Problems/Challenges facing Industry Data Base Users

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National Westminster Bank has a tremendous investment in information technology. In planning for the future, the following issues represent important problems and challenges:

- Disparate legacy systems provide islands of data, often without maps let alone bridges.

  National Westminister still runs major core processes that were written in the early 1960s. These and the systems that followed it were written using tools and techniques available at the appropriate time. Little structure or consistency of approach is apparent in the earlier systems, and in most cases little cohesion exists between systems supporting different areas of business. The organic growth of the company has often meant that very different technology solutions have been adopted by almost completely independent IT shops.

- There is huge investment in legacy systems which must remain relatively intact for some time.

  The size and complexity of legacy systems represents a huge investment which is difficult to justify the cost of replacing even in a good economic climate.

- The need for Management Information (MI) is moving its focus from individual business areas to a Customer Relationship level.

  Given the separate battle to increase market share of the finite customer base, a major trend in the marketplace is to ensure maximum value is obtained from the existing customer base. In order to manage this exercise the business needs to be able to query an information base built to reflect the customer's relationship as a whole.

- There is also a need for Operational Information, with a similar focus.

  The same maximization of existing customer benefit, and a push to differentiate National Westminister Bank by providing better and holistic financial services, requires that we create a view of the overall customer relationship to support operational needs. This entails collating the separate business sector views from legacy systems in a manner appropriate to support of business critical operational support systems.

- These needs are typically solved through duplication of data to:

  - Avoid risk of volatile unstructured access for MI purposes degrading operational systems support of business critical systems.

    Flexibility of MI access requirements does not traditionally sit well with high volume/performance operational systems.

Proceedings of the 19th VLDB Conference
Dublin, Ireland, 1993

- Enable a single interface for re-mapping of disparate data bases to a single consistent model.

  Even allowing for format differences between systems, perhaps more alarming is the potential for any two systems to hold different values for a single piece of information on a customer. Where this is the case then rules to weigh each system's accuracy, and procedures to enable correction, are required.

- Avoid major network impact of table joins across platforms/environments, primarily for MI.

  Even if all of our legacy systems had grown under a single, modern technology using consistent data structures and formats, the MI query that requires to combine predicates from different islands of information would have this problem.

- Provide a single high performance access path for critical operational systems.

  Something in the region of 15-20 operational systems need to be drawn together to create the single view of a customer. Reliability and quality of service from so many diverse data providers to mission critical, customer facing systems is a high risk solution.