

A soccer ball is shown in the process of hitting a goal net. The ball is white with black and blue panels. The net is white and made of a hexagonal mesh. The background is a green grassy field.

Goal Failure

What, How and Why?

In safety, as in all areas of business and life, goals are a critical component in the pursuit of a desired future state. “What gets measured, gets done”, “You can’t manage what you can’t measure”, “You are what you measure” – there are a plethora of quotes around targets, goals and metrics which allude to their importance and prevalence. However, goal attainment can be very elusive but even worse, when we achieve a goal or target at times, it doesn’t work out quite how we planned. Without delving into the learned literature on the topic, I have reflected on the most important components of goals and also looked at why many goals fail – some from my personal (often bitter) experience. The critical components of safety goals and targets are no different from those of individual goals and targets – so we’ll start with a general review.

Firstly, lets define goal, target and metric:

- A goal can be defined as the primary ambition that people cherish time and again to achieve. As human beings, we all have goals in life. In our professional life, it can be to achieve our highest potential.
- The word target refers to aims in general, and it has the figurative meaning of distance or mark. While a goal remains as an individual’s ultimate achievement, targets are milestones on the way towards the goal. A target may be considered a leading indicator of success.
- A business metric is a quantifiable measure a business uses to track, monitor and assess the success or failure of various business processes. The main point of using business metrics is to communicate an organization's progress toward certain long- and short-term objectives.

It is common to find target and goal used interchangeably. The definitions above suggest they differ in their horizon – a goal is an ultimate objective, a target is an intermediate objective which leads towards the ultimate goal.

Setting targets can be quite straight-forward but is absolutely fraught with potential pitfalls. Good targets have a variety of essential components and it’s easy to achieve one or two of these components, but completely miss the desired outcome due to a lack of focus (or even awareness) of other components.

Success in business comes from linking organisational goals to employee goals. Establishing an organisational vision that motivates and engages its employees is a crucial step in creating this positive linkage. Thereafter, everything the business does and the goals and targets that cascade from it must have a tangible connection.

So why do goals and targets fail so frequently – and what can be done to avoid these failures? In simple terms, one or more of the components of a “good target” as listed below, is missed in setting the target. The most common failures involve the failure to link the target to the organisational vision – so it feels disconnected – this can often be accompanied by leaders who set the vision but then act, report and prioritise issues which do not appear connected to the vision.

Organisational targets tend to be dominated by financial metrics – revenue, EBIT, share price, market share. Easy to define and quantify – but are seldom linked to the organisational vision. These blunt metrics are outcomes of the processes of the organisation. These metrics are, of course, critically important. If the business racks up losses or does not control its cash flow – then attainment of the vision cannot occur. Attainment of these metrics can affirm to individuals that their efforts are reaping rewards, but failure to attain such goals should also prompt introspection “what can I do or influence that might improve our overall performance?”. Alone, however, these targets will not motivate employees without specific, actionable targets which improve the processes of the organisation – and which the individual can personally influence. Another common failing at management level can be a lack of content in vision, mission and metrics around safety. If safety is not perceived as a direct priority at management level, the process of making it important at lower levels of the organisation becomes very difficult.

So, what makes a good target?

- Good targets are SMART. Very popular mantra in business is that goals should be specific, measurable, achievable, realistic and time-bound. This is absolutely true and necessary, but meeting this specification alone does not make the target a good one. There are many other factors which are required to make the target a really good target...
- Good targets are important and (clearly) are linked to the organisations vision – they are important to the people that set them and the people that take them on. They mean something to the individual and the business and connect to the vision of the business. Attainment of the target should not be an isolated, disconnected feat - it should clearly be linked to the big picture for the individual, business or (ideally) both. The big picture objective is the goal.
- Good targets are lived and prioritised by leaders – nothing undermines a target more than a leader who sets it and then pays no attention or lip-service to it.

- Good targets are within the power of the person who accepts them. Nothing is more demotivating than a target which depends on other people, groups or resources to be attained when the target is not shared or prioritised by the other stakeholders. Target-setters must pay attention to ensure that the resources required to achieve the target are all in place to ensure that the target-owner is “set up to succeed”.
- Good targets need processes, plans and milestone targets to support their attainment. A target is typically an outcome / a destination, but it needs a process / map for how to get there.
- Good targets need regular progress checks. Setting a target and then ignoring it until the target completion date (or the next annual review!) can be catastrophic. A lack of “check-ins” can lead to goals not being progressed or, potentially worse, divergent approach to the target attainment compared with that intended / desired. In the worst case, the target could be completely missed despite the effort expended to achieve it.
- Good targets can be complex. There is a strong compulsion to set targets which can be easily defined and quantified. This has the advantage of being clear, concise, understandable and unambiguous. However, life is often not so simple and what we really want to achieve can be much more difficult to define and quantify. Going the extra mile to establish criteria for a complex target is usually rewarded by ending up where you wanted to end up.
- Good target attainment leads to a positive outcome. Achieving a target should have some reward. It is important in setting the target to understand the motivations of the individual and aligning the reward with the motivator. Whilst for some, financial reward is a key motivator, it won't be the same for others. Understanding the motivations of employees and not applying a blanket reward structure is crucial to ensure genuine motivation and establish “good” targets at an individual level.



If all the components of a good target are in place, the chance of success is considerably enhanced. Ultimately, a goal is something that brings about a behavioural change in those pursuing it.

Targets and Metrics in Safety

Safety goals are a particularly complex area. In occupational safety, lagging indicators predominate. These are the traditional safety metrics used to indicate progress toward compliance with safety rules. These are the bottom-line numbers that evaluate the overall effectiveness of safety at your facility. They tell you how many people got hurt (or could have got hurt) and how badly. Whilst these goals provide an understanding of the trajectory of risk exposure of the business, in isolation, they do little to influence the trajectory – they merely monitor it. As one of my colleagues accurately describes leading indicators, “it’s like driving your car whilst looking exclusively in the rear-view mirror”. We need to learn from the past, but it is not the always a reliable predictor of the future. As such, setting targets around these lagging metrics can be useless without sub-targets which seek to positively modify the exposure (or consequence of the exposure) i.e. leading indicators.

In defining lagging and leading indicators, the safety pyramid (also known as the accident pyramid) is commonly referenced. This model, first introduced by H.W. Heinrich, includes two important messages:

- Safety accidents can be placed on the safety pyramid corresponding to their severity; with the highest consequence incidents at the top of the pyramid and lowest consequence incidents at the bottom of the pyramid.
- Lesser consequence incidents always occur before incidents of higher consequence.

Acknowledging these two points (especially the second point) suggests that the model has predictive characteristics, i.e. higher consequence safety incidents can be predicted by multitudes (or more frequent) lower consequence safety events like near misses and challenges to safety barriers.

However, the model is significantly flawed as:

- Event potential is not considered.
- It focuses on trivial occurrences.
- There is no comprehension in the model of the understanding of the complex causes of **SIF (Serious Injury and Fatality)** events.

Heinrich's Triangle Theory



Thus, the Heinrich safety triangle is accurate descriptively, but not predictively – especially not for events with more serious potential (such as process safety events).

The findings from our SIF research show that the triangle is actually misleading. It lulls people into a false sense of security (“reduce the bottom and it will reduce the top”) despite being accepted as ‘science’ for many years. The point “high consequence incidents can be predicted by multitudes of lower level incidents...” is thus fundamentally flawed. Intuitively, we know that more ‘less serious’ things happen than ‘more serious’ - the data shows that - so the pyramid works in showing that. However, the flawed bit is the assertion / inference that actions to address the bottom of the pyramid, can impact events higher up, in equal measure. Our research has shown that this is not true as typically only 25% of recordable incidents have genuine SIF potential – thus without delineating and identifying scenarios with SIF potential, actions to address issues lower down the pyramid may not reduce SIF potential. The triangle concept is not completely without merit though. It is possible to identify the characteristics of incidents that have SIF potential (precursors) and these can then be addressed - which means it is possible to identify the direct relationship between certain circumstances / behaviours / situations and serious events to create a link – and break it.

It is easy to set a goal based on a lagging indicator but which encourages precisely the wrong behaviour as an unintended consequence. Establishing a target (and giving rewards) for a reduction in near misses (or even incidents), for example, can drive a behaviour and culture of under-reporting / non-reporting which “hides” the reality simply in order to achieve the target. It could be argued that setting a target of increasing near miss reporting would be a better goal to really understand how safe a facility is – but that then runs the risk of the reporting of increasingly trivial events, just to attain the target.

For topics like “near miss reporting” it is therefore worthwhile recording these – as a metric – but not incentivising an increase (or decrease) in it. It is then still possible to reward someone for a great near miss report – particularly those with SIF potential. In process safety, the situation gets even more complex due to the compelling necessity to use leading indicators rather than lagging indicators. **Loss of Primary Containment (LoPC)** is a common indicator used in process safety – but it is a lagging indicator and thus of little predictive value (and doesn’t necessarily indicate the real underlying risk of more serious events). Safety leading indicators are proactive measures that measure prevention efforts and can be observed and recorded prior to an injury. Such indicators link to the presence and performance of barriers and systems designed to prevent incidents. These metrics can be quite technical and less easy to understand for employees and board members alike. However, if a company genuinely places a high organisational value on safety, then it must find ways to communicate and elevate the status of safety in its communications – in a digestible, understandable and meaningful way.

A concept invoked in all Process Safety Performance Indicators (PSPI) is the “Swiss Cheese Model”, a model describing how incidents occur. This model is conceptually important, as it is a foundation on which all the practices are based. In summary, accidents are prevented by a series of barriers. Barriers are not perfect, and always have deficiencies in them (i.e. holes), and those holes can get bigger over time, especially when left unmaintained. Accidents only occur when there is alignment of these holes in series, i.e. failure of every barrier in conjunction with an initiating event. This is a useful concept to have in mind especially when using the barrier-based approach, as this approach is about monitoring the effectiveness of these barriers. Risk control system is the terminology used to describe safety barriers, but they are also known as lines of defence, layers of protection or safeguards in the literature. Setting targets for the maintenance of barriers, closure of audit actions, etc are thus effective targets for process safety and high SIF potential events. The best metrics in safety are leading indicators which correlate strongly with lagging indicators. Easy to write, less easy to define.

The Importance of Organisational Culture

Organisations who are successful in safety have a culture which promotes and supports empowerment, openness, seeks the truth and exhibits a “chronic sense of unease”. The culture is always set at the top – how leaders behave and what they prioritise are cues for the rest of the organisation. Certain organisational characteristics can have a profoundly negative impact on safety – those that “have a blame culture”, “punish bad news”, “blame the messenger”, “have a tick box mentality” and “incentivise only good news”. A just culture should exist where wilful violation is punished but unintended violation is viewed more sympathetically as a learning opportunity.

Research shows that organisations which benefited most from a metrics programme and had the best performance have:

- Reporting Culture: Strong culture of reporting and fixing,
- Action Execution: High rate of action with timely execution
- Leadership Responsiveness: Responsive, disciplined involvement

In conclusion, an effective implementation of a metrics programme requires resources; champions, teams and leadership. The organisations’ culture should also be considered to enable a successful implementation of the programme. Establishing good goals and targets – taking account of all the components thereof – will drive desired behaviours which will dictate success.

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Steve has a 30 year career leveraging his chemistry background in process safety. Over the last 12 years he has been Managing Director of our Organisational and Process Safety business and has hybridised into a professional leader

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DEKRA Organisational & Process Safety

DEKRA Organisational and Process Safety are a behavioural change and process safety consultancy company. Working in collaboration with our clients, our approach is to assess the process safety and influence the safety culture with the aim of 'making a difference'.

In terms of behavioural change, we deliver the skills, methods, and motivation to change leadership attitudes, behaviours and decision-making among employees; supporting our clients in creating a culture of care and measurable sustainable improvement of safety outcomes is our goal.

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