My personal aversion to silos has a long history. I read engineering at Cambridge. I was the first intake after the ending of compulsory 'national service' in the UK so part of a group of students who were two years younger on average than the others in the intake. We had the advantage that we had not 'lost' the habit of book study and accordingly the University offered a 'fast course' that did the course work in two years rather than the usual three.

By way of explanation, in the 1950s and 60s, the 6th form course work for 'A' levels (and especially 'S' levels) in the UK was mostly equivalent for first year university work in North America.

After 2 years at the university, (including a summer term) I had completed the coursework and passed the exams for an engineering degree (Mechanical Sciences Tripos Part I) and was faced with a critical decisions. I had to decide what branch of engineering I wanted to specialize in for my 3rd year. At the time I had no idea at all which branch of engineering I wanted to specialize in, whether it would be electrical, mechanical, civil or the emerging field of electronics, or something even more specialized like hydraulics, soil mechanics or aeronautics. Faced with having to make this decision in engineering, instead, I chose to spend the third year taking on economics.

I had the opportunity in the summer vacation to do an immense amount of reading about economics without the benefit of any guidance from the formal economics faculty at the university. Better still I was using the books in the Montreal City Library which had a different flavor than the collection in a typical university economics library. After a few weeks of economics, my tutor, Professor Andy Roy, suggested that I should do the Tripos Part II exams at the end of the year rather than the Part I … in some ways, a ridiculous stretch … but who knows? I was young! In any event, it worked, and while I did not get a 'First', I had a respectable 'Second'.

More important, I now had as a result of an engineering degree, a good understanding of how things worked and, courtesy of my economics, some understanding of the broader context of the economy and society. Up to now, I had, however, rather little understanding of how business … as apposed to economics … worked.

I had learned a little bit about the world of business and factories because a part of the engineering requirement was to work on some engineering problem in the factory/business setting during the summer vacation and to satisfy this requirement I did machine shop apprentice work in a Royal Ordnance factory where I got to appreciate the skill of people who actually make things, and start to understand a bit the social / class hierarchy within the factory setting.
I learned a whole lot more about these things in my first post university job. I joined the Davy United Engineering and Foundry Company in Sheffield as a 'Management Trainee' and started a rotation through all the departments of the company. The company designed and built ultra heavy equipment for the iron and steel industry as well as for the nuclear industry, chemical industry and aluminum industry … rolling mills, blast furnaces and the like. We also did turnkey projects for complete integrated iron and steel projects all over the world except North America. In this role I was assigned to various engineering oriented tasks in the drawing office and in the factory which, at the time, had one of the best heavy machine shops in the world, as well as being assigned to work with clients where we were assembling our machinery … rolling mills, blast furnaces at steel mills and so on. I was also assigned to work in some of the non-engineering functions like 'contracts' and the 'accounting department' where I got introduced to 'cost accounting'.

By the end of a year, though I was impressed by some of the work being done, but I was also appalled at the underlying dysfunction of the company itself and the industry that it served. I also realized that the really big decisions were being made by those with 'business' training and experience, often with little or no understanding of technical matters either as it related to engineering or economics.

In the early 1960s, the Harvard Business School had already established a reputation for business training, but there was nothing like it at the time in the UK. I decided that the best thing I could do was to train in the UK as a Chartered Accountant, and after a series of interviews in London, I left Davy United and joined Cooper Brothers as an 'articled clerk' which in due course would give me the Chartered Accountant qualification. More important, experience at the bottom of a big accounting firm gives one the opportunity to see all sorts of business situations from the 'inside'.

These were exciting times. Cooper Brothers was in the process of merging with Lybrand, Ross Bros and Montgomery to form the international firm of Coopers and Lybrand … which of course is now part of the international firm of PriceWaterhouseCoopers. I was articulated to Brian Maynard, the Principal Partner of the Management Consulting unit of the firm, and in large part because of my (quite modest) engineering and factory experience landed up with many very interesting and quite complex assignments. These were termed 'investigations' rather than being just routine 'audit' assignments.

By this time … I was still in my early 20s … I had learned something of the problem of 'silos'. People were making big decisions with a lot of knowledge of what they knew in their specialty and near zero knowledge of anything else. This was systemic dysfunction on a grand scale, with hardly anyone capable of comprehending the bigger systemic problem.

Growing up, I had had the opportunity to visit bits of Europe, so had some appreciation of the character of both the UK and the countries of Europe. The UK and Europe was slowly coming out of the World War austerity, but everything was still constrained by shortage both of financial capital and physical materials. However, while at university I had had the chance to visit Canada and the United States courtesy of the University Canada Club which chartered an Air France Boeing 707 to carry us to New York. Canada gave us dispensation to do summer work in Canada, and I did this for two summers … 1960 and 1961. The USA would let us in, but would not let us work!
Quite soon after I qualified as a Chartered Accountant in London, and knowing something of the difference in economic opportunity between what was going on in the UK and Europe compared to North America, I decided that I would migrate to Canada. The immediate economic advantage was enormous. As a young well educated and professionally trained person I was able to earn more in one month in North America than I could in a year in the UK or Europe.

Fast forward some 15 years. I am now the CFO of Continental Seafoods, a US based international fishing company with operations in 26 jurisdictions around the world. It is now the mid-70s and we are building an integrated fishing port and shrimp processing plant in Nigeria. This is where I really learned about the problem of silos. No matter how good our work was in designing our project and doing our work, we were impacted all the time by the reality of the place where we were working. The first project manager that we appointed had all the right qualification to build and run the project, but he had no ability whatsoever to understand the environment that he had to work with. When he got sick and had to be evacuated, I found myself the acting project manager, and I learned very fast how important externalities are and how important it is to be able to relate to the experts in all sorts of different silos. The project manager that eventually replaced me had these strengths and we got the project up and running.

Getting materials into Nigeria at this time was extremely difficult. The main Nigerian port at Apapa (near Lagos) had a four month wait for an unloading berth and even more if you did not know the procedures. We were having two large diesel electric generating sets shipped from the USA to Nigeria, but the ship, because of the Apapa delays, chose to offload our cargo in Abidjan, Cote D'Ivoire … way down the coast, essentially four countries away and with very primitive road transport infrastructure. Solving this sort of logistics problem is very different from pouring concrete for a building … a different silo … but critical that it gets resolved.

Fast forward again, and by the mid-80s I am doing consulting work evaluating projects of the World Bank, the IFC and the United Nations, and not becoming at all popular. By my standards, most of the projects were badly designed, and even more badly implemented. It was only by taking a very (silo) limited view of the projects that they could be considered to have been successful at all … but outside this silo they were merely disbursing money with effectively no impact on broader development goals.

In my view what was happening was that very good projects were being designed with a solid sector orientation … identified, prepared, appraised, negotiated and implemented … and then falling flat on their face because there was an implicit assumption that other sectors would be functioning when they were not.

Worse, most projects in the Official Development Assistance (ODA) arena are not flexible, and when something relatively small goes wrong there is neither authority of budget to do something differently. As a result quite small impediments result in quite significant project failure.

The projects that worked were ones where 'multi-sector' was built into the project design … but even then flexibility was frowned upon!

My favorite agency in the UN system is UNHCR … the United Nations High Commission for Refugees who operate (or did when I was somewhat engaged with them in the 1980s and 1990s) with a very clear idea of their mandate to assist refugees and a very open mind as to how this needs to be done. They do what needs to be done as fast as possible, and spend their administrative time doing accounting not budgeting. What I mean by this is that while they have an estimate or budget for what needs to be done and the funding required in total, they spend the
minimum they can as fast as they need to without the typical bureaucratic delays that bedevil
typical ODA projects. In my view they account for what they spend better than most agencies in
the humanitarian emergency assistance arena.

Another reason that UNHCR works is that they are a multi-sectoral agency that does all the
things that are needed to help refugees … transport, food, water, shelter, health, education,
iccome generation, legal (for relocation), etc.. They do not do external security themselves ,
though they address internal security in the camps.

My aversion to silos is not absolute. I do see the need for deep focus in a specialty in order to
progress a research and development agenda. While I joke about specialization as being learning
more and more about less and less until we know everything about nothing, I am well aware that
in order to push the frontier of learning there is a need to be very very good in a perhaps quite
limited area of interest. Having said that, quite often the value arises and the breakthroughs
happen when this deep learning in one silo suddenly finds application outside the silo!

What I am doing with TrueValueMetrics and Multi Dimension Impact Accounting is to design
and develop accounting so that it works IN all silos and as well serves to enable meaningful
aggregation of the activities and impacts of ALL silos taken together. The business community is
able to do this with conventional money profit accounting so that we can summarize the financial
performance of quite diverse groups of companies … but we cannot yet do the same thing for the
impact that business and economic activity generally is having on people and planet.

Though many may argue that the silo problem is no more and ubiquitous data has broken down
this particular area of constraint, I am not so sure. Rather, I think that some of the silos that I
grew up with and have had to live with may be less problematic than in the past, but there are
new silos emerging that might be even more damaging to the progress and performance of
society.

Exciting times.

Peter Burgess – TrueValueMetrics – Multi Dimension Impact Accounting

Contact information for Peter Burgess:  Founder / CEO ... TrueValueMetrics

Website: http://truevaluemetrics.org
Email: peterbnyc@gmail.com
Skype: peterburgessnyc
Twitter: @truevaluemetric
LinkedIn for Peter Burgess : www.linkedin.com/in/peterburgess1/
LinkedIn for this blog: https://www.linkedin.com/pulse/article/20140727131923-27861-my-aversion-to-silos