

<https://baselinescenario.com/2013/02/09/the-importance-of-excel/>

The Importance of Excel

Posted on February 9, 2013 by James Kwak | 164 Comments

By James Kwak

I spent the past two days at a financial regulation conference in Washington (where I saw more BlackBerries than I have seen in years—can't lawyers and lobbyists afford decent phones?). In his remarks on the final panel, Frank Partnoy mentioned something I missed when it came out a few weeks ago: the role of Microsoft Excel in the "London Whale" trading debacle.

The issue is described in the appendix to JPMorgan's internal investigative task force's report[1]. To summarize: JPMorgan's Chief Investment Office needed a new value-at-risk (VaR) model for the synthetic credit portfolio (the one that blew up) and assigned a quantitative whiz ("a London-based quantitative expert, mathematician and model developer" who previously worked at a company that built analytical models) to create it. The new model "operated through a series of Excel spreadsheets, which had to be completed manually, by a process of copying and pasting data from one spreadsheet to another." The internal Model Review Group identified this problem as well as a few others, but approved the model, while saying that it should be automated and another significant flaw should be fixed.[2] After the London Whale trade blew up, the Model Review Group discovered that the model had not been automated and found several other errors. Most spectacularly,

"After subtracting the old rate from the new rate, the spreadsheet divided by their sum instead of their average, as the modeler had intended. This error likely had the effect of muting volatility by a factor of two and of lowering the VaR . . ."

I write periodically about the perils of bad software in the business world in general and the financial industry in particular, by which I usually mean back-end enterprise software that is poorly designed, insufficiently tested, and dangerously error-prone. But this is something different.

Microsoft Excel is one of the greatest, most powerful, most important software applications of all time.[3] Many in the industry will no doubt object. But it provides enormous capacity to do quantitative analysis, letting you do anything from statistical analyses of databases with hundreds of thousands of records to complex estimation tools with user-friendly front ends. And unlike traditional statistical programs, it provides an intuitive interface that lets you see what happens to the data as you manipulate them.

As a consequence, Excel is everywhere you look in the business world—especially in areas where people are adding up numbers a lot, like marketing, business development, sales, and, yes, finance. For all the talk about end-to-end financial suites like SAP, Oracle, and Peoplesoft, at the end of the day people do financial analysis by extracting data from those back-end systems and shoving it around in Excel spreadsheets.

I have seen internal accountants calculate revenue from deals in Excel. I have a probably untestable hypothesis that, were you to come up with some measure of units of software output, Excel would be the most-used program in the business world.

But while Excel the program is reasonably robust, the spreadsheets that people create with Excel are incredibly fragile. There is no way to trace where your data come from, there's no audit trail (so you can overwrite numbers and not know it), and there's no easy way to test spreadsheets, for starters. The biggest problem is that anyone can create Excel spreadsheets—badly. Because it's so easy to use, the creation of even important spreadsheets is not restricted to people who understand programming and do it in a methodical, well-documented way.[4]

This is why the JPMorgan VaR model is the rule, not the exception: manual data entry, manual copy-and-paste, and formula errors. This is another important reason why you should pause whenever you hear that banks' quantitative experts are smarter than Einstein, or that sophisticated risk management technology can protect banks from blowing up. At the end of the day, it's all software. While all software breaks occasionally, Excel spreadsheets break all the time. But they don't tell you when they break: they just give you the wrong number.

There's another factor at work here. What if the error had gone the wrong way, and the model had incorrectly doubled its estimate of volatility? Then VaR would have been higher, the CIO wouldn't have been allowed to place such large bets, and the quants would have inspected the model to see what was going on. That kind of error would have been caught. Errors that lower VaR, allowing traders to increase their bets, are the ones that slip through the cracks. That one-sided incentive structure means that we should expect VaR to be systematically underestimated—but since we don't know the frequency or the size of the errors, we have no idea of how much.

Is this any way to run a bank—let alone a global financial system?

Notes.

1. http://files.shareholder.com/downloads/ONE/2272984969x0x628656/4cb574a0-0bf5-4728-9582-625e4519b5ab/Task_Force_Report.pdf.
2. The flaw was that illiquid tranches were given the same price from day to day rather than being priced based on similar, more liquid tranches, which lowered estimates of volatility (since prices were remaining the same artificially).
3. But, like many other Microsoft products, it was not particularly innovative: it was a rip-off of Lotus 1-2-3, which was a major improvement on VisiCalc.
4. PowerPoint has an oft-noted, parallel problem: It's so easy to use that people with no sense of narrative, visual design, or proportion are out there creating presentations and inflicting them on all of us.

Update 2/10: There is an interesting follow-on discussion that includes a lot of highly-informed technical people, including some who work in finance, over at Hacker News.

Comments.

164 responses to "The Importance of Excel"

Sash | February 9, 2013 at 3:43 pm |

I think there is a more fundamental problem, the model distorts the nature of the reality. Back in the late 80s i spent a summer in one of NY's largest real estate firms. At the time spreadsheets were relatively new. My boss observed that the spreadsheet made people think that real estate was a bond and not real estate.

cubicamente | February 9, 2013 at 4:11 pm |

In my opinion, if a 'model developer' has left to his users the possibility to copy and paste or something like that, he did a bad job. With my work, I use Excel spreadsheets every day but when I start to develop a project, I have in my mind a system with an engine (the spreadsheet with formulas and macros) and with an user interface, with icons that prevent at users to do anything not provided. So, the core of the spreadsheet can work without modications, and results can be more reliable.

CBB | February 9, 2013 at 4:58 pm |

Blackberries are preferred because of the enhanced security of RIM's proprietary enterprise e-mail capabilities. It's how you know who's dealing with potentially "sensitive" information in DC. That, and legacy systems are slow to upgrade.

Vic Volpe | February 9, 2013 at 6:06 pm |

Do you suppose they use Excel because they don't know how to do statistical analysis in a database program?

BillK | February 9, 2013 at 6:07 pm |

Points out the fact that spreadsheet models should be reviewed and checked by other experts BEFORE they go into production systems.

David | February 9, 2013 at 7:34 pm |

I am a professional software engineer, and what I design and build works because I know what I'm doing. I have no sympathy for any of this. Programming IS an extreme sport. Leave it to the professionals, and do NOT attempt it yourself at home.

Jason | February 9, 2013 at 7:38 pm |

" Errors that lower VaR, allowing traders to increase their bets, are the ones that slip through the cracks. That one-sided incentive structure means that we should expect VaR to be systematically underestimated"

This. A thousand times, this.

They'd probably use Ouija boards if they justified high-risk/high-reward strategies.
;)

After all, what happened to ratings agencies that dared to call crap "crap?"

azlib | February 9, 2013 at 11:55 pm |

As a software enginner what you describe is all too common. Excel is very powerful because it is relatively easy to use, but its ease of use means anybody can write a program using the tool which can be very difficult to understand or test.

What amazes me that the model was not tested more thoroughly considering the risks if there were systematic errors in the calculations.

colby | February 10, 2013 at 12:13 am |

cubicamente - I agree, I follow the same logic. The users are dumb so prevent them from doing anything other than what you build the tool to do. However, to James' point, anyone can create a spreadsheet, and there is no formal user acceptance testing, unit testing, stress testing, etc that occurs with the normal SDLC. I have been stating for many years at my current employer that we should not be running our business on an Excel spreadsheet, even when we run SAP. There is far too much downside risk and limited upside from the productivity. Additionally, I think it makes people dumber and less likely to critically think through situations.

aronjohnson | February 10, 2013 at 12:48 am |

The mistake made in the London Whale case could have been easily caught using the Formulas/Trace Prededents and Trace Dependents tools. This tool is invaluable in debugging complex spreadsheets.

aronjohnson | February 10, 2013 at 12:50 am |

Can't edit Prededents to Precedents, Sorry
osamakhn | February 10, 2013 at 1:22 am |

I guess this is where python and its libraries come in. You can build reliable models using code. Maybe its time the curriculum of mba/accounting/finance programs are also curated to add courses in python and financial modelling instead of just the fin engineers and quants doing the modelling.

Robert Klemme | February 10, 2013 at 7:42 am |

"The biggest problem is that anyone can create Excel spreadsheets—badly. Because it's so easy to use, the creation of even important spreadsheets is not restricted to people who understand programming and do it in a methodical, well-documented way." Unfortunately this is not only true for Excel and Powerpoint but for other parts of common office suites as well. One of my pet peeves is text documents where empty paragraphs are used to set paragraphs visually apart. Another one is the abundance of ad hoc formatting which increases size of documents and makes them look odd.

Bench Warmer | February 10, 2013 at 7:46 am |

I just like the old copy and paste format.
<http://sports.yahoo.com/blogs/mlb-big-league-stew/photos-marlins-fans-turn-winter-warm-event-220646017-mlb.html>

Jim Dikelow | February 10, 2013 at 8:09 am |

There is a rich literature (accessible through Google Scholar) on the deficiencies of Excel for ststistical calculation and the unwillingness or inability of Microsoft to fix them. Much better is the open source (and free) Excel clone, Gnumeric.

Moses Herzog | February 10, 2013 at 8:23 am |

Well, I think it's safe to say I've been one of the more loyal and LONGTIME readers of this site. I joined in on the dialogue here after Simon's first appearance on Bill Moyers. I wanna say that was 2008, but if it wasn't 2008 it was 2009. I gladly purchased both books, and I enjoyed them immensely and learned a lot from them (I learned more from "13 Bankers" than from "Burning" but I walked away with better understand and knowledge base from both).

But I think this will probably be my last post here. The "sweet spot" from Mike Konczal's old site (Rortybomb) really left after he went to the Roosevelt Institute. Konczal's writing drastically changed after that. And I'm afraid that time has come to this site as well. Too much time intervals between posts, too many tease links to other sites where after years of loyalty to the two hosts we get the crumbs from the paid sites tossed at us for increased link hits.

And frankly, too many phrases like this one I don't remember seeing in this site's early days: "where I saw more BlackBerries than I have seen in years—can't lawyers and lobbyists afford decent phones?"

I suppose people would say I am being "hypersensitive" to be upset at such a small passing remark. But class snobbery, and judging people on socio-economic issues was kind of what I had thought this site was supposed to be fighting against, not encouraging. I don't think James Kwak would have written that in the first 6 months—lyr+ of when this site was at its best. So to me, it's like picking up a glass of what you thought was your favorite brand of soda pop, but when you ran it on your tongue you found they had substituted the sugar with high fructose corn syrup, and it just wasn't the same.

When I think of Konczal repeating liberal talking points VERBATIM (not because they are the best, but as if he phoned the ACLU and Berkley Liberal Arts Dept. before every post to see if it was kosher) and James Kwak saying things like "where I saw more BlackBerries than I have seen in years—can't lawyers and lobbyists afford decent phones?" I think I am tasting the Dr. Pepper with high fructose corn syrup and not the Dr Pepper with sugar ("Rortybomb" and James Kwak circa 2009–20??) that I liked so much.

Warm Regards,
Resentful and Bitter Zeitgeist crouching under the keyboard.

Marc Heller | February 10, 2013 at 10:28 am |

Dear Moses -

I've never commented on this blog before, but I always read what others have to say. I hope you reconsider your decision to not continue making your ideas known on this blog. I, for one, look forward to what you have to say.

Dan Palanza | February 10, 2013 at 10:54 am |

Let me add to Moses Herzog's critique: Your topic today, whether you know it or not, is a bookkeeping problem/solution pattern. I discovered, 35 years ago, when I bought my first microprocessor-driven computer, that it is impossible to create a proper double-entry book-of-accounts using any spreadsheet, no matter how it is designed.

There are four fundamental variables in a proper book-of-accounts: debtor-value, creditor-rights, cash, and capital. Pacioli calls the bookkeepers attention to these four variables in 1494 A.D. The four are isomorphically related to one another within the contract that the bookkeeping sets out to resolve; read as "sets out to balance."

Until these bookkeeping fundamentals are understood by the software community, and the accounting software designers know how to create the four-way isomorphic balance by using a serious programming language, the banks will continue to steal from the monetary system.

Right now, James, your above essay has no right to take up the bandwidth that you are wasting by your not knowing where first base is located in the playing-field of software-driven accounting.

Colin | February 10, 2013 at 11:30 am |

The FT Alphaville team have a very good overview of this – <http://ftalphaville.ft.com/2013/01/17/1342082/a-tempest-in-a-spreadsheet/>

MacCruiskeen | February 10, 2013 at 12:17 pm |

"PowerPoint has an oft-noted, parallel problem"

Actually, the real problem with PP is that it, at root, has no actual value at all. Anything that can be communicated with PP can be communicated better with some other media: verbally, paper, PDF, whatever. Heck, most presentations and meetings are really unnecessary.

Cornbread | February 10, 2013 at 12:56 pm |

I don't use Excel except when I am required to. There's several reasons for this. First off, it's ability to do complex mathematics is incredibly poor. If you're not dealing with something that was linear in the first place Excel is not the best program for it. If you've got phenomena operating in opposing directions it's not terrible if you can linearize them and run in very small steps. But if you've got coupled equations

that aren't necessarily positively or negatively reinforcing, Excel should be last on the list.

Second problem is documentation. Excel spreadsheets are notorious for being poorly documented. Shoot, it's difficult to see who came up with it in the first place, then you've got to comb through the attached VBA and the cell formulas to find it.

Third, mobility of data. I've seen many instances where Excel doesn't correctly or consistently pull from a database or update the database correctly. It was certainly a matter of poor coding, but Excel doesn't seem to consistently write to databases from machine to machine.

What Excel is pretty good for is dumbed-down visualization, ie, when you're presenting technical stuff but need to make it ultra pedestrian for the business school guys, nothing's better than Excel's cartoonish graphics.

Austin | February 10, 2013 at 1:06 pm |

any "quant" worth their weight should be intimately familiar with SAS and SQL and deliver their results via Excel so the "business" can lipstick that pig.

Oregano | February 10, 2013 at 1:24 pm |

@Moses, I have to agree with you. Baselinescenario was created to discuss the reasons behind and way forward from the Crash of 2008-2009 and had its greatest relevancy then. Now, it's mostly a site waiting and hoping for something positive to happen in a political environment that has regrouped and moved on in the same general direction it was heading before the crash. Simon and James have spoken their peace, written their books, and are moving on as well. There needs to be a change in national and Beltway politics that can reestablish a nexus of pragmatic governance for this site to regain its vitality. I'm hoping that my child will see that day. I suspect I won't.

aronjohnson | February 10, 2013 at 1:35 pm |

I totally disagree with this disgusting comment!!! Excel has several powerful tools although it's solver function could be improved for non linear responses and coupled models with over 4 degrees of freedom (a convergence issue). For after tax cash flow analysis (in Engineering Economics class), I once programmed in Excel the entire IRS Depreciation schedule with just two inputs and a lot of conditional logic. (I found an error in the published tables which they fixed.)

It does not do PDE's which economists seem to love and practical engineers regard as oversimplifications of reality since most of them ignore friction (economic parallel?). It doesn't do computational fluid dynamics either but we have good programs like Fluent which do. In addition to the wonderful flow visualizations, they provide the data we need in spreadsheet format for further analysis.

I like Excel because I can check the individual calculations which are hidden by most programs.

Keith Stephenson | February 10, 2013 at 2:28 pm |

By the way from what I have read, A program that excel basically copied, Lotus 1-2-3, was basically the 'killer app' of personal computers which made forever changed accountants jobs for the better. The PC revolution in the early 80's took off from there. It that way the spreadsheet is the most important application of all time.

Anonymouse | February 10, 2013 at 6:02 pm |

I sympathize with Moses's concerns. When statistics and numbers are manipulated to favor the ruling classes agenda, and since we it has been proved that politicians, (at this point in time), can no longer distinguish right from wrong, or right from the left,

or anything other than the current status quo. We really do have a dysfunctional congress, that takes money candidates over quality ones. And we have a wall street that is in denial to it's dying breath.

I myself don't know how it can sustain itself, and had I the power, I would expose them all.

It's really only a matter of time as to when, and how, the reset equation is used, so the strong CAN carry on. Until then we must put up with disinformation politics, and economics, because it has become the norm.

Jack | February 10, 2013 at 6:26 pm |

Blaming Excel is like blaming guns for gun crime. There are many technical ways to potentially overcome the 'copy and pasting' problem. For example using templates, locked cells/sheets, Excel Services, document-level customizations etc.

The problem described is NOT a technical one. Its social or organizational. What is it about the banks and those they employ which allow casual and unprofessional 'hacks' to be built for mission critical activity? Why don't they know their tools well? Where is the training? Where is choosing the right tool for the job? Where is the technical oversight and leadership?

Worthy LaFollette | February 10, 2013 at 7:32 pm |

Excel, Powerpoint and Access all suffer from similar issues - they are tools which are overused by amateurs. What is described above for Excel is exactly the same sort of critique Tufte has of Powerpoint - namely it creates a false sense of competence and is overused in places it should not be in order to satisfy the gods of "convenience".

Derek Burden | February 10, 2013 at 7:46 pm |

Wow VisiCalc. Have not heard that name in a while... Excel modelling is only as reliable as the person designing it. It's a lot like programming. Sloppy code results in unpredictable and unreliable performance. Investing the time in proper architecture (using vector math, for instance, where possible to simplify calculation touch points) enhances the performance of the model created. It also makes it easier to audit. I think we will be using it in business for the foreseeable future because, despite their best efforts, little has emerged to replace its broad functionality. It's a never ending quest to turn data into information. That being said, if you are going to rely on it, you should invest the time to be a black belt.

Joe Smith | February 10, 2013 at 8:16 pm |

I think some of the comments lose sight of the original facts. The bank contracted out the building of a model to an "expert" who made a programming error. I agree with the original post that it is too easy to make such errors in Excel. Excel should probably not be used for production calculations but when it is, the model should be properly tested and documented. I wonder what the state of the art is for standards and tools to document and test spreadsheets. (VisiCalc was the original killer app - Lotus 123 was a clone written for the IBM-PC)

kylehreed | February 10, 2013 at 8:29 pm |

I just discounted everything you wrote because of your hysterical and gratuitous Microsoft bashing. By the way, Lotus had an innovative commanding system but still essentially ripped off VisiCalc and Multiplan. Excel was the first with a GUI.

ShamelessBill | February 10, 2013 at 9:26 pm |

@David (professional software engineer): Your point concerning the importance of experience, training, and competence is well taken. Having said that,...

With all due respect for your doubtless considerable expertise in building software that does the work it is designed to do, please bear in mind this well established and humbling fact: Every human being is subject to marvelously seductive illusions of attention, memory, confidence and knowledge.

Awareness of their existence and power immunizes none of us against these illusions.

Self-deception afflicts each of us, bar none.

Katon Najmlodzy | February 10, 2013 at 9:57 pm |

Hey!

Celer | February 10, 2013 at 10:05 pm |

"After subtracting the old rate from the new rate, the spreadsheet divided by their sum instead of their average, as the modeler had intended. This error likely had the effect of muting volatility by a factor of two and of lowering the VaR . . ." "As the modeler had intended"....what? The spreadsheet didn't do anything the modeler screwed up. Excel is singularly unimaginative and uncreative and suffers from being able to do one linear thing at a time which undermines supposedly nice features like Real Time Data links etc. Oy $a+b$ vs $(a+b)/2$or such.

Celer | February 10, 2013 at 10:18 pm |

Believing in Models in the first place is a far bigger error perhaps than misconstruing them...a model allows humans to withdraw from responsibility for their actions. Models are only models. Reality is far more complex than a model and the assumption a model captures reality in a suitably complete manner to be the sole basis of decision making is stupid in itself.

In any case the dialogue set out above gets sucked into the bs of technical matters when in fact there were some very obvious 'non-technical' matters that should have constrained the Whale or led to his constraint by a supervisor (not a committee with no apparent singular person held accountable) like an overall position limit for example which requires no VAR to ascertain and could easily have been summed up on one or two sheets of an Excel workbook.

And so through technical arguments, critiques of spreadsheets, committees we lose track of the fact that the Whale was out of control and no one is ultimately held responsible in a significant way. Controlling unbridled corporate Banking Greed would go much further than quibbling about models to prevent trading abuses - a class and moral approach to controlling criminal behavior.

Alex McClafferty | February 10, 2013 at 11:23 pm |

Is the moral of the story to be more vigilant and improve attention to detail? 'To err is human, rather than Excel.'

Senith | February 11, 2013 at 12:28 am |

Jim,

James is right. Excel is everywhere and probably the single most used 'software' but it is prone to failure too. We teach financial modeling using excel <http://graduatetutor.com/financial-modeling-using-Excel.php> and would be interested in teaching the Excel clone, Gnumeric. Do you know experts in this field?

shev | February 11, 2013 at 2:06 am |

I love excel. People create complex spreadsheets and eventually they become big / buggy / brittle. I then get employed to develop software to replace the spreadsheets. It is a never ending stream of work, and quite nice work because the spreadsheet are usually a pretty decent spec.

hoatzin | February 11, 2013 at 5:24 am |

Somehow I knew Gnumeric would be mentioned. Thankfully I set my drink down first.

Not enterprise ready.

softwaretrading | February 11, 2013 at 7:15 am |

I find it a bit of a stretch to turn a copy and paste error into a class warfare issue. Also software engineers need to understand the basics of accounting to create something that works in the first place. I't a bit hard to "pin the tail on the donkey", where the developer is at fault because the users weren't careful.

Anonymouse | February 11, 2013 at 7:17 am |

There is nothing like experience and common sense to further an endeavor. The further away from it you get (and create models to replace it), the closer you get to simply throwing the dice that day. It's synthetic devices such as these which allow us to find alternate ways of making cheap money, which is eventually socialized when the experiment goes bad. The solar power scam is only one such socialized industry. Had the industry gone mark to market, there would have been company losses, and a realization that actual current delivered was far less than the manufacture had advertised. Instead we need to bring a defective product to market to lessen the losses of the manufacture.

This type of behavior, combined with avarous greed, corruption, hypocrisy, and congressional ignorance, it would SEEM to me, is how country's and their citizens lose their rights, and become second rate worldly citizens. We are currently witnessing the breakdown of society here today, as the media is reduced to chasing storms and increased violence, rather than being the tool of choice for learning and making life more efficient. We have inbred ourselves with violence for decades, and then wonder where it all went wrong, but the obese list goes on and on. If you look at life as you were meant to suffer, rather than have fun, you won't be as surprised when the consequences come home to roost from all the irresponsibility acquired and stored from the past, it's quite an excel spreadsheet collection of jumbled numbers that don't favor the end user over time.

jpgnt1 | February 11, 2013 at 8:06 am |

let's not forget there is A LOT of money at stake, done with excel sheets and manual operations while specialized, professional software exist to automate the process.... inexcusable!

Dan Palanza | February 11, 2013 at 8:39 am |

On Mon, Feb 11, 2013 at 6:17 AM, The Baseline Scenario wrote:

> ** > Anonymouse commented: "There is nothing like experience and common > sense to further an endeavor. The further away from it you get (and create > models to replace it), the closer you get to simply throwing the dice > that day. It's synthetic devices such as these which allow us to" >

DJQ | February 11, 2013 at 11:08 am |

The new model "operated through a series of Excel spreadsheets, which had to be completed manually, by a process of copying and pasting data from one spreadsheet to another."

=====

The problem wasn't that the person was an Excel expert. It was that he wasn't. It's a no-brainer to automate COPY from one spreadsheet to another. It's a 10 second job.

Raj Nagel | February 11, 2013 at 11:10 am |

There is also spreadsheet process management software that exists to leverage existing spreadsheets, renovate them and automate them into a repeatable, auditable process. Kind of like an alternative to a full enterprise system that removes excel entirely.

aronjohnson | February 11, 2013 at 11:18 am |

I agree with Celer on whether attempts at modeling fancy algorithms in huge programs like VAR models are a far greater threat to misinterpreting risk analysis than the use of Excel.

Most economic and other risk models must assume a stationary random processes, which in turn assumes the conditional probabilities can be defined based on the independent trials assumption. As a result, risk models may work on the average but seldom are reliable in the extreme. Nearly all "Normal Accidents" involve a sequence of events which have never occurred before. Therefore the joint probabilities are unknowable for what is essentially a non-stationary random process. (Try looking up that idea in any book discussing economics.)

. One can compute financial risk in well-behaved markets which are never too far from equilibrium (efficient market theory). However, markets which get far-from-equilibrium are not "algorithmic in a useful way" since their future risk probabilities include non-zero but also non-computable risks because of tightly coupled events as described in Richard Bookstaber's Demons of our Own Design. One must accept that the real world cannot price (except after the fact) illusionary "fat-tail insurance", other than to assume that the taxpayer will rescue institutions "too big to fail".

In The Black Swan, Taleb cite Mandelbrot's work on fractals which treat all non-linear problems as "initial value problems" leading to chaos and the "butterfly effect". This has little to do with the real world, which should be mathematically modeled as a "time varying boundary value problem" (think weather forecasting more than a few days in the future. Thank goodness for weather satellites) At present, these complex problems are beyond mathematics based solutions (bounded rationality). We have learned nothing significant or useful about normal accidents in economics or vessel stability (my primary activity) by treating them as deterministic initial boundary value problems.

Incidentally, the most readable reference on time series analysis is Bendat and Piersol's 4th edition (2010) of Random Data, Analysis and Measurement Procedures.

Anonymous | February 11, 2013 at 11:24 am |

<http://rt.com/news/software-tracks-predicts-raytheon-878/>

Prediction - more sociopathic idiocy ahead...

Simon | February 11, 2013 at 11:45 am |

I think what is most surprising is that the problems with Excel are not widely accepted and it is only when something goes horribly wrong do organisations consider the End User Computing artefacts that are in fact strategic decision making tools. You should have a look at the European Spreadsheets Risks Interest Group <http://www.eusprig.org> we have been considering this very problem for the last decade or so. We have many published research papers from practitioners and academics and also we compile a list of horror stories from around the world <http://www.eusprig.org/horror-stories.htm>

mf | February 11, 2013 at 12:12 pm |

good grief, this statement that the Excel sheet is the most powerful instrument

ever created for finance says it all. How can the world not crash and burn?

Patrick R. Sullivan | February 11, 2013 at 12:43 pm |

So, does Excel also get credit for all the billions in profits that JPMC made that more than cancelled the London Whale losses?

sh | February 11, 2013 at 12:49 pm |

Attempts have been made to improve the spreadsheet concept... like <http://www.ankhor.com/en/visual-analysis-and-dataflow-programming>

It is possible to get a complete audit trail there because the processing steps and all intermediate results are fully observable...

Anonymous | February 11, 2013 at 2:03 pm |

we're looking to cheap things to "automate Excel" here; for these very large organizations they have the pockets to invest in proper software solutions - let's get serious and stop working around the problem...

ExcelGuru | February 11, 2013 at 2:27 pm |

Not sure why no one has mentioned that there are solutions out there to deal with Excel. In the last two investment banks I've worked in we've used <http://www.clusterseven.com> and there are other solutions out there as well. The lack of interest in spreadsheet management solutions reminds me of a quote from the hitchhikers guide to the galaxy:

"There's no point in acting surprised about it. All the planning charts and demolition orders have been on display at your local planning department in Alpha Centauri for 50 of your Earth years, so you've had plenty of time to lodge any formal complaint and it's far too late to start making a fuss about it now. ..."

Richard Rumelt | February 11, 2013 at 3:06 pm |

I am a professor of business at a top school and I can tell you that 20 years ago we taught students to write programs. Today, most cannot even write a VBA subroutine for Excel. They use computers but do not really know how to compute.

tvaught | February 11, 2013 at 3:16 pm |

Two points:

1. without a proper version control system, "you're not doing it right."
2. Excel does serve as an incredible UI model for exploring data, but because you can't audit/review code easily, using it for anything more than prototyping is dangerous.

So, just use Python, and you can solve both problems. There are enough scientific computing shops that use Python these days that there is no longer any excuse for doing it wrong.

Bruce E. Woych | February 11, 2013 at 4:18 pm |

@ ANONYMOUSE; I fear your critical advice may be unwelcomed here, but many interested techs have realized that the tech-revolution and systems rule over behavioral conditioned models has been assimilated by a relentless business ethic that seeks only self- sustaining (justified; legitimated; validated) power structures that harness relative degrees of obsessive/compulsive controls; and various practice deviations that lead to control fraud and market solutions to managerial rule.

Your statement:

"Instead we need to bring a defective product to market to lessen the losses of the

manufacture."

Is true across the board, whether it is to our poorly deceived soldiers overseas or to pharmaceutical industry medicines and items of questionable value like tamaflu and 'flu' shots that pervert the value ratio of peoples survival vs. market returns (ROI) and medical cost ratios to insurance profiteering (as well as private equities skimming the profits through privatization of the public domain.

I am not sure that this particular title fits a "Baseline" "Scenario"

or that after the tech exchanges people would be interested in taking one moment to reflect a bit abstractly, but after seeing your comment I had some additional extensions to your comment.

It is one thing to make RIOs and stopgaps against losses. Very reasonable, and limited in how much one can manipulate that particular "scenario" and stay in business. However, the fact is now such a reality that creating wealth through healthy profits is not the scenario of American business as dictated by the scale demands of finance & survival. It is not simply sustaining wealth but profit growth and progressive returns that drive TBTF to put garbage in and garbage out. Finance can hide these bubbles but technology must remain relatively honest with itself and between the tech-community.

I have a deep respect for the tech-community, and the quiet revolution that they established between (say...) 1950 and 1995 was one of the most fascinating accomplishments in world history if not human culture itself. However; the "market" is a money tap-n-trap

arena that is supposed to be furnished by "shares" of "stock-invested" capital to help the best stuff get developed during the leaner years of research, trial, development and the systems engineering processing of continuous learning improvements.

Planned obsolescence and market competition has been lost to stock finance manipulations that punish innovation, and top down survival marketing that captures the revenue streams based upon a business strategic plan of Enron style production ethics.

The relative subordination of the tech-community to the scale-markets of the MBA communities is a capture of technology itself and profit incentives alone will not proficiency provide a healthy corporate path dependent strategy down Private Equity alleys.

In short, the markets are exploited for what they are worth and this is more and more implying that expedience trumps competence, and the stench of market efficiency completely rules under the business ethics cost shifting and survival profiteering.

Bruce E. Woych | February 11, 2013 at 4:40 pm |

@ Moses Herzog | : Well Brother...don't you dare abandon ship!

kwakheads used to a critical perspective from too much kwak will have to be informed of Jame's conversions insidiously happening as he transits the Yale jailcell of "deformation professionelle" and that goes for "Simon Said" attendees as well. But perhaps it is a good thing to bring in some of the clear thinking of the Berkeley and MIT engineering people (...there are very good people here outside of the corruption and what are we to leave them to...? The intelligence community? Perhaps the counter-balances are the remnants of the truth (if it ever existed) to a coherent counter-culture, but unless we get exiled and censured...we need to stay the course! of course in due time we expect to see title heading of deep intentional probing of our countries critical thinking; "for truth justice & the Saudi-American Way..." , but in the meantime the stealth and wealth machine is not going anywhere as quickly as it would like...and that may be due to cross examinations that, at least in part, has happened here.

But Mr. Kwak must realize that after staring down metaphores and contemplating the contract theories from a Baseline of Tabula Raza origins...I (with you) can not contemplate blank white sheets that are paradoxically and absurdly contaminated with the words written in bold letters by the institutional perspective:

".....:THIS PAGE IS LEFT BLANK INTENTIONALLY....."

Bruce E. Woych | February 11, 2013 at 5:38 pm |

...And (assuming those above links get posted...) and you are still seeking the wider perspective: check this out succinctly :

<http://jonathanturley.org/2012/01/15/10-reasons-the-u-s-is-no-longer-the-land-of-the-free/>

10 Reasons The U.S. Is No Longer The Land Of The Free

by: Jonathan Turley the Shapiro professor of public interest law at George Washington University.

Anonymouse | February 11, 2013 at 6:32 pm |

Indeed Bruce, I will take that as a complement , sometimes story's lead me astray as my resources and time are limited at the Base.

I have no doubt whom will win in the end, it's the in between's which force a one way path to their destruction (which could be avoided), that irk me, but once you know them as well as we do, then one sees the effort they will go to, too see their plan through.

You know, a rock and a hard place dealeo.

Bruce E. Woych | February 11, 2013 at 7:21 pm |

A compliment & open support. There is a cloud ahead. A deep cloud. The Earth itself is being destroyed in a methodical way. We can not even correct this because these "people" are not willing to stop, in fact they are exploiting the destructive scarcity that they weld for power over humanity. It is all about power, supremacy and strategic positioning ...even while manipulating global ecological pressures for political leverage.

This is deeply entrenched "real politik !" The answers have actually been bypassed; so sad and tragically ignored and even fought down for self gains or better, the ruthless sense that whatever is not taken is lost.

As "participant observers" It is important to read this as an observer to a process as a sequencing serial history from a sub-set of demographic class-centric & megalomaniac succession planning. Real strategic guidelines for the global predisposition (right now) as well as the intended outcome disposition over the next progression (50 year succession planning) are being assessed to sustain and progress wealth class nested hierarchies with corporate fortified coordination that is considered the top priority planning tactical / technical blueprints of a future supremacy..."as if" it were the "real' end run of game theory. History has become narrative ideology; and the cold war participants are still all with us playing out a domination game with no real borders...no specific uniforms, false flags, no loyalties, no true allegiances except to survival and money; no clearly defined battlefields except markets and their ultimate weapons..."other people's lives' (of course).

And yet we sit as untrained observers behind a fourth wall http://en.wikipedia.org/wiki/Fourth_wall...and under path dependent conditioned history we are ritually aligned to defend our own demise.

The "WEALTH TRAP" is indeed a great parasitic community that we have been taught to call "ELITE" (how repulsive!). These are the reptiles pulling humanity down with their sense of self-sustaining redundancies of power, greed, and indifference. The rest of us are just "useless mouths" and ultimately caught up in a dependency entrapment of repression, suppression, capitulations and recapitulations that have been repeated again and again at different levels of success in history. The critical problem is that we have now hit the level of global saturation. it can not "expand" anymore...it must intensify. So the model is clear. More of the same is predicted. No one really wants to know that the "Suharto" model of "military-politico organizational structure" is insidiously being set-up in the USA, but it actually being "practiced" in what goes under the heading of foreign policy.

So, Anon...do you think our children will know what it means to "get back to Nature? Let alone some concept of true soul or God?

Annie | February 11, 2013 at 7:23 pm |

@Woych, "...God Bless the Pope...sorry to see you go!..."

Man oh man, the HYSTERICAL internet *religion* censors are out today, scheesh.

Here's what one guy said on Huff and Post:

"When the cardinals placed him in power, the decisions he makes are not about popularity. They are about what he believes are in accordance with God's laws. I know the history of women in the church and won't argue one way or the other. Point is the church is not a democracy."

Here's the CENSORED reply of mine - c'mon, seriously? Why?! No comment is allowed to follow one that ends with "...is not a democracy..."?

"The Church is the Brotherhood of (Hu)Man who have the Fatherhood of God in common - we are ALL the children of God. Such believers have well EARNED the democracy they evolved over centuries!"

I can produce an Excel spreadsheet and graphics to go along with what I said as "proof" that I'm not disseminating strategic misinformation about the ORIGINS of democracy, would that help?

Heck, let's just go for broke and "...pledge allegiance to SaudiAmerika, one nation united under skull and bones..." that sounds about right for this dark epoch that FIAT \$\$ \$\$ bought...Congolese savagery labor market bought for the opium boyz to control as a "market" by the USA military contractors - gee, what could go wrong there?

No one asked any of these people for their Excel presentations - they just made it all up, all by themselves. GIGO.

But how clear was the GOAL.

STEAL IT ALL.

Disgusting that these MIT boyz feel so confident of what they did achieve -

"...we DID get ALMOST all of it, Sir" -

that they are out here in the commons arguing about the software instead of the damage TO LIFE ON THE PLANET and its good souls.

Anyone seen Kwak's 360 head spin? Or is he only good for a 180?

Bruce E. Woych | February 11, 2013 at 11:08 pm |

Annie: I was wondering when you would show up to play:

Here's one for you:

The globalization process has become analogous to a game pf Parker Bros. Monopoly . Finance has converted everything to a stack of worthless printed money that captures the assets of a con game called supply side economics. The only thing that trickles down from this monetary supply side economy is corruption itself. MONOPOLY lends itself to a political economy of viciously reductive scale, legitimation tactics for competitive exclusion, zero sum games and crisis driven control fraud. Absolute power corrupts absolutely. The wealth trap is the compulsion, the obsession and the imperative to play Monopoly with living systems, with geopolitical liquidity and contraction, and with ecological destruction and resource depletion all under a process of building urban centers of massive sprawl to create consumer markets and market "

robots" (Czechoslovakian for workers) to scale the system and skim the profits.

In our society democratization has been converted to monetarism. The price you pay at the basic supermarket includes the political cost of someone else's political interest. Poor or wealthy you must contribute through your purchases to corporate contributions (for issues you may actually not agree). This is not tax, this is virtual tribute. At the same time financing has become the final word for all social and political decisions and these control the directions of stability, change, and executive controls that determine outcome...regardless

of legislative authority. By pushing and pulling capital flows Finance determines the ebb and flow of political opinions. If the financial services sectors do not agree with an issue, the power of finance is going to influence not only politicians...but corporate opinions who are seeking favor. The rigging gets tighter! Capitalism has become a living historicism.

PRIVATIZING THE US Government has become the ultimate gaming of the system from what goes under the false heading of private equity (in reality a conglomerate of international sovereign and private interests seeking plunder and gains).

This represents the finalization of executive capture and the hostile takeover of the United States Domestic Society under the tools of monopoly monetarism (which is the contemporary version of totalitarianism as the monetary capture and financial control over the factors of survival).

All other facets derive from rationalizing this neo-institutional corporatism in the service of a cross border sovereign wealth pool of political power with many moving parts. We are just learning now of at least 21 TRILLION DOLLARS hidden OFFSHORE by private interests <http://drpinna.com/the-super-r...>

What was said above is worth repeating:

The ONLY thing that trickles down in the neo-con economy is corruption!

America is burning down for a fire sale. There is only one way to save her!

Labor Economics MUST UNITE! The re-framing of issues can not be based upon an appeal to "profit as authority." The ideology of managerialism can no longer be allowed to openly manipulate price theory as an authentic mode of production, when in fact quantitative monotheism as monetarism is merely an algorithmic mythology; a grid metric of property rights that render and exploit real production. This exploit of greed and manipulative abuse must be carefully delineated from being called a categorical universal representation of an unqualified "capitalism" when it reduces assets. Cost effectiveness must be prioritized over profit driven efficiency dogmas that creates a zero sum exclusionary path dependency. Externalizations must be mutually evaluated into the colon cancer of independent greed parading as leadership in a schizophrenic claim to commercial interest over the public good!

"Please note that a "Fourth Wall" is not synonymous with the more classic "Fifth Column" designation from the World Wars.

See: http://en.wikipedia.org/wiki/Suspension_of_disbelief

see: http://en.wikipedia.org/wiki/Fourth_wall

see: http://en.wikipedia.org/wiki/Fifth_column

and: <http://www.britannica.com/EBchecked/topic/206477/fifth-column>

It is the suspended disbelief of our American Culture indoctrinated by an uncritical acceptance of propaganda rhetoric and cold war ritual psychopathology...that permits this culture of predator supremacy to continue and instill its viral controls over our economy and it's rationalistic "economics" in the name of freedom and liberty. The world looks on against cognitive dissonant rhetoric and responds with cognitive estrangement. Political reality can be likened to this cognitive estrangement in the mass market media of consensus opinion and conformity to an identity membership. Alienation and market engineering trumps eugenics in the selective process of career

survival and self preservation has been degraded to an accepted "name brand" of class recognition in a profit as prophet centered sociopaths.

No better than aristocratic tyranny that enslaved centuries of Europe, but all relabeled as libertarian market realism. Pure rhetoric to hide ancient exploitations of power; an Old Snake...in New (Neo-Con) Skin."

Bruce E. Woych | February 11, 2013 at 11:17 pm |

(Alienation and market engineering trumps eugenics in the selective process of career survival and self preservation has been degraded to an accepted "name brand" of class recognition in a profit as prophet centered sociopaths...

should end on socio-pathic-dependency.

The Raven | February 12, 2013 at 1:38 am |

Rrrrrr!--the piratical Raven

More seriously, yes, it's a problem.

Robert | February 12, 2013 at 3:04 am |

without words... <http://www.eusprig.org/index.htm>

Dave W | February 12, 2013 at 6:11 am |

I spent some years working in the derivatives markets – developing hardware and software for traders. The problem wasn't Excel – it was that the maths they wanted to automate was just plucked out of the air, not based on any real science, or, well anything. It's still the same – they make it up as they go along. The models are totally not fit for purpose.

Steve Quinn | February 12, 2013 at 6:52 am |

The ubiquity of Excel use for data analysis is not confined to Banks.

My current employers rely heavily on this product, not because of its accuracy or reliability but because it APPEARS SO SIMPLE TO USE.

They aren't 'afraid' of it because they can flash up a quickie sheet with the best of us!

To be honest, while Excel is being castigated here (and I'm well aware of its reported failings), ANY spreadsheet application would be equally miss-used by people who see it as some kind of Word for numbers.

It's a safety blanket for people who are essentially math-illiterate. Try even suggesting that to them...but make sure you have another job to go to.

"If you speak the truth have one foot in the stirrup..." :.)

Anonymouse | February 12, 2013 at 6:57 am |

That's difficult to tell Bruce. I'm certain it would be in their best interests, but the deep cloud you speak of is none other than aging desperate demons falling back on their animal spirits. And I also know from my geriatrics (pun intended) studies, that as they age they care less and less about the children and their future, and more and more about their pick me up entitlements and games. Which both gets them through the day, and puts a strangle hold on the family's finances and the occasional dinner discussions. But that okay with me, for I heard a tale about mark twain's childhood and the Hannibal gold that was placed along mississippi river in the 1500's. He was given a quarter of it to do as he pleased, and left behind a map as to where he chose to leave and have it buried for his family's future. It's my goal to locate and acquire that wealth, and should be quite an adventure when the day comes, five feet of metal under only fifteen feet of soil, with nothing but a truck and few black slaves.

brenda | February 12, 2013 at 7:28 am |

You should familiarize yourself with current versions of excel, powerpivot and powerview before you make such negative assertions.

Mark A J Riley (@smiler29) | February 12, 2013 at 7:55 am |

Real Goldman Sachs employee quote: "The problem with excel is that it doesnt have a formula for Head of IMF accused of shagging hotel maid"

Al Werner | February 12, 2013 at 8:20 am |

What a great concise and well researched article.

What we are see here documented in your fine article, are the limits of desktop computing, paired with shortage of basic mathematical skills and simple approximation techniques to proof the results obtained.

Having worked for many years ihere in the UK, many IT professionals in the financial industry have made representations to limit desktop computing application, and use to mainframes with the trusted ORACLE software to run company wide applications.

So spell it once again: Excel is a great software, good for non critical desktop applications, but critical accounting and ressearch data belongs onto a mainframe with a trusted ORACLE dB.

jpgnt1 | February 12, 2013 at 9:19 am |

Does have to be Oracle though! many more options on the market that beat Oracle DB and apps - let's say: centralise the data securely and use real enterprise specialised software

Joseph | February 12, 2013 at 10:32 am |

"Excel spreadsheets break all the time. But they don't tell you when they break: they just give you the wrong number." Great line. I'm also a big advocate and excel and love its agility. Nevertheless, when it comes to dealing with large datasets and building models based upon them, the results can be devastating. This is precisely why niche software developers are so in demand.

I have to agree with Al here. Excel is great to derive quick, initial estimations. But when it comes to making big decisions, I don't like relying a few numbers spit out of an enormous spreadsheet that 12 different people have worked on.

Kelmen (@kelx39) | February 12, 2013 at 11:00 am |

Excel is just a UI, a financial calculator and what a wonderful monster it is in this class! I think excel is being castigated here for no fault of it. You are using it for wrong purpose.

Scott Tovey (@satovey) | February 12, 2013 at 11:18 am |

Reading the post and several comments, I got the distinct impression that neither the author nor many repliers have the clarity of analytical processes that they themselves boast of themselves.

The clear bias towards anyone who utilizes an easy to use program such as Excel is so in your face obvious that the bigotry cannot be missed. However, as clearly stated in the article, the JP Morgan model that blew up was not caused by Excel, nor was it caused by just anyone using Excel, the article clearly states that the cause was due to

the internal Model Review Group not following proper procedural protocols in the course of approving a model.

"To summarize: JPMorgan's Chief Investment Office needed a new value-at-risk (VaR) model for the synthetic credit portfolio (the one that blew up) and assigned a quantitative whiz ("a London-based quantitative expert, mathematician and model developer" who previously worked at a company that built analytical models) to create it."

" The internal Model Review Group identified this problem as well as a few others, but approved the model, while saying that it should be automated and another significant flaw should be fixed."

There you have it folks. All the while you so called professionals point the finger at all the amateurs using Excel, and focus on the use of Excel as the cause, it was in fact; experienced professionals who created the modal, experienced professionals who recognized that there were problems with the model, and experienced professionals who approved the model despite there being problems with the model.

Stating that something should be automated and another significant flaw should be fixed, then approving the model is not requiring the flaws to be fixed. It is suggesting that they be fixed. Any experienced developer knows full well that if something is suggested, the greed motive in business dictates that such suggestions need not be followed.

The people who posted here and pointed at the tool rather than the failure to follow proper approval protocols as the fault would have made the exact same mistakes and are just as culpable for the economic crash as JP Morgan's internal review board.

The claim that " Programming IS an extreme sport. Leave it to the professionals, and do NOT attempt it yourself at home." is so blatantly arrogant it is near unbelief. No one is a professional from birth. It takes years of training and years of doing to become an expert at anything. Following this sage advice would send the world economy into a never ending tail spin as there would never be any future professionals of anything.

The true culprit in the global economic crash is not the tools being used. The true culprit is the underlying greed in society at large that devalues a workers worth and expects that one should receive services for free. For all the billions that JP Morgan earned, only a single individual was tasked for creating a new Model, not a team of two or three that would have collaborated and possibly caught each others mistakes.. One can also assume, because it is generally the rule and not the exception, that an insufficient amount of time was given for the model to be properly developed and tested.

But the greed motive, which so many falsely claim to be profit motive, demands that the least amount of money be spent on the production of a product even when that product is so important that it could cause a global economic melt-down should it fail.

When an unemployed poor person asks for enough resources to obtain food and shelter in order to maintain their health until such time that they can find a job, those people are accused of having an entitlement mentality. Yet, when the rich demand lower and lower wages for the purpose of hoarding more and more profit, and demand lower and lower taxes to hoard more and more profit, and demand higher and higher prices to hoard more and more profit, that is said to be free enterprise, rather than the greedy entitlement mentality it actually is.

jackdeth7 | February 12, 2013 at 12:22 pm |

@satovey nails it. The process that lead to the mistake could have been automated in a couple of days at most - cut and paste automation in PowerShell, for example, is

simple and easily tested. The article does not detail the makeup of the team reviewing the model but it seems pretty clear that they didn't actually stress test the model - changing values and looking for expected v. actual movement in the parameters seems pretty fundamental to me and would have caught the error as reported immediately.

To all the "I'm a developer and you're not" bigots - please, the choice of tool/platform doesn't indicate quality. Excel is popular because it is powerful, flexible, and incorporates an amazing report/presentation engine that is extremely easy to use. Garbage in = garbage out no matter the tools used.

That said, rocket scientists aren't programmers and application development is a unique and challenging skillset - clearly a big fat "fail" for handing the keys to the kingdom to a model guy without Development and QA teams to back him/her up. Let the quants program the math. Let the developers make sure the result is a functional application, and don't take shortcuts in testing/QA. Pretty fundamental stuff, really.

Annie | February 12, 2013 at 12:58 pm |

....arguing about the software instead of the damage TO LIFE ON THE PLANET and its good souls....

@DaveW, "...I spent some years working in the derivatives markets - developing hardware and software for traders. The problem wasn't Excel - it was that the maths they wanted to automate was just plucked out of the air, not based on any real science, or, well anything. It's still the same - they make it up as they go along. The models are totally not fit for purpose."

You think that the GLOBAL War/Drug/Slave Lords do not know that? Of course they do. It's the PERFECT cover for their sadistic predatory craven avarice and SOULESS rule, isn't it?

They MADE IT ALL UP. And in order to live in that world day after day, they take drugs to make them "autistic" because the less they consider the "downstream" consequences of their actions, the more "gamester" they become - a whole new class of sycophants....

They ALMOST got it all. This is an analysis of what to fix to GET IT ALL.

"....I pledge allegiance to SaudiAmerika, one nation under Skull and Bones...."

Al Werner | February 12, 2013 at 1:50 pm |

Thanks Jack,

I do not know how banks and financial institutions work in the US, but here on the other side of the pond we are more careful when it comes to the application of software in the back office and in the higher echelons.

In so many ways I agree with you when you say "Excel is popular because it is powerful, flexible, and incorporates an amazing report/presentation engine that is extremely easy to use" and for prototyping as well.

A good IT development manager, (male or female) would encourage all members of the company to be stake holders, and to devise a company IT strategy which reflects this goal and is carried by all staff members.

In a company in which all staff are stake holders, staff members are encouraged to contribute and cross fertilize each other. During my period of duty I have always encouraged a mainframe based "Company Information Service", but discouraged enduser programming. At the same time I trained all staff member to use the "Company Information Service", trained the ORACLE SQL database language and allowed MS EXCEL to shine in full colors.

But under no circumstances would I have allowed the use of EXCEL in critical applications, unless the desktop program had been signed off by the IT department in conjunction with the enduser and all program and user database data had been stored on the "Company Information Service", to allow roll back and verification.

Thanking you.

Annie | February 12, 2013 at 1:53 pm |

@Scott - "...When an unemployed poor person asks for enough resources to obtain food and shelter in order to maintain their health until such time that they can find a job, those people are accused of having an entitlement mentality..."

All the data mining just to obfuscate who you are talking about here - the PRODUCERS. Pure hatred on the part of babushka busybodies to employ their "perception is reality" schtick and reframe the PRODUCERS as "unemployed poor people with an entitlement mentality". I got the paperwork from Circle F Industries all the way to the 2 engineered "crashes" in Verizon stocks. It's all there. Vicious, targeted, sadistic THEFT.

Need an excel spreadsheet?

Raj Nagel | February 12, 2013 at 2:03 pm |

If you look at venasolutions.com or solutions like that (haven't seem many), it seems like it's a blend of clusterseven.com and a traditional cpm product. Has anyone used the system?

Al Werner | February 12, 2013 at 2:03 pm |

Thanks Annie

Nice to read your post....

I remember having read a US book on derivatives, written by two university scholars with mind blowing mathematics, no job for EXCEL in my humble opininon in 1990.

Slash | February 12, 2013 at 2:15 pm |

Lurker here. Um, don't lobbyists and lawyers for regulatory agencies use Blackberry because they're required to by their employers because Blackberries are considered to be more secure? Not because they prefer them? Apparently, lots of people have Blackberries for work and iPhone for personal stuff.

Also, RE Excel spreadsheet: I check people's work for my job. In any document, even a brief email, there's almost always at least one mistake. And everybody I deal with is a college graduate. In any sizable Excel spreadsheet, I'd be surprised if there weren't many errors. Transposed numbers. Misplaced decimal points. Etc.

I shouldn't be, but I am actually a little shocked that people made enormous investments based on an Excel spreadsheet. That's just dumb.

BlueCollarCritic | February 12, 2013 at 3:53 pm |

So long as the Excel user is able to say "Why can't you do that with our very expesnive Enterprise Ready Software Application when I can easily do the same thing in Excel in just a few mouse clicks" and we are unable to answer in a way that they can comprehend then this remain the same.

Carsten H. from Germany | February 12, 2013 at 4:11 pm |

Ahahaha, Excellent Article! All that huge corporations that are sucking directly FED's money (Tax payers money) use that piece of software.

Now you now one reason for the debt-crisis.

And people are white knighting for a GUI which united a DB with poor performance, a chart rendering program with limited features and some proprietary import/export modules.

But that must be a thing of people which are coding with VBA :)

The most impressing fact is that (and you don't need 5 fingers to calculate that) all sold copies in 20 years could have made Africa looking like Hawaii.

aronjohnson | February 12, 2013 at 5:21 pm |

This is getting out of control. Why all this time spent on the London Whale using Excel when the real crashes occurred using a totally misleading VAR analysis on some really big machines???? Stated again: VAR risk analysis works on the average and seldom in the extreme. It is not a useful model for major events. Quants appear to be good algorithm writers for inadequate mathematical models. Let's discuss that problem.

Marcelo | February 12, 2013 at 11:14 pm |

Blame Excel and not the anarco-capitalists.

Mr. Unexpect | February 13, 2013 at 1:01 am |

Love the idea that Excel's ubiquity is only due to everyone being too much of an idiot to use "real" "software". By which I assume everyone means software that is delivered months late, horribly over budget, bug-riddled, and still can't do the simple damn math right. Stupid users, trying to find answers to things! Most of them lose like 6 billy a day!

Douglas Smith | February 13, 2013 at 7:36 am |

Excel is not the problem here any more than a hammer being held by the wrong end is the problem when it won't pound nails very well. Automation is not the solution either as it would only allowed the model to crank out bad results much faster and more efficiently. The key problem was not adequately testing and validating the model, and this is certainly not unique to Excel. As a professional Excel developer, I have seen poor testing and validation as the root problem many times. Math errors, frozen formulas, incorrect automation and erroneous query results are common problems that could be detected with proper testing and validation. Oh, and a little documentation wouldn't hurt either.

A successful Excel-based model needs to be built by a Subject Matter Expert, an Excel Expert (usually shouldn't be the SME) and then severely tested by the above, end users, other interested parties and if you have someone who is good at breaking software, let them test it too.

E.L. Wisty | February 13, 2013 at 9:26 am |

Reblogged this on Pink Iguana and commented:

This actually does get to an interesting point about the quality of analytic code on the Street. Check out the Hacker news link at the end as well. FinQuant code process from the perspective of conception/evaluation/performance/composition is quite different from other more traditional engineering codes.

Annie | February 13, 2013 at 1:08 pm |

Sustainable man to land ratio establishing a post industrial quality of life - architecture, clean air/water/food, medicine, efficient distribution of goods and services for LIFE-MAINTENANCE?

Uh, nope.

Bookkeeping that places OWNERSHIP equal to LABOR that produced it?

Uh, nope.

Mathematical limit to profit?

Uh, nope.

More misery for others = More \$\$\$\$ for ME ME ME!

Uh, yup.

Ownership of other people's LABOR transfered to ME ME ME via "rents"?

Uh, yup

There you go, Kids. Software problem solved. Now go help the Swiss educated Supreme Ruler of North Korea make mini-nukes. It's fun to be a Supreme!

Are "The Protocols" a hoax?

Annie | February 13, 2013 at 2:59 pm |

One more observation and I am moving on. I happened to be in a foreign country as a student at a time of epic change in that country.

Operationally, it was the very opposite of "austerity" economics. The people did not have enough food on the shelves because it was being shipped out - a 5 year "communist" plan somewhere. The decision was made to keep things "in-house", so to speak. How did that decision come about? People knew how to feed themselves - it was 1000 year old agricultural "economy".

Instead of ripping the food out of their neighbor's mouth, they quietly went about establishing a "black market" economy - everything done off the "excel" spreadsheet of the communist 5 year plan. They defeated "austerity" with "generosity" because they set limits on both - on demands made on the resources (must be sustainable) and on how much is honest "profit" from inventions dreamt up during the winter when the land was not being worked :-).

There are real sustainable western civilization cultures and countries in the world. And they all have ONE major trait in common - they NEVER resorted to slavery to get to where they are. So those peoples recognize the re-committing to slavery (fraudclosure land grab to starve people) that Saudimerica has made.

Sure 'nuff, CNBC, the biggest problem on the planet is a \$9 minimum wage, or so say the shills for the 480 worth 2.08 TRILLION...

Bruce E. Woych | February 13, 2013 at 3:05 pm |

BRAVO ANNIE: UNDER THE TABLE SUBSISTENCE ECONOMIES BEAT OFFSHORE FINANCIAL TREASURE HOARDING EVERY WORKING DAY.

But that is the real reason that gold and cash will soon be relics of a bygone day and e-money along with your e-vote will be all you have...

to e-at! E-nough!

compliments on expressing that reality. That is empirical reality and ethnographic truth!

Bravo!!!

Steve | February 13, 2013 at 6:19 pm |

Excel is a nice little tool for some things. For computing risks on major financial assets... NADA...should never be used. These models should involve serious software engineering and be checked, cross-checked debugged and automated. This was Barclay's being stingy for one thing. Pay the money and buy a real model from a real firm!

Anonymouse | February 13, 2013 at 6:37 pm |

Actually Steve from what I recall Barclay's did buy a real model, from a real firm, it was a real bankrupt firm called Lehman Brothers. Which was merely a fall guy, or girl, for the remaining banks and brokerage houses that eventually got a gvt bailout. And the software engineering was checked and double checked, only to find the regulators at fault with there own laws run amok. That is what lead to the several forms of QE we are currently using to keep the system afloat, until the tsunami of higher interest rates becomes the straw that breaks the camels economic back that is.

Keith Alexander Ashe | February 13, 2013 at 9:51 pm |

I am an engineer that used to work in management consulting. I have built Monte Carlo simulation models in Excel. Every time I crunched the numbers I'd do a logic test.

If I were looking at someone else's spreadsheet I would use Excel's trace functions to make sure the calculations, model logic, and results made sense. I want to say that I am shocked that folks missed the basics.

This could be due to one or more of the following factors: lack of intellectual curiosity, lack of analytic rigor in the model development process, lack of model review, cognitive bias derived from seeing the desired result, or manipulation of the data to get the desired result.

Annie | February 14, 2013 at 1:28 pm |

@Woych - and what a LONG laundry list of why it will never happen in USA, including the targeted economic genocide of people who DESERVE the democracy because they earned the right to We the People rule.

Meanwhile the micro managing of starvation and land grabs continue - "...not everyone deserves to own a HOME..." - looks like Warren will decide who "deserves" Heinz ketchup...

Switzerland and Israel are in a big battle for the "minds" of USA students - will Ritalin or Adderall take over the school board in your town...?

Emmanuel de Villeneuve Esclapon, Business Modelling @Ernst & Young | February 14, 2013 at 1:29 pm |

I would say that on Excel, everyone can make a computation, just because it is so easy to use ... However, the challenge is really to help people turn a simple computation into a model, and a model into a decision-support tool ...

Bruce E. Woych | February 14, 2013 at 1:33 pm |

@ Keith: "This could be due to one or more of the following factors: lack of intellectual curiosity, lack of analytic rigor in the model development process, lack of model review, cognitive bias derived from seeing the desired result, or manipulation of the data to get the desired result."

I think you are opening the door to more widely significant questions that plague

not just technological (market based?) communities but the cognitive bias of market societies specifically...the black box; the Pandora's Box or the Magicians' Box is a great Engineering quest for what is on the real table. The truth is that there seems to be 18 holes on the Tabula Raza of competitive markets...and we have not assessed where competition becomes renditions of creative development and unity of purpose that might originate in purely intellectual circles. We are faced with the real vs. ideal syndrome of attrition under market pressures.

There are certainly enough data out there to assess when TOO BIG TO FAIL becomes the tipping point of destructive market practices.

It is interesting to note that Carter's deregulation of the airways has now reversed trend with the new and improved bigger than ever merger into a too big to compete with; or question...single pilot engine.

It does not seem accurate to simply dismiss competitive exclusion of cooperative outcome as the tipping point of absolute elimination of all competition (a point, interesting enough, demarcates an actual "phase change" in decision making towards monarchic structures of monopoly control). There must be increments and parameters that are measurable that would act as governors against entry into the black boxes and virtual black holes of systems dynamics? What are the principles of entropy and atrophy (engineering) of deterioration in market discipline and self-organizing corrections?

or closer to your phrasing what are the factors of deconstruction in the analytic rigor currently appearing in models of development & the process of (what we still call) progress?

Annie | February 14, 2013 at 3:47 pm |

<http://www.nbcnews.com/id/49263362#50807753>

I think instead of "tar and feather" the Nihilists in the midst, we can exfoliate their body hair with "glue and chart". Here's my pick for the day - RATtner and his "middle class" excel charts...I'll pop open the bottle of bubbly apple cider to celebrate the day "Morning Joe" disappears from the "cultural" scene.

Keith Alexander Ashe | February 14, 2013 at 6:36 pm |

@Woych You brought up some very important facts that question the wisdom of blindly following the ebb and flow of the invisible hand of the market. The truth is that there is no one measure or set of parameters that can warn us that of an impending crisis. It is difficult to predict Black Swan events. However, we can assess the fragility of markets and systems and then use scenario analysis to determine the methods to reduce vulnerability to the exposure.

The next challenge is dealing with the risk blindness and the powers that be. Individuals would pay more for terrorism insurance than life insurance after 9/11 because they overestimated the risk of death due to terrorism and did not consider that life insurance would be sufficient. Emotions and biases get in the way. Also, banks making stellar profits have no interest in being broken up or nationalized.

Keith Alexander Ashe | February 14, 2013 at 6:41 pm |

@Annie It is sickening to hear Joe Scarborough and the Fix the Deficit crew cry about saving(cutting) Medicare and Social Security because the deficit!! Joe keeps saying that Paul Krugman wants to wait until Medicare collapses before we do something.

Krugman was on Morning Joe last week when he said that job creation should be our number 1 goal and dealing with the long term deficit should be lower on the totem pole until we lower unemployment.

Annie | February 14, 2013 at 7:25 pm |

@Keith - NO ONE has the real time, real life DATA on what the actual medical needs are of the 330 million USA citizens. Closest real time/real life data is from hospitals - good for "hot-spotting" expensive patients.

The Baby Boomers are spending a lot on "vanity" medical stuff - like teeth and skin, etc. - out of their own pockets. This kind of consumer medical care, if you will, also means problems are taken care of much sooner in that demographic. Not to mention their philosophical bent, when it is "incurable", they rather tick off something from the bucket list of adventures than empty out their nest eggs on stuff that is not a "cure".

So everytime anyone opens their mouth about "health costs" - they really do NOT know what the actual costs are. No one does. You'd think that would be enough to shut them all up, but, nope, they still are making up stuff about "costs" and making excel graphs projecting out those "costs" :-)

I still think we should get an IM from Homeland Insecurity every morning (can't Orwellian be re-tooled to be nice?) asking everyone what their immediate, life-threatening needs are for health care. Figure out what today costs.

"Hi Annie. This is your friendly, totalitarian, micro-managing, lower-than-your-IQ stalker from Generic TBTF Equity in HedgeHog Investments. Need to see a Doc, Dentist or other medical practitioner today for something life-threatening?"

"Nope. Feeling just fine, freakazoid."

"Well in that case, report to the clinic for a MANDATORY contribution of stem cells for your lord or be fined 1000 bitcoins"

(the modern "pound of flesh" idea if we reference The Merchant of Venice).

Yes, we do need to get serious about how it is "culture" that decides how sustainable life-maintenance commerce gets conducted in a sovereign nation.

Al Werner | February 14, 2013 at 8:14 pm |

Thanks Annie,

I'm just a humble tec guy from the other side of the pond, in my honest opinion we need more technical and social innovation to create jobs and prosperity and security around the globe. Than we will find enough money for health care, and can support the poorest in society.

So lets reach out at each other, and make this blue planet a great place for all. Thank you for your humanity.

Bruce E. Woych | February 14, 2013 at 8:41 pm |

OPEN INVITATION:

Dear all,

We would like to invite abstracts for the panel *Society and technology: concepts and networks of relations *which will take place during the conference of the Polish Sociological Association in Szczecin in Poland, 11-14 September 2013. Deadline for the abstract submission is 20 February.

Contact persons:

Nawojczyk Maria, dr hab., Akademia Górniczo-Hutnicza - Wydział Humanistyczny w Krakowie, maria@list.pl,

Lis Aleksandra, dr, Central European University w Budapeszcie,
aleksandra.ola@gmail.com

Please find the panel description below:

Society and technology: concepts and networks of relations

It is difficult to image an analysis of contemporary societies without referring to the occurring technological changes. The problem of how technologies function in societies and the relation between them is a complex one. We propose a broad definition of technologies as various mechanisms, schemes, algorithms, devices and organizational arrangements that mediate people's interactions. We take Bruno Latour's definition of "technology as society made durable" as a point of departure. This

definition underlines the role of technologies in stabilizing social processes and in mediating between different parts of society. This definition also redefines and dismantles the boundary between the "social" and the "technical" as being artificial.

This view on the relation between

technology and society has been adopted and gave fruitful results in organizational studies which examine "socio-technical infrastructures" or "socio-technical systems", sociology of markets examining calculative socio-technical devices, social studies of environmental problems analyzing various "socio-technical arrangements/agencements". We would like to stress

that also our daily human-to-human relations are mediated through various technologies, like: law, communication technologies, or medical technologies.

We have become hybrids and, at times, it seems arbitrary to

say where the human agency starts and technical agency ends. It has become problematic to clearly distinguish who is the subject of various social actions: humans, technologies or socio-technical dispositions?

We propose to reflect upon the following problems: is such a broad

definition of technology useful for social sciences? How does the Latourian definition of technology differ from the sociological definition of an institution? How to study various socio-technical infrastructures and how does it contribute to the development of sociology as a discipline? How to theorize the division of labour between humans and technology? What kind of technologies should occupy a special place in the contemporary sociological

analysis, and why? What roles do technologies play in the social world?

Do they mediate, translate, stabilize or fold the social reality? Which one of these concepts actually explains what is going on in contemporary societies and which one of them is a mere rhetoric gimmick?

We call for contributions from various fields of social research:

communication, technology, engineering, economic sociology, environmental sociology, sociology of law, sociology and anthropology of everyday life, medical sociology and anthropology, migration studies, institutional approaches, social change, sociology of arts and science.

We invite papers based on original research that reflect on the contemporary approaches to the studies of technology.

With kind regards,

Aleksandra Lis

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From Anthropology Matters: An international collaboration of interdisciplinary issues.

Bruce E. Woych | February 14, 2013 at 9:09 pm |

Keith; Al & Annie: The bigger picture is not marketing and cutting corners, but State dependent directions of intentional (shall we say...)

"after market" models: Lucrative, but not necessarily transparent.

<http://www.guardian.co.uk/commentisfree/2012/aug/15/new-totalitarianism-surveillance-technology>

Naomi Wolf

guardian.co.uk, Wednesday 15 August 2012 16.12 EDT

The new totalitarianism of surveillance technology:

If you think that 24/7 tracking of citizens by biometric recognition systems is paranoid fantasy, just read the industry newsletters

"...New York Mayor Michael Bloomberg joined NYPD Commissioner Ray Kelly to unveil a major new police surveillance infrastructure, developed by Microsoft. The Domain Awareness System links existing police databases with live video feeds, including cameras using vehicle license plate recognition software. No mention was made of whether the system plans to use - or already uses - facial recognition software. But, at present, there is no law to prevent US government and law enforcement agencies from building facial recognition databases.

And we know from industry newsletters that the US military, law enforcement, and the department of homeland security are betting heavily on facial recognition technology. As PC World notes, Facebook itself is a market leader in the technology - but military and security agencies are close behind."

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<http://lewrockwell.com/rep3/us-giant-surveillance-grid.html>

19 Signs That America Is Being Systematically Transformed Into a Giant Surveillance Grid

End of the American Dream

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<http://www.telegraph.co.uk/finance/newsbysector/retailandconsumer/9733504/Tax-row-turns-to-Microsoft-over-1.7bn-of-online-revenues.html>

Tax row turns to Microsoft over £1.7bn of online revenues

The row over the amount of tax multinationals are paying has taken another turn after it emerged that Microsoft pays no UK tax on £1.7bn of online revenues.

The US technology group is understood to be channelling online

payments for its Windows 8 operating system and other downloads of software through Luxembourg and Ireland, where corporation tax is lower than the UK.

This means that Microsoft's Irish registered company, Microsoft Ireland Operations Ltd, has reported £1.7bn of revenues from the UK on which the company has paid no UK corporation tax.

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Crime Prediction Software Is Here and It's a Very Bad Idea

<http://gizmodo.com/5517231/crime-prediction-software-is-here-and-its-a-very-bad-idea>

There are no naked pre-cogs inside glowing jacuzzis yet, but the Florida State Department of Juvenile Justice will use analysis software to predict crime by young delinquents, putting potential offenders under specific prevention and education programs. Goodbye, human rights!

<http://gizmodo.com/5517231/crime-prediction-software-is-here-and-its-a-very-bad-idea>

marksolock | February 15, 2013 at 3:33 am |

Reblogged this on Mark Solock Blog.

Al Werner | February 15, 2013 at 7:40 am |

Thanks Bruce

While I appreciate your concerns, I can not follow some your findings.

Yes, civil liberties of the individual are important- but the protection of the state and the upholding of the law and order are paramount.

GLOBAL TAX AVOIDANCE

But this aside, the UK government is doing all it can to shine a light into the tax liabilities of global companies, which pay little or no tax. But we are a democracy and I am sure all findings well reported and acted upon swiftly.

CRIME PREDICTION

I had in the early 90 tees the opportunity to be involved with a discussion for the than forensic science service in London, to produce a piece of software to create a crime prediction software, which would have saved the MET and other police forces millions of pounds every year and would have made Britain a saver place. A great concept idea..... but never implemented.. sorry guys,

CONCLUSION

In my humble opinion we need to track the criminal, the mad men and the terrorist, whilst protecting the innocent and our democratic heritage.

This is the reality in 2013.

Tony Foresta | February 15, 2013 at 8:27 am |

It's a hacking issue. Any software can be hacked to make gold out of dross. The real issue is the perverse incentives that drive the manipulation of numbers to show returns, ie profits. Debt is and always will remain debt, no matter how complex, erudite, or manipulative the software that conjures and shapeshifted debt into an asset!

Because the incentives are so perverse, (otherworldly profit conjured out of the myst) there will always be programmers who hack or game the models and software to manufacture that which is and will always be a liability, (debt) into an asset! As long as governments and regulators ignore this simple truth, the global financial system will always be distorted by hackers and manipulators in the finance oligarchs den of thieves!

Burn it all down! Reset! It's the only option!

rondavis | February 15, 2013 at 12:47 pm |

The software hacking is very dangerous. Any software can be hacked to make gold out of dross. The real issue is the perverse incentives that drive the manipulation of numbers to show returns, profits.

Freelance job training in Bangladesh

Annie | February 15, 2013 at 1:55 pm |

@Woych and AL - Yes there is a lot that can be done for the greater good with "technology" that hasn't even been invented, yet.

I'm a bit of a Thor Girl - commanding lightening bolts is my mental fascination :-)
Seriously, how do all those electrons secretly signal each other to go gather in that one location?

Meanwhile, somewhere in Wyoming today, Cheney and Rove are bemoaning the fact that a 10 ton meteorite did not explode over USA during the time that they were concocting reasons for invading Iraq - "...we could have told everyone that it was a WMD launched by a terrorist - slam dunk!..."

MM | February 15, 2013 at 2:47 pm |

I love this discussion. I suggest taking a look at TimeValue Software's TValue software product for verifying, auditing, and testing numbers calculated in the Excel

spreadsheets. It's been around since the mid 80's and is used by the top accounting firms and finance professionals worldwide. TValue is based on algorithms, not individuals creating formulas in every spreadsheet or copying/pasting where human error is always prevalent. I use the software and help professionals every day with calculations. I find errors in Excel spreadsheets all the time. If you want or need to verify/audit calculations, you may want to check it out. Call and ask for Markus or Marty to give it a try. The support is great.

Anonymously Moment | February 15, 2013 at 4:32 pm |

I tried that call man, they said only wills, or bills, or macs or buddies worked there man, they never heard of MM.

ramblingbog | February 15, 2013 at 4:46 pm |

Reblogged this on ramblingbog.

Lizelle du Preez (@lizelledupreez) | February 16, 2013 at 1:36 am |

Oh dear, how does a discussion about Excel end up with religious and political comments, I even saw the word "drugs"?!

Derek's comment "if you are going to rely on it, you should invest the time to be a black belt." sums it up. Any software should be used for what it is intended for, and we should be responsible for making sure we are trained properly. I am convinced that most people use only a small fraction of the functionality available in MS Excel, Word etc. due to lack of training or simply because they don't require more from the software.

Annie | February 16, 2013 at 12:35 pm |

@Lizelle - GIGO - garbage in, garbage out.

Or are you suggesting that "excel" is not part of a religious rite? "Economy" is, by every definition applied to "religion" over the centuries, a "religion" accompanied by the LOVE of \$\$\$\$.

Excel was the shaman who controlled it for you.

Get "creative" about clawbacks :-)

Anonymous | February 16, 2013 at 4:36 pm |

95% of spreadsheets are wrong - not because of Excel, but because most spreadsheets are never tested beyond a cursory "looks about right to me". This is a failure of management to apply proper risk management control over the software development process.

Note that I use the term 'software development' deliberately - building a spreadsheet is akin to building any other type of software. Prudent organizations would never deploy a new or modified application without extensive testing, because they know that it will contain bugs. Yet that is exactly what most organizations do with spreadsheets.

Spreadsheet errors can be managed. There is a well-established academic and practitioner literature on spreadsheet errors and what we can do about them - see, <http://www.i-nth.com/index.php/resources/biblio>

Bruce E. Woych | February 16, 2013 at 5:14 pm |

Apr 11, 2011

George Akerlof is the Koshland Professor of Economics at the University of California

Bruce E. Woych | February 16, 2013 at 5:16 pm |

Simon Johnson: The Challenge of Large, Complex Financial Institutions (6/7)
 Bruce E. Woych | February 16, 2013 at 5:22 pm |

Catherine Austin Fitts Interview :The Looting Of America (Part 1 of 4)
 Uploaded on Apr 23, 2011

Former Assistant Secretary of Housing under George H.W. Bush Catherine Austin Fitts blows the whistle on how the financial terrorists have deliberately imploded the US economy and transferred gargantuan amounts of wealth offshore as a means of sacrificing the American middle class. Fitts documents how trillions of dollars went missing from government coffers in the 90's and how she was personally targeted for exposing the fraud.

Fitts explains how every dollar of debt issued to service every war, building project, and government program since the American Revolution up to around 2 years ago - around \$12 trillion - has been doubled again in just the last 18 months alone with the bank bailouts. "We're literally witnessing the leveraged buyout of a country and that's why I call it a financial coup d'état, and that's what the bailout is for," states Fitts.

Massive amounts of financial capital have been sucked out the United States and moved abroad, explains Fitts, ensuring that corporations have become more powerful than governments, changing the very structure of governance on the planet and ensuring we are ruled by private corporations. Pension and social security funds have also been stolen and moved offshore, leading to the end of fiscal responsibility and sovereignty as we know it.

Bruce E. Woych | February 16, 2013 at 7:54 pm |

Al Werner: I understand your position and I find that the "bad guys" always hide behind the mainstream "good guys" defensive posture...which of course is always as pure as the new driven snow.

However, the exceptions not only break the rules, but eventually make the rules. The fact is that large entities hide behind tech as well and use and abuse is not easily discerned. The Enron irony is not that they played a shell game and got caught, but that they were the darling "MODEL" of how to do business. The real quest is not for the past proven cases, but for the systems undetermined that no one wants to believe is plain destructive. Lumberman didn't want to stop cutting wood even when they are cutting down the last vestiges of their own free forests. Too Big To Fail exists because we only envision what will happen when or if it fails; but fail to take seriously that the future is much worse if it blows everything up. Better a nuclear reactor sample core meltdown now, than a chain reaction of 1000 more 20 or 30 years from now. The Japanese have learned the hard way. Now the upper crust refuses to recognize that fiat money must be asset based at some point if wealth is not to become a paper tiger in society. The self defense process begins to collate parishioners in the "markets" into (Annie's) secular technocratic religion and the control panels from the techno-sector are more or less arming the real politik of the working ideology of command / control. But the templates have been around for scheming for a long time: But no one care to look too closely lest they disrupt their own lifestyles and denials. But since the "crash" more people in the middle class have been exposed and some of the old "templates" of corruption have taken on new meaning:

(1) This is an accessible link to George Akerlof's 1993 comprehensive study & expose of LOOTING <http://www.scribd.com/doc/135...>

(2) THIS IS THE ORIGINAL VERSION OF 1989. THE EXTENDED 1991 HARPER PAPERBACK IS GREATLY ELABORATED.

http://www.archive.org/stream/insidejoblooting00pizzrich/insidejoblooting00pizzrich_djvu.txt

Full text of "Inside job : the looting of America's savings ...

Inside job : the looting of America's savings and loans / Stephen Pizzo, Mary Fricker, and Paul Muolo. p. cm. Bibliography; p. Includes index. ...

<http://www.archive.org/stream/insidejoblooting00pizzrich/insidejo...> - Similar

Bruce E. Woych | February 16, 2013 at 7:58 pm |

Annie: this is out in a Movie form too: Most people would not get the interplay of metaphores with abstract global finances ...very real...yet it was all stated very early...(pssss...before Excel too).

Cosmopolis: A Novel

http://www.amazon.com/Cosmopolis-Novel-Don-Delillo/dp/B0000T70K4/ref=sr_1_1?s=books&ie=UTF8&qid=1361058908&sr=1-1&keywords=cosmopolis#reader_B0000T70K4

Click to open expanded view

Bruce E. Woych | February 16, 2013 at 8:16 pm |

...smarter than Einstein?... The new theory of relativity:

Despite earning more than \$1 billion in profits last year, social media juggernaut Facebook paid zilch when it came to federal and state taxes in 2012.

In fact, the website will actually be getting a refund totaling \$429 million thanks to a tax reduction for executive stock options.

In the coming years, Facebook will continue to get monster tax breaks, totaling about \$3 billion.

Read more: <http://www.foxnews.com/tech/2013/02/16/facebook-paid-no-taxes-despite-record-profits/#ixzz2L6v9oYfg>

Bruce E. Woych | February 16, 2013 at 8:43 pm |

Race Against The Machine: How the Digital Revolution is Accelerating Innovation, Driving Productivity, and Irreversibly Transforming Employment and the Economy [Kindle Edition]

Erik Brynjolfsson (Author), Andrew McAfee (Author)

(89 customer reviews)

http://www.amazon.com/Race-Against-Machine-Accelerating-ebook/dp/B005WTR4ZI#reader_B005WTR4ZI

Click to open expanded view

Bruce E. Woych | February 16, 2013 at 9:03 pm |

From across the pond: @ Al Werner (compliments)

<http://www.channel4.com/news/osborne-urges-action-on-tax-avoidance>

Saturday 16 February 2013 UK

Osborne urges action on tax avoidance

Chancellor George Osborne renews his call for global action to tackle the problem of multinational companies which move their profits around to avoid tax.

Calls for an overhaul of tax laws will be highlighted to finance ministers at the G20 in Moscow by the Organisation for Economic Co-operation and Development (OECD), which will present its report published this week.

The work by the OECD follows the controversial news that international companies such as Google, Facebook, Amazon and Starbucks all pay minimal tax on large UK revenues.

The controversial "transfer pricing rules", which were written almost 100 years ago, will be drawn into focus as one of the main vehicles of corporate tax avoidance. Transfer pricing is used by companies to divert profits to parent companies or to lower tax jurisdictions, via royalty and service payments

Bruce E. Woych | February 16, 2013 at 9:29 pm |

Catherine Austin Fitts Interview: The Looting Of America (Part 4 of 4)
 Ingolv Urnes | February 17, 2013 at 5:57 am |

Can you imagine the world of business without excel? 99% of start-ups and new ventures over the last 20 years will have started life as an excel model. Excel has enabled cost-effective and flexible controls of millions of businesses. I think it has had a more profound impact on the management of organisations than any other software solution.

Annie | February 17, 2013 at 1:11 pm |

It's another authoritative and selfish *religion*. They freak out when you provide mountains of evidence that what they "believe" is not what they think it is. Even the atonement doctrine is in place - the human beings who built the machines that replace them must suffer and die in order for the machine to take their place. All hail Shaman GIGO...

Bruce E. Woych | February 17, 2013 at 3:53 pm |

James Glattfelder studies complexity: how an interconnected system - say, a swarm of birds - is more than the sum of its parts. And complexity theory, it turns out, can reveal a lot about how the economy works. Glattfelder shares a groundbreaking study of how control flows through the global economy, and how concentration of power in the hands of a shockingly small number leaves us all vulnerable. (Filmed at TEDxZurich.)

James B. Glattfelder: Who controls the world?
 Filmed Oct 2012 • Posted Feb 2013 • TEDxZurich
 Bruce E. Woych | February 17, 2013 at 4:05 pm |

@ingolv Urnes: "Solution"? That has a track record you leave unaccounted and consequences you presume resolved...

Research Article Open Access / Peer-Reviewed

The Network of Global Corporate Control

Stefania Vitali,

James B. Glattfelder,

Stefano Battiston

<http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0025995>

Abstract

"The structure of the control network of transnational corporations affects global market competition and financial stability. So far, only small national samples were studied and there was no appropriate methodology to assess control globally. We present the first investigation of the architecture of the international ownership network, along with the computation of the control held by each global player. We find that transnational corporations form a giant bow-tie structure and that a large portion of control flows to a small tightly-knit core of financial institutions. This core can be seen as an economic "super-entity" that raises new important issues both for researchers and policy makers."

FULL ARTICLE:

<http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0025995>

Bruce E. Woych | February 17, 2013 at 4:20 pm |

"SERENDIPITY" !

Financial world dominated by a few deep pockets

"Economic "superentity" controls more than one-third of global wealth."

"...Researchers aren't sure what to make of the core's interconnectedness. On the one hand, it could expose the whole network to risk."

http://www.sciencenews.org/view/generic/id/333389/description/Financial_world_dominated_by_a_few_deep_pockets

By Rachel Ehrenberg

Web edition: August 15, 2011

Print edition: September 24, 2011; Vol.180 #7 (p. 13)

Bruce E. Woych | February 17, 2013 at 4:26 pm |

DECODING COMPLEXITY
THE ORGANIZING PRINCIPLES BEHIND OUR ECONOMY

By James Glattfelder

The Montréal Review, April 2012

"We spend billions of dollars trying to understand the origins of the universe, while we still don't understand the conditions for a stable society, a functioning economy, or peace."

Dirk Helbing, Professor of Sociology at ETH in Zurich

"It sounds paradoxical, but today it appears that we understand more about the universe than our society. We have created systems, that have outgrown our capacity to genuinely understand and control them. Just think about the Internet or the financial markets."

(READ MORE):

<http://www.themontrealreview.com/2009/The-Organizing-Principles-Behind-Economy-Complex-Systems.php>

Bruce E. Woych | February 17, 2013 at 4:33 pm |

THE "NEW" expediciencies of spreadsheet utopia:

<http://www.truth-out.org/news/item/14396-the-real-recovery-welcome-to-the-network-of-global-corporate-control>

The Real "Recovery": Welcome to the Network of Global Corporate Control

Thursday, 07 February 2013 09:50 By Andrew Gavin Marshall,

"Despite international turmoil in financial markets, a collapsing Europe, natural disaster in Japan, and increased food and fuel prices spurring social unrest and poverty, global corporations had a wonderful year in 2011."

[and]

"This is, of course, merely doing the same thing that created the financial crisis in the first place, but calling it a "solution." Not to mention that the bill gets handed to the population."

<http://www.truth-out.org/news/item/14396-the-real-recovery-welcome-to-the-network-of-global-corporate-control>

Bruce E. Woych | February 17, 2013 at 4:38 pm |

Welcome to the Network of Global Corporate Control: Meet the Global Corporate "Supra-Government" (Part I)

Thursday, 07 February 2013 10:53 By Andrew Gavin Marshall

<http://www.truth-out.org/news/item/14404-welcome-to-the-network-of-global-corporate-control-meet-the-global-corporate-supra-government-part-i>

"We live in a corporate culture, where most of us have worked or currently work for corporations, we spend our money at corporate venues, on corporate products, watch corporately-owned television shows and movies, listen to corporate-sponsored music; our modes of transportation, communication and recreation are corporately influenced or produced; our sports stadiums and movie theaters are named after car companies and global banks; our food is genetically altered by multinational conglomerates, our drinking water is brought to us by Coca-Cola, our news is brought to us by Pfizer, and our political leaders are brought to us by Exxon, Shell, Goldman Sachs and JP Morgan Chase.

In this global corporate culture it is often difficult to take a step back and look at transnational corporations, beyond what they represent in our culture, and see that they are, in fact, totalitarian institutions with power being exercised from the top down, with no democratic accountability, legally bound to be interested only - and exclusively - in maximizing quarterly short-term profits, often to the detriment of the environment, labor, human rights, democracy, peace and the population as a whole."

(read more):

<http://www.truth-out.org/news/item/14404-welcome-to-the-network-of-global-corporate-control-meet-the-global-corporate-supra-government-part-i>

Al Werner | February 17, 2013 at 10:42 pm |

Dear All,

It has been such pleasure to participate in your truly evervessing discussions.

It will be close to 3 AM in England when this e-mail will be send, which is probably my most creative period of the day when the shadows have almost disappeared and gray moves into gray.

Tonight I would like to speak out in praise of Excel, which has given me an opportunity to calculate, velocity profiles for stepper motors, to analyse biological data, to assist me with my personal accounts, and enabled me in the visualisation of data in a most astonishing ways, even from complex neural networks. Thank you Bill.

But in all this interesting work I have never forgotten to use Excel with caution, and used a slide rule each and every time new formulas where applied, just in case I had made a mistake or have made a logical error which are sometimes very hard to find.

This brings me to one of my great concerns, which is the overreliance of critical software in todays world, from banking to manufacturing etc.

You guys over the pond are all aware of the Dreamliner debacle, which is affecting the share price one of the greatest US companies Boeing dearly.

All we know is that their have been outages and fires onboard, caused by the overheating of their lithium batteries.

I am not an electrical engineer but I know that their are a number of factors which affect the temperature of lithium batteries.

- A) The rate of battery discharge
- B) The rate of battery charge
- C) The cell temperature
- D) Most importantly the load characteristic

While all learned professionals would agree that they have a clear understanding of the parameters A+B+C, they might have given

parameter D sufficient consideration. And why had parameter D not been given greater considertation ? Because no "Electrical design CAD" analyses the load characteristic, as required in this critical application.

YOU HAVE TO DO PRACTICAL RESEARCH

From what I have read in the news media in the UK, it appears that the plane has all electrical actuators. If these actuators are based on linear technology, it should have rang bells at Boeing's design team. As it is a known fact, that the high pulse loads are generated by linear actuators which may cause the Lithium battery to fail quickly and may cause a fire.

What can one say ? Allways show scientific curiosity and never blindly trust any software, but be humble.

Bruce E. Woych | February 18, 2013 at 12:45 am |

Nicely put..."Allways show scientific curiosity ..., but be humble"

Bruce E. Woych | February 18, 2013 at 12:47 am |

SEE: <http://www.northerngraphite.com/index.php/graphite-labs/graphene/>
[AND]

New graphene oxide-reinforced polymers show bright promise ...forums.spacebattles.com/threads/new-graphene-oxide-reinforced-polymers-show-bright-promise.224740/

May 13, 2012 ...

<http://forums.spacebattles.com/threads/new-graphene-oxide-reinforced-polymers-show-bright-promise.224740/>

[AND]

<http://www.economist.com/node/21554503>

Optoelectronics

Graphene shows its colours

A much-vaunted new material may change telecommunications

May 12th 2012 | from the print edition

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Electronic applications by IBM 2011...integrated circuits...and much more....bio-tech applications are potentially revolutionary.

<http://en.wikipedia.org/wiki/Graphene>

Bruce E. Woych | February 18, 2013 at 1:26 am |

Published on Oct 8, 2012

"Neuroscientist Vilayanur Ramachandran from the University of California outlines the fascinating functions of mirror neurons. Only recently discovered, these neurons allow us to learn complex social behaviors, some of which formed the foundations of human civilization as we know it."

"..."There is no real independent self, aloof from other human beings, inspecting the world, inspecting other people. You are, in fact, connected not just via Facebook and Internet, you're actually quite literally connected by your neurons." (Vilayanur Ramachandran)

#109 How Mirror Neurons Help Us To Learn New Skills And Create Empathy For Others

TonyForesta | February 18, 2013 at 2:52 am |

Excel is intragal, no doubt - but just a tool! The cutting issue is not the tool, but the criminal and evil manipulation, misuse, and abuse of that and many other tools. Systemic criminal and evil manipulation, misuse, and abuse of software and other tools, and the wanton failure or complicity of socalled regulators and the snarky pathological liars, parrots, and shaitans in the socalled government to address those crimes, manipulations, evils, misuses, abuses define the issue and the horrorshow realities the rest of humanity must suffer, hazard, and endure!

The entire system is run by and peopled with a den a vipers and thieves! These predatorclass monsters seek and are succeeding in the ruin of all of us for their otherworldly profit. A pox on the predatorclass, the finance oligarchs, and all the forked tongued slithering reptiles in the socalled government that shield and advance this evil!

Burn it all down! Reset! There's no other viable option!!!

Anonymouse | February 18, 2013 at 7:29 am |

When I can't sleep at 3am and it's quite, I am frustrated, I used to count cars but if it occurred again, I would check gas prices. I gassed up at \$3.19 a tank, and a 5 gal galvanized can around here last week. Yesterday the price was in the 3.60's and i'm glad I have a 3 week buffer. Here are some airless tires for the future. <http://www.>

google.com/imgres?imgurl=http://www.scientificamerican.com/media/inline/B33F74B4-B41F-AF07-FD7B7C294F3C45F4_1.jpg&imgrefurl=http://www.scientificamerican.com/article.cfm?id%3Dtires-that-dont-need-air&h=320&w=320&sz=28&tbnid=YcZ6vW4PmJLs5M:&tbnh=99&tbnw=99&prev=/search%3Fq%3Dairless%2Btires%26tbnid%3Disch%26tbo%3Du&zoom=1&q=airless+tires&usg=__dBa4CBxTcMbgMU54haBnLDSbrXg=&docid=8w3hIpoKa5ziuM&sa=X&ei=7A0iUb2BIpSi8ATfoYDQAQ&ved=0CFkQ9QEwBA&dur=411

And Tony, nobody here really disagrees with you. But you need to study up on the timing of such an event. It does no good to reset and then simply give the same people the same powers as before, you get the same result. And the queen is not of age to be reset right now, we must have patience along perseverance in order to trick him into being himself until then, if he fools us and learns from it, he has won once again.

TTT | February 18, 2013 at 12:52 pm |

Model risk is a real issue, no doubt. what kinds of review processes do people use? The model isn't perfect in large part because people are not perfect. As a tool, though, Excel is quite powerful. In trying to model systems of greater and greater complexity, problems arise. Assumptions need challenges. Calculations need validation.

Annie | February 18, 2013 at 1:48 pm |

http://www.huffingtonpost.com/michael-s-lofgren/scientology-for-rednecks_b_2707087.html#comments

Excel for rednecks? LOL

Even a dog would choose to minimize "risk" so that his human could continue to produce the treats.

@Woych, The Urantia Book will knock the intellectual socks off of you and you will better understand why all the links boasting of the fait accompli of massive theft is met with a great big, "So what? We'll get it back."

It's really just millions of us now deciding whether it's going to be done the hard way, or a better, new way. Interesting how few of the iniquitors grasp the mercy being offered. A clear refusal is noted as the final vote and final judgement is issued - in THIS world - based on the simple laws of the jungle regarding the employment of savagery in the execution of the theft.

"(193.3) 16:7.4 As a result of experience an animal becomes able to examine the different ways of attaining a goal and to select an approach based on accumulated experience. But a personality can also examine the goal itself and pass judgment on its worth-whileness, its value. Intelligence alone can discriminate as to the best means of attaining indiscriminate ends, but a moral being possesses an insight which enables him to discriminate between ends as well as between means. And a moral being in choosing virtue is nonetheless intelligent. He knows what he is doing, why he is doing it, where he is going, and how he will get there."

Bruce E. Woych | February 18, 2013 at 4:29 pm |

>BETTER TO BE SLIGHTLY RIGHT...THAN TOTALLY WRONG<

MARKETING EXPEDIENCE:

QUESTIONING

The term "analysis paralysis" or "paralysis of analysis".....

"...The phrase describes a situation where the opportunity cost of decision analysis exceeds the benefits that could be gained by enacting some decision, or an informal or non-deterministic situation where the sheer quantity of analysis overwhelms the decision-making process itself, thus preventing a decision. The phrase applies to any

situation where analysis may be applied to help make a decision and may be a dysfunctional element of organizational behavior. This is often phrased as paralysis by analysis, in contrast to extinct by instinct (making a fatal decision based on hasty judgment or a gut-reaction)."

"In one "Aesop's fable" that is recorded even before Aesop's time, The Fox and the Cat, the fox boasts of "hundreds of ways of escaping" while the cat has "only one". When they hear the hounds approaching, the cat scampers up a tree while "the fox in his confusion was caught up by the hounds."

"Software development

In software development, analysis paralysis typically manifests itself through exceedingly long phases of project planning, requirements gathering, program design and data modeling, with little or no extra value created by those steps. When extended over too long a timeframe, such processes tend to emphasize the organizational (i.e., bureaucratic) aspect of the software project, while detracting from its functional (value-creating) portion.

Analysis paralysis often occurs due to the lack of experience on the part of business systems analysts, project managers or software developers, as well as a rigid and formal organizational culture.

Analysis paralysis is an example of an anti-pattern. Agile software development methodologies explicitly seek to prevent analysis paralysis by promoting an iterative work cycle that emphasizes working products over product specifications."

(ALL FROM: http://en.wikipedia.org/wiki/Analysis_paralysis)

Baron Canon | February 18, 2013 at 4:37 pm |

The only true way of eliminating Excel spreadsheet risk is to take Excel out of the equation! Our company (www.westclintech.com) develops XLeratorDB, which is an in-database analytics package that installs and runs directly on the database. It eliminates spreadsheet risk by performing all of the Excel calculations on the database, not in the spreadsheet. We have over 650 financial, statistical, mathematical and engineering functions that not only mitigate the Excel risk, but lead to much greater performance since you are not moving data back and forth across the network.

Excel is still a great tool for discovery, but not for business critical reporting and analysis. Once an Excel spreadsheet has become the de-facto "production" report that is used by management for decision making, the operational risk has overwhelmed the "benefits" that Excel provides.

Bruce E. Woych | February 18, 2013 at 4:42 pm |

Annie: Thanks for the "Universal" reference! I contemplate parallel cosmologies in a multi-universe all the time, but I-rants and U-rants are akin to linguistically loaded chants of a different cognitive order.

It does reflect complexity in a brainstorming network of synapse, but I am not sure what universe or Event Related syndrome it truly represents.

Annie | February 18, 2013 at 5:54 pm |

@Woych - the RIGHT people have to an experientially earned Rule of Law.

There is a major assumption that if it can't be graphed on Excel, that people don't have a RIGHT to Rule of Law.

Think Eugenics - getting rid of the degenerate and depraved in your own tribe who commit acts of lying, fraud and murder as if it is their right to do so.

If your tribe elevates the murderer, fraudster or pathological liar to a "god" status, and then re-writes "laws" to keep the god on the throne, then aren't you setting up a tribe vs. tribe conflict of historical proportions?

There's only one universe, in the final analysis. Everyone into the gene pool :-)

Vanessa Wenye Xiao | February 19, 2013 at 10:50 pm |

As a college student, I agree that all the softwares have their own problems: or why are we asked save our articles once in a while in case they are lost?

Norm Cimon | February 20, 2013 at 9:48 pm |

A quick note about the BlackBerry. I don't know how many Z10s you saw at the conference, but I have to tell you that version (brand new) is probably the most complete and secure dataphone yet devised. That's because BlackBerry (the company formally called RIM), asked another Canadian firm QNX to create the OS guts of that phone. QNX makes exceptional real-time OSs and this one is, apparently, in that league. You'll want to read David Pogue's column in the NY Times about the phone. He tries not to rave but it still makes me blush to read it: <http://www.nytimes.com/2013/01/31/technology/the-blackberry-refreshed-lives-to-fight-another-day.html?pagewanted=all&r=0>

...and if you're technically inclined, you'll find the details about the OS at many sites such as this one: <http://www.zdnet.com/blackberry-10-forget-about-the-phone-its-the-os-that-really-counts-7000010650/>

As for Excel and it's use in the financial sector, it's hard to know where to start. It's is a brilliant tool and one that, along with it's precursors and rivals (VisiCalc, Lotus 1-2-3, Quattro Pro,...) has helped usher in the golden age of data analysis. Its use in the financial sector started on day one of its existence.

However, my first thought once I found out how widespread that use had become in the mid-90s, was that the lack of controls - given the ever-quicker turnaround demanded of analysts using it to devise increasingly convoluted investments - would be the downfall of more than one company. I was a little on the low side on that head count I'd say.

It's hard to over-estimate how deadly faulty analysis linked to a global financial system and powered by an endless supply of networked computing power can be, though we certainly got a small taste with the 2007-2008 collapse. Excel is amazing. I've watched people who are really good with it and they've become one with the thing. It's also designed to dazzle and it does.

That's the problem. It has no inherent controls built into it outside of what the analyst may or may not decide to build into her model. Get yourself in a bind for time and that's the last thing you'll ever build in. that's a mistake and one we'll continue to pay for without those controls.

We've gotten about as far down this road as we should allow ourselves to go. We can't be having tens of billions riding on bets made on software that's got bugs, not in a global economy where those bets can be leveraged over and over again into the sort of feedback that can resonate with a truly destructive force.

The reason workers in the real world - hospital care, plumbing, electricity, flightline workers, construction, ... - are given mandates about safety that they have to obey is very simple. If something only has to happen a single time to cause the loss of life, a catastrophic gas explosion, a plane collision, an industrial accident, ... then every effort that's humanly possible should be made to insure it never happens.

With software that drives the flow of money, the same is certainly true. It only has to happen once, as it just did, to cause a near-death experience. Draw your own conclusions.

Jo | February 20, 2013 at 10:53 pm |

@David: It IS an extreme sport! But they'll outsource it to the lowest Indian bidder just to save a few bucks. What jackasses!

ezra abrams | February 21, 2013 at 12:07 pm |

story from the Times of Thebes , 2500 BC

Dateline, the pyramids

Today, older surveyors are complaining bitterly that with the new abacus, any person can do complex math and survey a property.

Surveying is an extreme sport, say the established, professional surveyors; however, with the abacus, and easy cut and paste math, any one can do it - and who is going to fix the erroneous boundry lines between properties that results from bad math by amateurs ?

best to leave it to the professionals

The problem is NOT

repeat

NOT

excel

the problem is the manager at JP Morgan not knowing what tools s/he needed, or being too lazy or drunk or arrogant

it is not excel

Al Werner | February 21, 2013 at 12:52 pm |

..... and the solution of the problem is ?

Well, if you are holding at least one cigarette in your over worked and underpaid hands, while crunching boring numbers, without any sense of investigative curiosity, believing that approximation is a total waste of your employers time.

Hand in your notice... you are in the wrong job

Excel can not help you either.

Bruce E. Woych | February 21, 2013 at 7:28 pm |

Lessig on "Aaron's Laws - Law and Justice in a Digital Age"

Anonymouse | February 21, 2013 at 8:30 pm |

On January 12, Swartz's family and partner issued a statement, criticizing the prosecutors and MIT.[114]

Speaking at his son's funeral, Robert Swartz, an intellectual property consultant to MIT's Media Lab, said, "[Aaron] was killed by the government, and MIT betrayed all of its basic principles." [115]

After Mitch Kapor posted the statement on Twitter, Carmen Ortiz's husband, Tom Dolan, replied, criticizing the Swartz family: "Truly incredible that in their own son's obit they blame others for his death and make no mention of the 6-month offer." [116] This comment triggered a backlash of criticisms including one from Charlie Pierce, political blogger for Esquire: "The glibness with which her husband and her defenders toss off a 'mere' six months in federal prison, low-security or not, is a further indication that something is seriously out of whack with the way our prosecutors think these days." [117]

Should I add this to the list of consequences to be paid by MIT, the courts, and the gvt officials concurring with, so many similar or worse ones? There's plenty of space in the waiting room for them.

Bruce E. Woych | February 21, 2013 at 8:51 pm |

http://en.wikipedia.org/wiki/Aaron_Swartz

"On January 6, 2011, Swartz was arrested near the Harvard campus[11][61] by two MIT police officers and a U.S. Secret Service agent on state charges of breaking and entering a building with intent to commit a felony.[9][59][62] State prosecutors dismissed the charges eleven months later, after Swartz was indicted in federal court.[10]"

"...a U.S. Secret Service agent..."

Lawrence Lessig danced around this question but it raises some very serious implications...why was the 'secret service' involved, especially at this initial stage of this (Inquisitio Haereticae Pravitatis) Establishment Inquisition against Aaron Swartz just off campus.

Nick S | February 22, 2013 at 12:52 pm |

Like any software Excel is as good as the processes in place to support it management and development. Rapid and safe Excel is just another development approach like Agile we use our own approach supported by tools like Spreadsheet Workbench (www.finsburysolutions.com)

Anonymouse | February 23, 2013 at 8:11 pm |

Gold has suffered a tough slog lately, unable to advance despite central banks aggressively inflating their money supplies all over the world. Seeing gold stuck in the mire despite very bullish fundamentals has certainly exacted a psychological toll on traders. They are irritated and discouraged after watching the yellow metal inexplicably languish for months. But technically gold still remains in a young upleg.

The mortal enemy of successful speculation and investment is EMOTION.... <http://www.zealllc.com/2013/goldyng.htm>...

With traders being fed up with gold and very discouraged, and it being very oversold, this metal is overdue for an imminent major rally. Some catalyst is going to arrive very soon that will spark serious buying as gold shorts rush to cover their positions. Maybe it will be the US stock markets rolling over, maybe it will be Europe woes, maybe it will be something else. But technically gold is due to surge.

(And the very next week we end with:)

Gold's low-volume holiday technical breakdown that cascaded into this week's capitulation was purely emotional. Gold's bullish fundamentals haven't changed much at all since the summer of 2011 when its last bull high was achieved. After a long high consolidation since, this metal is overdue to surge to new bull highs over the coming year. If the capitulation scared you out, you are going to miss the coming gains.

Happy hunting.

Anonymouse | February 25, 2013 at 10:05 am |

Interesting timing here.

<http://rt.com/news/bradley-manning-1000-protests-342/>

Anonymous | February 25, 2013 at 7:30 pm |

Var should not have been the only limit anyway. Everyone already knows of the problems you alluded to so there probably are others. If every limit failed at the same time then its just luck.

Daniel de Bruin | March 3, 2013 at 8:36 pm |

This is something I've come across at various clients. Issues with Excel sheets and the lack of control and auditability can be over-come using software such as SolveXia: <http://www.modellingdesign.com/our-expertise/software/solvexia/>

Bruce E. Woych | March 3, 2013 at 8:57 pm |

Anonymous | March 4, 2013 at 2:58 pm |

<http://rt.com/shows/keiser-report/keiser-report-episode-413-674/>

Nico | March 7, 2013 at 1:18 am |

1) Definitely, the firm's Chief Investment Office needs to create a standardized methodology for financial software development in Excel.

For a good Excel development methodology, refer to the paper "A Software Development Methodology for Research and Prototyping in Financial Markets" by Andrew Kumiega, Ph.D. and Ben Van Vliet. <http://arxiv.org/pdf/0803.0162.pdf>

As a technical reference see the large collection of Mathematical and Statistics libraries that can be used in documentation of Excel based algorithms and financial calculations: <https://github.com/rnfermincota/IVEY/tree/master/modules>

(2) Use Hash Tables in Excel to get and trace data from multiple worksheets, workbooks and/or text files.

For an effective implementation of a Hash Table in Excel see the Stock Market add-in of the Ben Graham Centre for Value Investing. <https://github.com/rnfermincota/BGCVI>

(3) Last but not least, banks need to consider using R Programming Language for Risk Management and Trading Applications. Check the excellent work done by Dirk Eddelbuettel: <http://gallery.rcpp.org/> <http://cran.r-project.org/web/views/Finance.html>

al werner | March 7, 2013 at 6:47 pm |

Hi Nico,

Thank you for your contribution.

As you will see, I can not agree with all your theories and findings, but I will do my very best to be as constructive as I can be.

I would say that the Chief Investment Officer needs to propose a standardized methodology for application, development and training of Excel for trading staff, in conjunction with their IT department head. The Chief Investment Officer and the IT department head, will be responsible for the creation and signatories of a Software Requirement Specification (SRS) for Excel in their company.

This above statement brings me into direct conflict with the article you have cited on your posting:

"A software Methodology for Research and Prototyping in Financial Markets" Kumeiga & Van Vliet.

Step 6: Page 117

and I read :

*We can give the entire package to a programmer or outsourcing firm and receive a working product without having a programmer that is also skilled as a trader or portfolio manager. * Companies need to be very careful to pass on their trading intelligence to a third party. In as far as the software development cycle goes, and time is here always of the essence, I would not appoint programmers without trading room, fund management knowledge and a sound mathematical background.

Thanking you for the link to the Github libraries, but as always exercise great cautions when such libraries are being implemented. validation, validation, validation

From my experience with Excel in a trading room environment, have never had an issue to use Excel as a prototyping and visualization tool for fund managers, as long as staff are well trained and supervised. If Excel on the other is used as a decision making tool in a trading live environment, it will be important that all transactions can be rolled back and re-validated.

Here the simplest way is to use "Track Changes" in Excel it's not perfect, but should be a minimum requirement but it is not secure enough to comply with the FDA, GxP Part 11 regulations, neither current EU regulations.

All Excel PC,s terminals should be password protected, provide full Audit trails, User Level Security, and Electronic Signatures, and be backed up by a high quality data base for example ORACLE.

Due to the complexity and the daily challenges posed by the fast trading environment, we need more than just tickers, and error handling maps, we need an overlay system which actively monitors market movements and trading transactions on a global scale, as all our future depends on it.

For many years Neural Software has been developed to assist fund managers in the stock picking of large portfolios, giving clear indication when it is time to buy and sell. One of the great Neural Software packages is "Neural Ware", it could be an ideal candidate for a global overlay tracking system for fund managers, and governments and law enforcement agencies alike.

Thanks Nico.

Also posted <http://www.stat.rice.edu/~dobelman/Dinotech/Software.Excel.pdf>