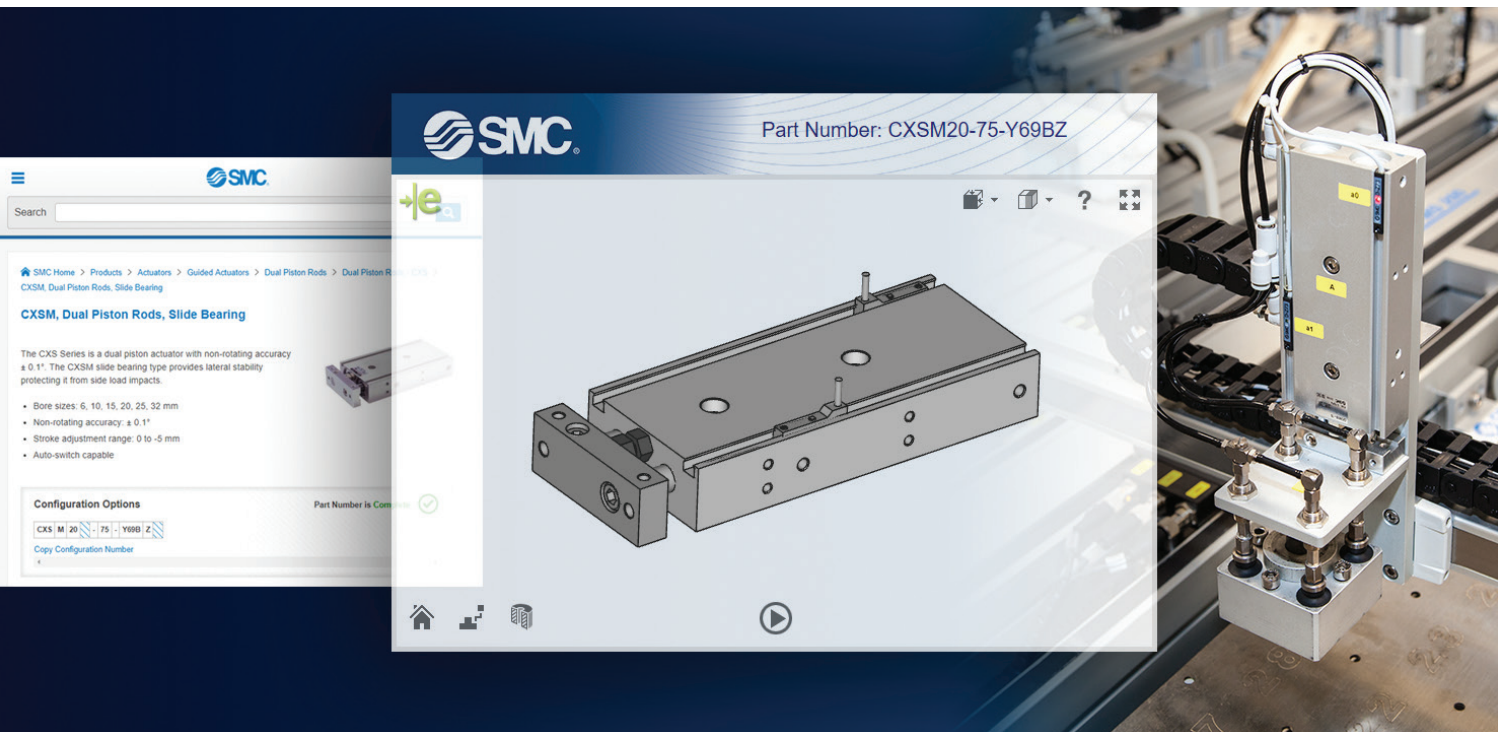# HOW TO DRIVE SALES ONLINE WITH A 3D DIGITAL CATALOG

White Paper

SUMMARY

The internet creates opportunities and challenges for manufacturers of off-the-shelf components, many of which formerly relied on printed catalogs to market their products. Today, the web has quickly become the primary medium for driving component sales. Product designers and engineers, who once searched through paper catalogs to select parts for use in their designs, now regularly search for and download configurable component models from online 3D catalogs, and then import them into their designs—virtually guaranteeing sales. However, establishing and supporting 3D digital catalogs in an efficient, affordable manner remains a challenge for many component manufacturers. This paper examines 3D digital catalogs—from concept and approach through implementation, maintenance, support, and results—including how the 3D ContentCentral® online catalog service from Dassault Systèmes provides the flexibility, access, and efficiency that component manufacturers need to support their 3D digital catalog in a cost-effective manner.

RESPONDING TO THE TREND TOWARD ECOMMERCE MARKETS

Although the dot-com bubble of the last century revealed that a singular focus on the web economy was a bit premature, the trend toward eCommerce has accelerated over the ensuing two decades, affecting some industries and markets more than others. The impact of online shopping on the retail consumer market has been the most dramatic, with online retailers impacting brick-and-mortar stores to the point of disruption. The seemingly weekly news accounts of additional retail store closings serves as a stark reminder of how eCommerce now dominates the consumer retail marketplace. In short, online retailers are growing while traditional stores selling the same items are retracting.

Manufacturers of off-the-shelf components and assemblies find themselves in a similar situation. Historically, manufacturers of volume component products—including fasteners/connectors; valves/pumps; casters; switches; tubing; and a range of other mechanical, electrical, and electronic components—have marketed their products through printed catalogs. These catalogs generally provide descriptions, photos/illustrations, part numbers, dimensions, options, capacity/travel, pricing, and ordering information for each item. In the past, product designers and engineers would reference these catalogs to find the parts they needed, whether they were developing a piece of industrial equipment or an innovative consumer product. They would then remodel the components as accurately as they could for inclusion in their own designs.

With the advent of 3D online technologies, designers and engineers no longer want to remodel components from a catalog. Today, they not only want to download a 3D model of a component for direct import into their designs but also want a specific configuration of the model in their native design format. In this context, eCommerce does not relate so much to customers making an immediate online purchase as it involves downloading component models in 3D, an act that typically produces volume sales at a later date. Failure to meet this emerging model download standard in the component market will most likely result in disruptions similar to those affecting the retail space.

However, it's not just the risk of business disruption with which component manufacturers need to be concerned. A 3D online catalog also provides real opportunities for business growth and brand promotion. Every component model that is downloaded from the web can generate a lead, promote the brand, and could likely result in a sale. Component manufacturers can achieve this type of targeted market reach while maintaining or decreasing the cost of leads/sales that they have experienced using a printed catalog. This paper explains how.
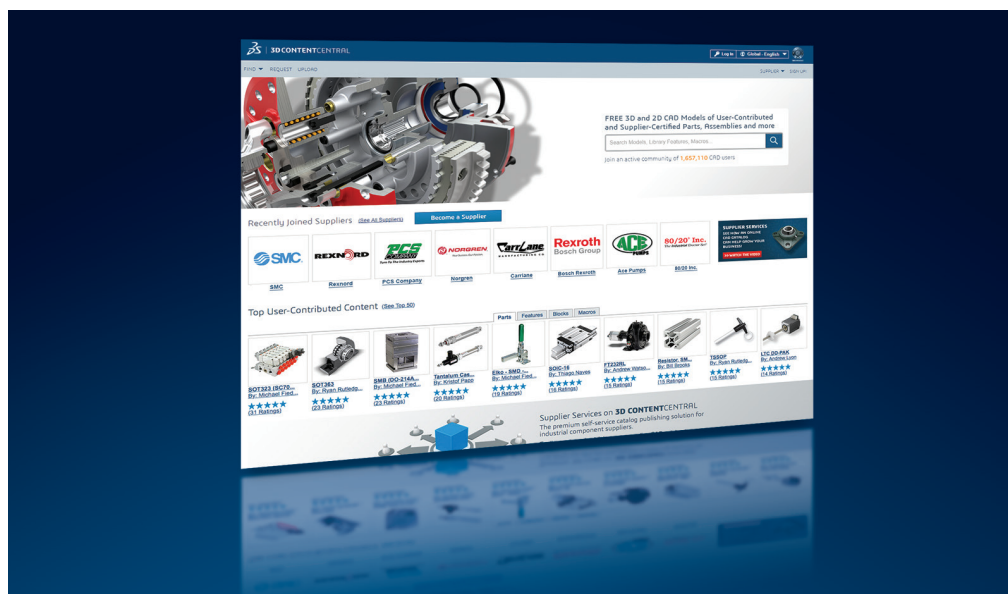
WHAT IS A 3D DIGITAL CATALOG?

A 3D digital catalog resides online and is similar to a traditional printed catalog but with important differences, technical capabilities, and additional benefits. Many of these relate to the model download capacity of a 3D online catalog, an act that connects manufacturers with their prospective customers in ways that a paper catalog cannot.

Pump provided by Ace Pumps.

Easy to Access and Search Online

Anyone who has conducted research the old-fashioned way—in a library using reference books, magazines, and periodicals—and who has then completed a web search using keywords quickly appreciates the speed and convenience of an online 3D catalog. Instead of scanning through indexes across different catalogs to find the part or assembly that they want—and then verifying that the catalog is up-to-date and that the component is still available—designers and engineers can quickly locate what they need by typing a keyword or two and hitting "enter". If a supplier's models are not available online and those of a competitor are, the competitor's product may be selected instead. A 3D digital catalog provides convenient, fast, and easy access to part models anytime and from anywhere.

Configurable 3D Models for Download

Product developers use 3D computer-aided-design (CAD) models, not photographs or illustrations, to design products. When a particular component is listed in a paper catalog with multiple possible configurations, those are frequently presented in table form under a single image, making it difficult to visualize different configurations of the same part. A design engineer wants to see how a specific component configuration works within his or her design or assembly. With a 3D digitial catalog, component manufacturers can provide all configurations of a part model for download, allowing would-be customers to try different configurations of the same part in their designs instead of looking for another, possibly competitive part in another catalog. Configurable model downloads in leading 3D design data formats represent the main difference and benefit of a 3D online catalog.

Model Downloads Generate Leads, Drive Traffic, and Close Sales

With traditional component sales and marketing methods—such as telesales, trade shows, and distributors—paper catalogs remain the primary point of reference for providing product and ordering information. Once a catalog is delivered to a customer or prospect, manufacturers have no way of knowing what recipients are doing with the catalog until they receive an order. While paper catalogs rely on distribution lists and order forms to generate leads and execute sales, an online 3D catalog utilizes its worldwide reach and model downloads to generate leads, which are captured when the model is viewed or downloaded, and ultimately, sales. 3D digital catalogs specifically target likely customers and capture their information via model downloads.

...A CASE IN POINT

The US subsidiary of the world leader in pneumatics, SMC Corporation of America produces a wide range of pneumatic components, such as cylinders, actuators, regulators, and valves, for the North American market. In 2001, the company sought to transition away from the paper catalogs it had traditionally used to an online 3D catalog that provided customers with access to configurable models of SMC components for download.

SMC collaborated with Dassault Systèmes (DS) SOLIDWORKS to develop an online catalog service, which evolved into the 3D ContentCentral® (3DCC) supplier model download service. SMC chose 3DCC because the service is affordable, easy to update/maintain, and provides access to more than 3 million SOLIDWORKS users worldwide.

According to Online Marketing Manager Brad Weedon, this approach has increased web traffic on SMC's website by 10 to 15 percent each year, increased the number of leads generated, and grown sales.

"Today, we have 50,000 to 60,000 daily page views with roughly 5,000 to 6,000 model downloads per day, of which 5 to 15 percent come from 3D ContentCentral," Weedon points out. "We are realizing an increasing number of total model downloads in all CAD data formats each year, and 50 percent of those downloads are in the SOLIDWORKS format."

Read the full SMC story by clicking here.
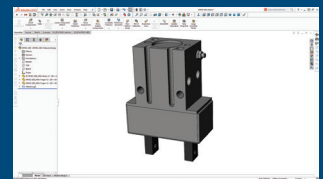
HOW MANUFACTURERS BENEFIT FROM 3D DIGITAL CATALOGS

Manufacturers of off-the-shelf, configurable components with 3D online catalogs realize a range of important benefits both externally and internally. Many companies with online catalogs report increased sales and improved customer satisfaction. In addition, keeping the accuracy of design data current is easier and less costly than producing, printing, updating, and mailing paper catalogs, many of which are nearly out-of-date the day that they are published.

Targeting Strategic Market Segments

With a 3D online catalog, manufacturers can strategically target specific market segments and increase visibility for their products, not just in existing domestic markets but worldwide. Because 3D design data is universal, there are no barriers to gaining exposure among new sets of potential customers. Model downloads simply expand a manufacturers reach globally. Because the product model becomes the focus of a prospective customer's work, the manufacturer's brand remains front and center during a product developer's design decision-making process, contributing to brand awareness and, in many cases, the eventual purchase of the component.

Up-to-date Design Data Increases Accuracy and Quality

By providing the model from which a part is made for download, component manufacturers can ensure that the design data utilized by their customers is current and accurate. This results in improved quality and the elimination of modeling errors that can negatively affect sales and production. When a customer re-models a component using the information in a printed catalog, the likelihood that the model is perfectly accurate is low. Misrepresented, inaccurate models can complicate the sales and production process because the part no longer fits within the customer's design. The accuracy of model downloads ensures that the part will always fit because it exactly matches the final physical component.

Produces Sales 80 Percent of the Time

Perhaps the most important benefit of an online 3D catalog is that a model downloaded virtually ensures a later sale. Studies have shown that when a designer or engineer downloads a component model, their company eventually purchases the component—often at high volume—about 80 percent of the time.* This is because downloading and importing a model is part of the design engineering workflow, at the end of which the design and imported component are frozen ahead of production planning and sourcing. Typically, the only occasions when a downloaded model doesn't result in a sale is when the product design that includes the component is never released to manufacturing or when the prospective customer finds a less expensive or better fitting alternative elsewhere.

DO USERS PURCHASE PARTS AFTER DOWNLOADING AND INSERTING A 3D VERSION INTO THEIR DESIGNS?

Yes
~80%

No
~20%
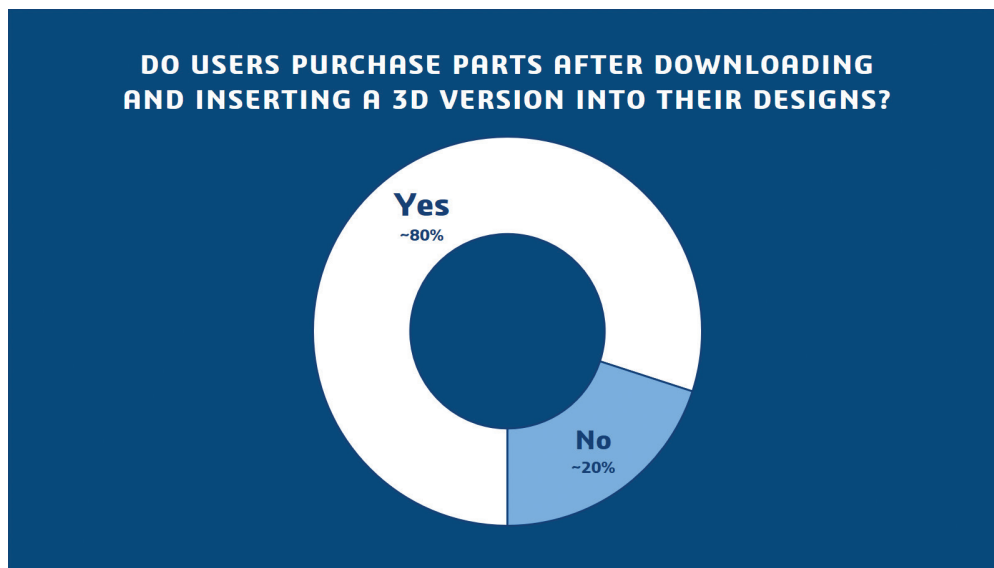
Supports Model Configuration

Another benefit that a 3D online catalog provides to component manufacturers is the ability to provide potential customers with multiple configurations of the same part. This enables designers and engineers to try out various model configurations of a manufacturer's component—to identify the specific configuration that works best with his or her design—before looking elsewhere. Unlike paper catalogs, which require customers to do a lot of modeling work to try out different configurations of a part, 3D online catalogs let design engineers quickly and easily try out all of the various versions of a part, letting them exhaust all possibilities for a part before deciding to evaluate other parts.

Provides Customer Analytics

While the 80 percent lead-to-sales-conversion ratio is clearly much higher for 3D online catalogs than it is for printed versions, online catalogs also improve a manufacturer's understanding of customer and prospect requirements through the analytics potential of model download and lead data. In addition to helping track lead-to-sales conversion rates, online catalogs provide data that can be mined to show what products individual customers are downloading the most, what specific configurations of a product are the most in demand, and what components are not being used that much. This type of data analytics is also useful in bringing a more strategic approach to component product development.

...A CASE IN POINT

Triad Magnetics is a leading manufacturer of magnetic components for medical, industrial, commercial, and aerospace applications. The company has historically relied on its printed catalog to market its products and drive sales through its network of distributors.

However, Triad Magnetics started receiving requests from customers, distributors, and sales professionals for 3D models of its components, and these requests became a weekly occurrence by 2014. That's when the company began evaluating hosting its model library itself or working with a supplier service to support model downloads.

Triad Magnetics chose the 3D ContentCentral® online catalog service—beginning at the free self-service level in 2014 and upgrading to 3D ContentCentral Professional in 2015—because it was easy to get started, was associated with the SOLIDWORKS® 3D design software used by many of its customers, and provided the scalability to grow into lead-reporting and syndication levels.

 The magnetics supplier now has 1,612 different product models available for download via 3D ContentCentral, resulting in an average of 1,500 views and 500 model downloads each month, and a 20 percent increase in web traffic.

"The 3D ContentCentral service has been really good for us, particularly over the last year," notes President William Dull. "When someone downloads one of our models, the system captures their name and contact information, which goes into our sales and marketing funnel."

Read the full Triad Magnetics story by clicking here.
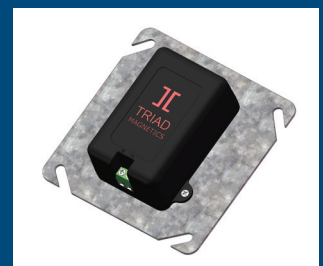
HOW TO BUILD A 3D DIGITAL CATALOG

Creating a 3D online catalog obviously carries a host of tangible marketing, brand awareness, and sales benefits for component manufacturers. So, what's the best approach for building an online catalog that enables downloads of configurable 3D part models; captures contact information of prospects; and is easy to support, update, and maintain? The answer to that question depends on the size of the company, the amount of available resources, and the specific markets that a component manufacturer is trying to reach.

Do It Yourself

Many component manufacturers have chosen to create a 3D online catalog that resides and is maintained on their company's web site. Others choose to utilize a dedicated service provider, which can be accessed through the company's and/or the service's web site. While both approaches have advantages, the do-it-yourself approach carries additional costs, including initial and ongoing investments in skilled web development resources, and the creation and management of design model libraries, including all available configurations. A third group of part producers utilizes a two-headed approach—access to downloadable models from their own web sites as well as use of a separate supplier service—to extend their online footprint, which generally allows them to generate additional model downloads and more leads.

Work with an Expert

For many companies, however, working with a service provider with expertise in this area is more efficient and cost/resource-effective than doing it themselves due to the level of automation and economies of scale through which service providers operate. Things to look for include whether the service uses open or proprietary technology, because proprietary systems are more resource-intensive and costly in the long run; offers only full-service, only self-service, or a combination of the two; and provides direct connections to engineering markets and communities. For example, the 3D ContentCentral online catalog service from Dassault Systèmes connects component manufacturers directly with the SOLIDWORKS engineering community—arguably the largest group of product developers in the world—uses open technology to simplify updates, and offers both free self-service and paid full-service capabilities.

...A CASE IN POINT

Cylinders & Valves, Inc. is a family-owned pneumatic and hydraulic supply manufacturer, which has produced high quality, small-bore, pneumatic and hydraulic cylinders, valves, and fittings since 1958. Unlike large manufacturers, Cylinders & Valves will customize its products to meet specific customer requirements.

As a small company with limited engineering resources, adhering to the company's customization commitment is an ongoing challenge, especially as customer requests for 2D and 3D CAD models have become increasingly frequent. To improve efficiency in honoring product model requests, Cylinders & Valves subscribed to the 3D ContentCentral® online catalog service in 2016 because it is easy to use, affordable, and supports configurable model downloads in all major CAD formats.

"At one time, referring to a hard-copy catalog or looking at a PDF image was sufficient for many of our customers," says General Manager Katherine Frederick. "Today, nine times out of 10 customers not only want the information online, but also want the 3D CAD model in their native format. With 3D ContentCentral, we are able to satisfy this need without breaking the bank."

By subscribing to 3D ContentCentral Standard, Cylinders & Valves achieved 850 model downloads in the first year, increased web traffic by 15 to 20 percent, realized an additional lead generation mechanism, and freed up engineering resources for custom and new product development.

Read the full Cylinders & Valves story by clicking here.
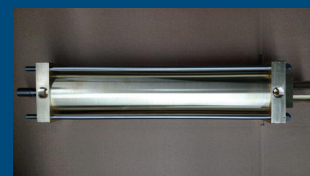
MAXIMIZE 3D CATALOG PERFORMANCE WITH 3D CONTENTCENTRAL

Manufacturers of off-the-shelf components can maximize online 3D catalog performance, while minimizing costs and maintenance requirements, by working with the 3D ContentCentral catalog service from Dassault Systèmes. This is an easy way to get your catalog up and running, utilizing the free, self-service approach to provide your 3D component models for download.

Access a Large Design and Engineering Community

With the 3D ContentCentral online catalog service, component manufacturers gain access to the global network of design professionals who use the SOLIDWORKS product development platform, as well as other leading design packages. With access to more than 3 million users and growing, 3D ContentCentral is recognized as the go-to supplier portal for a powerful design and engineering community. Because of the dominant presence of the SOLIDWORKS design platform in machine design, mold and tooling, electronics, manufacturers, and consumer product development, and 3D ContentCentral's ability to support additional CAD file formats, you can quickly and easily establish a model download capability for millions of designers and engineers, using a variety of systems, worldwide.

Self-Service and Full-Service

A valuable aspect of the 3D ContentCentral service is that it allows you to walk before you run. In other words, you can choose to start by making your configurable component models available for download simply by joining 3D ContentCentral at the self-service Free level and uploading your 3D content. You can then get access to more benefits by moving to the fuller-service, fee-based options as necessary. These levels include Standard, through which you are listed as a verified supplier with the option to receive up to 200 leads per month and 5GB of model disk space; Professional, through which you can syndicate 3D ContentCentral to your own web site, and receive up to 1,200 leads per month and 25GB of disk space; and Premium, which lets you customize your 3D Catalog on your web site using Application Programming Interfaces (APIs), integrate your 3D models into e-commerce solutions such as Configure, Price, Quote (CPQ), and receive up to 3,000 leads per month and 100GB of disk space.

Supports All CAD Formats

Just because 3D ContentCentral was created by Dassault Systèmes, developer of the SOLIDWORKS 3D CAD system, doesn't mean that the service is only available to companies who use SOLIDWORKS design. Because 3D ContentCentral is built on open technology, it can support all leading 2D and 3D CAD formats as well as universal data formats, such as IGES and STEP. While 3D ContentCentral has special advantages for SOLIDWORKS users—particularly when it comes to configurations—it supports the same level of model update and model download capability regardless of CAD format.

Leverages and Promotes Your Brand Identity

Brand identity is crucial for component manufacturers as some of their components have become synonymous with their brands. With the 3D ContentCentral catalog service, you will maintain your logo and brand identity throughout every part of the web site from which users can download your models. 3D ContentCentral is designed to supplement a company's web presence, not replace it. This is why many suppliers link to 3D ContentCentral from their web sites to support model downloads or take advantage of web syndication to embed a 3D ContentCentral 3D catalog directly on their own website.

Simpler and More Affordable for You to Maintain and Support

Using 3D ContentCentral for component model downloads is easier and less costly to maintain and support. Updating model data—including eliminating some models, adding new models, and modifying existing models—can be as easy as updating individual models when necessary or providing an updated XML file on a quarterly or monthly basis to mass edit. Due to the large number of suppliers who take advantage of the 3D ContentCentral service and the automation technology used on the site, suppliers benefit from the economies of scale involved, which helps to keep costs low.

Detailed Model Download Data and Lead Analytics

A valuable aspect of the 3D ContentCentral service is that in addition to expanding a component manufacturer's web footprint and supporting model downloads, the service provides detailed statistical data on what models were downloaded and by whom on a monthly basis. Suppliers can utilize this detailed lead data to conduct follow-up sales activities or drive data analytics, both of which can positively impact your bottom line.

Secure, Satisfying User Experience

With its registration and log-in protocols, 3D ContentCentral is designed to provide every user to the site—whether they are a designer, engineer, or supplier—with a secure, satisfying user experience. A great deal of user input and research has been done to make 3D ContentCentral easy to navigate and use, and ensure that suppliers' models are secure. Suppliers can also safeguard proprietary model information by utilizing tools in SOLIDWORKS, or other CAD systems, and following recommended methods to only share shells of models on 3DContentCentral, which eliminates access to proprietary internal parts.

3D CONTENTCENTRAL BENEFITS

- Increase your exposure by distributing 3D CAD models of your products to a global network of designers and engineers.

- Ensure designers & engineers include your product in their designs by providing them with 3D models.

- Follow up with prospects who download your 3D models to generate sales and grow your business.

- Enhance your customers experience by offering your 3D CAD Catalog on your website.

CAPITALIZE ON ECOMMERCE OPPORTUNITIES WITH 3D CONTENTCENTRAL

The internet presents exciting eCommerce opportunities through the creation of 3D online catalogs. By enabling configurable model downloads of component products by customers and prospects, you can successfully transition from an increasingly obsolete way of doing business, avoid the disruption roiling other traditional markets like brick-and-mortar stores, and position your company to reap the benefits of conducting business online.

With the 3D ContentCentrals online catalog service from Dassault Systèmes, component manufacturers can quickly and easily create an online presence with a free 3D catalog, and grow into the 3D ContentCentral paid service options that best meet their organization's sales and marketing needs. With its catalog flexibility, targeted reach, and automation efficiency, 3D ContentCentral provides component manufacturers with an effective, affordable solution for developing an online 3D catalog that contributes to their company's success.

To learn more about how the 3D ContentCentral online catalog service can improve your marketing, lead generation, eCommerce, and sales, visit **www.3DContentCentralSupplierBenefits.com** or call **1-774-369-1300**.

Our **3D**EXPERIENCE® platform powers our brand applications, serving 12 industries, and provides a rich portfolio of industry solution experiences.

Dassault Systèmes, the **3D**EXPERIENCE® Company, provides business and people with virtual universes to imagine sustainable innovations. Its world-leading solutions transform the way products are designed, produced, and supported. Dassault Systèmes' collaborative solutions foster social innovation, expanding possibilities for the virtual world to improve the real world. The group brings value to over 220,000 customers of all sizes in all industries in more than 140 countries. For more information, visit **www.3ds.com**.

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Americas
Dassault Systèmes
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02451-1223
USA

Europe/Middle East/Africa
Dassault Systèmes
10, rue Marcel Dassault
CS 40501
78946 Vélizy-Villacoublay Cedex
France

Asia-Pacific
Dassault Systèmes K.K.
ThinkPark Tower
2-1-1 Osaki, Shinagawa-ku,
Tokyo 141-6020
Japan