

## Transformational Government: A radical Plan B

### Introduction

In order to truly “seize the opportunity provided by technology to transform the business of government”<sup>1</sup>, a much more radical approach is required than that proposed in the paper. This response provides a brief overview of this alternative approach and outlines a transformation strategy.

### The crux of the opportunity

- 1) Will networked computing will be less expensive, faster and more ubiquitous in 2010's?
- 2) Is the current business computing model<sup>2</sup> the most appropriate for networked computing?

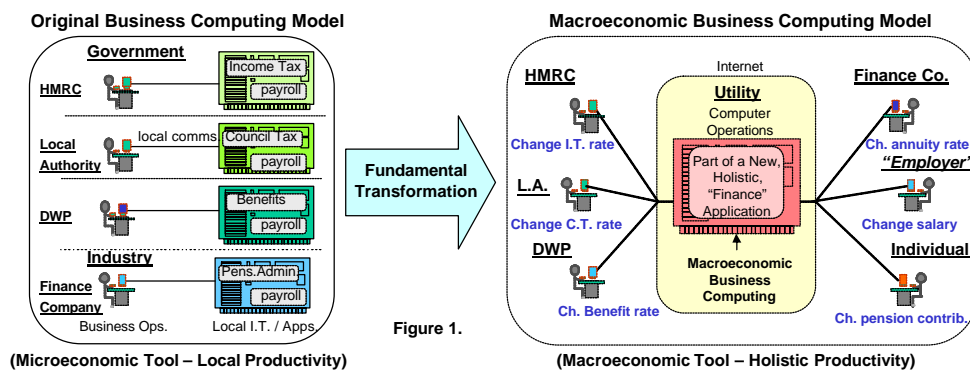
Assuming answers of yes and no, the key question is:

- 3) What is the best business computing model for inexpensive, ubiquitous networked computers?

### The Fundamental Transformation of Business Computing

The real opportunity for Transformational Government is the re-creation of business computing as a macroeconomic tool, including the creation of a new, shared utility for IT Operations.

Figure 1 below illustrates the difference between the two models, using payroll, personal taxation and private pension provision as the example. On the left we see today's approach with massive duplication, e.g. payroll, and also fragmentation, e.g. collection of taxes and payments of benefits, in IT Operations. There is also considerable duplication in Business Operations. As a simple example, every organisation needs to be made aware of an individual's change of address.



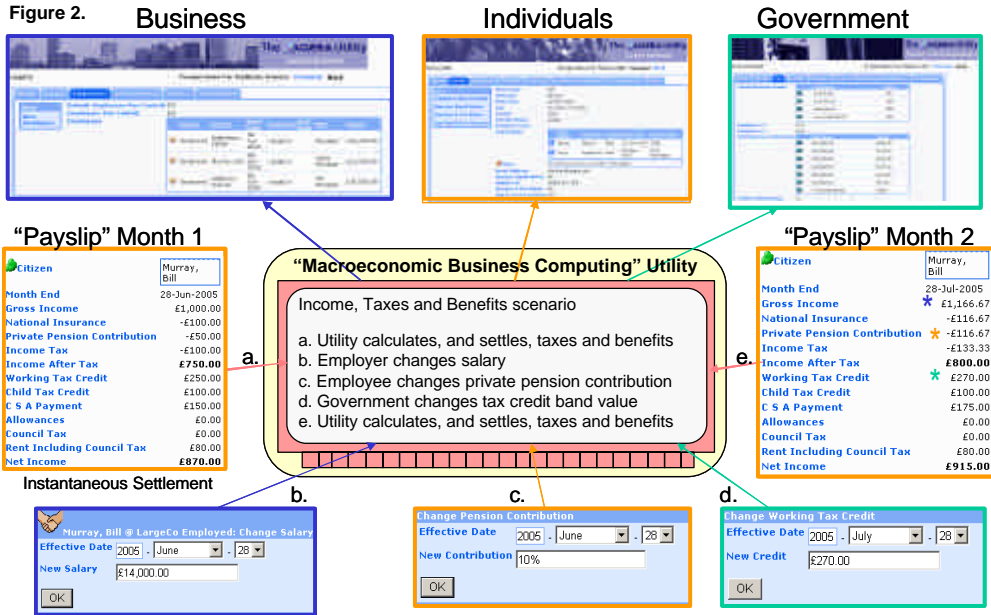
Designing a solution for networked computing from scratch would result in a process/application covering all aspects of payroll, personal taxation and private pension administration, with the relevant party updating information once and the data being shared, as and where appropriate, with the other parties. Figure 2 overleaf illustrates this using a simple scenario. Assuming the holistic process design optimises the overall process then this delivers the optimal long-term solution for business computing. It minimises the cost of Business Operations for all parties and obliterates the cost of IT Operations, as illustrated in figure 3.

<sup>1</sup> Transformation Government paper: paragraph 1

<sup>2</sup> Business computing is operated as a microeconomic tool. It was created to raise the productivity of an organisation through the automation of computational tasks and digitisation of record management. The productivity gain came from organisations replacing labour, whose costs were rising due to wage inflation, with computers, whose costs were falling rapidly due to Moore's Law. The key computing component is the application software, such as a payroll system. Early applications were narrowly scoped due to the limited processing power of computers at the time and the lack of data communications. This led to the microeconomic approach which still accounts for virtually 100% of business computing solutions.

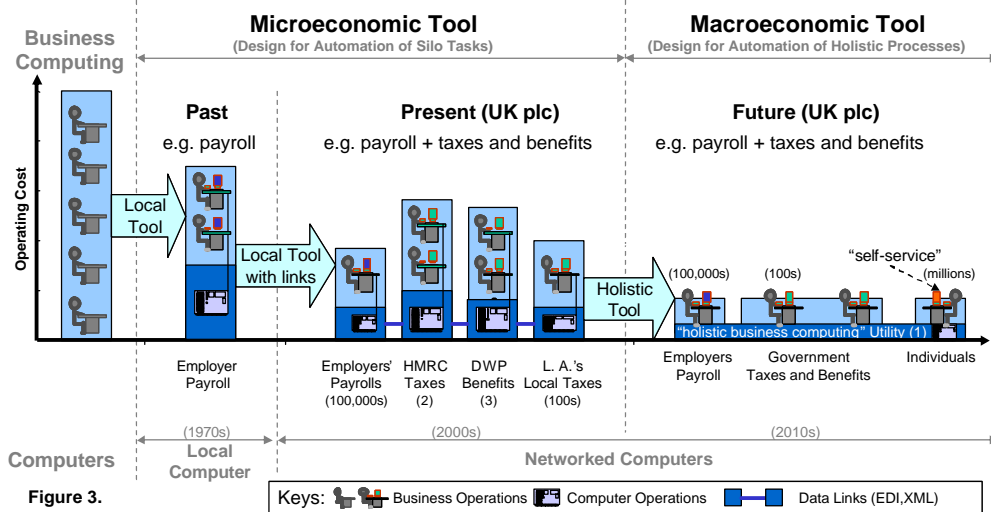
**Accelerated Take-Up**

Another factor in favour of this more radical approach is the ability to develop a consistent user interface for all services operated by the Utility. A prototype of the Utility solution in figure 2 below shows how all services would be accessed by all parties using a consistent user interface. The prototype also covers other scenarios, such as health.



**Growing problems of today’s model**

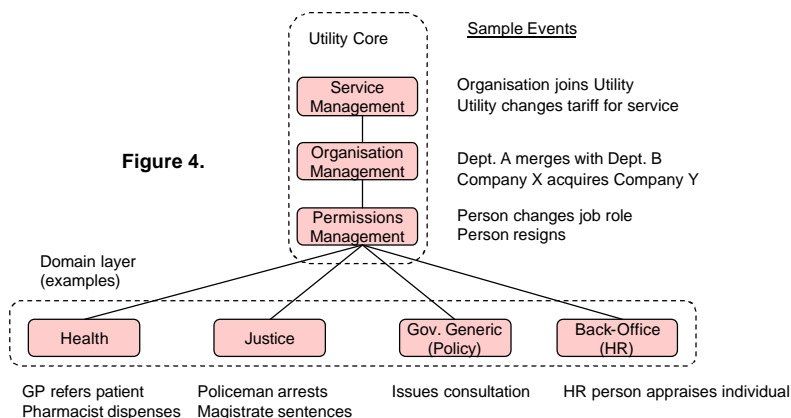
The diagram below shows the evolution of business computing. As previously stated business computing was developed as a microeconomic tool to reduce costs within organisations. Over the past thirty years more effective applications have been developed and the cost of processing power has continued to plummet but the applications are now largely commoditised and suffering from diminishing operational returns. The same is true in IT Operations as processing costs are now only a very small percentage of cost.



In addition early adopters of today's business computing model, such as governments, have a huge volume of legacy systems, and with that large, and growing, levels of IT cost and risk. In summary the original business computing model has several major problems, none of which is easy to address incrementally. Other than some economies of scale from Outsourcing how are more efficiencies going to be squeezed out of the microeconomic model?

**Transformation Strategy for Macroeconomic Business Computing**

It is proposed that a two stage transformation strategy be adopted. The first stage is the development of an executable vision statement for the future (2010's). An early prototype of the vision statement is illustrated in Figure 2, covering personal finance. It would also contain key scenarios from other core domains such as health, justice and education as well as generic government requirements and core back-office tasks. The vision statement would be evolved incrementally in partnership with the relevant domain experts (figure 4).



The second stage of the transformation is the incremental roll-out of production versions of the domain requirements. This does not require a big bang approach as the Utility would manage both the scope of solution and range of participants, e.g. GP services in a district or HR in a Department.

**Current Status**

HISL<sup>3</sup> is currently building the skeletal vision statement with a view to engaging domain experts in the development of the vision statement in the second quarter of this year. The company has recently made contact with the Shared Services team (Ian Law) and will keep them abreast of developments.

**Summary**

This response does not advocate changing any current plans for Transformational Government. It points out the shortcomings of today's business computing model and articulates a Plan B for Transformational Government. This alternative plan does not require a big-bang and it is hard to see that the data migration requirements can be any more challenging than those involved in migration to an ERP solution. This is a once-off transformation and government needs such a solution more than industry given the complexity of its relationship with the individual (taxpayer, patient, householder, pupil/parent, jobseeker, licensee, etc...) and its stated goals for efficiency and effectiveness. This approach would clearly deliver a major contribution in the need for radical reform in the delivery of public services.

<sup>3</sup> HISL Background: The company was established as the result of a management buyout from AT&T. The team has considerable experience in developing large, complex business computing solutions in several industry domains using its own sophisticated tools developed whilst operating as an applied research team at AT&T ISTEEL. That project received major funding from AT&T, and was developed in partnership with Bell Labs.