

Marginal Losses: An Explanation of Suboptimal Institutional and System Performance



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When I wrote my last article for SIA ([Wanted: a New Ideology](https://www.sageinternational.org.au/general-discussion/wanted-a-new-ideology/) <https://www.sageinternational.org.au/general-discussion/wanted-a-new-ideology/>) I did what philosophers have a tendency to do: I put the cart before the horse. In the process of outlining what is wrong with the thinking that underpins so much current decision making and behaviour, and proposing the foundations for an ideology, which could assist us to improve our decision making and actions, I did not provide a description, or explanation, of the suboptimal performance that we currently experience and contribute to within institutions and systems.

Time after time I found myself involved in similar conversations, trying to ascertain how and why the institutions and systems we interact with frequently function at a suboptimal level. Whether in conversation with John Bruni after recording an episode of the STRATEGIKON podcast, or with Charles Vandeeper while sitting at an airport waiting for a flight, or with Greg Shepherd while trying to make sense of the world over coffee and a bag of chilli chips, I consistently found myself out of ideas and stuck at the same observation: most people are trying to get something useful done, but getting it done is consistently more difficult than it should be, and they inevitably achieve less than they expect they could. It took quite a while to get beyond this sticking point, but before I go on with my elaboration I need to thank my interlocutors

for their stimulating conversation and take full responsibility for the faults in my logic and for the holes in my analysis.

I have been trying to satisfactorily explain to myself why it is so difficult to get things done, and why achieving less than expected has become the norm, for at least four years. I thought that there must be a good, big, and comprehensive answer that would satisfy my curiosity and illuminate the way forward. I began by considering the concept of entropy, that all systems are subject to slow and inevitably to stop working, but quickly rejected it as an explanation. Institutions and systems are constantly exposed to new people, ideas, issues, and environmental pressures, so no human-centred system is likely to wind down just as a matter of course. As people rotate in and out of institutions and systems, and policies and requirements are altered to suit changing perspectives and preferences, even the concept of stasis provides an unsatisfactory explanation.

After concluding that concepts such as entropy and stasis are unsatisfactory explanations for suboptimal performance, I turned to people as the possible answer. Once again I was disappointed, but, at least this time, pleasantly disappointed. From my perspective as a Human Performance Consultant, long time University educator, and as a student of decision making at both a micro and macro level, I had plenty of experience to underpin my belief that people can make an institution, or break a system. In keeping with the literature on High Reliability Organisations, I was sure that institutions and systems could function well, if people were able to create positive culture and implement appropriate processes.

The more I observed people, asked questions, expanded my research, and put the pieces together, the clearer it became that a majority of people are working hard to get useful things done, and that they see meaning in, and take pride in, what they do. But at the same time they feel stressed, frustrated, thwarted, and unable to turn the tide, which is wearing them down.

So, where did this leave me? With the knowledge that people are not the problem, but that the problem diminishes people and their ability to overcome a myriad of little problems. And then I had my penny drop moment:

An Aggregation of Marginal Losses contributes to the suboptimal performance of institutions and systems.

For those of you with a financial background, Marginal Losses will not be a new concept; and for those of you with a keen interest in elite sport, you have probably already spotted a possible link to Sir David John 'Dave' Brailsford and the concept of the Aggregation of Marginal Gains. Despite these two potential sources of familiarity, what I have found is that most of the people I have discussed suboptimal institutional and system performance with have not thought about it in terms of Marginal Losses.

Consequently, here I am now writing about something that seems simple and obvious, but that has not received the discussion I believe it deserves. The Aggregation of Marginal Losses is not the critical clue that Sherlock Holmes would lay out at the last moment, nor is it the silver bullet required to save the day, but it does provide us with a concept we can discuss and use for analysis. If we can better define and analyse the problem, then we can equip and empower people to overcome it.

Since I am conceptualising Marginal Losses as closely related to Marginal Gains, as elaborated by Sir Dave Brailsford, it seems appropriate to begin with the world of elite cycling. Sir Dave Brailsford is credited with turning British cycling and Team Sky's fortunes around. Under his stewardship British riders won seventy percent of the possible gold medals in cycling at the 2012 London Olympics and Team Sky has now had three British cyclists standing on the top step of the podium at the Tour de France. Brailsford credits this success to the broad application of Marginal Gains across all areas of Team Sky and the Olympic team.

Marginal Gains have been found in every aspect of the cycling world, ranging from tiny improvements in bicycle aerodynamics, seat location, tyre weight, diet, recovery through sleep, prevention of infection, team management, through to better procedures for running meetings. None of these Marginal Gains are game changers on their own, but the aggregation of these Marginal Gains has resulted in a consistent winning advantage. Brailsford has repeatedly stated that finding and combining these Marginal Gains depends on people being committed, having ownership, accepting responsibility, and that the presence of all of these leads to excellence.

Like Marginal Gains, Marginal Losses are not significant enough in and of themselves to cause a marked decline in performance, but in aggregate they represent a significant loss. In the same way that Marginal Gains were found throughout the closed system of elite cycling, Marginal Losses can be identified and experienced anywhere within the performance of an institution or system. I have observed the same Marginal Losses in educational institutions, government departments, and private businesses, and as they increase in number their deleterious effects become more obvious.

Also like Marginal Gains, Marginal Losses are nothing new, but dealing with them in a coherent and cohesive manner may well lead to improved performance in institutions and systems — as has been achieved in elite cycling.

As I would prefer people to read this article, rather than conclude that they need to find enough time to wade through something dense and long, I will confine myself to a few examples of Marginal Losses and their related effects.

Technology is as good a place as any to begin, because it provides fertile ground for both improved performance and Marginal Losses. I am a strong example of, and advocate for, the transformative power of technology. As a blind person who relies on screen reading software to make a computer useable, and relies on the accessibility built-in to my iPhone (plus specialist apps) to do everything from navigating the streets to reading a menu, I could not be half as productive as I am without technology. Nonetheless, technology is also frustrating, distracting, and wastes our time.

How often are we confronted with a software update that changes the location, or function, of a feature we use every day? How does a change in one software package impact our ability to successfully work across platforms and products? And how overwhelmed can we become by potentially useful information popping up in a number of places and a number of different ways?

Each of these everyday technological experiences slow us down for a few seconds, and distract us from what we were trying to do for several seconds more. Despite the gain of potentially having everything in front of us and at our fingertips, we experience constant Marginal Losses of time and concentration as a consequence of the excess that technology enables. And when the working day is done we are likely to relax in front of a big screen, or with a small device in our hands, maintaining our state of over-stimulated distraction, until our ability to recover overnight is compromised. The Marginal Losses of our workday are exacerbated by the addictive potential of the technology we rely on and enjoy.

An excess of potentially relevant information via multiple channels is not just a consequence of rapidly developing technology, but is also a direct consequence of more than thirty years of Neoliberal policies. With an on-going pressure to complete more increasingly high quality tasks in less time, people are having to simultaneously deepen their expertise and widen their set of competencies. Deepening expertise and widening skill sets are both good things, but doing them at the same time is always a juggling act, which can easily result in disruption to both positive ends.

Deepening expertise requires time to develop and implement incremental iterations (Marginal Gains), which can easily be disrupted when we must move our focus to get the next general task done. When we need to fill in an unfamiliar form, follow an unfamiliar process, or occasionally interact with a system, we lose our focus and must rack our brain to remember how we got an acceptable general outcome last time. All of this is normal, but in our high productivity and low staffing level world Marginal Losses are magnified by our growing reliance on self-service systems. There may, or may not, be documentation to read about how the self-service system works, and we are likely to have too little time to read the documentation in anything more than a cursory manner. If we can get the general task done on our own, then we still lose time and concentration on activities that are unlikely to stick in our memory, because

we do not do them often enough, or with enough focus, to turn them in to expertise. And if we need to enlist an expert to help us with our general task, then we disrupt them from their expert task to assist us with our general task. Everyone loses some time and some focus, and as pressure and time turn another circuit the Marginal Losses grow like a snowball rolling down a mountain.

As we move from a hierarchical professional world into an increasingly networked professional world, we encounter new perspectives, different partners, and a broader range of stakeholders. Consequently, the breadth and depth of what we can achieve increases, but so do all of the opportunities to accumulate Marginal Losses. With any new complex and integrated situation there are opportunities to learn new things and to deepen our expertise, but there is an equal (and generally under-considered tendency) for all of the new moments of unfamiliarity and uncertainty to distract us and slow us down.

In closed systems, such as in a McDonalds' kitchen, or on a Toyota production line, Marginal Losses can be identified and reduced, because there are only so many variables within the system, and new variables are tested and implemented a few at a time. In contrast, in our increasingly networked world, new activities extend the openness of the system exponentially. On top of all of the Marginal Losses that we do (or do not) consider, we come in to contact with all of the Marginal Losses that our stakeholders and partners do (or do not) consider.

As educational institutions, government departments, and private businesses seek to develop transformation strategies, to most effectively situate themselves in their new expanded environment, one tendency is ubiquitous: transformation strategies assume a positive outcome at the end of the transformation process without acknowledging, or quantifying, the carry-over and cumulative cost of Marginal Losses. It is as if transformations are being planned for closed systems, even though it is apparent that transformation in a networked world increases exposure to a myriad of potential time wasting and focus breaking Marginal Losses.

In addition to not acknowledging the practical cumulative effects of Marginal Losses, many transformation plans fail to acknowledge the human cost of piling change on top of unresolved Marginal Losses. If we take Sir Dave Brailsford's perspective that Marginal Gains depend on Commitment, ownership, and responsibility leading to excellence, then we can invert it to suggest what happens when Marginal Losses are not identified and resolved. If a transformational plan does not take and assign responsibility for resolving Marginal Losses, then there is no reason for anyone to accept ownership of carried over problems, which is likely to reduce levels of commitment, all of which make excellence unlikely. And here we are back at my original observation: most people are trying to get something useful done, but getting it done is consistently more difficult than it should be, and they inevitably achieve less than they expect they could.

The reduction of Marginal Losses and their aggregated effects should be a first order priority for institutions and systems. They should be identified, analysed, and resolved prior to the creation and implementation of any transformational plan. Marginal Losses erode the foundations on which institutions and systems stand, and are corrosive to people's sense of commitment, ownership, and responsibility.

There are a number of practical steps that can be taken to reduce Marginal Losses. To begin, decisions should be made about what is essential and what is not: establishing stable and reliable foundations is critically important. As Marginal Losses often have the greatest impact at lower levels, people should be equipped and empowered to remedy the little problems that disrupt their days. Human Resource management should focus on finding a balance between deepening expertise and increasing general skill sets. Self-service systems need to be judged on the basis of whether they serve the people who interact with them as generalists rather than as experts. And finally, transformation plans need to embody an awareness of the cascading effects of networking open systems.

An individual Marginal Loss is easier to overlook than it is to fix, and the impact of an accumulation of Marginal Losses is easier to see than it is to resolve. As always, we have a choice as to how we wish to proceed. If we want better performance from our institutions and systems, and we want people to be as productive as they can be, then we need to start with the little disruptions and distractions. Otherwise, excellence will become even harder to achieve.

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