



## **FIX Dynamics**

### ***Bridgestone/Firestone Enterprise Solution includes VBA***

By Bob Hill

**W**ith annual sales of more than US\$6.5 billion and nearly 45,000 employees, Bridgestone/Firestone, Inc. operates 17 tire plants and 20 additional manufacturing facilities in the United States, Canada, Mexico, Brazil, Argentina, Venezuela, and New Zealand. A new plant will soon begin production in Aiken, South Carolina; it's expected to provide 800 new jobs, and generate an estimated US\$400 million in new revenue for the local economy.

#### **The Problem**

In planning a data infrastructure for this new facility, Bridgestone/Firestone wanted to ensure the plant could not only meet today's needs, but could also readily adapt to the next level of enterprise integration. Such a system would have to facilitate data flow, from raw materials, mixing, component preparation, tire assembly, and curing and warehouse inventory, to engineering, process engineers, plant-floor operations, managers, and upper management.

The company sought a common look-and-feel framework that would adhere to industry standards, and they hoped to avoid proprietary software programming interfaces to the maximum extent possible. Another prime requirement was the ability to link legacy manufacturing applications, as well as custom applications across wide-area networks and the Internet. Finally, the solution would have to require minimal debugging time, and offer exceptional ease-of-use.

#### **The Solution**

Bridgestone/Firestone determined that FIX Dynamics from Intellution Inc. was the best

way to achieve these objectives. An automated, fully integrated component object solution that ties together plant-floor and business data, FIX Dynamics is designed around industry standards for integration, interface, and communications technologies. According to Andy Bedingfield, engineer, component preparation and process systems development at Bridgestone/Firestone, "With FIX Dynamics, we have a solution with the unique flexibility to expand, leveraging Microsoft's standards such as ActiveX, OPC, VBA, and COM/DCOM interfaces." Of these standards, Intellution used VBA to create FIX Dynamics' core development environment (see FIGURE 1).

Using I-Core, an integrated, open, component-based platform, FIX Dynamics is able to provide smooth integration between software. As a result, Bridgestone/Firestone was able to build a plant-floor foundation that established the framework for the next level of enterprise integration.

Scalable from the plant floor to corporate directives, FIX Dynamics facilitates the process of retrieving and distributing data in real time. This level of scalability is an important capability for Bridgestone/Firestone, which ties all data into business decisions, not only for production, but also for quality assurance.

The VBA development environment in FIX Dynamics is a component object solution that works with all open industry standards to provide complete plug-and-solve functionality for the new plant. The time and costs of implementing and maintaining traditional solutions are eliminated because no custom coding is

