UNIFIED GOVERNANCE AND PLANNING FOR HIGH IMPACT EVENTS IN FINANCE, CLIMATE AND THOSE CAUSED BY MALICE

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Abstract

In 2007, the US Transportation Security Administration agency said Boeing would use its Monte Carlo simulation model "to identify U.S. commercial aviation system vulnerabilities against a wide variety of attack scenarios." The Boeing and TSA team that crafted the model said that because of the Monte Carlo method's success, the agency is considering extending its use to the analysis of policy problems outside the realm of security.
Perplexed by the complexity implied by the above announcement, I started looking for simpler ways of achieving the TSA objectives. Here are some of the conclusions.

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Introduction

The challenges to value creation in dynamic networks (the "eco-systems") are significant and interrelated:

- (In)ability to **envision** the desired outcome: implementing change swiftly but with confidence requires a shared vision and its effective communication,
- **uncertainty**: the difficulties are compounded by the uncertainties. Traditional approaches to the planning rely for their success on accurate predictions of the future,
- (In)ability to create and maintain **momentum**: ties linking the eco-system's participants are increasingly fluid. Conventional governance arrangements intended to steer your changes are not applicable.

Action-Oriented Enterprise

A SWIFT JOURNEY FROM A SINGLE SCENARIO VIA MULTIPLE SCENARIOS TO THE SYNTHESIS FOR ACTION

I briefly summarise very specific and systematic improvements to the ways stakeholders can carefully plan and then decisively act ahead of high impact events (desirable or not). These improvements do not make up just another

'method' but, instead, constitute a comprehensive 'Toolbox', with some of the 'tools' in atypical roles.

The approach is hard to implement only in that it requires understanding of a number of 'tools'; the real difficulty is inherent in the problem we are trying to solve. I have observed that even the most renowned generalists have not managed to cover planning under low levels of predictability in its entirety!

Insuring against *probable* high impact events (e.g. current 'credit crunch') has been, at best, very difficult and, at worst, undesirable: in a 1939 letter, J.von Neumann wrote: "I refuse to accept, however, the stupidity of stock exchange boys as an explanation of the trend in stocks". Therefore, the Toolbox contains compelling techniques for establishing a rigorous governance framework. (For example, the emerging dominance of the 'universal' banking model requires a judicious management of regulated versus unregulated business lines).

The importance of such a governance framework is in being able to approve – in an objective manner - the plans for action well ahead of high impact events.

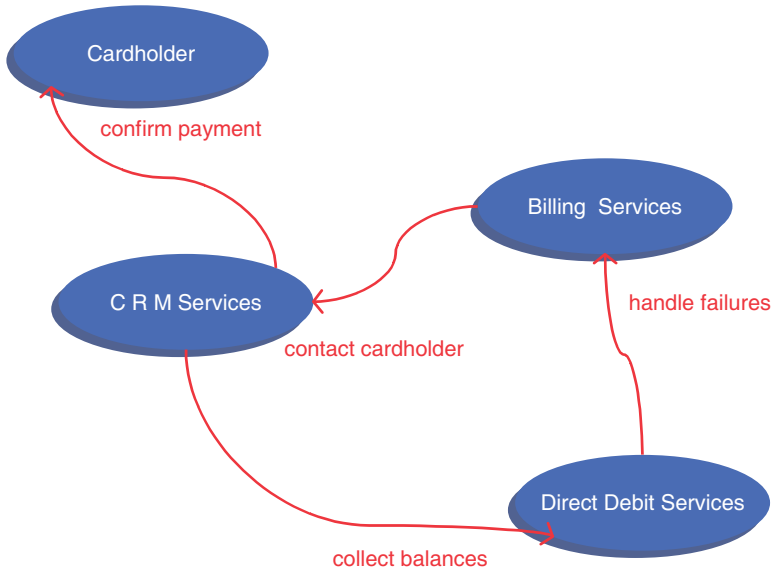
The traditional planning methods are based on *the belief* that external events and internal actions can be predicted 'sufficiently' accurately and, thereafter, useful plans-for-future drawn up.

What if predicting the future turns out to be much, much harder than we believe ? According to D.Deutsch, it is ".. impossible to extrapolate observations unless one has already placed them within an explanatory framework. For example, in order to 'induce' its false prediction, B.Russell's chicken must first have had in mind a false explanation of the farmer's behaviour."

Scenario Planning (SP) already improves *the reality* in some Industries, by allowing for multiple alternatives to the single prediction. Conventionally, SP is used as a form of Risk Management (RM). It frequently lacks substance. Experiences of Shell prove the most used SP technique is brainstorming. Apparently, there is very little planning: too much reliance on 'shallow' making up of scenarios (almost as if uncertainty requires fewer skills and precision than 'certainty'), and insufficient follow-through to get right actions formulated and initiated. **Worse still, SP very rarely involves a synthesis of results of any follow-throughs; i.e. individual conclusions are not being combined into a coherent picture, an "action map". This is where the greatest loss of opportunity occurs.**

Our improvements can be summarised as providing the stakeholders with a Toolbox to synthesise the follow-throughs from SP. SP will immensely benefit from the notion of business-oriented service architecture (BOSA, a business 'counterpart' of SOA, service-oriented architecture now prevalent in IT): we view an enterprise as a network of internal and external business services that require an objective method of prioritising and allocating capital. Governments and regulators are increasingly powerful contributors to such an eco-system. Remember that within a matter of months we have gone from a system where

central banks acted as a lender of last resort to one where central banks are the main provider of liquidity to all banks. Furthermore, governments and regulators have the historical data they try to use to influence the future.
BOSA / SOA can be an important tool in aligning business changes, management responsibilities and IT programmes; it is rigorous but intuitive. It gives stakeholders the expressive power to communicate more precisely in order to synthesise and act, swiftly but with confidence. In whatever we do, including any improvements to the governance arrangements, we first precisely design service interactions. Thus swiftly visualising the essential business scope and pinpointing problem areas within it. Here is an example of a BOSA we developed for an innovative credit card issuer. The Cardholder uses her/his mobile phone in order to confirm that an electronic Direct Debit payment may take place, thus retaining a level of control:



Arrows point to the service providers; thus unambiguously conveying responsibilities in the eco-system, .e.g. Direct Debit Services collect balances, Cardholders confirm payments, etc. Contrast that clarity with the following extract from the parliamentary investigation into the collapse of Barings Bank:
6.86 H. told us that responsibility for reconciliation was:

"very unclear. You could say that it was a finance function responsibility; you could say that it was a Futures and Options Settlements responsibility; you could say it was a Treasury responsibility...

6.87 B. told us that in his opinion the:

"responsibility for reconciliation lay ... I would have expected it to be in Singapore rather than in London. As between the treasury desk and the settlements desk in London, I do not have a view as to…"

Business priorities change and therefore your risks will vary. SP requires an effective RM: SP practitioners should plan to effectively compete under each of the scenarios; they should repeatedly answer the question "If I knew the future were going to turn out like this, what would my risk-adjusted response be?"

The goal is not to respond to uncertainty by merely replacing one loose prediction with several in-depth studies. Rather, the range of scenarios serves to judiciously map out "the space within which the future(s) might fall". Easier said than done… But it needs to be done to enable a meaningful synthesis for action, as follows:

A crucial outcome of applying business services concepts must be a flexible BOSA that would enable stakeholders to act decisively now, to cost-effectively prepare for uncertainty. BOSA will also allow them to respond swiftly later, every time when the expected or unexpected events occur, because they will be well prepared 'all' the time.

The 'required' BOSA – derived through a comparison of risk-adjusted business plans - will identify the core and contingent services. This step is not entirely unlike the attempts by L.Wilkinson. In "How to Build Scenarios" he says: "Some of the *decisions* [italics by R.Erl] we make today will make sense across 'all' of the futures. Others will make sense only in one or two. Once we've identified those implications that work in all of the scenarios, we get on with them in the confidence that we're making better, more robust plans".

However, I have very serious doubts about the precision, and therefore usefulness, of 'decisions' for the purpose of the synthesis for action. Uncertainty requires more skills and precision than 'certainty'. Wilkinson and the textbooks have never recognised the vital 'glue' provided by:

- the notion of business services, that makes comparison of plans truly possible, and
- risk-adjusted i.e. credible individual business plans.

Thereafter, the core services – those appearing in a majority of plans - must be acquired whatever shape the future might take. This means that stakeholders have to act now regardless of uncertainties.

The contingent services - those appearing in a minority of plans - can be structured and pre-approved now. Then they could be managed as real options. Thus giving stakeholders a head start if and when it becomes imperative. This means that stakeholders can act now in spite of uncertainty, so that they can later respond swiftly.

Structuring a real option would hedge the strategic risk of not following the BOSA implied by a scenario. Exercising a real option would alter the 'current' BOSA to the 'next' BOSA that will include the contingent service(s) arising from the real option.

I have not included examples showing that from a small number of scenarios a much bigger number of altered states can be derived and thereafter be supported with contingent services.

Conclusions

Uncertainty is an opportunity for those who are well prepared. In unpredictable situations it is the speed of response - utilising 'pre-approved' solutions - that can confer a strong competitive advantage; management reaction can never match proactive action towards an uncertain future. In other words, the stakeholders' Toolbox must enable them to align disruptive business changes, governance arrangements, and management responsibilities for risks to operations or programmes of work.

I refer to the Toolbox as being 'action-oriented' because we have a focus on acting now, based on plans for effective responses to ever changing and unpredictable political, environmental, market or regulatory conditions:

- actions you have to take now regarding your core services, and
- actions you should take now as a means of preparing your contingent services.

However, an effective identification of core and contingent services is only possible if the individual plans are rigorous *and* based on an objective approach to risk. Conversely, the traditional risk methods *may* add value once the "future space" has been judiciously broken down into scenarios that are, taken collectively, representative of the future(s).

An important by-product of our approach can be derived from articulation of typical service aggregations - "business service patterns" (e.g. TSA 'policies'). They can offer both efficient and consistent service-based answers to similar questions that may appear in several business plans.

There exist remarkable similarities between the current "sharp discontinuities", for example in airline industry and banking, and the shocks in computing industry over the last two decades. Whilst some Industries have eventually found appropriate business models (e.g. "open architecture" in computing), a typical enterprise would miss major opportunities by relying solely on the corrective strength of regulators and/or competitive market forces: a flexible business architecture can be created, in many Industries, in such a way that it articulates a way forward around core services and affordable contingent services, thus commoditising and leveraging the latter. This requires less 'stupidity of stock exchange boys', and a *very* careful dose of internal oversight and external regulation.

According to J.Wisbey, CEO of Lombard Risk "we now face calls for a new world order and this will be determined largely by politicians and policy makers. The real danger is that there will be a backlash against bankers for causing the whole crisis when in reality politicians and regulators must share

some of the blame. Individual institutions can never have the same ability to gather information as the authorities in a country who gather information from all banks and market participants. Governments and regulators are powerful. They have access to information, they can guide and if necessary they can arm-twist."

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