On the Cusp of 2009H2

These are reflections from June events capping the first half of 2009. Politics, Technology and Business Will are converging on action in the arena of Financial Markets Regulations. How will we build to the new requirements in the coming 18 months?

This paper frames that question and describes how NGE and I intend to answer it. Please feel free to copy this approach AND describe your experiences in a Professional Network, e.g., in the Cloud Security Alliance (http://www.cloudsecurityalliance.org/), and in the LinkedIn Cloud Security Alliance Group (http://www.linkedin.com/groups?gid=1864210&trk=hb_side_g).

The Narrative: A Fable of Strategy for 21st Century Corporate Change

This is the corporate stage on which the CCO, CPO and CSO (and CIOs and CTOs) play their parts. Listen in on the Executive Committee meeting and hear them explaining their respective strategies to deal with increased government oversight in the coming decade. These strategies must cope, as well, with the increasing demands for higher revenues, lower risk and lower cost structure in new and retrofitted IT operations. The long view is always difficult to hold, but now it is more than ever in order to operationalize such strategies.

The Executive Committee looks like a Council of Lords each who rules over his/her fiefdom. The problem today is that the Manor Estates are becoming more global, more interconnected and more virtualized. The CSO must deal with virtual enterprise moats, called DMZs—the Captain of the Guard. The CCO and CPO must deal with multiple sovereign jurisdictions—the Head Emissaries. All, of course, is controlled by the Chancellor of the Exchequer—the CFO—all under the expectant eye of the Duke—the CEO.

The on-going drama is one of struggle in the Executive Committee for control of the Agenda. The narrative is Post Feudal. An operating first principle is that language is the main vehicle used to assert this control. Results don't hurt either. It is the definition of success which drives results that yield effective benchmarks. Benchmarks are standards that anchor operational performance and permit successive improvements.

We are at the dawning of Capitalism 3.0. The socio-political landscape looks a lot like the Renaissance of the Mediterranean. The West now is fighting Fundamental rather than Imperial Islam. Post Renaissance Europe, read, The Industrial Revolution, dealt with the Ottoman Empire up to WW I whence Imperial Islam was defeated and the current configuration of the Middle East was constructed by the Western victors.

Can Obama and the rest of the World deconstruct what the Middle East has become in the past century since Versailles and defuse this hotbed of Islamic unrest? These movements oppose the Global dominance of modern corporations, public and private, many of whom have revenues larger than the GDP of many of the smaller industrialized countries. Certainly, it is this economic power and its collateral impoverishment of developing nations that makes 12th Century Islam appealing—the apex of 400 years of Islamic intellectual power in the World. Interestingly, it was the Islamic Golden Age that saved and enhanced learning for Europe as it emerged from the Dark Ages into the Renaissance.

The Obama Decade—Prospective on Social Policy

It is against this backdrop that Regulation of Financial Markets becomes important to stem the greed and power of Monopoly Capital 3.0 at the end of the dawning decade of the 21st Century. Obama promotes Capitalism—not Monopoly, but Bourgeoisie (Middle Class) Capitalism. Additionally, the poor and downtrodden must be lifted up. Otherwise, the World faces increased war and repression. It is a matter of Enlightened Self-Interest on the part of the Developed World, Occidental and Oriental, to improve the lot of the Have-nots through development and self-reliance. We need to avoid colonialism and charity, at best, and, exploitation and repression at worst.

In the spirit of more transparency, we are rapidly approaching the Age of Aquarius which arrives in 2026. Cue ‘70s group, The Fifth Dimension, singing the theme of the revived Broadway hit ***Hair***, “**Let the sun shine in.**”

Processing Implications of Renewed Regulations

For the past 15 months, I have been thinking about what renewed and revised regulations impact would be. Last week, we had a first glimpse of the Obama intentions and a considered opinion from Patrick Butler of McKinsey & Co. President Obama’s comments looks at the solution from a capital adequacy maintenance position. Mr. Butler inveighs for solutions that are bottom up and avoid operational errors of omission and commission.

It is at this bottom up level that we find the implications for processing. According to theory, the Economy will recover slowly from the middle of this Kondratieff Winter http://www.kwaves.com/kond_overview.htm check out this chart from the cited link:

Spring (expansion)	Summer (recession)	Autumn (plateau)	Winter (depression)
1784-1800	1800-1816 (War of 1812)	1816-1835 ("Era of Good Feelings")	1835-1844 (Mexican American War)
1845-1858	1859-1864 (American Civil War)	1864-1874 ("Reconstruction)	1875-1896 (Spanish American War)
1896-1907	1907-1920 (World War 1)	1920-1929 ("Roaring 20's")	1929-1949 (World War 2)
1949-1966	1966-1982 (Vietnam War)	1982-2000 ("New World Order")	2000-? (War on Terror? Or?)

By any other name, this Recession is a Depression. A recent article in ***The Motley Fool***, (http://www.fool.com/retirement/general/2009/06/23/its-already-worse-than-the-depression.aspx) notes that in the past 10, US large-cap stocks years have seen larger negative returns than during the Great Depression:

> "According to Ibbotson Associates, of the 74 rolling 10-year periods since 1926 (i.e., 1926-1935, 1927-1936, and so on), U.S. large-cap stocks posted negative returns in just three of them. The first two were 1929-1938 (-0.89% compound annual return) and 1930-1939 (-0.05% compound annual return), and involved the Depression. The third loser decade was the most recent -- and the worst. From 1999-2008, U.S. large-cap stocks "returned" a compound annual average of negative 1.38%."

This is actually good news as every way is up, circa 2010-11, once activity begins to recover. Meanwhile enterprises will rebuild infrastructure to extract inefficiencies of cost structure in anticipation of more scalable growth when recovery comes. The good news for those of us who re-engineer infrastructure is that the Executive Committee is currently not distracted by revenue opportunities in this extended downturn. For the next 18 months, the Bottom Line rules.

This is the context of considering more standard policy enforcement mechanisms to automate the surveillance processes.

Macro implementation of regulations is top down through control of capital at risk.

On, June 17, 2009, President Obama publicly dropped the first shoe of renewed and reformed regulation of US financial markets. He indicated increased oversight at the systemic, not just the firm level, including global market connections. The processing of implementing such a goal is huge in theory. And in practice it will be incumbent upon we business IT mavens to create an infrastructure that is 5-10X cost efficient.

And, indeed, during the past 10 years of freedom from vigorous oversight, the Global Financial Industry created copious numbers of process/data crunching environments to project 20/30-yr portfolio returns by month and asset category and to calculate asset portfolio Value at Risk, such as we knew it, Daily Asset Liability Matching to old-timers. These techniques have been heavily used in virtually all financial institutions, quite a few hedge funds, and a smattering of private equity pools.

At the heart of all these quantitative finance techniques is Monte Carlo Simulation. It remains to be seen if someone can create a Global Monte Carlo Simulation Utility (GMCSU). Current Monte Carlo Simulation Engines (MCSEs) are all tightly integrated, premium-priced systems. The cost of implementing commodity knowledge needs to be commodity priced. Or else, the cost of regulation becomes quite taxing and deflationary.

Monte Carlo Simulation Engines have become first year graduate student projects. How soon till it is a sophomore project? Point is, this is rapidly commoditizing knowledge. So the MCSE must be factored out of the premium pricing. A GMCSU would provide benchmark pricing for such a balance sheet, or actual, factored capability. My current private analysis indicates 30-50% TCO reduction with improvements of 70-90% on the margin.

For a Global 500 firm, this translates into serious money. And, such a utility would enable serving everybody else, i.e., the long tail of analytics demand. The financial models are the premium products, the calculations realizing them are the commodity. Current Global IT Trend: commodity pools of always on, reliable, private and trusted analytics calculation environments appear imminent.

This is the global financial system's incipient demand for what is being called Cloud Computing today. This is the low cost capability to provision and calculate economic implications of expected events. However, it is the highly unexpected events (c.f., Taleb's 2007 book, ***Black Swan: The Impact of the Highly Improbable,*** http://en.wikipedia.org/wiki/The_Black_Swan_(Taleb_book) for a deeper dive on this phenomenon) that have placed us in the current Great Recession.

Micro implementation of new regulations will be bottom up at a policy suite level.

From London on June 17, 2009, concurrent to Obama's announcement, Patrick Butler released his McKinsey Quarterly opinion on "Learning from financial regulation's mistakes in Page 1 he notes (http://www.mckinseyquarterly.com/Financial_Services/Banking/Learning_from_financial_regulations_mistakes_2380):

> "If regulators working on solutions resist the reflex to build incrementally on conventional wisdom and existing structures, we now have an opportunity to reshape the global regulatory system fundamentally. That will require a dispassionate assessment of the reasons for the current system's failure. The difficult issues regulators must address include the appropriate degree of protection for financial institutions, the regulation of nonbank entities (such as hedge funds), and the determination of adequate capital levels. Brave—even radical—changes may be necessary."

He and others agree that the key problem with the current economic situation has been lack of transparency into contractual financial transactions in the small (over the counter deals) and in the large (balance sheet inclusion/exclusion). Butler suggests disclosure in real-time, dubbed "radical transparency," per the Daniel Roth ***Wired*** Feb 09 article

"Roadmap for financial recovery" (http://www.wired.com/techbiz/it/magazine/17-03/wp_reboot). This real-time disclosure can certainly be facilitated by a Policy Suite-Alert mechanism. Building such a mechanism is Tactical. It must be realized as Practical projects. But we keep in mind the Strategic extension while we work.

"In the small" will involve more complete and situation specific policies prescribing, proscribing and inscribing interaction behaviors on a moment to moment, daily basis. And so, we have the challenge for a policy enforcement infrastructure that is achievable in small funding steps, easy to use and operationally cost efficient.

Levels of Policy Enforcement Mechanisms —Separation of Concerns

We need to consider how to categorize policies to be developed. The approach here is to look at policies in terms of a stack from absolutely necessary for an enterprise to survive up to what is needed to be a strong and formidable market player.

Accordingly, there are four levels of concern in which Policy Enforcement Mechanisms operate:

1. Information and Application Security

   Basic security capabilities that must be done (Got2Do): Identity Authentication, Role Authorization, Interaction Audit/Non-Repudiation, Data Integrity, Interaction and Data Privacy

2. Regulatory Rules

   Agencies Oversight Controls (Best2Do): Treasury (OCC) and Fed (new System Oversight Commission), SEC, Commodities Future Commission, Laws: SOX, GLBA, Patriot Act (AML), HIPAA, Series 6, 7, 8, 42 and all other forms of certification for financial professionals

3. Best Practices Business Processes

   Industry Practices and Guidelines (Good2Do): e.g., Fraud Detection and Prevention Guidelines, PCI, etc., Cloud Security Alliance Guidelines, Certification of People, Processes and Policy Suites for fitness to business purposes

4. Enterprise Competitive Advantage

   Differentiating Behavior (Sustain2Do): Relationship Management, Brand Management, Provisioning of "Secret Sauce" Experiences

Getting Started

As a practical matter, one should take it from the top in numerical order above. The first three involve Enterprise Context processes whereas (4) is Core to the Enterprise. This means (1)-(3) should be bought or acquired from outside the Enterprise, while (4) should be internally developed and maintained.

Each Industry and Enterprise needs to strategize, plan and develop to its own particular systems, culture and exigencies. This is what makes corporate theater so interesting and compelling.

Issues

Issues are always present. The IT Manager's task is to contain and shrink them. Current state-of-the-art, the issues around designing, building and operating policy enforcements capabilities are broad. We are standing on the lower edge of Moore's Chasm in the Adoption Curve. There are bridges built through Business and Technical Pilots which are needed to cross it.

Business

There are two Business Issues that are paramount to proceeding:

- A cost profile for projects implemented under a new regimen is the explicit *sine qua non.*

  If one is to plan installation projects, one needs to know exactly what the cost characteristics are for deploying policy enforcement into production. Armchair thought can only go so far. Until we have the processes and the resource requirements to achieve such processes, we cannot do the cost-benefit/ROI models. We need the compelling Business reason to do it!

- As always, socialization and syndication is the great political challenge of change.

  There may be such a thing as too much information, but there is never enough communication. This new (really, refined) policy enforcement approach needs to be instilled in Business and Technical operatives alike. First we need to get people to understand what we are talking about and its primacy in solving problems of New and Renewed Regulation. That accomplished, we then need to diffuse the adoption through small individual projects throughout the Enterprise.

Technical

The main technical challenge of a policy focused approach is in the tools and techniques to help manage the complexity in its realization. These include, but are not limited to:

- Legacy Conditioning

  Legacy is everything in production, regardless of age. We build legacy in real-time. Today's Roll-Out is Yesterday's Plan and Tomorrow's Legacy. The challenge is to separate policy enforcement from existing systems and render it within in a new regime. Part of this involves creating interfaces, gateways and native connectors. Another part is the creation of a triage process on system updates: Redo, Retire, Reuse Decision.

- Developmental Complexity.

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- Operational Complexity

  With deployable policies, we need the Environments and their embedding Platforms in which to enforce the policies, monitor the results, and remediate exceptions from their violation.

Next Steps

The New Global Enterprises agenda for the next 18 months is to produce four deliverables, in largely the order described, and to implement in three Global 1000 enterprises:

1. Strategic Security Framework

   This deliverable is well along and should come to fruition in mid 2009Q3.

2. Enterprise Reference Security Architecture

   This deliverable, too, is well developed to date in 2009H1. It is expected end of 2009Q3.

3. Operational Experience through a few well chosen pilot business applications.

   With current NGE activities in flight, this should be planned in 2009Q3 and executed 2009Q4-2010Q4, inclusive.

4. Strategic Compliance Framework

   This deliverable is programmed for 2010Q1.

