

Service Oriented Architecture (SOA) in Manufacturing Companies Spanning the Globe

Nowadays, a global information system in multinational companies consists of various applications located all over the globe. Systems are locally fulfilling their tasks at various levels of business processes. Dynamic growth of companies via acquisitions, investments and modernizations brings new challenges into the process of data evaluation at the corporate level of an enterprise. Ability to compare relevant key figures coming out of various production plants all over the world is key competitive differentiator in today's global marketplace. Readiness to process data acquired by heterogeneous local systems as well as flexibility in the area of future enterprise growth by acquisitions and development are the most

Quick Glance:

The **Enterprise 6screens Framework** is a unique combination of TIBCO's cutting edge technology and PIKE's 20 year information systems experience in the manufacturing industry. It is able to bring actual, real-time production information from the process control level, over advanced planning and scheduling, business intelligence up to the corporate level.

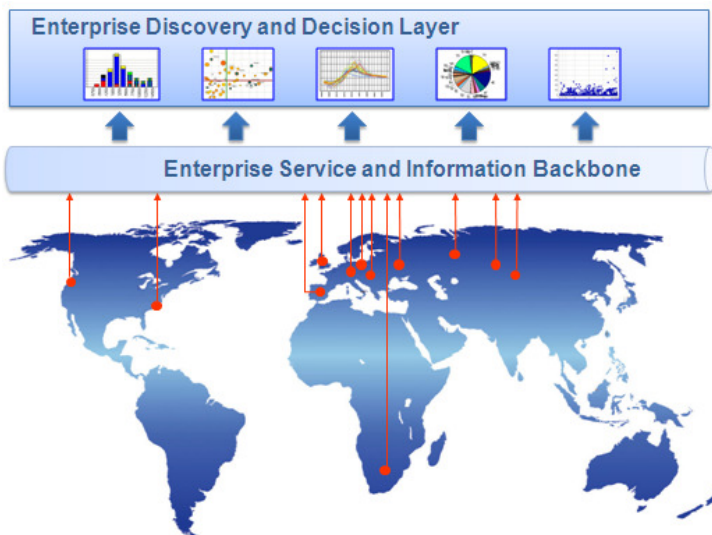


Figure 1 Enterprise 6screens Framework

brings maximum data interchange reliability, flexibility in configuration, and a “white canvas” approach to the world of real-time *Business Intelligence*.

Often the current decision-making processes applied to today's environment are unscientific, untimely, reactionary, and lacking in broader context and meaning. It is, however, the very same environment that constitutes the main cost saving and revenue generating opportunities for the business. It also represents the company's external character to the marketplace, its customers, and partners. Providing a decision-making capability that addresses tactical (scenario-specific) decisions, at specific inflection points (real-time) and with a level of context (event history, priority and circumstance) is the aim of *Complex Event Processing (CEP)*. Every top managerial decision or corporate strategy should be based on the most up to date data, helping in return to increase the quality of decisions based on them.

challenging tasks for the information system at the corporate level. The Enterprise 6screens Framework enables all of the above by using the ESB at an enterprise level to create processes involving multiple company locations and get consolidated data for the multinational enterprise instantly.

The Enterprise 6creens Framework provides a unique combination of the most suitable applications connected through TIBCO's *Enterprise Service BUS (ESB)*. The ESB approach is an integral part of the 6screens framework philosophy since it

Value of the Enterprise 6screens Framework for manufacturing:

- Decreases the cost of a new KPI monitoring implementation by 60%
- Maximizes the reliability of data delivery, which reduces 50% of issues during data transfer and consolidation
- Introduces the SOA concept to a worldwide level. Enterprise 6screens is an extensible framework that supports the configuration, deployment, and management of heterogeneous IS entities to achieve SOA
- Data interchange over the TIBCO ESB opens the door to the world of Complex Event Processing (CEP) and Real-Time Business Intelligence
- Accelerate the process of seamlessly integrating any enterprise entity

The *Enterprise 6screens Framework* is a combination of cutting edge TIBCO technology and PIKE's experience with various automation implementations and handling of global information systems. It's not your manufacturing plants that care about your business..... **IT'S YOU!** *PIKE's Enterprise 6screens Framework maximizes the utilization of your existing application infrastructure and seamlessly integrates newly added real-time technology applications. This ensures you reliable and fast data interchange in your IS, which is the basis for the real-time data you need to make relevant, competent, and impactful decisions.*

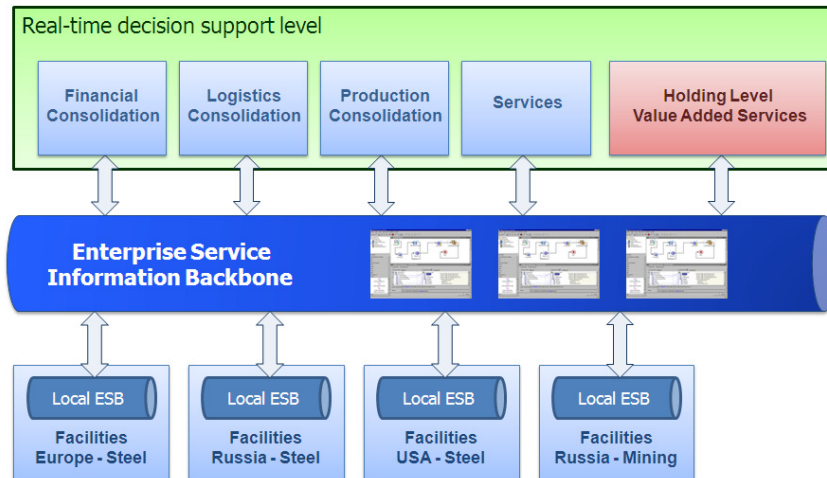


Figure 2 Enterprise 6screens Framework architecture

The schematic picture on the left represents the main layers of PIKE's Enterprise 6screens Framework. In the bottom part, there are local ESBs of particular enterprise entities. They interchange data with the global ESB, which is called the Enterprise Information Service Bus. The Enterprise Information Service Bus ensures that real-time consolidated data is delivered to the right decision support area for corporate business intelligence when it matters.

Benefits

- **Global Overview:** Across the entire company, consortium or holding.
- **Real-Time BI:** Real-time information across all levels of control. Appropriate and up-to-date information available for executive levels of management.
- **Ability to Respond to New Challenges:** Possibility to immediately create new processes at the enterprise level and utilize the consolidated power of the entire company as a competitive advantage.
- **Flexible Integration:** Using the Enterprise 6screens Framework brings the highest flexibility to the global IT infrastructure.

Features

- Creates visibility into the neural system of your worldwide enterprise.
- New data is real-time and available for other systems at the moment of maximum business impact.
- Enables easy and fast integration of acquisitions or new facilities into your enterprise infrastructure.
- Provides consolidated views across the whole enterprise, such as: global claims and liabilities reports, global credit limits, global production work in progress reports, etc.
- Available adapters for various applications, communication protocols, data formats and legacy systems

6screens Framework components

- TIBCO Messaging Bus
- TIBCO ActiveMatrix as Enterprise Service Bus establishing Enterprise Service and Information Backbone
- Real-time business intelligence module TIBCO Spotfire
- CEP, MDM, iProcess