

GID Development Corp.

Helps inventors think big with CATIA, ENOVIA SmarTeam and 3DVIA Composer



Overview



■ Challenge

GID Development Corp. needed solutions powerful enough to design a wide range of complex products quickly, and accurately convey the designs to overseas factories for right-first-time manufacturing.

■ Solution

GID implemented DS PLM, including CATIA to empower its designers, ENOVIA SmarTeam to manage data complexity, and 3DVIA Composer to collaborate with its manufacturing partners in China.

■ Benefits

GID models multiple 3D design options in a fraction of the time previously required, allowing it to deliver on its customers' vision quickly and helping to nearly double profit margin per project.

“The engineering and design disciplines we’ve been able to master utilizing our Dassault Systèmes solutions rival anything that any team of engineers at any enterprise level is able to do. CATIA, ENOVIA SmarTeam and 3DVIA Composer are critical to how we compete and win.”

Pat McCarville, President,
GID Development Corporation

GID: Small, but thinking big

With just six employees, GID Development Corporation is a small company with a big challenge: working with inventors to design and manufacture a dizzying array of products.

Each project is unique. GID must quickly arrive at just the right design to capture the inventor’s vision while creating a product that is durable and cost effective. And it must do it all efficiently and accurately, launching its customers’ products ahead of the competition at prices that win in the marketplace.

To achieve its vision, GID makes its design solutions a top priority. “We embrace technology like no other company at our level would or could,” says GID President Pat McCarville. “We level the playing field for our customers to go from idea to market and compete with large enterprises in the same product category. We couldn’t even conceive of doing that without efficient technology that works without placing boundaries on our designers’ creativity.”

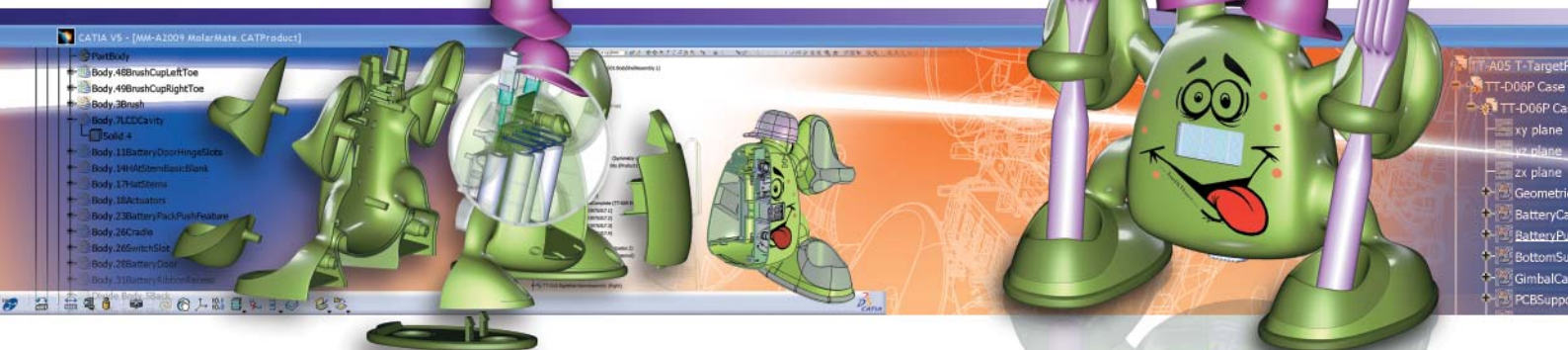
To succeed, GID chose Dassault Systèmes Product Lifecycle Management (DS PLM) solutions.

DS PLM technology powers profitable growth

Founded in 1998 as a small design boutique, GID has evolved into a true one-stop source for product development and production, offering everything from initial concept to manufacturing. In the process GID has embraced technology, from its first investment in CATIA for 3D virtual design to its deployment of ENOVIA SmarTeam to manage its burgeoning data challenges. Its latest choice from the DS PLM portfolio, 3DVIA Composer, communicates design intent to GID’s customers while clearly guiding its manufacturing partners in China through the complexities of mold-making and final assembly.

GID founder and lead designer Jim Grimes believes blazing a path with new technology has been pivotal to the company’s success. “These solutions





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Jim Grimes, Founder and Lead Designer, GID Development Corporation

pay for themselves on the first one or two projects, because without them you couldn’t even do the projects,” he says.

Adds McCarville: “The engineering and design disciplines we’ve been able to master utilizing our Dassault Systèmes solutions rival anything that any team of engineers at any enterprise level can do. We can make any type of product, from a toothbrush training device for children to digital air control valves for automotive paint spray guns. But we couldn’t do it without embracing this technology and capitalizing on it.”

GID’s pioneering spirit is paying dividends, allowing it to take business its competitors cannot and delivering a start-to-finish capability offered by few in its market niche. “Prior to our effective implementation of DS PLM, our margin per project was 9% to 12%, McCarville says. “Today, GID achieves margin per project of 20 to 25% when the projects are in full production.”

“Growth in fiscal 2007 and into fiscal 2008 has resulted in a 45% increase in revenue that has come by adhering to GID’s best practices, which are based in accelerated proficiency with existing and new CATIA tools,” McCarville says. “And the best part is that GID’s headcount is the same as it was in fiscal 2004-05.”

DS PLM also has allowed GID to serve bigger clients with recurring business. “Five years ago, we took \$5,000 to \$10,000 contracts, with no commitment

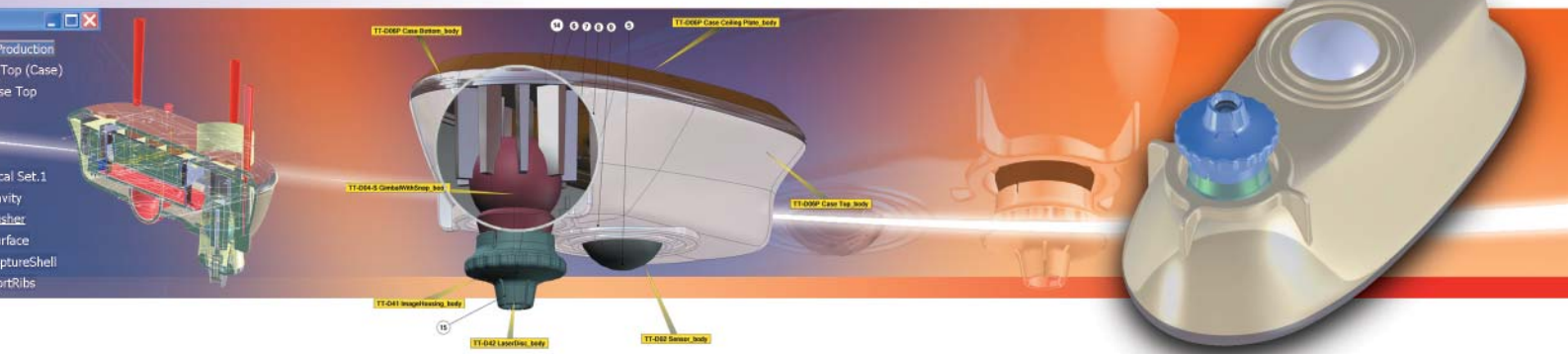
to the follow-on business,” Grimes says. “Now, some of our contracts are hundreds of thousands of dollars. That journey has been powered by CATIA. And as we add more technology like ENOVIA SmarTeam and 3DVIA Composer, we ensure our future.”

CATIA for Design: boosting innovation for design excellence

GID has combined the capabilities of CATIA Imagine & Shape and CATIA Functional Molded Part to offer design capabilities its competitors simply cannot match using other design tools. Both modules are part of the CATIA for Design solutions portfolio.

GID begins with an old technology gone digital – the ability to work on a computer in Imagine & Shape as if the image on the screen were modeling clay. Imagine & Shape allows designers to tug a form into any shape imaginable, enabling free-form design studies without the need for physical mock-ups. Designers can quickly arrive at the optimal balance between pleasing form and practical functionality while maximizing the emotional content that makes consumers consistently choose one product over another.

This technology – unique to CATIA – allows designers to play and experiment with a design challenge. Projects that would require hundreds of features and complex structure trees in a parametric-based tool can be achieved with a few dozen features in CATIA Imagine & Shape. The designer



literally does not need to know where the design is going until it arrives, and can back up and restart any number of times from any design direction.

“CATIA does everything I can dream of doing,” Grimes says. “With Imagine & Shape I can quickly develop several concepts, then easily modify them with the client to achieve a single design. That single design can then proceed to the next development phase. Using CATIA, we’ve achieved time savings of 30% in the completion of a project’s first phase.”

Making parts right the first time, every time

Functional Molded Part, meanwhile, accurately turns the design into a manufacturable product, from splitting the core of a mold and defining cavity geometry to addressing considerations like drafts and parting lines. Functional Molded Part gives GID the confidence that the designs it sends to its manufacturing partners will result in a perfect prototype on the first try, every time.

“We can’t afford to send files over there and guess whether the part’s going to come back right,” Grimes says. “If I give a Functional Molded Part design evaluated with the Core & Cavity functionality to a manufacturer in China, I have 100% confidence that they’re going to be able to make us a mold. It’s right, and we win.”

Functional Molded Part delivers more

than just manufacturing accuracy, however. It also contributes to reducing design cycles and managing complexity. “With the variety and complexity we deal with, it’s a real key to my ability to keep up with the demand and quality our clients expect,” Grimes says. “It lets me do things I just couldn’t dream of doing any other way. If you really get into some of the finer features of CATIA, you can become a powerhouse as a small business.”

ENOVIA SmarTeam maximizes design efficiency

As the company moves forward strategically for the future, GID has implemented ENOVIA SmarTeam to streamline its management of 3D design data, as well as its development and outsourcing processes for manufacturing.

ENOVIA SmarTeam has allowed GID to improve its processes from 3D design through to communication with suppliers. As McCarville points out, this makes the company “multi-task capable.” It helps GID manage its data to create accurate BOMs for manufacturing, track parts and costs, and quickly locate data for reuse in new projects. ENOVIA SmarTeam also gives McCarville the ability to communicate directly with the supply chain using product design files, allowing GID’s designers to stay focused on design, not business processes.

When every minute of each designer’s time is critical, ENOVIA SmarTeam



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maximizes efficiency by being quick and easy to implement, plus simple and transparent for routine daily use. "We see ENOVIA SmarTeam as a strategic part of our plan as we go forward as a company," Grimes says.

3DVIA Composer documents products without words

GID also is employing 3DVIA Composer, harnessing the advanced 3D technologies long used by engineers for the benefit of users throughout the enterprise – and beyond.

3DVIA Composer reuses existing product design and manufacturing data to cut the time and cost in producing documentation. Particularly for a small company like GID, simplifying the technical draft and illustration process with 3DVIA Composer makes collaboration easier, less time consuming and less expensive. Each time a design change occurs, documentation created with 3DVIA Composer updates as well.

GID uses 3DVIA Composer to "wow" many of its clients by demonstrating the design, assembly and practical use of products early in the design process. 3DVIA Composer also simplifies the process of working with GID's Chinese manufacturing partners. Using 3D design data from CATIA, Composer automatically explodes designs to show how they should be assembled while checking for clashes and other common errors.

Best of all, 3DVIA Composer helps communicate without the language barrier that sometimes occurred in the past, saving time and making changes easier to incorporate. Because everything is communicated visually, words and expensive translations are not required.

GID: positioned for the future

McCarville and Grimes plan to position GID to collaborate with people throughout the "disengaged" global enterprise of the future. DS PLM solutions are critical to "threading" their small business into that future. "Our idea is to invest in it, learn it, and roll with the changing landscape," Grimes says.

In the meantime, GID has "streamlined our design processes and we're saving time," Grimes says. "That improves our efficiencies and capabilities, keeping our customers happier and boosting our profits."

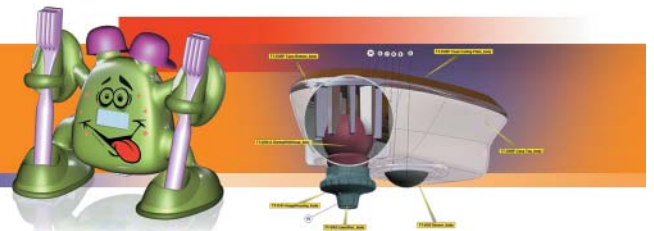
GID is now engaging with confidence in projects with more complex design requirements. "We're able to provide clients with a confidence level we never have before," McCarville says. "With DS PLM, we exceed the competition and demonstrate to our clients that we can do things no one else can."

"CATIA Imagine & Shape and Functional Molded Part let me do things I just couldn't dream of doing any other way."

Jim Grimes, Founder and Lead Designer,
GID Development Corporation



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