Visible
SYSTEMS CORPORATION
Engineering the Enterprise for Excellence®

A Visible Success Story

Presented by Eric Ross
Vice President of Operations
Plasfab Engineered Systems.

Located in Rhode Island, Plasfab Engineered Systems is a one of the leading suppliers of turnkey automated "small" electo-plating, surface finishing, and manufactured parts chemical processing systems. Plasfab has a wide range of customers in the electronics, aerospace, and general metal finishing inductries. Single and/or multiple line installations have recently been completed for IBM, NASA's Johnson Space Center, Vishay-Sprague, Pratt & Whitney, Kaman Aerospace, Englelhard Corporation and others.

Flexibility and responsiveness in rapidly producing highly customized, low cost, top quality processing systems are the keys to success in Plasfab's business. Thus, Plasfab's business strategy includes transitioning into an "agile manufacturer," yielding new approaches to internal operations, information management and sharing, and trading partner relations. This strategy will allow Plasfab to continually enhance both the capability and capacity of its core strengths of design, assembly, and fabrication; while using extensive, flexible outsourcing to similarly enhance the other aspects of it business.

In order to assist in its transition to agile manufacturing, Plasfab turned to Visible Systems, Incorporated, a leading supplier of application development tools, training and consulting services, for assistance. Visible provided us with all of the required models in terms of information structure, content, and flow for our agile manufacturing activities. They successfully converted Plasfab's strategic goals and objectives into an operational model and information systems architecture. The following overview briefly describes how we accomplished this.

Together with Visible Systems, we were able to identify Plasfab's strategic goals in terms of Growth, Market, Profitability, Cash Flow, Product Development, Process Reengineering, Trading Partner Relations, Employee Empowerment, Training, Core Competencies and Image. Additionally, we able to perform a SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis for Plasfab. Visible Systems was then able to capture this information in one of their toolsets, Visible Advantage, where it was reviewed and refined as necessary. Upon importing this information to The Visible Analyst, we were ready to develop the supportive operational and informational models. This phase was accompanied through the following activities:

Determine application primary functions	Functional Decomposition Diagram in Visible Analyst
Determine application secondary functions and related processes (level 2)	Context Diagram and Process Diagrams (Data Flow Diagrams) in Visible Analyst
Determine application primary data entities and related attributes.	Entity Relationship Diagram in Visible Analyst
Determine application stored procedures and table constraints.	Stored Procedures and Table Constraints in Visible Analyst
Briefing/ Progress Report to Plasfab Management.	Explanation of Task Deliverables and related documentation as follows:
	Functional Decomposition Listing
	Data Flow Detailed and Summary Listings
Refinements identified based upon feedback from user groups	Association Matrix of Data Stores and Entities
	Entity Relationship Detailed Listing and Business Rules.
Revise functional, process and data models based upon refinements.	Revised models with completed system definition and documentation

Briefing:

Completion and Final Reports to Plasfab Management

By the end of the third month we were able to identify, overall, our workflow including process models as well as a fully normalized logical data model. More specifically, we were able to specify our operational limitations, capacity requirements, core competencies and other drivers of agility. Through our work with the Visible Analyst we were able to develop the following:

A specification of the technical and business elements required for agile manufacturing,

A functional description of Plasfab agile manufacturing activities, an information architecture and operational work flow in support of those activities; and

An overview implementation plan on how to proceed in terms of application package software selection and/or the development of specific in-house applications.

Today Plasfab is well on its way to becoming an agile manufacturer. We credit much of our success to working with Visible Systems and the Visible Analyst ease of use. With the Visible Analyst we were able to effectively and efficiently store, document and share business, product, and process data throughout the internal and external organization in a very short time. Also, Plasfab will be able to communicate its capabilities and abilities to prospective trading partners in a easy-to-follow visual representation with a detailed functional description on an as needed basis.

Visible Solutions, Visible Success Stories, Visible Viewpoints, and other *Visible* white papers are available from our web site (http://www.visible.com).

For more information concerning this *Visible Success Story* please contact:

> ### Alan Perkins
> ### Vice President, Client Services
> ### (703) 739-2242 ext. 225
> ### alan.perkins@visible.com

About Visible

Visible Systems Corporation (Visible) is a world leader in software engineering solutions, tools, training, and consulting services. Founded in 1981, Visible has consistently pioneered products and practices for efficiently and effectively engineering mission-critical systems.

Visible's modeling and design tools are designed for software engineers, analysts, and designers interested in taking an architected approach to developing quality software solutions quickly.

Visible brings much greater value to customers by providing not only exceptional, proven software development products, but also skills improvement training, and on-site consulting. Visible helps software developers successfully support the changing needs of the enterprise, and helps the enterprise fully leverage its investment in information systems and technology.

Visible, a member of the Software Productivity Consortium, was founded to improve the effectiveness and efficiency of software development worldwide. Visible helps clients assimilate a rigorous and repeatable, disciplined, tool-supported Enterprise Engineering methodology for software component engineering through training, coaching, and mentoring.

- *Staff skills and productivity improve so that better software is developed faster.*
- *Standards are established and enforced.*
- *Metrics are identified and utilized.*
- *Appropriate tool sets are acquired and used.*
- *Software development quality becomes consistent and repeatable.*
- *Changing requirements are met rapidly and well.*
- *Maintenance costs (typically, 70% to 80% of software development budgets) are reduced significantly, often as much as 75%.*

Visible helps its clients become world-class software developers. With our assistance, clients improve processes and procedures until they are able to consistently develop quality information systems that exactly meet their own and their customers' critical information needs.