



Where knowledge meets passion

*“Our experience with large-scale applications helped us devise a sophisticated solution to a complex problem. The result was a custom solution that met our customer’s mission-critical goals the first time around.”*

*Farhan Muhammad, President and Chief Architect  
ILM*

## CUSTOM APPLICATION SOLUTIONS

*Ensuring highly accurate results or a global manufacturing client*

### CHALLENGE

A high-profile global manufacturing company had a dilemma: how could it accelerate production and subsequent product launches without compromising quality? With thousands of assembly options available for each mission-critical transmitting product it produced, the company needed a custom manufacturing system to ensure highly accurate design, production and quality assurance. After two leading IT consulting firms failed to devise a successful solution, the company turned to ILM for answers.

### SOLUTION OVERVIEW

ILM technical consultants partnered with the customer’s IT department to architect and develop a system of mission-critical applications. These included a custom rules engine and syntax program designed to interpret the customer’s complex manufacturing rules. The result was a global manufacturing system that provided workers at each assembly line location throughout the world with step-by-step specifications for building each customized product.

### RESULTS

The global manufacturing system provided our customer with a scalable platform that allowed for future assembly applications. In addition, it supplied customer engineers, assembly technicians and plant managers with valuable information regarding exactly what product assembly steps must occur at each installation location. This real-time information led to shorter production schedules and higher quality assurance – resulting in faster, more frequent product launches.

### SCOPE

**Duration:** 2 years

**Hours Billed:** 5,600 hours

**Team Size:** 2

### TECHNOLOGIES

- Microsoft .NET 3.5 Framework
- SQL Server
- C#
- Windows Presentation Foundation (WPF)
- Winforms

### CUSTOM APPLICATION SOLUTIONS

Take advantage of our custom IT solutions for your large scale, high performance needs. We provide:

**Application Development**

**Business Analysis**

**Project Management**

**ALM with Team System**



## SOLUTION DETAILS:

ILM developed the custom manufacturing system by leveraging our extensive experience in custom-built scalable solutions for large-scale projects. Our solution included the following key components:

### MICROSOFT .NET 3.5 FRAMEWORK

This software helped expedite development efforts and provided a dynamic and reliable framework for the project. Advantages included:

- More stable computer environment via managed program code
- Easy application deployment and maintenance
- Assured application compatibility with current and future versions of Windows

### SQL SERVER

The best technology was used to build a robust server platform that incorporated:

- Minimized downtime
- Quick, easy access to financial information
- Maximized data mining capabilities
- Enhanced application performance, scalability and security

### C#

We leveraged C# to manage the sophisticated and complex database needs of the application. Various benefits consisted of:

- Versatile architecture that supported mass volumes of data
- More efficient and reliable manner of tracking, storing and transmitting relevant data to users

### WINDOWS PRESENTATION FOUNDATION (WPF)

A unified programming model helped us provide a rich user experience that incorporated:

- More flexible user interface components on windows workstations
- Transformation of screen layouts to custom, print-ready outputs

### WINFORMS

This graphical application programming interface provided:

- A rich Windows-based user interface compatible with a variety of Windows versions
- Feature-rich screens that allowed for a variety of input devices such as RFID readers, laser scanners, infrared devices and touch screens



## ILM

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## ABOUT ILM

ILM is one of the leading IT development solutions firms in the nation. We excel in all areas of the software development lifecycle. From analysis and development to implementation, our experts specialize in complex and mission-critical custom business applications for organizations of all sizes.