SIEMENS

Automotive

I.DE.A Institute

Project development without borders

Products

NX, Teamcenter

Business challenges

Continuous innovation in new product development

Leveraging company knowledge across geographically distributed offices

Effectively interfacing per the client's business and technology needs

Keys to success

NX software for digital product development

Teamcenter software for heterogeneous data integration and knowledge sharing by the extended company

Results

Greater design capacity

Reduced editing time and frequency

Maximized re-use of information

Increased collaboration across diverse, geographically dispersed groups

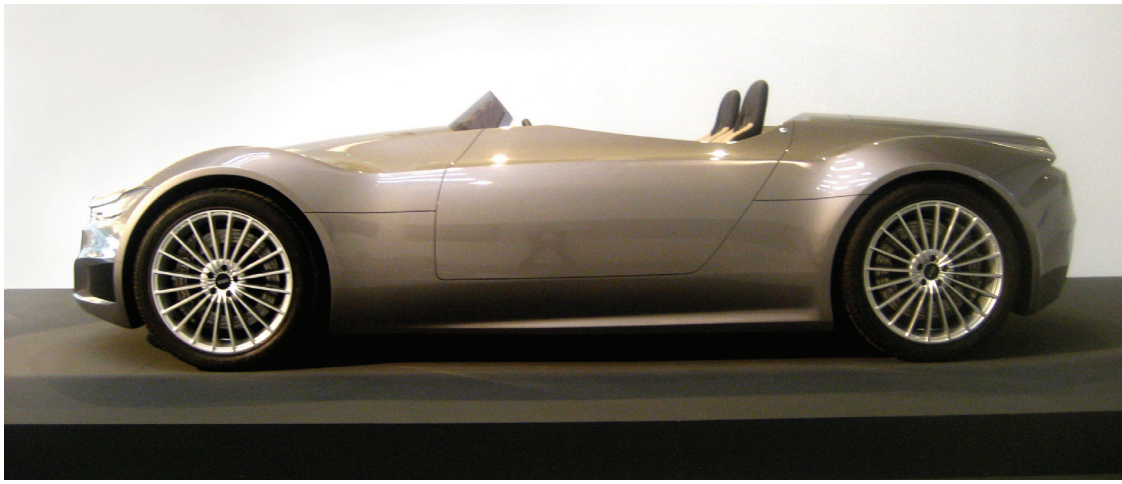
NX-Teamcenter combination enables fast, flexible and integrated design across geographies, resulting in greater innovation and styling

Comprehensive product development

Providing industrial design services since 1978, I.DE.A Institute possesses significant experience in the motorcycle, home appliances and furniture fields; however, it is best known for its innovative approach to design and engineering in the automotive sector. During the past thirty years, the company has been able to give body to the creativity and styling of internationally known designers, leveraging the most advanced technology solutions.

I.DE.A Institute was acquired by Rieter Group, a multinational company, in 2000. Reiter provided the support necessary to face an increasingly competitive marketplace and the gravitas to handle the challenges presented by globalization. Today the Turin office supports a network of branches including sites in France, Romania and China, with work teams in India and Brazil. The company employs more than 400 people. Despite its revenue of about €40 million annually being modest compared to some of the automotive industry giants, I.DE.A's expertise and know-how give the company a very successful strategic presence in the international marketplace.

Today I.DE.A Institute manages the complete product development cycle, including the concept, design and



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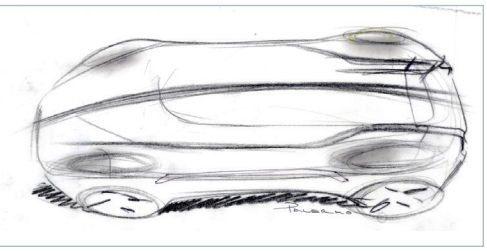
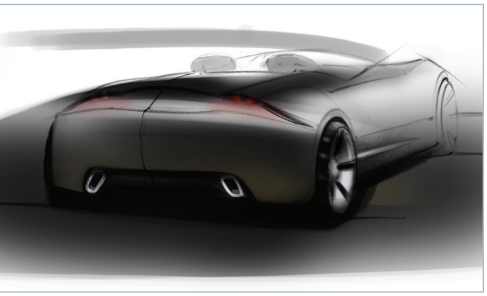
Matteo Beretta
Project Development Director
I.DE.A Institute





engineering stages, creation of style models in 1:1 scale, production of working prototypes and industrialization. In providing a technologically complete partnership for car manufacturers, I.DE.A Institute enhanced all the critical areas of its product development organization, restructuring its knowledge base to market requirements as well as acquiring new skills. Dr. Pietro Lardini, the company's chairman, notes, "Our current strategy is designed to optimize our work flow and process management. According to the demands of the market, we have abandoned once popular compartmentalized design in favor of a wholly flexible and integrated approach."

Multi-site coordination

The geographic distribution of the I.DE.A Institute's technical offices was a primary concern in being able to achieve such optimization, and the company did not underestimate the task. Among the main challenges the company faced was coordinating numerous work stages and project specifications (feasibility studies, simulations, style processing) across different offices, and doing so promptly and efficiently from a shared repository. The company also wanted to work "in sync" with the work methods of each client. To accomplish these goals, I.DE.A Institute implemented product lifecycle management (PLM) technology from Siemens PLM Software, including the NX™ digital product development system and Teamcenter® digital lifecycle management solution.

"NX is a very productive tool," says Matteo Beretta, project development director at I.DE.A Institute. He explains: "By finalizing projects developed from scratch with NX, we fully appreciate its parametric and associative nature, which allows us to significantly shorten design time and to measurably reduce the number of changes we typically require. NX enables us to keep tight control of our work throughout the development process. For example, on the same vehicle development shaft, concept and feasibility studies can begin in Turin while detailed development and equipment launch can start in Brazil. The NX master model faculty is particularly valuable for a company structured as a network, as is the case with our organization."

Beretta notes that I.DE.A Institute's decision to invest in Siemens technology represents a strategic move that enables his company to quickly respond to an exceptionally competitive automotive marketplace and especially the deep changes that are transforming the industry. Beretta notes, "Considering the dynamic nature of the market and particularly the multi-geographic distribution of the activities we simultaneously face, it is necessary to provide our collaborative teams an effective, integrated, heterogeneous design environment. We recognized Siemens as the right choice, in part, because many key automotive players, including our clients, were already using Siemens tools."

According to Beretta, Teamcenter has been critical in enabling his company to easily arrange and interchange data, and where appropriate, share knowledge throughout the company and its interlocutors, OEMs, partners and suppliers. Teamcenter enables data from different tools to be merged, serving as a product information backbone. The solution has been particularly advantageous in allowing the company to overcome particularly challenging design stages.

Market trends and innovation

As a design consultancy, I.DE.A Institute aggressively employs its Siemens product development technology to respond to the sharp sensitivities of market requirements and trends, where a company's special intuition and innovation strengths are critical to success. The company reports an increasing inclination for researching low cost vehicles (both in terms of production and energy consumption) and fielding

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requests for cars designed with not only fewer components, but with ones that are recyclable.

"We cooperated on the implementation of all the most important low-cost vehicles on the world market," says Dr. Lardini. "The Tata Nano, for example, represents an important low-cost design assignment that entails reducing vehicle weight, slashing production costs and simplifying overall functionality. Moreover, the application of carry-over concepts (that is borrowed from existing models) was not possible and therefore required designing the structure starting from zero."

I.DE.A Institute's versatility is exemplified in its work on vehicle systems for Fiat VSS, Fiat Tipo, Nissan Terrano II and Daihatsu Move and in the company's strong collaborative work with Changan and Hainan, (rising manufacturers in China). Recently, I.DE.A Institute completed a 1:1 scale project within 30 days – the energetic and elegant roadster ERA, a fabulous show car. The project continues to evolve, and the definitive version of the concept car will be exhibited in the prestigious international showcase of the Geneva Auto Exhibition 2009. Dr. Lardini says, "The name of this beautiful concept car, ERA, also symbolizes a new era. He notes, "With the introduction of ERA there is also our recent opening of a new operations site in Brazil. I.DE.A Institute's future looks bright."

Solutions/Services

NX
www.siemens.com/nx

Teamcenter
www.siemens.com/teamcenter

Customer's primary business

I.DE.A Institute specializes in the automotive sector, managing all stages of product development, including the concept, design and engineering stages, creation of style models in 1:1 scale, production of working prototypes and industrialization. The company is recognized for its ability to give body to the creativity and styling of internationally known designers and for its expert application of advanced technology in delivering collaboration and value.
www.idea.institute.it

Customer location

Turin
Italy

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