

**Institutional**

The *Market Infrastructure Framework* reports describe how the PIP might be developed. Strong needs that were identified were to “un-bundle” the complexity of existing institutional arrangements for managing and delivering spatial information; provide consistent; standards to allow integration; and the need for research, development and flexible responses to the rapidly changing environment.

It recognised that such a system could provide services responsive to the community and in doing so, satisfy broader government policy directions in information access and whole-of-government service delivery.

A “Product Market Infrastructure Framework” was designed, which can be described as a complex clearing house system that facilitates land conveyancing, development and planning, and collection of revenue.

The vision of a ‘clearing house’ is one where information derived from a number of participating agencies is assembled and delivered promptly in a suitable format, at a convenient place, and for a reasonable price.

Making this vision a reality requires someone in a temporary management role to implement the

system and an on-going management role in operating the system.

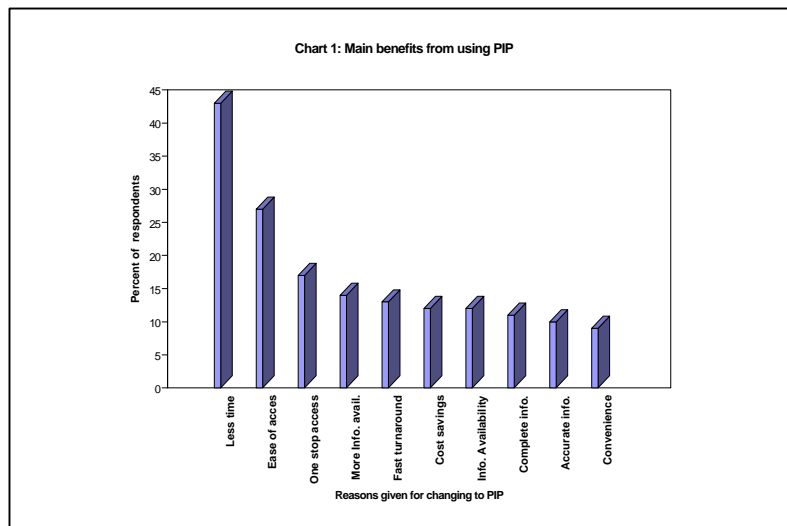
The purpose of the *Market Place Demand Model* report was to measure the expected demand for the PIP. Results indicated strong market support for the introduction of a PIP type product, particularly if cheaper than current market equivalents.

Figure 3 indicates respondents see very real benefits from using PIP. The most significant of these relate to savings in time.

Figure 4 deals with a comparison of current access methods and those proposed to be available under PIP. The most obvious difference is the marked swing to the use of the Internet as the preferred method of data access,

and the subsequent decline in the traditional methods such as facsimile, mail, and particularly across the counter.

There is a strong demand for PIP and related products. However, the



data must be complete and must be priced at equal to or below current prices. If these criteria are met, there could be an 80% uptake within three months.

The swing to the use of the Internet will have a profound effect on the employment of staff for

across the counter sales - the main method of data distribution at this time.

There will be a need for customised selections of PIP data for different market segments. Business users of property information will be the main users of PIP. Other users and new markets within educational institutions, marketing firms, and firms providing specific geographic markets, will develop.

### **Informational**

The *Infrastructure Modelling* report found that traditionally, spheres of government and the private sector have operated in isolation by collecting and maintaining their own data to support their functions. This has led to data duplication and incompatibility between agencies, despite some using the same data.

A detailed data model was developed that described the data sets and elements that would constitute a PIP, and a number of significant data issues were identified that require resolution in order to implement a product such as the PIP.

Firstly, it must be ensured that adequate core level meta-data is captured and made available regarding foundational data elements. Agencies also must provide adequate information about the standards that apply to their data, and some commonality is needed on benchmark levels of quality for core data elements.

A significant issue that was encountered was anomalies in understandings of data custodianship. Clearly issues of ownership and responsibility for core data are pre-requisite to entering into agreements for the use, and in some cases, modification of that data.

There was also a strong need identified to establish commonly understood data standards, and that captured meta-data clearly identifies what standards have been adhered to.

Lastly, the trial integration of previously separately held data sets revealed that a significant task lies ahead in terms of data validation. Some data sets may also require some investment to upgrade the quality of data to an agreed benchmark standard.

The report emphasised that this is perhaps the most significant, complex and time-consuming task ahead, the magnitude of which remains largely unknown until specific data sets within geographical extents are examined and compared.

### **Technological**

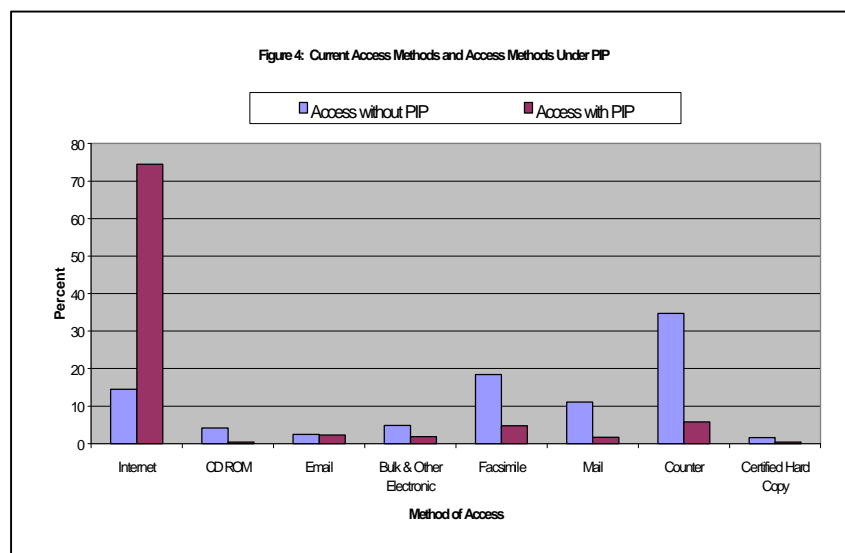
The *Technology Infrastructure for the PIP* report also identified a number of important issues. A significant positive finding was that the prototype could be introduced without modification to agency databases, by using the approach of software “wrappers”.

The investigation also showed that interfaces could be developed that “tailored” the product for different target client groupings.

It was also found that although resultant response times varied, they generally exceeded expectations and achieved acceptable operational speeds.

However, the prototype development has clearly shown that there is a distinct lack of technical

documentation in participating agencies. Some of the agency systems are very large and complex, and the knowledge and expertise about these systems is located with external



contractors and a few agency technical staff. Existing agency documentation is not sufficient to support wrapper development.

A significant requirement for future development would be the creation of an acceptable development environment. This would ideally be an environment that can be accessed without any security or performance linkage problems to the existing production systems.

Another limitation that was noted was that in many agencies, there was no single business unit responsible for electronic services or integrated information delivery. If this were to remain the case, then the development of a PIP would require complex communication with agencies, and a significant task in education and awareness raising.

Legislative and privacy issues relating to the type and the amount of data to be made available also were identified as key issues.

### Learnings

Some major themes can be drawn from the learnings of the PIP CRP (refer to Figure 4).

Firstly, it seems clear that there is a strong market demand for such a product, the information is available, and the technology is feasible today.

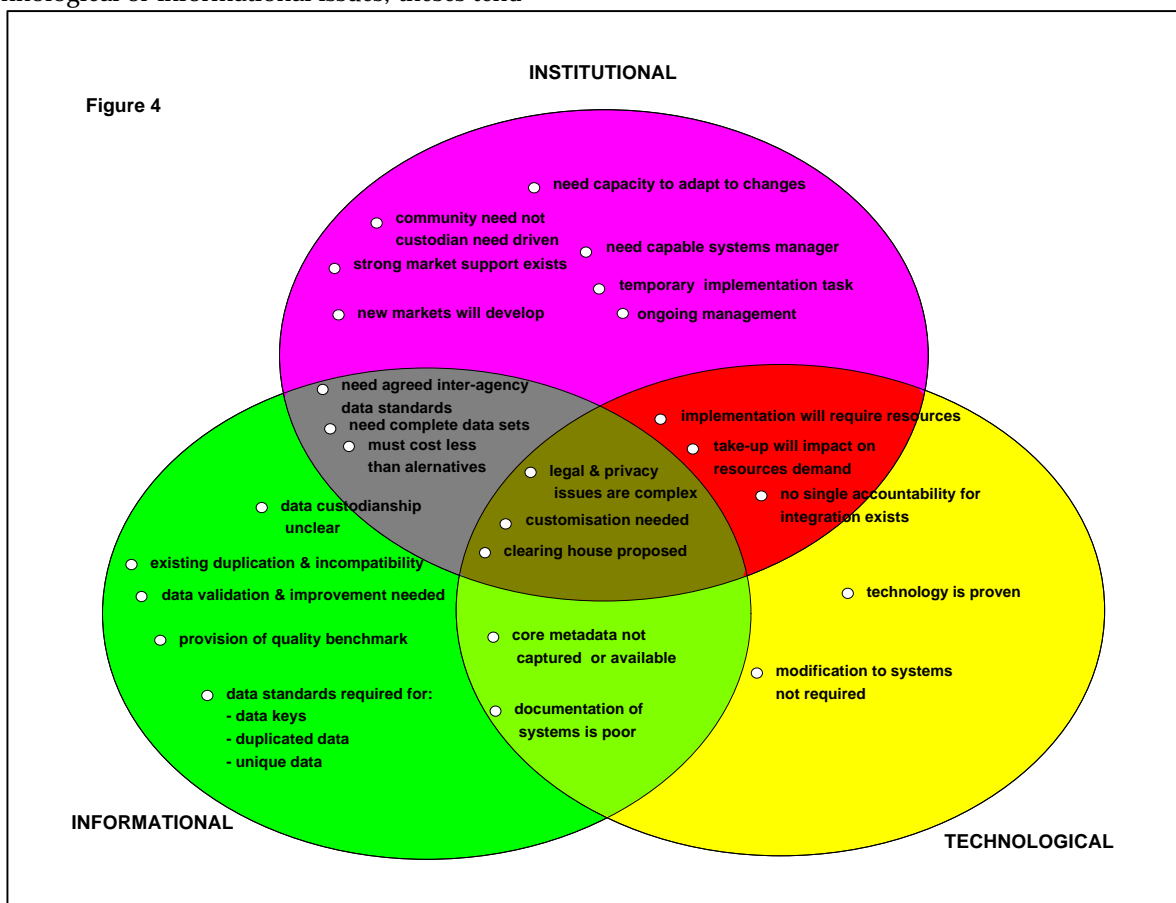
In terms of constraints, it generally seems that the real hurdles remaining are of an institutional nature. Although there are a number of technological or informational issues, these tend

lower than that of acquiring it through alternate, separate means. This clearly shows that change to institutional arrangements for data provision and pricing could have major impact on the viability of such an integrated product.

Similarly, if such a product became available “on-line”, take-up would be extremely rapid (80% of existing consumers within 3 months), leaving existing delivery mechanisms largely abandoned and current business processes radically affected.

### The Challenge.

Unquestionably, the PIP project has been a success. It has supplied important institutional,



to exist at the interface with institutional arrangements.

Particular issues that were common across the research reports, pertain to the resourcing and accountability for such an integration activity, cooperation in the determination and communication of information and system standards

A fundamental learning is that whilst a clear market demand was demonstrated, this is dependent upon the cost of accessing complete sets of information through such a product being

informational, and technological learnings.

QSIIC has determined that development of such a product should be driven by the private sector, consistent with the QWSIIS vision.

QSIIC remains committed to resolving the institutional issues identified, so that industry will be stimulated to take such a development further.