It pays to be accurate!

Imagine the scene: a group of people from different organisations, brought together to discuss ways of reducing data error. If you were one of them, what examples would you have of things that have gone wrong at work? How about, sending an event invite with the wrong date? Or starting a new employee on the wrong salary? You undoubtedly have your own horror stories of things that have gone wrong!

This short article delves into the cost of human error, explores why relying on software isn't always a good idea, and provides an introductory tip or two for overcoming the natural barriers to accuracy. There are a couple of fun accuracy activities to get you thinking, too!

The error cost multiplier

Accuracy when we're working with data is crucial. And the good news is that typically, most competent people have an accuracy rate of around 97%[1] so most of the time everything works fine. But that 3%[1] error rate is a killer in terms of wasted time and damaging repercussions. Making an error in someone's name or transposing a couple of digits takes a matter of seconds. Finding it again, so you can put it right, can take hours, days or even months, depending on how quickly the error is picked up. It's surprisingly common for people not to spot those mistakes until the repercussions start! It's the 'error multiplier' factor which takes a tiny error rate of even under 3%, to seriously expensive levels. A single data input error which takes seconds to make, can waste 20% or more of an employee's time. See for yourself with our first activity:

The Ripple Effect

Take a piece of paper and draw concentric circles on it, dividing the inner ring into four sections and the outer ring into eight sections as illustrated.

In the centre circle write down a short description of an error you know about.

In the first (gold) ring, identify four different direct consequences of the error you have identified. What happens? Who has to be informed?

In the outer (blue) ring, identify a further two repercussions for each direct consequence. How does it get escalated? What are the knock-on effects?

It's easy to see how a single error 'ripples out' to demonstrate the multiplier effect. One apparently 'tiny' error usually leads to several people and other organisations being involved, disruption to work, significant wasted time and damage to trust and reputation.

Causes of mistakes

People don't make mistakes deliberately, so telling them not to doesn't work. It's as helpful as telling people not to get a cold! Sound advice, but useless. People work in good faith intending to be accurate, so what's going on when a mistake happens?

One of the reasons for mistakes is due to the way our eyes work. We have no control over the movement of our eyes as we 'read' a piece of data.

Take the bank account number 89792939

As our eyes look at the numbers, they literally jerk backwards and forwards across the numbers. It's easy to look at the overall shape of the digits, to transpose them, create repeated digits or simply just read it incorrectly. Simply because of the way the human eye works. Where the eye stops is called a fixation and the jerky movement is called a saccade.

But if you use our 'advantage of threes' technique, naming each single digit in your head, in a waltz-type pattern, you focus on each element of the data, with a little emphasis on each group of three like this: **8**97 **9**29 **3**9.

Sub-verbalising the digits in this way, means it's possible to 'listen' for mistakes as well as to look for them. There are different techniques for working with grouped (or clustered) data like telephone numbers; or punctuated data like sort-codes or salary amounts; or alphanumeric data like postcodes or National Insurance numbers. Learning and practising these techniques with different types of data is proven to reduce human data error by 50-60%[2].

Other causes of error include: having too many levels of checking, where increasingly senior people check a percentage of the output; being stressed; memory lapses and not knowing how to manage distractions. Two other major factors, which we'll explore briefly now are the way our brains work and the kind of mindset we need to adopt when working with information.

The brain sees what it expects to see

You cna raed tihs sentnece even thoghu most of teh wrods are not splled crroectly because our brians see waht we expcte to see, not waht is actually tehre.

Our reading skills get in the way of our accuracy skills, so we tend to look at the overall shape of data. Moreover, when we are familiar with a task and know what to expect, it's easy for our brains to 'sort out' mistakes for us, so we don't even 'see' them. There is nothing wrong with our optic nerve; but our brain automatically compensates for the mistakes in front of our eyes. This is why it can be so hard to believe we've made a 'silly' error. But when it is pointed out to us, or we examine the data more carefully, we can see it immediately.

Being present-minded

Adopting an accuracy mindset is essential.

Related to concentration and attention to detail, present-mindedness goes one stage further. We define it as 'being fully engaged in the task and all factors affecting it'. This means that accuracy is improved by being aware of the consequences of errors and by taking conscious steps to mitigate the risk. Since people are generally fairly accurate, it's easy to be lulled into a false sense of complacency and therefore it's important to adopt a 'self-sceptical' approach where you assume a questioning approach to your work. Actively looking for mistakes before processing data means you are likely to find them before they do any damage and when they are easy and quick to correct.

Clever software encourages the wrong mindset

Software organisations like to suggest that errors can be reduced or even eliminated by computer power. The automation of processes previously dependent on data input is of course usually more efficient and not prone to human error. But this in itself doesn't eliminate mistakes completely. If a process is largely automated, the people using it tend to rely on it to get everything correct. If attempts are made to eliminate errors by tightening the rules and procedures, the unintended consequence can

be to squeeze intelligence and judgement out of the process, and that can lead to an increase in error. People who are encouraged to depend on the system alone, without applying critical thinking, stop being proactively engaged in the task. Once in a system, mistakes have a nasty habit of recurring and causing exponential damage, whereas a present-minded, thinking human being would spot and query any anomaly.

The blind side

Mistakes are a drain on productivity. They waste time and cause us to be inefficient. And they sometimes have far-reaching damaging consequences. And what's worse, we are often blind to just how costly they are. We try to combat error with systems instead of developing human critical thinking skills to spot the problems which systems never can. Make no mistake: it pays to develop your people's accuracy skills.

In that vein, here's another fun activity for you to do. Carefully follow the instructions given.

Your challenge is to find the mistake that's hidden here.

1. Place your finger on any black square

2. Move your finger up or down ↕ to the nearest white square

3. Move your finger left or right ↔ to the nearest black square

4. Move your finger diagonally ↘ to the nearest white square

5. Finally move your finger up or down ↕ to the nearest black square

   You will finish on the the banana!

Did you spot the error? Email accuracy@scottbradbury.co.uk for the answer! Mistakes are nearly always hidden from view – until you spot them.

Details about Scott Bradbury

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Since 2003, Scott Bradbury has worked with organisations to improve their efficiency and productivity by developing the accuracy skills of their people. Through *Developing an Eye for Accuracy*, the company's flagship workshop, Scott Bradbury has delivered measurably improved accuracy skills to thousands of participants around the UK, Europe, India and Australia. More recently, Scott Bradbury has developed the programme *Accurate Written Communication*, which brings the valuable accuracy improvements to written communications too.

[1]The 97% accuracy rate and 3% error rate are based on the thousands of tests taken over the last fifteen years by people around the world participating in accuracy skills training. The average figure is remarkably consistent.

[2]The 50-60% is the typical error reduction achieved by participants learning these techniques in the training programme *Developing an Eye for Accuracy*.

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