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Title	MPS Strategic Cloud - Supplier Workshop: Data Migration
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Summary	By 2014/15 the MPS needs to reduce spending by £600m, compared to 2010/11. To assist in delivering this reduction a number of change programmes are underway focusing on reducing inanimate costs. The Strategic Cloud programme is looking to deliver a next generation cloud based replacement for current legacy MPS applications, focussing particularly on the high volume front end operational policing systems.
(B)OCU or Unit, Directorate	Directorate Of Information
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Not Protectively Marked

Suitable for an audience with:

No Vetting

Strategic Cloud Market Engagement Workshops

Data Migration

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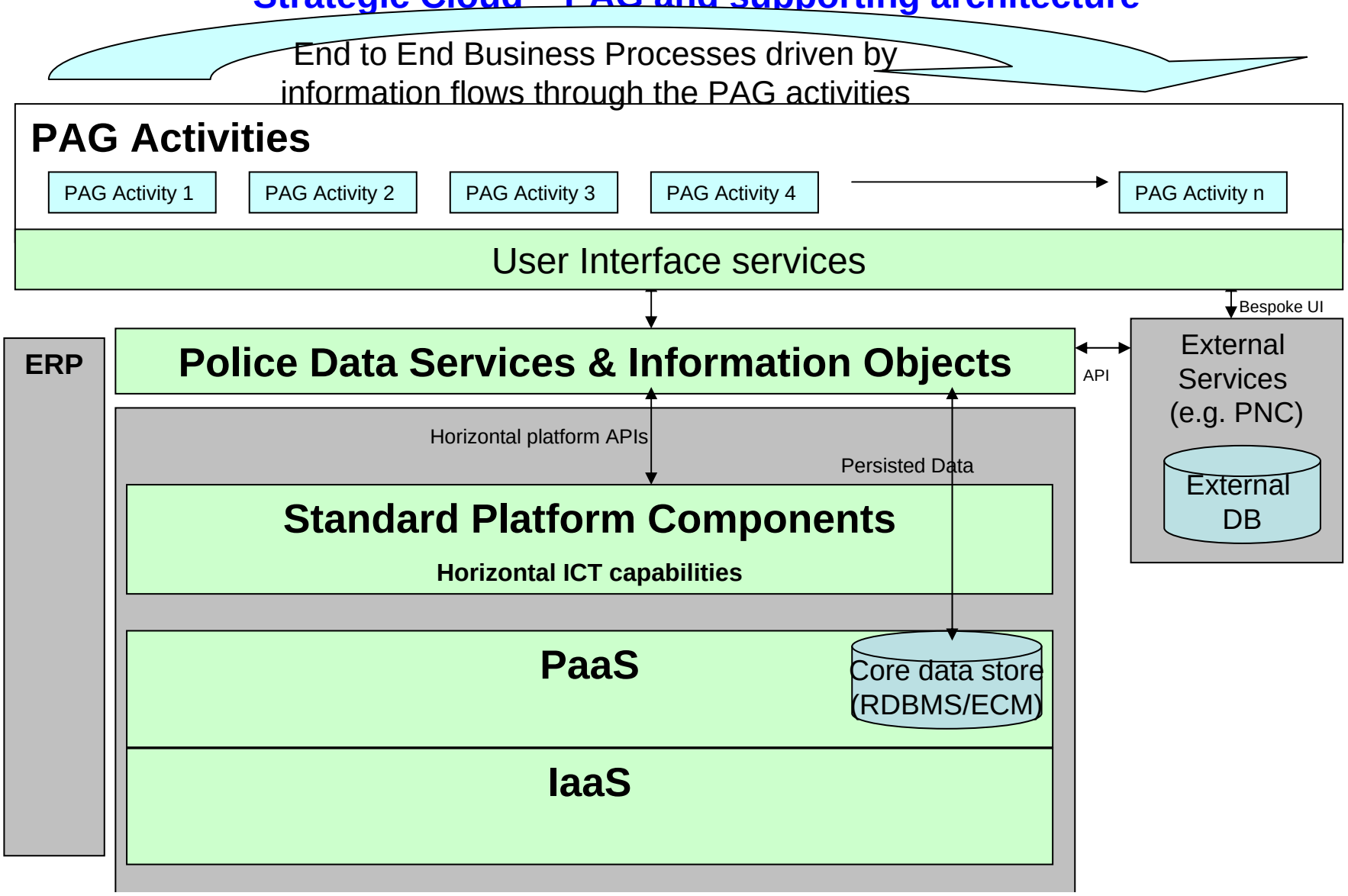
Strategic Cloud – Main business requirements around information

Evidential Weight	Secure unimpeachable integrity of documents. Secure and fully documented audit trail.
Professional Standards	Full audit trail of information access
RRD / MoPI / DPA and Information architecture	Support for retention periods, support for subject access requests (if applicable), and deletion capability. A master data rather than incident focused data view. MPS as data controller – must be able to partition data logically at this level in any multi-tenant model.
Downstream intelligence	Retention of information for pro-active intelligence, analytics and risk management
GPMS	Ability to support GPMS at Information Object level
Security	Accreditation / RMADS / Migrated data into new security model
Migration - repeatable	Data migration will not be a one-off activity for each information object

Strategic Cloud – PAG and supporting architecture



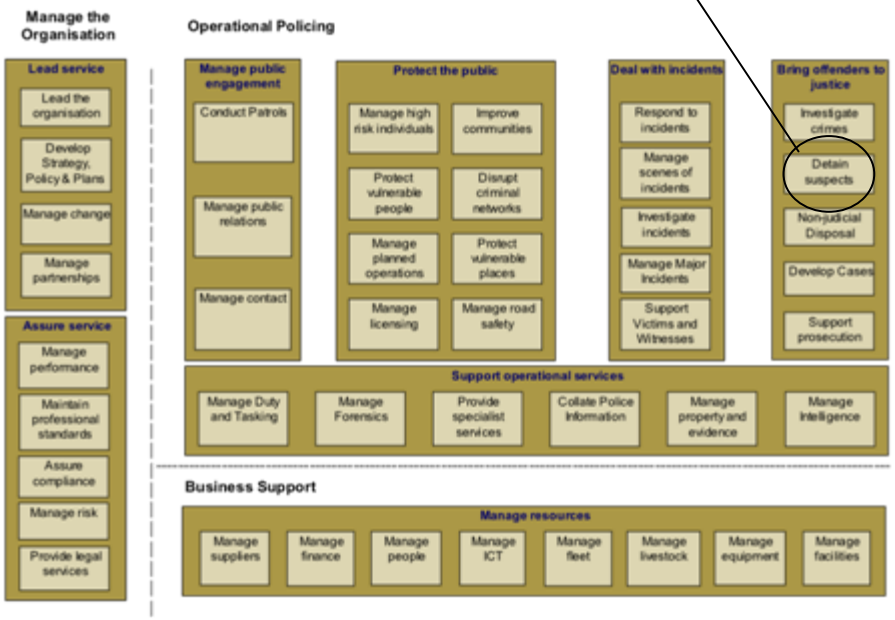
Strategic Cloud –PAG activity and information object development

Detain Suspects

Detain Suspects

- Book-in Detainee
- Manage Custody Risk Assessment
- Manage Detainee Property
- Manage Detainee Rights
- Manage Detainee Health and Well-Being
- Manage Custody Authorisations
- Manage the Taking of Samples and Biometrics
- Manage Detainee Interviews
- Manage Detainee Transportation
- Manage Detainee Bail
- Manage Detainee Release

Detainee Escort Request Record	Schedule Date
	Originating Force
	Originating Station
	Custody Number
	Detainee Surname
	Detainee Initials
	Detainee Gender
	Detainee Adult/Juvenile
	Detainee Date of Birth
	Destination
	NFR
	Detainee Ethnicity
	Detainee Violent Risk
	Detainee Suicidal Risk
	Detainee Escape Risk
	Detainee Medical Risk
	Detainee Segregation Required
	Escort Free Text



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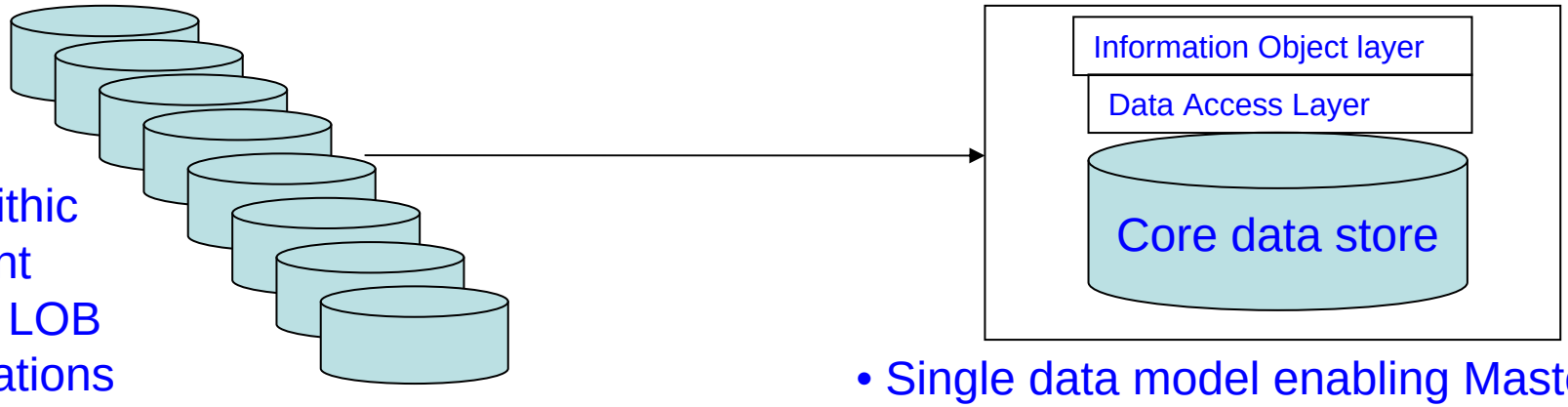
Strategic Cloud – Information Objects and persisted data



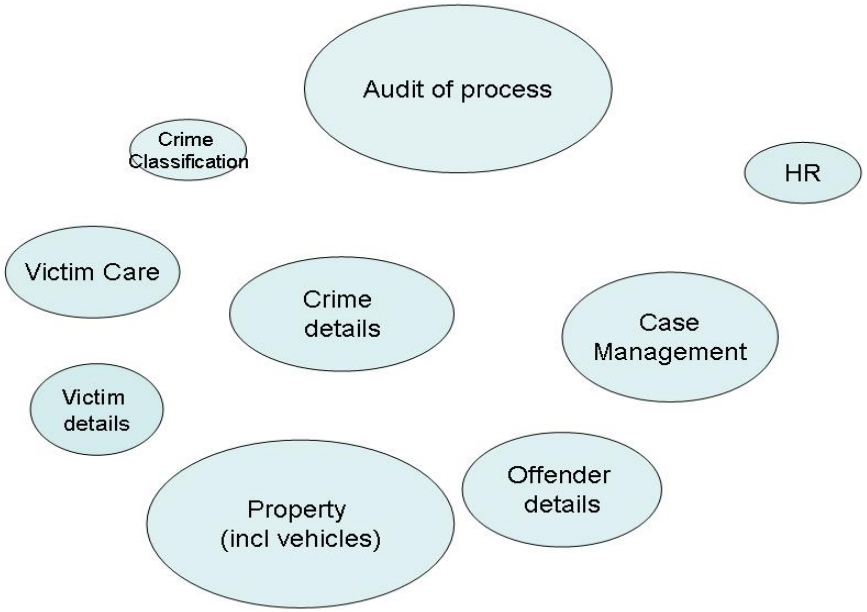
Monolithic Incident based LOB applications

- Incident based data models
- Applications aligned to business functions
- Inconsistent data standards, data models and data quality.
- Business rules and interpretation of data tightly linked to silo application software.
- Business process coded into application
- Mixture of COTS and some MPS owned

- Single data model enabling Master Data type functionality for MoPI compliance, but
- Retaining provenance of information and support for evidential weight.
- Data only accessible via data services and information object layer.
- Business Rules and BPM as services

NOTE : Migration of data will not address MDM. However new model will be designed for development of a 'POLE' (master data) view of data.

Strategic Cloud – Example applications 1 - CRIS



(Size of entities very approximately equates to complexity in the physical model).

Multiple police activities supported;

- Crime case management/development
- NCRS & performance stats/compliance
- Record of investigation process
- Workflow (supervision, screening, etc)
- Police BTR support
- Victim support
- Support for CSO and CPO requests
- Property recovery
- Intelligence & full audit

Approx 17M reports, about 1M p.a since ~1996

Very large numbers remain open – long lived transactions

Evidential weight implications (witness statements etc)

Crime based (no POLE model)

Hard coded business rules, workflow and complex data model (~400 tables) tightly coupled to application

Strategic Cloud – Example 2 – Crimint+

Multiple police activities supported;

- Pure intelligence and associated process (referrals, supervision and grading)
- STOPS recording
- Recording of RIPA decisions
- Intelligence operations planning and recording
- Information Sharing reports
- Firearms made safe reports
- DNA matches to scenes of crime
- Bail conditions

MPS implementation of Memex intelligence application

Supports a POLE model within the application

Large transaction volumes

STOPS may be short lived transactions

Intelligence likely to be short lived transactions but retained for long periods

Strategic Cloud – Migration and Business Constraints / Plans

PAG and legacy applications do not match 1:1

– Unlikely we will be able to simply de-commission applications like CRIS as a single transition.

Business drivers for switching off applications will not necessarily align to pure ICT driven dependencies

– We may end up having to implement PAG applications which are dependent on data services which are not yet in place in the new model.

- Information Objects may be created from mix of data from legacy applications and new data services.

Rollout and business change

Rollout by business unit and/or geographic area

- Process/approach required for transition of in-flight business processes

Existing data quality issues

- Data Services layer must support ability to import 'legacy' data which is unlikely to meet the same data quality and business rules applied in 'new' information objects.

Strategic Cloud – How do we migrate to new data platforms and applications without compromising MPS business ?

- Cost of maintaining / parallel running legacy applications, versus cost of migrating data and imperatives to retain data
- Process life cycle length and in-flight transactions
- Volumes of data (esp in-flight transactions)
- Evidential weight, audit and compliance requirements
- Down stream use (Intelligence, DPS, performance information, MoPI and RRD)
- PAG and application functions and data do not map 1:1
- Data Quality, multiple use applications, inconsistent data models and standards
- Business drivers for retiring applications is unlikely to align well with ICT architectural dependencies in building the new architecture
- Expertise and availability of information on existing applications and data
- Data migration should be repeatable (New forces and migration of Incident models to POLE model)
- Security, audit, unstructured content and BPM information held in separate services

Strategic Cloud – Workshop Themes & Aims

- **General approaches to migration off legacy estate**
  - Options to meet business requirements
  - Relative costs and benefits and compromises
  - What are other organisations doing ?
- **Technical Solutions / Implications and types of tool available in the market**
  - Especially around the issues of compliance, evidential weight and audit
- **Project Planning factors**
  - Transition timing & Road-mapping application migration and dependency issues – likely impact
  - Team working issues (esp between new application / data layer developers, migration team, and existing application owners and support teams).
  - Data Quality Issues, data model gaps, standards and resolution approaches
- **Risks / Issues and Mitigation**
- **Other**