PROCESSION
BREAKING THE SOFTWARE BARRIER

A White Paper

A new Business Technology approach to improve UK Government Systems

This brief is designed to address some of the challenges that all UK Government Departments face, and to stimulate discussion in the context of Procession's unique capabilities. Such attributes have been described by no less than Bill Gates as the future and the holy grail of software.

Background

Government

UK Government systems have evolved over the years based upon transaction processing and database storage and represent a significant investment in money, labour and knowledge. The traditional design of systems often results in information being stored in isolated silos, duplicated many times and consequently very simple procedures become complex and challenging.

Any attempt to modernise existing systems by changing or wholesale replacement is inherently risky, would be prohibitively expensive and ill-advised in almost all circumstances. These legacy systems contain a vast amount of highly valuable, often confidential and largely irreplaceable data, and as such are germane to the functionality of Government Departments.

The "IT" industry

Generally speaking, business software comes from very few players and the rationalised market is dominated by the three largest, namely IBM, Oracle and Microsoft. This has resulted in an interesting dichotomy; a mature industry yet an immature product set? Yet this particular software aspect of "IT" remains highly complex and continues to evolve on the basis of "components" which require to be "coded" together to deliver a useable solution for business. The result was eloquently described in a recent article where the title says it all "*IT Today: Unsustainable, unhealthy and just plain screwed*".

Stating the problem is relatively easy the solution is much more profound. Forrester CEO George Colony in an exchange in 2010 said: *"If we don't get from IT to BT [Business Technology] we're going to have more disasters like our present mortgage meltdown. Why? Because IT creates impenetrable systems that human beings can't manage. BT is about human beings back in control."* In 2008 Bill Gates said "*future applications should use only around 10% of the code that is used today*" seeing this as "*the holy grail of development forever".*

Headline articles published recently indicate that change is happening "*Ditch Your Dominant Vendors? Time May Be Right*" by Jonathan Feldman in the US and from UK TechMarketView analyst Angela Eager talks of "*tumbling edifices*" when referring to the vendors' "*tied ecosystems*" who are facing customer unrest not least of which is coming from the UK Government with its commitment to SMEs and looking for real innovation to help deliver "more for less".

The Government Dilemma

So, how does a Government IT Executive retain the best of his legacy system, representing *£ms* of investment, and yet introduce a unified, cross-platform, flexible, process-driven environment that serves its people more effectively? Before a sustainable approach is adopted it is important to understand some basic fundamentals in how organisations actually work.

First **people are the source creators of all information** and second there is the need to recognise that **people work in relatively small teams** to achieve individual and collective outcomes that make any business or indeed an efficient government. Worthy of note is that book keeping is just that it records history and generally keeps the accountant happy it does not "run" the business. Of course Governments do not actually have "balance sheets" as required in the private sector; what they need is accurate recording of their income and expenditure from source. This reduction in complexity should make government systems easier to implement? **These basic understandings bring into question is there such a thing as "enterprise" applications and why is there a need for such "large" projects**?

This may be a surprise for technical led people but understand that **business logic has never changed since commerce started;** indeed business is actually quite "simple" if you focus on supporting people at work. This includes "rules" simple or complex (e.g. means testing) it just reflects business logic. The communication technologies to deliver are both complex and challenging but do not change the fundamentals of business; it is about people, internal and external to the organisation and IT is there to support and contribute to efficiency.

When you look at how people work irrespective of the required function **there are relatively few work task types, human and system, including the user interface that address all business driven issues?** So why repeatedly recode for every function in a business? Business owners ask the questions; "Do we really need to rely on a vendor's view to be imposed to run "my" organisation? What do coders know about business when I want a custom solution?" In both cases the result is a compromise to the actual operational requirements and by nature both lack flexibility to support the dynamic environment where people work.

Having recognised **people are a major asset in any organisation**, one of their attributes is that they are the authors and implementors of change to maintain efficiency. Yet "IT" as it has evolved and driven by the dominant vendors has failed to support people. "Agile" is currently high up most organisation's agenda and no more so than the UK Government. However the way business software has evolved over the past decades militates against supportive change with its complexity and high resultant cost. As the "agile" movement stands today it is about better project management to improve the dialogue between the end users and the technical builders of solutions. It does not address the inherent deficiencies in the current vendors' software offerings?

The basic requirements for step change Business Technology

From all this it is easy to draw up some simple "requirements" to see step change next generation software described as "Business Technology" by Forrester Research.

- **People centric** – supporting exactly how people work with identification where duplication can be eliminated and automation incorporated to maximise efficiency

- **Agility in the software** – resulting in no need for detailed initial specification with organic build as feed back from users is readily incorporated and becomes future proof with inbuilt flexibility
- **Software that is transparent to the business** – removing the interpretation gap as currently exists between IT and the user with understanding of any deployed solution by all interested parties
- **Real time information** from where information is created – resulting in making better informed decisions

All these issues have been recognised for many years but little has really changed. It was over 15 years ago that the founders of Procession decided they were going to take on this challenge.

What is Procession?

In summary:

1. Procession is **a platform technology** with all requirements for the creation of business applications, including an integrated user interface.
2. Procession is **a unified tool set** that addresses all the requirements of business logic recognising the relative few work task types required which have been isolated from the technology driven delivery mechanisms.
3. Procession's inherent capability to handle **front and back office** allows a "ProcessHub™" approach that uses existing legacy systems, thus maintaining the value of investment to date.
4. Procession is **the new alternative** to Custom Off The Shelf ("COTS") and custom coded solutions; Procession's core code does not need to change yet delivers custom solutions.
5. Procession's design philosophy allows for rapid change – it is **truly flexible, "agile" software** thus making investment in new systems future proof. Procession is the perfect tool for use with the IT industry's "agile methodology" initiative.
6. Procession delivers high levels of **process automation** and operational efficiency that empowers people to deliver the required service yet in a controlled manner intuitively supporting "System Thinking"(1).
7. Procession uses a "declarative" technique – just as envisioned by Bill Gates; there is **no code generation or compiling** of code to build applications.
8. Procession custom applications can be built very quickly: ***circa* 80% less time and cost** than conventional "hard coded" ones.
9. Procession **closes the interpretation gap** between the business users and the application developers; application development now becomes a "domestic matter" i.e. no need to send work off shore, and projects managed by business professionals. There is no requirement for armies of hard code programmers.

A practical approach for Government

With such a new capability available adoption of use will require experimental and "agile" approach to establish the best way to transform systems into sustainable efficient applications that allow for constant

change. Do not be distracted by discussion about the "Cloud" which addresses a completely different set of cost issues. It should be taken for granted that new applications can be deployed in any environment.

It is important not to create just another inflexible legacy which is a real "danger" if there is a failure to recognise the basics as described. There are few "green field" sites and in the larger departments most are "brown field" but that does not reduce the relevance of the emphasis as described above. There will be many existing "back office" applications which do a good job e.g. payment processing. Use such existing capability but where civil servants are at the frontline delivering a service think people and their process with outcomes. Next generation Business Technology can simplify the approach to new systems and avoid creation of a new inflexible "legacy" yet use the valuable information built up over years. Start with how people work individually and collectively to achieve an outcome and quickly build a solution which supports the current "agile" initiatives in Government.

The UK Government has created and encouraged some innovative initiatives that will help; the mandate that SMEs should take 25% of contracts, the HMG Skunkworks should see quick results, the support for the search for innovation as demonstrated by the recent Innovation Launch Pad initiative from the Cabinet Office and speakers at Civil Service Live 2011 encouraging civil servants to experiment, take risks even if they fail, learn from the experience. All this leads Government to becoming the intelligent buyer after a decade of over reliance on their prime contractors to "do the best for the taxpayer".

Summary

Procession has developed and pioneered a completely new approach with its innovative thinking in the creation of Business Technology addressing business application software. It is a paradigm shift, prospectively of seismic proportions, for the world of business application creation.

The technology priorities of commerce, industry and government are set to change radically with a far greater emphasis on value for money and "future proof" of investments; these changes in respect of the enabling software are available now as pioneered by UK based Procession.

These views are based upon deep knowledge of Procession's attributes and capabilities that challenge established ways of managing the complexities of different software technologies. We believe that using Procession to update Government systems will be at a fraction of the time and cost of existing methodologies and technologies, and will result in very much more efficient and transparent systems. Procession has pioneered a new way with "people and process" at its core, and it is proven robust operationally and highly suited for deployment in Government Departments.

Note

(1)"Systems Thinking optimises how business processes operate from end to end, working together with the solution supplier, for the benefit of the customer and ultimately for the benefit of their customers". From the booklet "Managing Transformation *actually means* Transforming Management" available from The Deming Forum

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