

Article 2 - Problem solving

Act III - Back in the park, back to reality, but who's reality?

Bill feels happy enough with his morning's work and goes for a jog in the park; feeling good, feeling positive and running fast. However, it's not long before his mind gets around to thinking again, and he realises that he's not really got anything like a story that he can put to Sunny.

Eventually, his thinking takes over, his pace slackens and he finds himself sitting on a bench mentally rehearsing his analysis of the pro and cons of spreadsheets. 'Sorted it all out then' booms a voice. Bill looks up to see Red Beard standing there with his random collection of carrier bags.

Bill tells Red Beard enthusiastically about his analysis but the response surprises him. 'You know what?' says the sage, 'I don't know a thing about spreadsheets, never found one, well not in this park anyway, but I do know that you don't seem to have listened to a word I said'. 'Oh dear' says Bill, 'I'm missing something, aren't I? Please tell me again'. 'Slowly, he adds. 'It'll cost you' says his new friend, 'Oh look, I think it's starting to rain!' Ten minutes later Red Beard settling into his favourite seat by the window in the Bull & Cow while Bill dutifully gets the pies and pints.

'It's like this' says red beard, eventually. Last night you said you had a problem. You expressed it as a dialogue, a conversation about a situation. I suggested a way of thinking about your problem. Today, you tell me about your analysis but that doesn't refer to either the problem or the dialogue. No wonder management consultants do so well out of you corporate types.' You are as constrained by yourself and your professional training just as surely as those prisoners in Plato's cave allegory were constrained by their physical chains. Eventually, their perception of reality became the shadows on the hypothetical wall, not the real people outside. Here, you have a real problem with real people but you're only able to think about it in terms of the way in which your existing tools, these spreadsheet thingies, structure your approach to work. You'll never see the light unless you can leave the cave that you and your colleagues have made for yourselves.'

'This is deep' thinks Bill, 'but, perhaps he's onto something'. He orders two more pints.

'OK' says Red Beard 'just a couple more clues and then you can think this out for yourself. What was the start of the problem?' 'That's easy replies Bill, 'Sunny is giving me grief because in his view he has been misled by the spreadsheet 'error' and then feels abandoned by the accounting function because of Freda's secondment to Paris to help out with the year-end. But the real problem is the ERP system which has never worked properly from the start'.

'Maybe Sunny is an unfortunate victim of happenchance, maybe he isn't, although as I see it it's more your problem than his' murmurs Red Beard. 'And, this is the first time you've mentioned this ERP thing.' 'Sorry', replies Bill 'it's such an issue I guess we just accept it and forget about it'. Bill visits the restroom but returns to find only an empty table, two empty

glasses and a note. 'People create problems and other people frame those problems in terms of their own particular view of reality, conditioned by their own situation and training.'

Walking home he begins to think. Dialogue, problems, people, reality'. He then remembers how he did structured problem solving framework at university. Next morning he calls Freda to get her take on things.

Act IV - Back at the office, and back to earth!

1. Problem definition

Freda's opinion was predictably robust. 'Sunny **actually** asked for an analysis of the client liaison costs for Big Food in the last fiscal', she tells Bill. 'He'd had a big thing about motoring costs a few years ago when the price of petrol went up and I assumed he was off on one of his 'hair shirt' purges again. Hence, I put in the sentence about using public transport. That's what he normally likes to hear because he can then blame finance for his cost cutting!' She added, 'The ERP has out-of-pocket travel costs per customer but doesn't have that level of detail for staff costs, because we don't do a customer profitability analysis, except at gross profit level. I took the spreadsheet that Dave Betts had built for the last travel analysis, sliced off some sales time data from a spreadsheet kept by Sunny's secretary, then multiplied those hours by 50% based on one designer at the meeting for every two sales people. There's still 30 people in the sales department compared with two years ago but, OK, a couple of the names had changed and I didn't update my old 'slice' because it was in an older version of excel and it seemed to be mangling one of the macros when I converted it. But the total cost was still right. He should blame his secretary not us!

However, I subsequently found out that the design team are now freelance and their time spent travelling outside of normal office hours is paid at an agreed hourly rate of double normal time. It is only a temporary measure for one year as a sweetener for getting them to be self-employed. It should be charged to a special restructuring account within head office but instead had been miscoded to the normal staff account which I'd used to work out an average cost per hour. Hence, the overall cost looks 30% higher than what the real long term cost will be, but nobody had spotted that the coding hadn't changed until I came across it by chance. Since we outsourced the purchase ledger these sort of problems are common. In any case, Sunny is being slightly economical with the truth when he links the 30% cost decrease in the revised spreadsheet with the merely 'technical' macro issue which delayed rather than made any material difference to the analysis.

Bill could appreciate a lot this, but it was no real excuse. He'd heard rumblings at board level about the lack of focus on net customer profitability for some time. Freda, as an experienced business partner, should have appreciated the context of Sunny's concerns. She had never attended a sales/design meeting either inhouse or at a customer's office. Neither had she, nor any of the other business partners, raised the issue of net customer profitability or data integrity problems in the monthly finance meetings.

2. Decision making method

Freda had interpreted Sunny's request as essentially a one-off issue about out-of-pocket travel expenses. With hindsight a better response might have been to get some quick estimates of time spent on Big Food and other key accounts from the sales and design team, and then assess whether there was a case for doing some detailed customer profitability analysis, based on an activity-based cost approach. Indeed, even a quick scan through the minutes of recent production meetings would have widened her perspective. Bill now recalls that recently at one such meeting, the only customer that didn't have serious scheduling and quality issues associated with it was Bigfood. 'If only our other customers took the time to get things right up front' lamented the production director, 'I could save at least 20% of my wastage and rework costs along at least 40% of my overtime costs each month'.

With hindsight this was a classic opportunity for some joined up thinking. Posters on the walls of both the factory and offices exhorted staff to; listen to customers; get it right first time; waste not want not, etc. etc. The present corporate mantra was about alignment with goals and 'the connected business'. But, if this scenario was typical then all Bill could see were echoes of the same sort of issues that had been around when he started his management career in the 1970s. All computers and spreadsheets seemed to have done was to speed up the mess!

3. Spreadsheet construction and error risk

Notwithstanding the above, Bill firmly believes that, at the very least, Freda should have got the formulae and macros right. Spreadsheet errors are 'school boy' errors in the eyes of non-financial managers.

But Freda's case was that because of the pressures of fiscal year-end she'd not set out to reinvent the wheel and had adapted the travel spreadsheet already in existence. She didn't have time to check everything as Sunny was emailing her every day asking why such a simple request was taking so long.

Freda had asked the central IT team to help her with the macros and the apparent incompatibility issue but the department head had told her to 'Go Google it' in front of the whole office.

Bill challenged her again and repeated Sunny's comment that it could potentially have led to a decision to withdraw from the Bigfood account. This time Freda was more robust in her defence, but her response only served to highlight the overall problem set for finance. I did inform IT that I was creating a new spreadsheet. I filled in the standard risk assessment form that we are now supposed to do for SARBOX. The total staff time and travel cost came to under £100,000, even if this had been out by 50% the error would have been well below the reportable risk threshold. No-one told me that Sunny might have used this information to renegotiate the terms of the £13million Bigfood contract with the potential that we might lose 9% of our overall turnover.

Later Bill followed this up and discovered that Freda had in fact correctly filled out the necessary risk assessment form now required to comply with Sarbanes-Oxely legislation

(Delicious plc had a US listing) but these were simply filed by a relatively junior person in the corporate office.

4. Presentation and communication

Freda did admit that the way in which she handled the presentation of the findings and the subsequent error amendment could have been much more business-like and sensitive, but she'd done it by email at 5.25pm on the day she'd left for Paris because, like everyone else in accounts, she tries hard to avoid catching Sunny when he's in a bad mood and delivering bad news at 'close of play' means that he at least has had time to calm down by next morning.

5. Team resilience

Where Sunny does score an undisputed 'home run' is in the failure of the business partners to think and work as a team. Whilst, originally it had been the divisions that had wanted dedicated Business Partners so as to improve the sense of connectedness with finance, nonetheless, they should be able to cover for each other and have access to each others' spreadsheets.

The prognosis

Overall, Bill feels Red Beard was right. Perhaps the Business Partners are constrained by their own version of reality. At best spreadsheets do seem to be a bit of a 'sticking plaster' to give the impression of reacting to real business issues. The main problem seems to be that they provide a structured process and output which gives a pseudo credibility to the investigation and solution of real problems but such outputs are garbage if the problem has been poorly defined, the source data is deficient, and there is a lack of joined up thinking between the wider goals of the business and the various facets of management and operations.

He could appreciate Freda's position in all of this. Her training and the present mindset of finance were suggesting that prima facia the production of management information through spreadsheets was her role and she was coping with a challenging environment. But on the other hand, the business partners are well paid because market rates in accounting are presently high. They also enjoy a certain level of professional status. It is not acceptable for them to simply be followers of the process, they should be thinking outside of the box and leading from the front. They should be connected with the business and each other as a team, in essence they need to 'get out more'.

Bill, is feeling quite good about his analysis although he still feels nowhere near a 'one-pager' of solutions. Later, his wife comes home to find him still in his track suit, asleep in front of the computer mumbling something about real-ale, red beards, dynamic accounting, meat pies, and sunny-shadows?. She hits 'T' for Therapist on her speed dial!

The next article will look at how Bill thinks through the issues and that 'one-pager' for Sunny.