

Managing Shrinkage in an Operational Environment

Shrinkage is a vital measurement in any Operational Environment, yet in my experience, it is consistently misunderstood and often measured incorrectly. Some organisations don't measure it at all but it is one of the most vital metrics to controlling your operational expenditure.

So what do I mean by Shrinkage? Well, it goes by many names. I've often seen it called Rostered Staff Factor, Efficiency, Staffing Allowance or Utilisation. What I mean by Shrinkage is the percentage of staff time lost to everything not directly related to their core job function. The goal of measuring Shrinkage is to let you know how many more staff you'll need to complete your work when you factor in all the things that will stop them from being productive.

Example

An Administration centre manages all aspects of their customer accounts. The centre is responsible for creating new accounts, updating customer details and responding to customer enquiries. Based on the volume of work that comes in per month and how long that work takes, the business has calculated that they need 100 Full-Time Equivalent (FTE) staff to complete the work.

Items of work	Volume	Minutes per Item	Hours	FTE
New Account Set-up	980	60	980.0	24.5
Customer Correspondence	2700	30	1350.0	33.8
Account Maintenance	2120	45	1590.0	39.8
Complaints	40	120	80.0	2.0
Total	5840	255	4000.0	100.0

However, this operation is going to require more than 100 FTE to complete their work. Staff will want to take holidays, be sick, need training, meetings and breaks etc. So how many more staff will our hypothetical operation need to make sure they have enough to complete all their work? 20...? 30...?

The answer depends entirely on their Shrinkage. Finance will often add a notional figure (often 20%) to the base figure. In this case, they'll give the operation 120 FTE.

But unless their shrinkage is less than 16.6% they will never be able to complete all their work with 120 FTE!

So let's take a look at the common items that make up Shrinkage:

Type	Definition
Holidays	% of time staff are absent due to holidays
Sickness	% of time staff are absent
Other Leave	% of time lost to other leave (study, personal etc)
Breaks	% of time given to paid breaks
Training	% of time staff spend in training
Meetings	% of time staff spend in meetings
121's	% of time taken for monthly 121 meetings
System Downtime	% of time lost to system downtime
Special Projects	% of time spent doing special 'one-off' work
Other	% of time spent doing anything else

Let's go back to our example. Our Administration centre doesn't have very good control over their shrinkage. In fact, they don't measure shrinkage at all. But we measured it and it turns out their shrinkage is 50%!

So that would mean they need 150 FTE to make sure they can complete their 100 FTE worth of work... right?

Unfortunately not. And this is a common mistake organisations make when it comes to calculating shrinkage.

Managing Shrinkage in an Operational Environment

If we have 150 FTE and we take away 50%, we are left with 75 FTE. That's 25 FTE less than what we need!

So how many FTE do we need if our shrinkage is 50%? The answer is of course 200 FTE. Once we remove 50% from 200 we are left with the 100 FTE we know we need to complete all our Administration activities.

So a shrinkage factor of 50% **effectively doubles** the amount of staff you'll need!

The correct way to apply shrinkage to a base staffing need is:

$$\frac{\text{Base Staffing Requirement}}{(1 - \text{Shrinkage \%})}$$

Or in this case:

$$\frac{100 \text{ FTE}}{(1 - 50\%)}$$

But with effective control of their shrinkage, our Administration centre was able to reduce their shrinkage by half to 25%. They still require a base of 100 FTE each month to complete all the work that comes in, but now with a reduced shrinkage, we can see they will need 133.3 FTE overall. (25% taken away from 133.3 = 100 FTE).

That's a saving of 66.6 FTE just by measuring and more importantly managing their Shrinkage! And this is purely based on a centre that has a need for 100 FTE. What could your operation save by measuring and managing shrinkage effectively?

When calculating how many staff you need to run your operation, it is important that Shrinkage is factored based on reality, not on goals. If you want to run at a shrinkage level of 20% but in reality your shrinkage is 30%, the result will be a failure to meet service standards, dissatisfied customers, unhappy managers and dissatisfied employees (no one likes failure).

Having said that, it doesn't mean that you shouldn't set high performance targets for your shrinkage. If you don't target your shrinkage and make it a Key Performance Indicator (KPI) for your managers, it will lose focus and gradually increase.

So what should your shrinkage be? How long is that piece of string again...? Shrinkage is one of those things that is independent to your organisations needs, values and requirements. For example, in complex environments, there may be a much larger requirement for training. In fact, it may be you're in a heavily regulated industry where you need to provide a minimum volume of training for staff each month. Or perhaps your employers are generous and provide more holiday entitlements than the average employer.

However, it is our experience that a high performing operation (with an average environment) should be able to achieve the following:

Holidays	8.0%
Sickness	4.0%
Breaks	3.5%
Training	4.0%
Meetings	2.5%
Other	2.0%
Total	24.0%



LEAN
CONSULTING

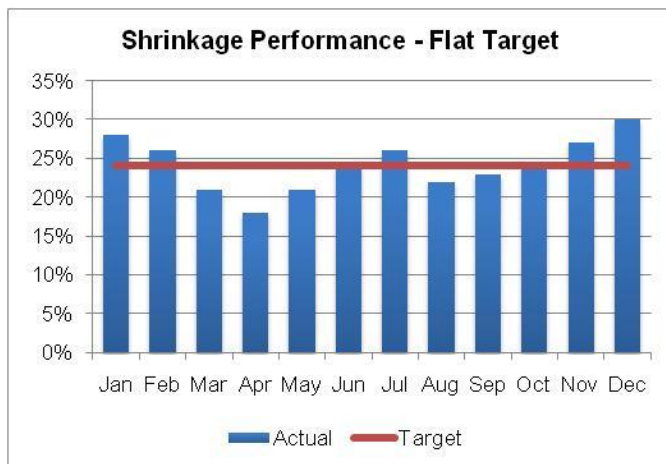
Managing Shrinkage in an Operational Environment

If your statutory holiday requirements are more or less than 4 weeks, this figure should be adjusted accordingly. Your operation may not give employees paid breaks, in which case, this should be excluded. As mentioned above, your training requirements may greatly differ from the average given in the previous table. **Your own circumstances must be taken into account when setting shrinkage targets.**

So how should we target Shrinkage so that we can be sure it's in control and not creating a strain on our staffing budget? There are 2 approaches to targeting shrinkage and both have their advantages and disadvantages.

Flat Target Approach

With this approach, the annual target is established and then that target is set for each month



However, work has a terrible habit of coming in at different volumes each month. The staff we require to complete work changes each month. So there are times when we need less staff and times when we need more.

In this chart, the operation missed their shrinkage target 5 out of 12 months, however their annual shrinkage performance was right on target at 24%.

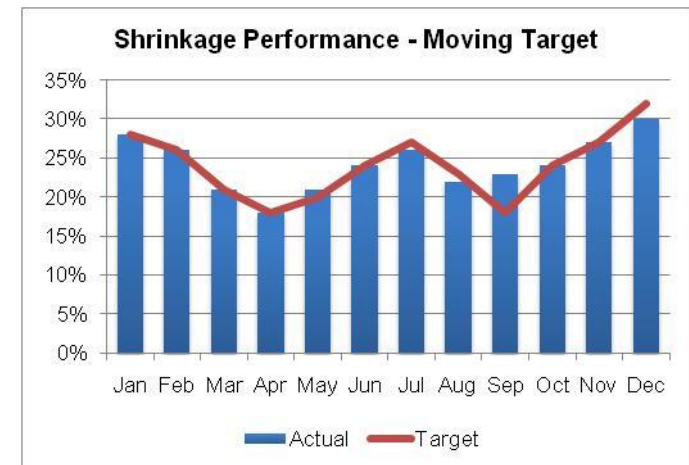
Did it hurt the operation that some months were higher and some months lower? Perhaps not, especially if the peaks and troughs were aligned to the incoming workloads.

The advantage to this approach is that everyone knows what they are aiming for 24% is consistent each month, the goal posts are not constantly shifting.

Moving Target Approach

With this approach, the annual target is established and then amortised across the year based on forecasted need.

The target changes each month, but performance is more consistent. Notice that the performance is the same as the previous chart, but in this case they only missed 1 out of 12 months' targets.



There is more to managing shrinkage than this white paper describes. To learn more, contact Lean Consulting today.

- Cameron Turner
Director, Lean Consulting Ltd