

# Introduction - Welcome and course overview

## Transcript

G'day and welcome. It's Stacey Barr here, performance measure specialist of [www.staceybarr.com](http://www.staceybarr.com) and creator of the PuMP® Methodology.

Thank you very much for joining me for this course on how to get the truth from your KPIs using Smart Charts.

The course will actually controversially challenge methods that you and your colleagues, and probably just about everyone else in the world, have traditionally used to interpret what your KPIs are saying about performance.

The course is going to give you a single, simple and very insightful replacement method for graphing your KPIs in a way that really highlights their true signals. It's going to make it easier for everybody to agree on whether performance is improving, staying the same or getting worse.

Validly interpreting the true signals in your KPIs or performance measures is of unquestionable importance when you realise just how much time and money we waste on initiatives that fail to improve performance and even on lead indicators that we miss before they turn into performance problems.

After you learn how to use Smart Charts for your KPIs and performance measures you are going to dramatically simplify your performance reporting. You're going to remove the confusing mixed messages that we get from silly dials and gauges and other graphs that we typically choose more for their decorative and entertainment value probably than for their ability to reveal the true signals about performance. And of course, this means that you and your colleagues are going to get the ability to make much wiser decisions that result in far greater performance improvements for the same or possibly even less investment than you currently are. You are going to hit your targets and you are going to know what performance excellence really feels like.



## About your presenter, Stacey

Now, if you know me even just a little bit you are going to already know that my entire focus is to help people get tangibly clear about the results that they really intend to achieve in their business or organisation and to know how to recognise if and how well these results are being achieved.

Now I believe that performance measurement really is the best tool to do this but over many years working in this field I have observed that it's a tool that struggle a lot with and that's where I have chosen to specialise in making performance measurement easier, faster, more fun and engaging and of course much more meaningful and I've done that for nearly 20 years now.

My background, some of you may or may not know this, is in statistics. I studied stats at University to a post-graduate level in fact. My very first job out of University was working as a research statistician before I ended up specialising in performance measurement.

There is no doubt that this statistical background has helped me look at performance measurement from a different angle to a lot of people, maybe even most people, and that's why I've noticed some very bad practices in data analysis and interpretation that possibly other people haven't noticed. It's been one of the greatest frustrations that I have had working in this field, how common mistakes in looking at data have become common practice, and what also frustrates me is just how hard it is to get people to shift away from those bad habits.

Thankfully whenever I teach people about using Smart Charts, which you are already aware is a method far more valid and insightful than the common malpractices that we use, it totally rocks their world. They love the simplicity, they love the clarity of Smart Charts and the dramatic "Aha!" feeling that they get when they realise just how much all those traditional methods have been misleading them.



## The misleading methods of interpreting KPIs

The methods that are very common in interpreting KPIs are these.

The first one is the good old month-to-month comparison, comparing this month to last month, or this week to last week, or this quarter to last quarter, or this year to last year, and calculating a percentage variance for those differences. Then we rely on those percentage variances to tell us when we should respond to performance or when we shouldn't.

**The misleading methods of interpreting KPIs:**

- Month to month % variances (or week, or quarter, etc...)
- Moving or rolling averages
- Trend lines
- Year-to-date or month comparison to targets or benchmarks

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Another of the common methods is the moving or rolling average. It's a method that has been used traditionally to smooth out seasonal variation and reveal the overall trend. It's where the current month or current quarter is plotted on a graph and that value that is plotted is the average of say the last 12 months' values.

Trend lines are another really common analysis method used in reporting performance measures and KPIs and generally trend lines are straight lines that are calculated and put through a time series, and again, like a moving average they are there to reveal the overall trend or overall direction that performance are going in. Excel spreadsheets can calculate trend lines at the click of a button.

The fourth most common method of interpreting performance measures is the year-to-date or monthly comparison to a target or a benchmark. So this is where you look at what was this month's value for our performance and how far away is that from our target, or how far away is that from a standard or specification or benchmark?

Dozens of times that I have displayed KPIs using these methods and then polled people or groups on what they think performance is doing based on each method, I get a lack of agreement every single time among the group about what a particular analysis method is saying.

For example, if I'm showing something as a month-to-month comparison and its one measure looking at percentage variances I can't get agreement in the group about what performance is doing when they are all looking at the same thing.

Even more frightening is when I show them each of these methods in turn for the same KPI, so maybe it's a sales or revenue or lost time injury frequency rate, when I show

them that they draw different conclusions about the same KPI from each of those methods.

This has really got to be proof that the methods that we currently use to interpret our KPIs simply are not working. They are misleading us. We've really got to stop using them because a) people can't agree on what those methods are even telling them about performance; b) the methods just don't accurately highlight the correct signal in the performance measure; and c) it drives people to act when they don't need to and to not act when they do need to, and we all know that leads to wasted money, wasted time and wasted effort.

Here's the rub – you can't adopt new behaviours just because someone says you should. You need to have new beliefs first and the only way you can change your beliefs is when you change your awareness. So to stop using these old traditional methods and to get your colleagues to stop using them, because they are so very ingrained into the way we manage in business today, we need to change our awareness and we need to help them change their awareness.

Realising that these four traditional methods of interpreting our KPIs actually mislead us is this awareness that needs to be raised and of course now we realise that our belief that these methods are helpful, or that they're valid, is wrong. We need something now that is more truthful to believe. We need a new belief to replace that old belief and then we'll get closer to the actions that we want to take, which is adopting better practices in performance measurement.

## KPIs tell lies when we use statistical techniques without statistical thinking

What we need to believe is that there is a thing called 'statistical thinking' which means that we need to have a really good understanding of variation.

That is the new belief that has to replace the old belief and when we can help people adopt that new belief then it's so much easier to help them adopt Smart Charts.

Part of this belief about understanding variation or statistical thinking is to acknowledge that all KPIs and

**KPIs tell lies when we use statistical methods without statistical thinking.**

- **ALL** KPIs go up and down over time
- Most of the up-and-down is **routine variation**
- Some of the up-and-down is **signals**
- Most KPI analysis methods **FAIL** to separate routine variation from signals

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performance measures go up and down over time. There's always going to be that random up and down movement and not every one of those differences is a real difference.

Most of the up and down movement is what we call 'routine variation'. It's just normal, natural variability. It's the result of loads and loads of complexity in the environment which is producing that performance or that KPIs performance. But not all of the variation and not all of the up and down is routine.

Some of that up and down is a signal. The trick for us is being able to discern the signals from the routine variation, or filter out the routine variation so the signals become visually apparent.

However, most of the analysis methods that we use simply can't do that separation. They can't single out the signals from the normal random routine variation. So to stop wasting resources and time fixing things that aren't broken and allowing things that are about to break to fly under our radar we need this new awareness, this new belief, this new knowledge. That is: everything varies naturally.

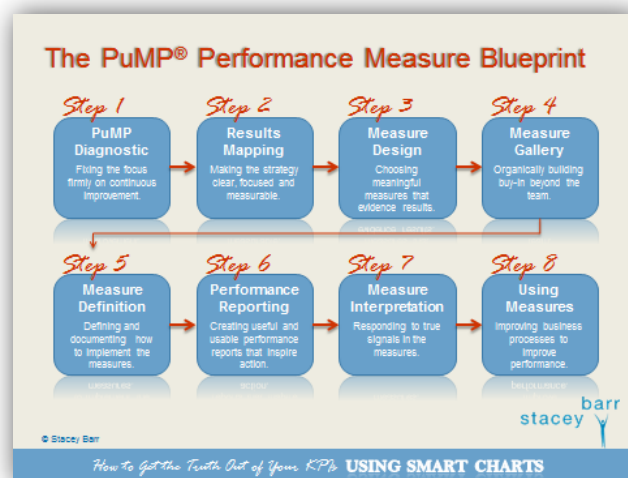
Most of the time it's routine variation. Signals of change in performance are the abnormal patterns of variation, the patterns that show a shift or a change away from the pattern of routine variation, and that's why we need Smart Charts. They are designed specifically to sift out that routine variation. Sometimes we call it noise and that makes it very easy to see the real signals of change in performance.

A Smart Chart should become a staple part of your performance measurement process, hands down. So let's take a quick look at how they fit into the performance measurement process before we start exploring them in more detail.

## The PuMP® Performance Measure Blueprint

Now I know that some of you have already been to a Performance Measure Blueprint Workshop or you've attended the Performance Measure Blueprint Online Program so you will be familiar with the PuMP® Performance Measure Blueprint. It has 8 steps in it.

- Step 1 is about the PuMP® Diagnostic and helping people understand, before they even delve into better performance measurement, that it's about continuous



improvement and not judgement.

- Step 2 is making your strategy measurable, getting rid of the weasel words and making your goals much more tangible and easier to measure, and in PuMP® we use a Results Mapping tool to do that.
- Step 3 is about designing the measures, choosing the measures that are the best evidence of the results that matter.
- Step 4 is about growing buy-in among all the stakeholders that will either impact on or be impacted by the measures that you are going to use and in PuMP® we do that using an event called a Measure Gallery.
- Step 5 is defining exactly how you are going to measure the measures – how you are going to calculate them, what data they need and all that kind of stuff.
- Step 6 is reporting your measures. It's about taking your data for your performance measures and collating that and analysing it and visually presenting it in a report or a dashboard that the users of the measures can then use.
- Step 7 is measure interpretation. It's about how to respond to the true signals in your performance measures, and that step 7 is where Smart Charts fit in. This idea of Smart Charts is taught at an introductory level in step 7 in the Blueprint programs but we are really going to expand on it and delve into it and look at it from lots of different angles so that you really can master how to use Smart Charts.
- Step 8 in PuMP® is about using your measures. It's about drawing conclusions from them that translate into action that results in processes being improved so that performance is improved.

Now step 7, or this idea of Smart Charts, definitely impacts Step 6 because it's going to give you a new way to visually report your performance measures in the reports or dashboards. It also affects Step 8 because the way you use a Smart Chart definitely has an influence over how you go about deciding which business processes need to be improved and how they need to be improved.

Don't worry about this too much, but when you are at Step 7 or when you are using Smart Charts it kind of pre-supposes that you already have meaningful KPIs. If you're not sure if the KPIs that you are going to be applying Smart Charts to really are ideal or perfect, don't worry too much about it.

You actually will soon discover if they are capable of giving you really important insights about performance as you start using them, as you start putting them into Smart Charts and using those KPIs. That's one of the ways to test their usefulness. Does it lead you to make decisions that you think really are important decisions for the performance of your business or organisation? I just wanted to put Smart Charts into context because Smart Charts are not the be all and end all of doing performance; they are just one step in the performance measure process.

## How we'll get the truth out of your KPIs

Now, to get the truth out of your KPIs – in other words, to use Smart Charts – there are a series of lessons that we are going to go through during this course.

**The first lesson** is simply to explore what exactly is a Smart Chart and we're going to talk about how Smart Charts really are quite powerful by looking at an example.

We are going to study the anatomy of a Smart Chart so that you understand the

terminology and the meaning of that terminology. We will wrap up Lesson 1 with just a couple of misconceptions about Smart Charts and specific traps you need to avoid.

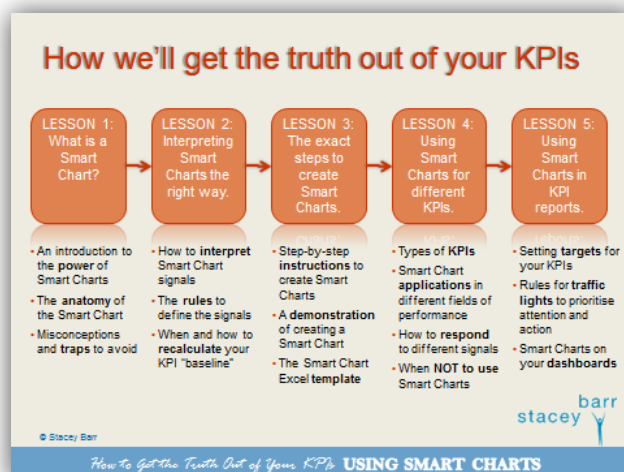
Now, I reckon that's a really great place to start because we could dig right into the steps to create a Smart Chart, but when you understand the anatomy and you understand some of the risks of using Smart Charts it's going to mean that when you come to learn the steps you will learn them much more easily.

**Lesson 2** is about interpreting Smart Charts the right way, and again I've chosen to do this before we dig into the steps of how to create Smart Charts. I think it's a very important thing to understand how to use one so that when you do come about to create them you know what you are doing and you know why you are doing it.

So in Lesson 2 we are going to learn how to interpret the signals in a Smart Chart, and again we are going to do that by following through an example. We'll look at the rules to define the signals and there are four very specific types of signals that we are going to discuss: the four signals that really encapsulate everything you need to know about interpreting a Smart Chart. We are also going to talk a little bit about how to re-calculate your KPI baseline. Now that will make more sense to you as we start looking at the examples, you'll know what I mean by baseline.

**Lesson 3** is where we dig into the steps to create your Smart Charts. We are going to follow step-by-step instructions that are in your workbooks as well as visually displayed for you through a demonstration that I am going to do in creating a Smart Chart from scratch.

Now in doing that demonstration in a sense I am almost building before your very eyes the Smart Chart template in Microsoft Excel that you will be able to use for your own KPIs. Really it's going to be as simple as pasting in your data, making a couple of little



adjustments to the charts to that the charts look at the complete range of data that you have, and then just looking for signals and going for there.

**Lesson 4** is about exploring how we can use Smart Charts for different types of KPIs. We'll explore what those types of KPIs are and we'll also talk about how Smart Charts can be used in different fields of performance.

You can use them in HR performance management, customer service performance management, and more technical areas like maintenance or anywhere really. Even in finance – you can use Smart Charts for financial KPIs. We'll talk a little also in Lesson 4 about how to respond to different types of signals and again we'll be looking at examples to illustrate that. Like when you see a particular sort of signal, what should you do next? And we're also going to talk about when you should not be using Smart Charts - what type of KPIs or situations are not appropriate for Smart Charts.

Now I haven't mentioned it here on the slide but we will also be talking about one particular problem that can come up with Smart Charts and that's where your data is seasonal or cyclical. So I'm going to show you how you can use Smart Charts in that situation.

Now the **fifth lesson** is about reporting Smart Charts. It's about some of the visual design aspects of displaying them in reports or in dashboards.

We'll talk about setting targets and how to use targets with your Smart Charts and also a very big risk of using targets with Smart Charts. We'll talk about how we now have different implications for traffic lights. You know when you have in a report or dashboard that red, amber and green lighting system designed to highlight priorities to people? Well we'll talk about how you set up those rules now because they really do become a very valuable tool when they are used with a valid charting method like a Smart Chart. I will share with you a little tip of how to shrink down your Smart Charts into little graphs that fit very neatly and beautifully into dashboards.

So that's what you are in for. That's our program. You are going to be able to ask questions throughout the program so if I'm not covering something that is relevant to you you'll be able to ask and I will fit it in.

**End of transcript.**