective, linked via cause-effect linkages (Strategy Maps) for each Strategic Theme, and then later merged together to produce one set of Strategic Objectives for the entire organisation.

## ***9-steps to Implementing a Balanced Scorecard***

*Courtesy of the Balanced Scorecard Institute*

- **Step 4 – Strategy Map Creation**

The cause and effect linkages between the enterprise-wide Strategic Objectives are formalised in an enterprise-wide Strategy Map. The previously constructed theme Strategy Maps are merged into an overall enterprise-wide Strategy Map that shows how the organisation creates value for its customers and stakeholders.

- **Step 5 – Performance Measures Identified**

Performance Measures are developed for each of the enterprise-wide Strategic Objectives. Leading and lagging measures are identified, expected targets and thresholds are established, and baseline and benchmarking data is developed.

- **Step 6 – Initiatives**

Strategic Initiatives are developed that support the Strategic Objectives. To build accountability throughout the organisation, ownership of Performance Measures and Strategic Initiatives is assigned to the appropriate staff.

## ***9-steps to Implementing a Balanced Scorecard***

*Courtesy of the Balanced Scorecard Institute*

- **Step 7 - Automation**

The implementation process begins by applying performance measurement software to get the right performance information to the right people at the right time. Automation adds structure and discipline to the system and helps people make better business decisions.

- **Step 8 – Cascade through the organisation**

The enterprise-level scorecard is ‘cascaded’ down into business and support unit scorecards, meaning the organisational level scorecard (the first Tier) is translated into business unit or support unit scorecards (the second Tier) and then later to team and individual scorecards (the third Tier). Cascading translates high-level strategy into lower-level objectives, measures, and operational details and is the key to organisation alignment around strategy.

- **Step 9 – Evaluation**

An Evaluation of the completed scorecard is done. During this evaluation, the organisation should try to answer questions such as, ‘Are our strategies working?’, ‘Are we measuring the right things?’, ‘Has our environment changed?’ and ‘Are we budgeting our money strategically?’



## 9-steps to Implementing a Balanced Scorecard Courtesy of the Balanced Scorecard Institute



## Target Setting

- Types of KPI measurements and Target types:
  - **Discreet/Raw Value:** This is the most common type of metric/target. A discreet value uses a raw score for each period. You would want to use this when you know your values change period over period and the goal is the individual period's success the driving factor. You can either set your target varied by period, or flat through the cycle.
  - **Year to date:** Instead of looking at sales month over month, where one month you may be “green” while you are still behind for the year. Using a year to date value is often used when the only thing that matters is hitting an annual (or weekly, monthly, quarterly) goal, then measure your progress to that goal with your monthly remarks representing what it will take to get to the annual target. A sales rep annual quota is an obvious example here. It is also a perfect example of a “perform or perish” metric where the goal and the repercussions are clear.
  - **Rolling Averages:** This is smoothed average where your discreet, or raw, scores vary too much to tell you something of meaning. A rolling average is useful when an annual target is not well defined and the real goal is continual improvement. A rolling 12 month average uses the last 12 months worth of scores, adding the most current value while dropping the first value. This is often a rolling 12 month, but it could be a rolling 4 quarter, or 3 months, or 52 weeks. It does not have to be a year, though you would want to use a value that would “smooth” out the values.

## Target Setting

- KPI Type Styles
  - **Trend Lines:** This is the more common target style, and often takes the least amount of thought. Trends can be linear or curvilinear. They can be seasonal to some degree.
  - **Continual Improvement:** Sometimes a precise target is not well defined, and the goal literally becomes some measurement of improvement. Here the target is often going to be the last month actual, or perhaps the same month last year actual will now become the target. The downside to this type of target is that performance could be less than desirable, yet I could still show a 'green' status.
  - **Indexing:** You can have a number of metrics combine to create an indexed score. The Dow Jones Industrial Average\_(DJIA) is exactly this. It is merely a combined score. This type of metric works well for measures that need to be combined or where the data is captured at different intervals. Customer service is often measured any number of ways within an organisation.
  - **Weighted Averages:** A weighted average is somewhat similar to an index, yet it is usually made up of like-metrics. Here you would just average the scores, based upon some relevance or weighting. Different regions of your business probably have varying impacts upon the organization. If we were measuring average selling price, we would want to weight the price based upon the revenue per region. This would give us a more accurate picture.
  - **Rule based or Compliance:** Here you want to measure the number of something belonging to a group. For example, a cable provider goal of up-selling their offering may want to measure the number of households paying for basic service out of all their subscribers.

## Target Setting

- Alternative Targets

A secondary or alternative target is another exercise in communicating the goals of the organisation and how performance is going to be measured.

- **Stretch Targets:** A stretch target is a great tool to drive break through performance. This target is above and beyond the initial target and is usually tied to some type of compensation accelerator.
- **Competitive Targets:** A competitive target tracks your performance versus the competition. Typically it is one or two primary competitors where the goal of the organisation is to steal market share from each.
- **Industry Targets:** Similar to a competitive target, this is the industry average. Caution should be used with this type of target as you are comparing yourself against the average which is typically a distance from the desired result. The potential risk here is that you are potentially sending a message that if we are above the average we are doing fine. If you are trying to achieve breakthrough performance, looking backwards at the average is the same as a sprinter looking backwards to see how far ahead he/she is.

Target setting should become a strategic tool used by an organisation to help deliver focus while communicating the goals and objectives throughout the organisation. Annually, or at least on a formal periodic basis, targets should be set to make sure the KPI still has relevance and value to the organisation. Loosely defined targets can send a message that mediocrity is acceptable. By creating a formal target-setting practice, not only are you thinking your plans through, you are forced into an exercise that will naturally filter the metrics that have less importance.