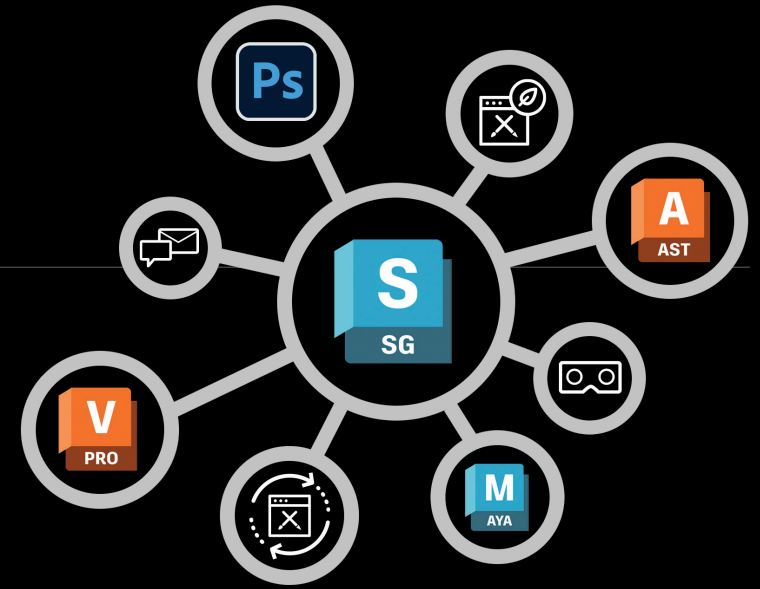




SHOTGRID

**Connect your design studio
for faster feedback and
streamlined processes**



7 common design studio challenges

HOW TOP STUDIO LEADERS AND CREATIVE TEAMS SIMPLIFY COLLABORATION

Anyone who works in an automotive design studio has a horror story. The design file that went missing. The manager's feedback that was not seen until the last minute. The clay that was milled from the wrong revision.

These and many other challenges are inherent to the way most modern studios work. Multiple teams work in parallel, and changes made by one group affect decisions made by another. Files are stored in messy or unstructured ways, often with little or no connection between the design task and the schedule. Review processes are fragmented and slow.

From a managerial point of view, a certain degree of "creative chaos" is tolerated as a necessary evil,

because exerting too much control could stifle innovation.

Fortunately, new technology is helping to solve this dilemma. It allows team leads to digitally manage and orchestrate design projects with unprecedented transparency into design progress. Additionally, it enables creatives to spend more time iterating on designs, and less time tracking down files, versions, and reviews. At the core of this new workflow is Autodesk® ShotGrid, a collaboration solution trusted by some of the biggest names in animation, visual effects, and gaming.

In this ebook, we explore how this technology can solve seven of the most common challenges in the automotive design studio.



Scheduling and project management

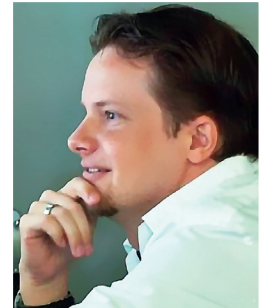
1 “AS A PROJECT MANAGER, I’M KEEPING TRACK OF A DOZEN JOBS, EACH WITH A DIFFERENT SCHEDULE, TEAM, AND RESOURCES. CHANGES HAPPEN EVERY DAY. I SPEND WAY TOO MUCH TIME REACTING TO THEM.”

Project managers, group leads, and design managers in the automotive studio are constantly asked to do more with less. Managing disparate teams digitally is a constant struggle, often because there isn’t one version of the project schedule that everyone on the team can easily access, with no efficient way to handle schedule changes that happen more or less constantly.

ShotGrid provides the core of connectivity that makes it much simpler to create schedules across multiple design projects, track projects and their associated digital assets (including concepts, themes, and parts), and block in all of the tasks

that need to be done. These tasks can be assigned to individual creatives and matched to due dates that are automatically connected to the actual work.

This effectively allows managers and leads to use a single point of reference for scheduling creatives, allocating time across projects and milestones, tracking which creative is working on what task (without interrupting that creative’s work), and seeing when tasks are scheduled to finish. Filling gaps and handling unexpected changes becomes much easier in this connected environment.



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We see big potential in ShotGrid to organize in-project team communication, scheduling, and file management within one cohesive package.”

– John Frye

Principal Designer, Digital Modeling and Visualization Group Leader, Honda R&D Americas, Inc.



File management

2 “MY MANAGER CAME TO MY DESK AT 5 P.M. AND ASKED ME TO RENDER THE LATEST MODEL FOR REVIEW TOMORROW. I HAD NO IDEA WHERE THE LATEST MODEL WAS, AND THE MODELER ALREADY WENT HOME.”

Knowing which version of a design is the latest version is often more difficult to figure out than it should be. Files from one designer or modeler may be named in a different way than those created by others. They may be stored in more than one place. Without direct confirmation from the person who built the file, the person who needs the file may have to guess which version they should use.

3 “I NEVER KNOW WHERE TO SAVE MY DESIGNS. OUR FILING SYSTEM IS ALL OVER THE PLACE. DEPENDING ON WHAT PROJECT I’M WORKING ON, I MIGHT NEED TO SAVE MY DESIGN IN THREE OR FOUR PLACES.”

Designers, modelers, and visualization artists are not experts in file management schemes—and they shouldn’t have to be. A great deal of productivity can be lost after the actual work is finished if creatives must then figure out where to save their files.

In a studio that uses ShotGrid, file locations are

ShotGrid solves this problem with the ability to enforce customized rules for file naming and versioning. In the example above, the visualization artist would be able to open a project, see all of the models associated with it, find the latest one, and be confident it was the correct file.



Collaboration

4 “THE MODEL WAS READY THREE DAYS AGO. I SENT IT TO MY MANAGER FOR REVIEW, BUT SHE NEVER GOT THE EMAIL OR IT WAS LOST. IN ANY CASE, WE LOST THREE DAYS ON AN ALREADY TIGHT SCHEDULE.”

Collaborating on design reviews is one of the most fraught processes in any studio. Creatives frequently need to screen-shot their work, drop it into a PowerPoint file, include annotations, then send that file through email or some other application. The data path is one-to-one, so there is no easy way to quickly access that information again. The sender may not know if the file was not received, and the workflow is not moving forward, so issues aren't obvious until it's too late.

The alternative is publishing designs that are ready for review instead of saving them or sending them to reviewers manually. When publishing a design in ShotGrid, the software makes the asset automatically available to designated reviewers who are then notified that the file is ready for review. This allows everyone on the team to confirm that the review is proceeding.



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Our big challenges are time management, resource allocation, acquiring proper tools, and making meaningful decisions as quickly as we can. To do that, you need help with file sharing, collaboration, and project management. Using proper conventions for file naming and location is one of the secrets to building a faster, more agile team. Having access to all your team's files in one place is paramount.”

– Brian Goldenberg

UX and Industrial Designer, Ford Motor Company

Review and approval

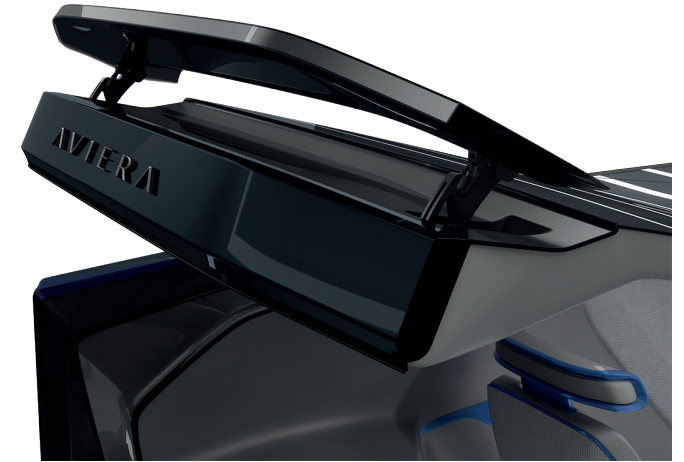
5 “AS A MANAGER, I NEED TO REVIEW DESIGNS AND PROVIDE FEEDBACK VERY QUICKLY. I CAN EITHER COMMENT ON A SCREEN SHOT IN A POWERPOINT OR TRY TO OPEN A POWERFUL 3D APPLICATION. NEITHER IS IDEAL.”

Feedback loops can be extremely challenging to control. Managers and design executives are often working on multiple projects simultaneously. Keeping track of one-to-one exchanges with creatives is inexact at best, creating opportunities for lost feedback or decisions. It also slows down the process if reviewers need to open heavy 3D applications in order to write a simple note. This challenge becomes even more pronounced as OEMs use design teams that are spread out across regions to be closer to customers.

ShotGrid offers simple ways to improve review and approval feedback loops. It extends the places teams

can review as well as the number of tools they can use to capture reviews. All of this information is centralized into a single source of truth.

For example, web-based reviews are much more efficient, which is why ShotGrid allows managers and design executives to see all of the design assets associated with a project—including 3D files—within a lightweight web viewer. Reviewers can draw over designs or annotate them without opening the underlying application. All of these notes are saved in ShotGrid, and the designer that published the asset is notified as soon as the feedback is submitted, so no notes go unread.



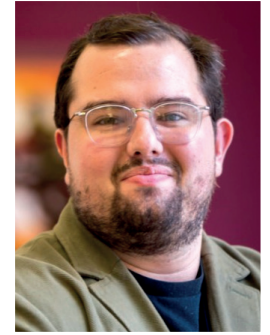
Review and approval

6 “I SPENT HOURS WORKING ON THE WRONG MODEL. IT HAD BEEN UPDATED AND NOBODY TOLD ME.”

Automotive design is never a clean, linear process. For example, after a model is submitted for visualization, modelers may continue to work on it while visualization artists are working in a separate application to adjust shaders, add textures, and enter data for color and materials. In this scenario, it is the modeler’s responsibility to notify the visualization artist when the model is changed.

ShotGrid automates this process to prevent any changes from slipping through the cracks. For

example, if the visualization artist is working in Autodesk VRED, a Scene Breakdown tool from ShotGrid (which is visible from VRED) tracks all the parts loaded into the scene. If a modeler makes a change or publishes a new asset, the tool instantly shows that the model is out of date, indicated by a red “X” beside the file. Getting the new model is as simple as clicking the update button. ShotGrid loads the file, reassigns shaders and materials, and matches any transformations in the scene.



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Everything we create is digital.

So every day we create more data and more files, but there isn’t a sophisticated way to manage all of these assets. This can lead to duplication of effort and information loss.”

– Jordan Beckley

Project Manager and Global Digital Design Instructor, Ford Motor Company

Automation and customization

7 “OUR STUDIO HAS REGULAR REVIEW PROCESSES, BUT WE SPEND TOO MUCH TIME PREPARING THE WORK FOR REVIEW. NOTHING IS STANDARDIZED.”

Studios often run into problems with the number and pace of concurrent design reviews that need to be completed in order for projects to stay on schedule.

In addition, no studio works the same way. So even though many aspects of ShotGrid can be customized, it can go further, allowing teams to automate repeatable tasks, build triggers, and integrate ShotGrid into the studio’s existing tools.

By automating regular processes, ShotGrid allows teams to spend less time on logistics and more time on designs. For example, a studio could set up ShotGrid to create a playlist of daily reviews,

which automatically gathers all designs published that day. Viewing the playlist allows reviewers to see all the work in progress, as well as any accompanying notes and comments from other reviewers.

This concept can be applied to other repetitive tasks as well. If a project milestone is achieved, ShotGrid can automatically package up relevant data and share it with engineering. If a design is approved, it can automatically kick off high-quality renders of the latest model. These automations are totally customizable for the studio’s individual needs.



Conclusion

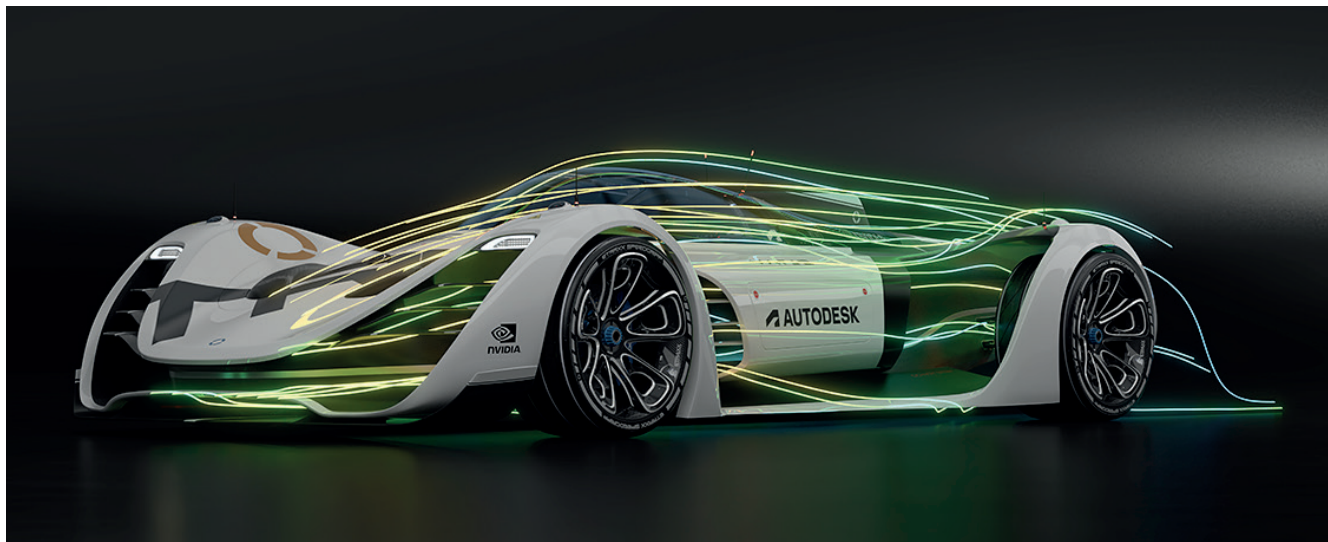
Enabling agility in the design studio

Nobody knows exactly what the automotive “studio of the future” will look like, but it will likely be more collaborative, connected, and agile than current processes. Using a solution like ShotGrid can help studios move toward this future reality today.

ShotGrid simplifies collaboration, so creatives and reviewers experience a more seamless feedback loop. It is connected to all of the tools creatives

use, so any user can view all of the design assets for any project, even if they are not running the application that created the file. Together, these capabilities enable studios to work more nimbly, with the confidence that new technology is keeping track of all files and tasks – and without forcing creatives to do their work any differently.

For more information about Autodesk ShotGrid, visit www.shotgridsoftware.com/automotive.



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As design studios become more digital, they need to connect their teams and maintain a digital record of design decisions and artifacts, which is what ShotGrid does. At the same time, automakers need to be more agile, especially as startups continue to disrupt the market. Shotgrid helps studios work more efficiently, iterate faster, and produce the most innovative vehicles.”

– Brandon Tasker
ShotGrid Product Manager



SHOTGRID

The leading cloud-based project management
solution tailored for the design studio