



DATAFACE, INC. EXECUTIVE SUMMARY

Business problem:

In spite of the focus on new web applications, businesses rely on a massive installed base of custom software and application packages which are antiquated, don't interoperate, are poorly documented if at all, run in an expensive environment, are designed for the business requirements of decades ago, and rely on a diminishing pool of talent.

Product Description:

The product is a smart-client framework for the Microsoft .NET environment. A framework is a reusable partial application. It is reusable and partial in the sense that it can be easily customized to build many different business applications for different implementors. All implementations rest on the same underlying components, which interpret the implementors' definitions of their applications. The definitions are static and declarative and expressed in XML. Custom logic in any .NET language can be added to the framework without disturbing the standard code released by Dataface. Our ambition is to provide the enabling technology for the coming generation of replacement software applications, sometimes referred to by analysts as Enterprise Software 2.0.

Business Value:

The Dataface Framework is based on innovative thinking to address the pressure on the business to reduce costs, improve application functionality, provide investment protection, enhance developer productivity, and advance operational consistency across applications.

To address these pressures the Dataface Framework features the following:

- Guides the design of a business app because: a) processing is based on an efficient XML description of requirements, b) rich and powerful components are provided to build screens and user dialogs, (c) system-wide database extension features add useful functionality with very little effort.
- Provides peer-to-peer approach using Web Services, gives maximum openness and distribution of data. Organization of the data in the database supports object-relational features (complex data, "setof", "deref") and XML nested elements.
- Provides a uniform user experience with many system-wide features built-in.
- The Dataface Virtual Machine provides a framework for any back-office type of application.
- Programmers concentrate on processing the business events raised. Interaction with the complex technical environment is voluntary.
- Records change information, including intraday changes, in a customizable log file appropriate for a Data Warehouse's Extract/Transform/Load process
- Changes to business logic are accomplished by updating event procedures or the declarative app description. No maintenance of HTML web pages.
- Server loading reduced to as minimum. Open-ended ability to access different servers on LAN, VPN, or the entire Internet.
- Handling the OS and database environment is the responsibility of Dataface Framework components, so keeping pace with Microsoft and other software vendors is no longer a significant client responsibility.
- Built in help system, technical support logs to assist the help desk, everything natively multilingual.

Distinctive Aspects:

The product is an application development framework for the .NET environment. A framework is defined in wikipedia after Johnson and Foote as: A framework is a reusable partially complete application that embodies an abstract design for solutions to a "family" of related problems. It can be extended to create a custom application. It is targeted to a particular technology. It implements a control flow [unlike a class library].

The products "family" is the entire spectrum of back-office business-to-business applications in intranet and extranet environments.

The product benefits from all the advantages of a smart-client architecture. The following definition is quoted from wikipedia. The term "Smart Client" is meant to refer to simultaneously capturing the benefits of a "thin client" (zero-install, auto-update) and a "fat client" (high performance, high productivity). Described as application environment which: delivers applications over a web http connection, does not require installation (or provide automated installation and updates), automatically updates without user action, and has the look and feel of desktop applications.

The product displays four principal innovations:

- An application description language based on XML. The XML will usually be generated by a utility that Dataface provides. The description includes a definition of the screens and the data sources and the binding between them and the desired navigation between screens.
- A user-interface in which any screen layout can be built up from 10 components. Dataface supplies implementations of the 10 components which can be used out-of-the-box to construct a high-quality prototype of the application. The UI is completely open-ended so that customers can replace any Dataface with their own.
- A database interface which implements a number of features that the designers believe are required in all business applications but which have never made their way into conventional database management systems. There is out-of-the-box default behavior which can be replaced by customers if they so desire.
- A 4-layer data-binding design for the display and validation of data fields. Dataface implements logic for standard data-types and the product is highly extensible by customers.