

Digital Innovations aka Inheriting the Nerds

My wife is an agent of change, slim, dynamic and focussed on the future. Before I stopped dreaming long enough to realise what was happening, she'd segued into the peace and serenity of a cultural environment position. However she's not tidy. She'd left behind a bunch of decidedly untidy computer boffins. Bright boys in the scheme of things, they were in this instance in desperate need of a rudder. I became that rudder, barnacles and all.

Now let me warn you girls and boys, as you pick your way through those brambles your teachers enthusiastically call "Pathways", and as you are tempted by the glitz and glamour of bots, drones, and teleports – there are two distinct kinds of IT workers. And I don't mean those who earn squillions and those who just manage a living wage – although they do in fact equate pretty well. No I mean the pattern makers and the dreamers.

Some of you will never dream because you sleep too well. You who can dream may lose a little sleep now and then but what fantastic worlds you will create. You can choose to dream big, very big or indulge in micro-dreaming.

Cain was a dreamer. He sat resting his back against the apple tree, chewing on a grass stalk and idly watching his father wrestling a very large boulder that had dropped from the cliff above in last night's storm. It had inconveniently blocked the entrance to their home. His baby brother Able and his Mum were trapped inside and the boulder was not inclined to move. Cain was not a particularly helpful boy but if he could see some advantage for himself he could come up with extraordinary solutions to problems. If it didn't confuse so, one could call him for a most able young man albeit with a taciturn nature. "Alright you can come on the bloody hunt then. Now get over here and put your shoulder to this rock." grated his father through clenched teeth. In response Cain got to his feet slowly and sauntered off into the surrounding trees to re-emerge shortly with a couple of long spars. He handed one to his father and showed him how to push one end under the offending boulder and apply his weight to the other end. Between them they managed to lift one side of the boulder and move it slowly away.

They'd been tracking the elk for some time and were preparing to go in for the kill when a pack of coyotes came careening across the valley causing the elk to scatter. One of them shot past into a patch of trees hiding a fork in the valley. "Lost him," growled his father turning disconsolately for the trudge home. "No! No! Come on," shouted Cain. He was already running for the first fork. By the time his father caught up Cain was lying spreadeagle on the valley floor with one ear pressed firmly to the ground. "It's not to do with what you can see," he offered condescendingly. "They've gone that way!" he pointed and was off running.

An elk carcass is no light weight and their home was quite some distance away. To Cain there was a simple solution. "If you can't take Mohammed ..." "But wait!" his father interjected. "The Koran is not our book. I believe, from conversations with God, that the likes of us are destined to follow the Holy Bible .. although I don't think it's reached the printers quite yet." Several hours later the family was united once again with a fine elk skin tent for shelter and elk steaks roasting on a fire deftly created from the spark of a bright idea by .. you've guessed it ... the token woman.

The two white coated scientists pause in their work and leant on the lab bench. "Sure the wheel was a great invention." mused Charles, "and who would think that mere people could evolve to build huge dams .. and bridges .. and tunnels .. and the Panama Canal. "

"And Disneyland! " interjected young Einstein. "Thinking big works!"

"But I posit that none of this is possible without the mathematicians," continued Charles (Babbage that is), "and so the need for calculating machines is even more pressing. I'm going to employ a woman to programme my new difference engine and you can ridicule me as much as you want. She's good."

"Go on!! Not Ada .. she's just a pretty face. All you want is her father's philanthropy ... or more likely to borrow one of his love poems the better to woo her with. Old man Byron is quite a bard."

"When it comes to thinkers, Isaac N's my man." continued young Einstein. "He has a way of building a bridge between the theoretical and the practical – a dreamer yes! But a dreamer who can do something with his dreams. One might class him as a planner." The two men lapsed into thoughtful silence as they stood at the lab bench stuffing atoms into their mini atom silo. Suddenly young Einstein stopped stuffing and held up a tiny atom. "Look!" he whispered "This little guy is alive!" "Get real." responded Sam coming into the room, his geology pick swinging from his belt. "That's an atom of gold with a microbe on it. We geologists have known for years that microbes can steal gold atoms from other compounds and redeposit them as pure gold. I've made a fortune out of it already."

"Hold up. You have to market through the organisation mate!"

"Not me. I'm off to the Kaman Islands next week."

"You know I so respected Sam when he came up with his Continental Drift Theory all those years ago." murmured Charles sadly as Sam exited the room.

So! Lost in the brambles on the pathway through "Pathways" are we? It rather looks as though, apart from "Big Data" *BIG's* been pretty well done over and even "Big Data" could come to a sticky end in the hands of our pollies. That leaves *MICRO*.

Let's start with the concept of teleporting. We're going to deal in binary digits – the hand dealt to a recently exposed fossil human so ancient that she predates Cain and Able. Interestingly she sports only two fingers on each hand. The world named her "Turing Woman". But I diverge. Shall we begin with a one or a zero? Given: 1 is something. 0 is nothing. Tricky .. what is your definition of zero? An empty space or a keeper of places and spaces? For the purpose of this exercise let's consider it as simply not being there. In so doing we've effectively halved the difficulty of this exercise.

The exercise: We shall teleport Uncle Tom and his whisky bottle to cousin Jane's? I think it's her turn to have him for a while. Project defined! Now we need the right man .. oops woman .. to look after the pattern making. I started by checking my barnacles ... No women there but I turned up young Guy, purported to be a bit of a bot man and still biddable. His brief was to code in detail the properties of every atom in Uncle Tom's body. Of course not by hand Silly! We have electronic scanners for this kind of thing. Uncle Tom will have his entire being coded along with a dozen bottles of whisky. The code will be communicated directly to a silo in Jane's village where Uncle Tom will be reconstituted, whisky and all, to the delight of our PM and the consternation of cousin Jane.

Meanwhile in Jane's sleepy seaside village the pace of life had risen from a crawl to full on bedlam. Prime Minister J in his akubra as always was scurrying about approving infrastructure projects by the score, the most exciting being the imposing amphitheatre where Uncle Tom was scheduled to appear on the appointed day. Notably too, a huge silo had risen in the middle of a once peaceful

little park ringed by beautiful oak trees. Under the watchful eye of ex Prime Minister T (now in charge of periodic tables) dozens of crates of atoms were being carried into the silo.

Then suddenly, after days of frenetic activity we were ready! The amphitheatre was packed, a huge printer like device stood on the stage and young Guy hovered nervously in the wings. I of course was back home with Uncle Tom furiously scanning the last of the whisky bottles. I straightened up and stepped across to the SEND button. The clock struck one and I paused while the second hand found zero. I pressed the button. Uncle Tom's digits took to the ether, fingers, whisky and all. Now that's overkill if ever I experienced it. I rushed from the lab, leapt into my sporty two seater and engaged the robotic clutch. Just as I was about throw the ENGAGE BOT lever the passenger door was flung open and in leapt Uncle Tom, a whisky bottle in each hand and the very largest of a triumphant grin on his face. No time to argue. I programmed the bot to take the most direct route it could find to the coast. What a ride that was. We took in three farm paddocks, five fences, an airport runway, a narrow lane and a couple of kilometres of actual road and as we came to a screaming halt outside the amphitheatre a scruffy apparition stepped from the bowels of the printer to be greeted by a roar from the crowd, "Uncle Tom!". The new Uncle Tom blinked, staggered towards a table and picked up a glass of drink. "Thirsty stuff" he said and proceeded to empty the glass. I felt a surge of euphoria .. We'd done it! We dreamed and our dream came true. I turned towards the car. That's when it struck me .. our dreadful mistake!

Dream on girls and boys. Follow your dreams, take the most fun "Pathway" you can find but remember as you dream, a nightmare is only ever a breath away.

From one dreamer to another!!!

GRM's fair e-table