

A Visible Success Story

REENGINEERING SOFTWARE DEVELOPMENT PROCESSES

Visible specializes in helping organizations improve their internal processes to become world-class software developers

Client:

Sullivan Graphics Nashville, Tennessee

Background:

When the new Vice President for Information Services started work at Sullivan Graphics they had computer systems that were from 7 to 25 years old. These systems had been developed independently using different tools and technologies to support operational requirements and were therefore completely unintegrated. The new VP wanted to establish a common architecture for all information systems and technology in order to ensure that current and future corporate information system needs were met. She also needed to reduce her staff and increase productivity of the remaining personnel. *Visible* was contracted to provide training, consulting and automated tools to help Sullivan Graphics meet its strategic and operational corporate goals.

Results:

With *Visible* assistance, Sullivan Graphics rapidly developed an enterprise-wide, technology-independent business model using *Visible*'s Enterprise Engineering methodology and model-driven development tool, *Visible Advantageä*. This model documents their understanding of their business information requirements and is being used to evaluate the functionality of various packaged client/server applications. Being able to accurately identify the specific business requirements that the commercial packages will satisfy enables them to choose the one that best meets the requirements. It also allows new information system development to focus on those business needs not met by the packaged solutions. Further, Sullivan Graphics is able to more easily integrate reverse-engineered legacy systems with the newly developed and acquired systems.

At the same time, *Visible* helped Sullivan Graphics personnel reengineer their software development processes so that they can consistently produce quality information systems that exactly meet corporate and operational information requirements. We used a "mentoring" approach that resulted in significant skills improvement by Sullivan Graphics personnel. Our Enterprise Engineering methodology provides both a road map and a vehicle for an enterprise's journey into the future. The Enterprise Engineering life cycle involves a multi-phased approach that coordinates strategic, operational, and organizational demands. The following is a typical cycle:

- 1. Describe the enterprise mission in a brief statement of purpose: what the enterprise does, how, and for whom.
- 2. Make assumptions and gather data about external factors; for example, government policies, rates of inflation, markets, and demographic changes
- 3. Assess enterprise strengths and weaknesses.
- 4. Establish goals and objectives and measures linked to the enterprise mission
- 5. Develop strategic and operational plans to meet the goals and objectives
- 6. Design/re-design and integrate cross-functional processes to meet goals and objectives.
- 7. Implement information systems that support enterprise processes and assist decision-making.
- 8. Evaluate performance to ensure that goals and objectives are being met
- 9. Reevaluate and change goals, objectives, processes and measures as necessary

Enterprise Engineering often involves wholesale enterprise culture change, and is quite difficult. The innovative and constructive use of computer-based tools, at every step in the cycle, can make such change much easier.

Sullivan Graphics personnel are now fully capable of continuously improving their new processes and maintaining their enterprise business model in order to rapidly respond to changing business, customer, and competitive requirements.

At the same time the Information Services department reengineered their internal software development processes, they also, with our coaching and assistance, used our Enterprise Engineering methodology and computer-based tools to help the rest of Sullivan Graphics reengineer their business processes. The IS department has become integral part of all Sullivan Graphics BPR projects.

Our approach for helping organizations evaluate commercial software is described in the *Visible Solution*, "*COTS Evaluation*."

Other related papers include:

"Enterprise Engineering" "Successful Business Process Reengineering" "Software Engineering Process Improvement"

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:

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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.