

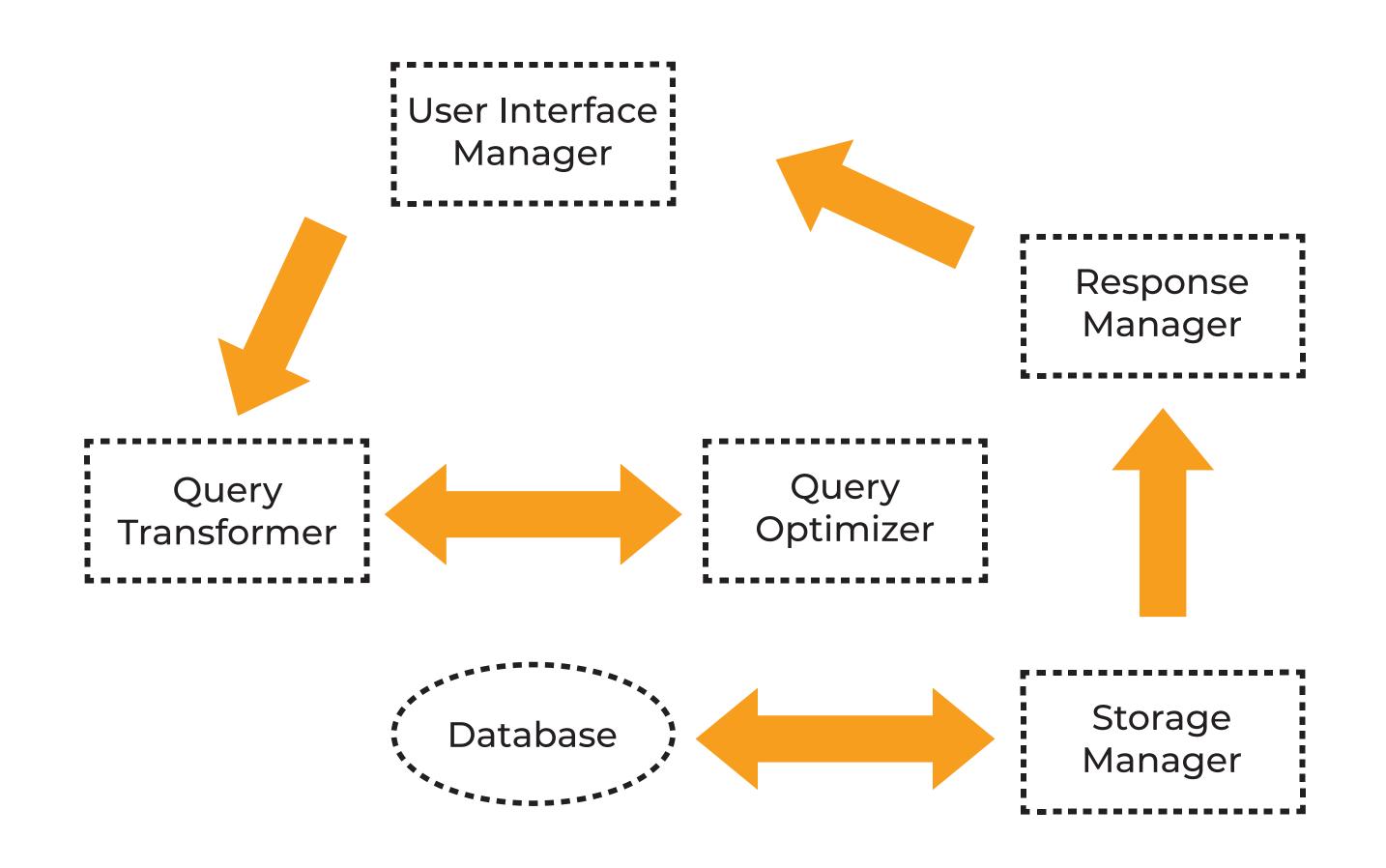
# USE IN DATABASE IN ADVANCED TRANSPORT MANAGEMENT SYSTEM - INTERFACE USING XML

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XML extensible Markup Language has emerged as an extension of HTML in order to increase flexibility in use of Internet data. One of the big advantages is to separate data context. This allows the collecting information once and then uses them in various ways. The connection between XML and database systems is realised easily because both store data in a structured way.

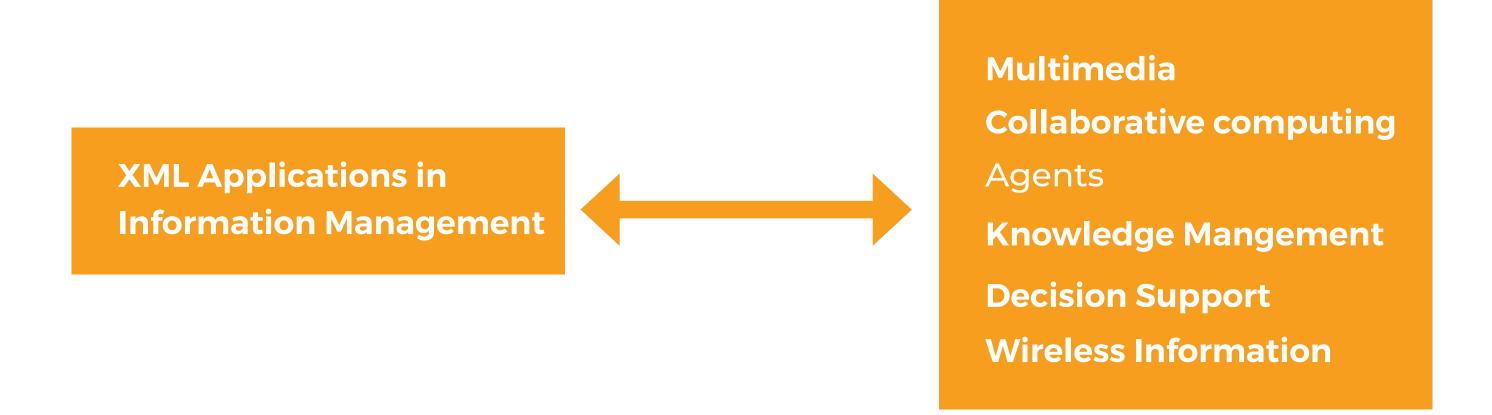
### XML & QUERY PROCESSING

Much of the data management related-work on XML has been with respect to query management. Notable among those efforts is XML Query Language (XMLQL) from INRIA, AT&T, University of Pennsylvania, and University of Washington [XMLQL]. Various commercial vendors have also developed Structured Query Language -like constructs to query XML documentsIn summary, query language and query optimization are two of the major challenges for XML databases.



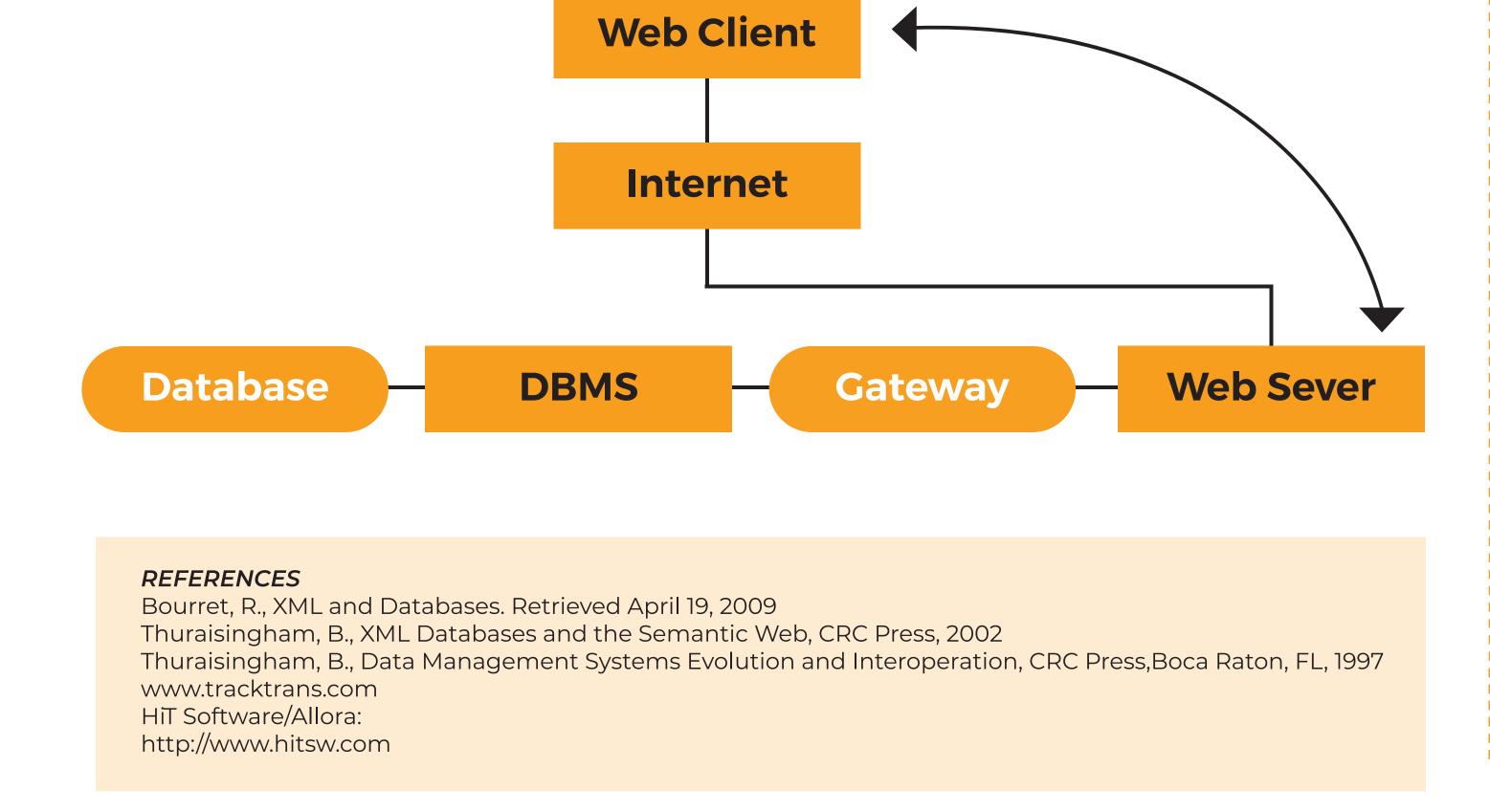
## **OVERVIEW OF APPLICATION OF XML** TO INFOTMATION MANAGEMENT

The assumption is that data management in general deals with database systems technologies whereas information management deals with a broader set of technologies including multimedia information systems, collaborative computing, knowledge management, intelligent agents, wireless information management, and decision support and related technologies.



#### DATABASE ACCESS

- A relational database consists of a set of tables, where each table is a set of records. The most popular model is the relational database, where data is stored in tables. Database Connectivity. The approaches have been extended to include object databases as well as object relational databases.
- These Web clients only understand the results of Web servers, and database management systems are not Web servers in general. Web database access is to use gateways between the database system and the Web servers.

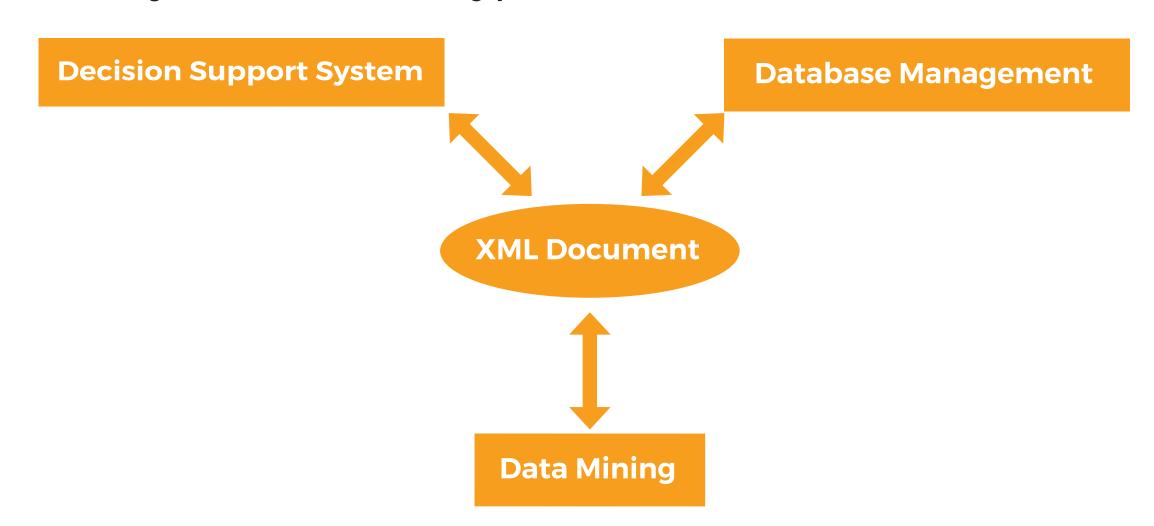


#### **DECISION SUPPORT & XML**

Decision support systems are essentially systems that support managers to make effective decisions. Decision support is a combination of technologies including data management, data warehousing, and data mining. To make effective decisions, one needs a clear understanding of the content.

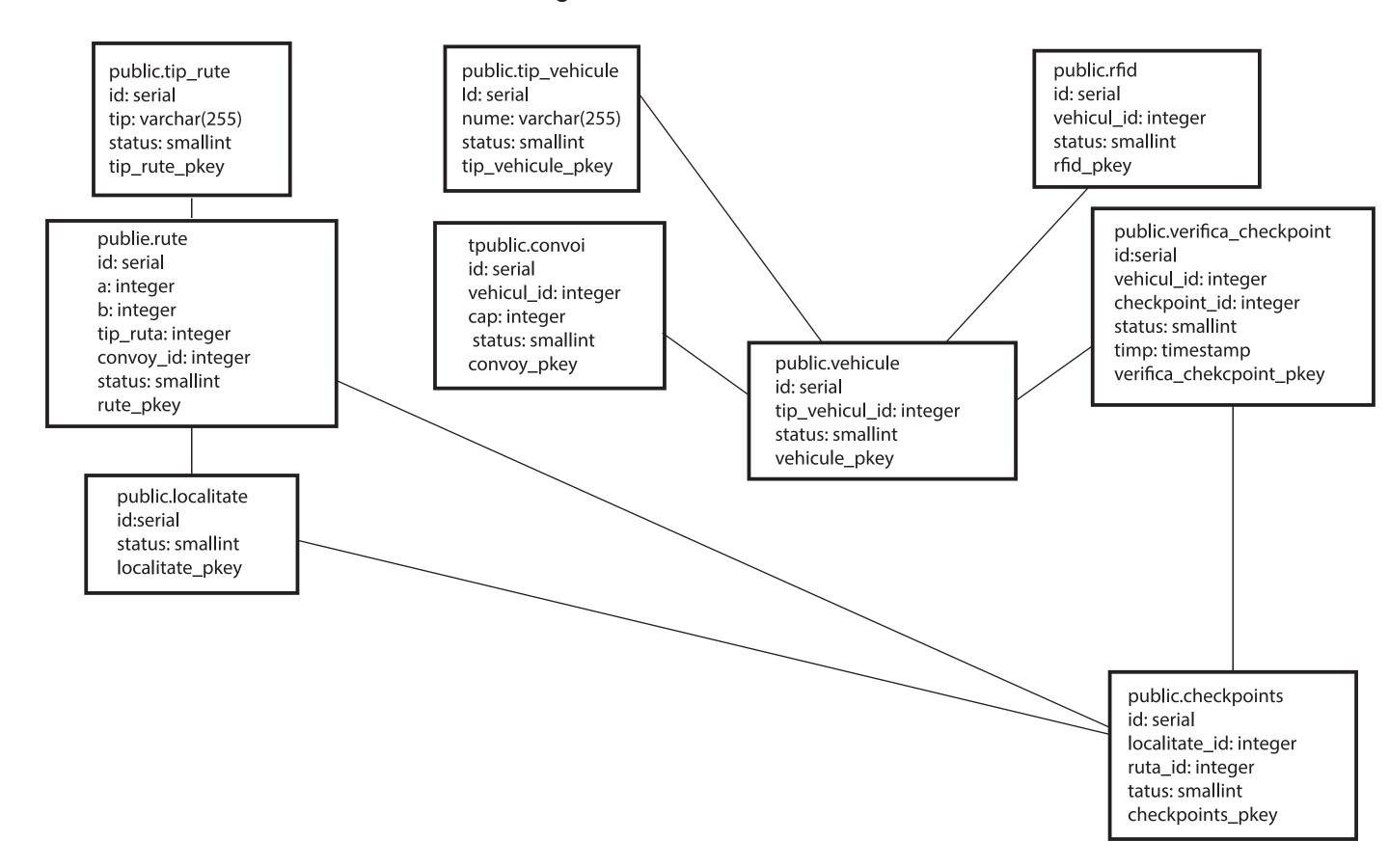
XML can be stored one of two ways:

- An XML Type column in a relational table
- An XML object in an XML Type table



## IMPLEMENTATION OF THE DATABASE IN THE COMPUTER SYSTEM

- The computer system consists of three components:
- Software needed for processing data collected by RFID reader;
- Database where is stored date:
- Graphical interface, allowing an operator to easily view the information and effectively.



## CONCLUSION

- Many opportunities are available in Web databases and XML. Furthermore, technology integration, such as integration of data management, data mining, objects, and security, is making a lot of progress.
- Converting XML to and from relational data is often difficult. In fact, when a project requires that relational data be converted to or from complex XML formats (XML schemas or DTDs), there is no silver bullet.
- We need infrastructures for the Web to support the various data, information, and knowledge management technologies. E-commerce and e-business will develop only if we successfully establish the Web as the integration platform.
- Ontologies and adding semantics will continue to play a major role in the development of XML.

