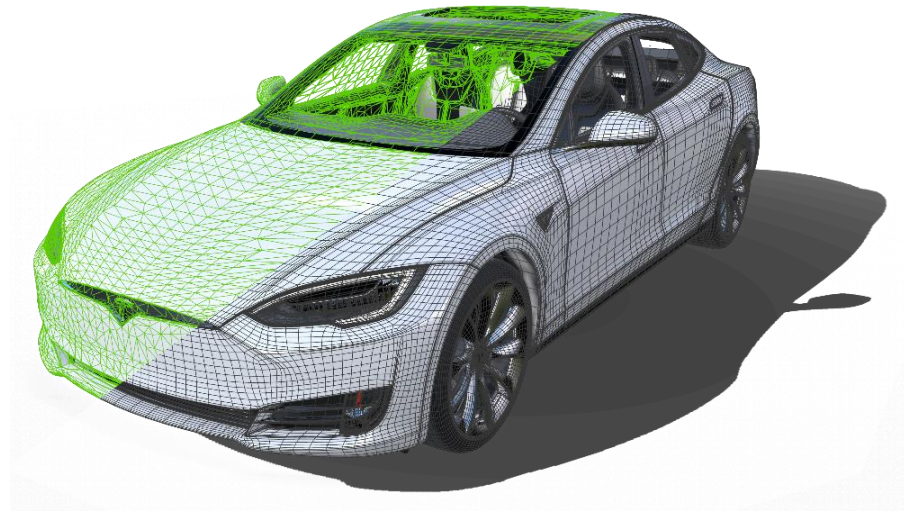
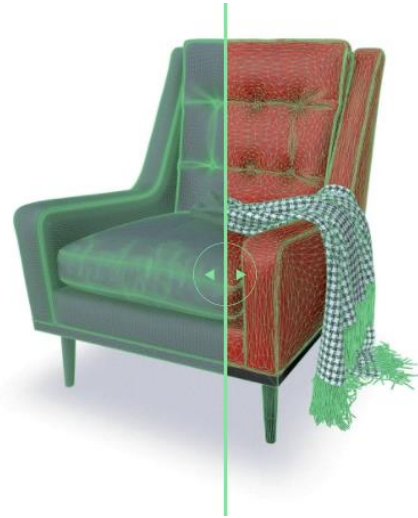


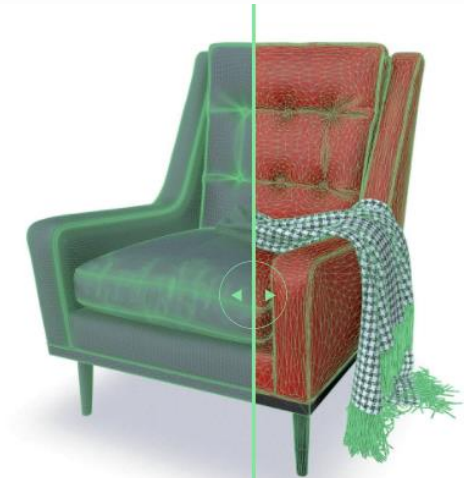
# Efficient Asset Creation and Optimization for 3D Commerce and Beyond



AREA & Khronos Webinar  
March 03, 2021

# Personal Introduction

- ▶ Tech / 3D Graphics Background
  - ▶ PhD on [automating 3D data optimization for Web & AR](#)
  - ▶ Former researcher and project lead at [Fraunhofer](#)
  - ▶ Contributed to 3D standards (X3D, glTF)
- ▶ CEO at [DGG](#)
  - ▶ Creators of the [RapidCompact](#) platform for 3D data optimization
  - ▶ Consulting & services around scalable, automated 3D pipelines
- ▶ Co-Chair of [3D Commerce](#) Asset Creation TSG at Khronos



# 3D Commerce Asset Creation TSG

3

- **Mission:**  
Enable efficient creation of 3D assets that can be reliably deployed for real-time rendering on diverse end-user delivery platforms
- **3D Commerce Asset Creation Guidelines v1.0 (Released 10/2020)**
  - [On GitHub](#)
  - [As PDF](#)
  - Tool-agnostic
  - Target Group: 3D artists who are new to creating e-commerce 3D assets for cross-platform delivery
- **Workflow Tutorials (Example: Next Slide)**

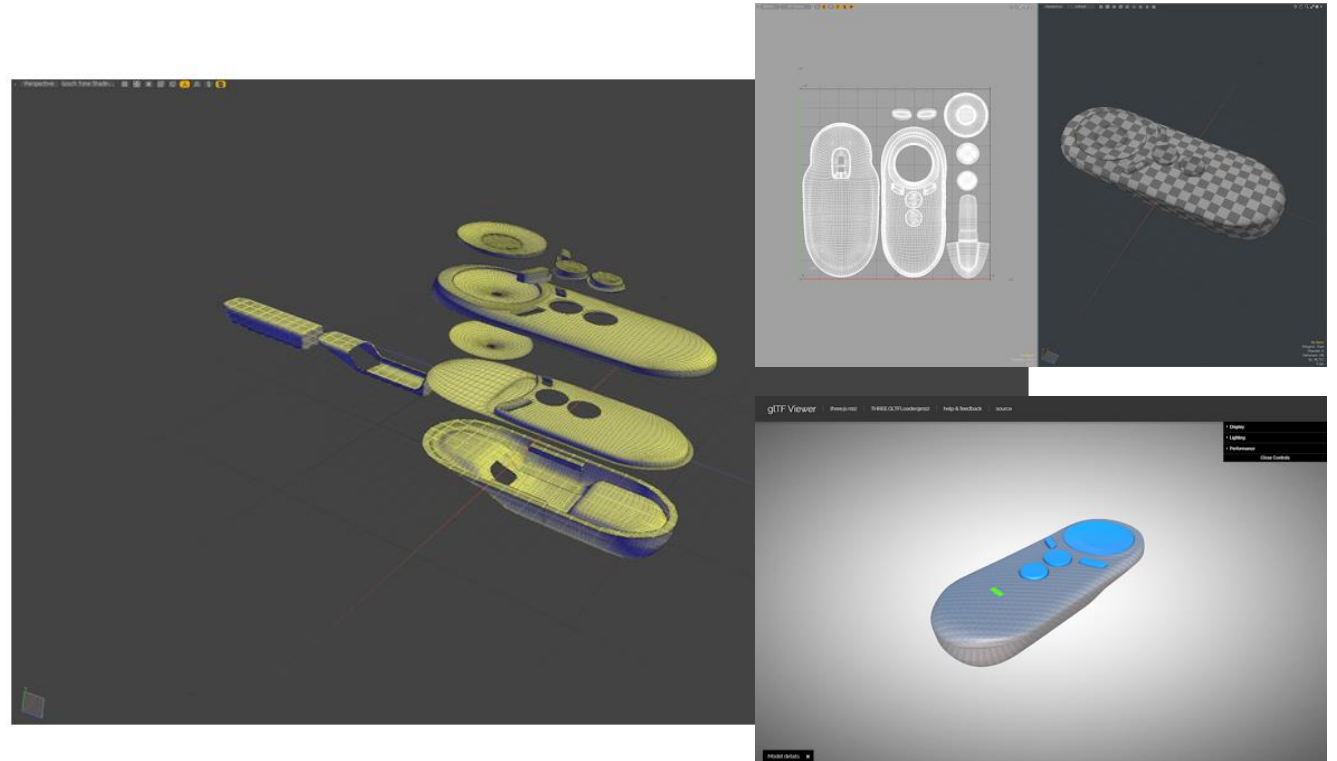


Get involved on [GitHub](#), or via [Khronos](#):

Your insights and pain points will help us evolve and simplify the 3D asset creation and deployment process for the benefit of everyone in the industry.

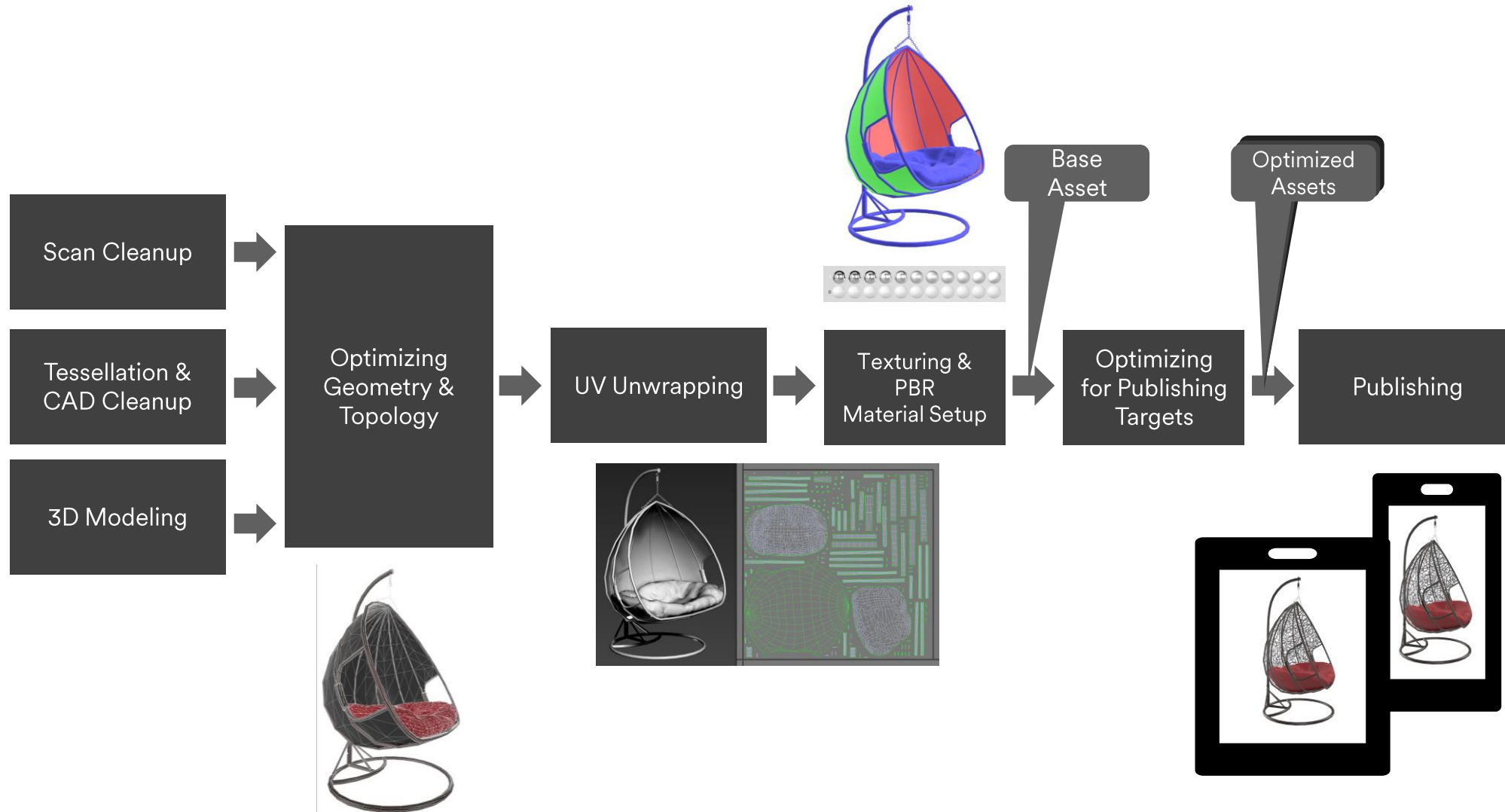
# Workflow Tutorial: Example

- “Optimizing a high resolution source model for real-time”
  - By Michael Badillo, Samsung Research of America
- CAD-to-Real-Time Workflow
  - Geometry Cleanup
  - UV Unwrapping
  - Materials Setup
  - Export to glTF
  - Review glTF in a viewer

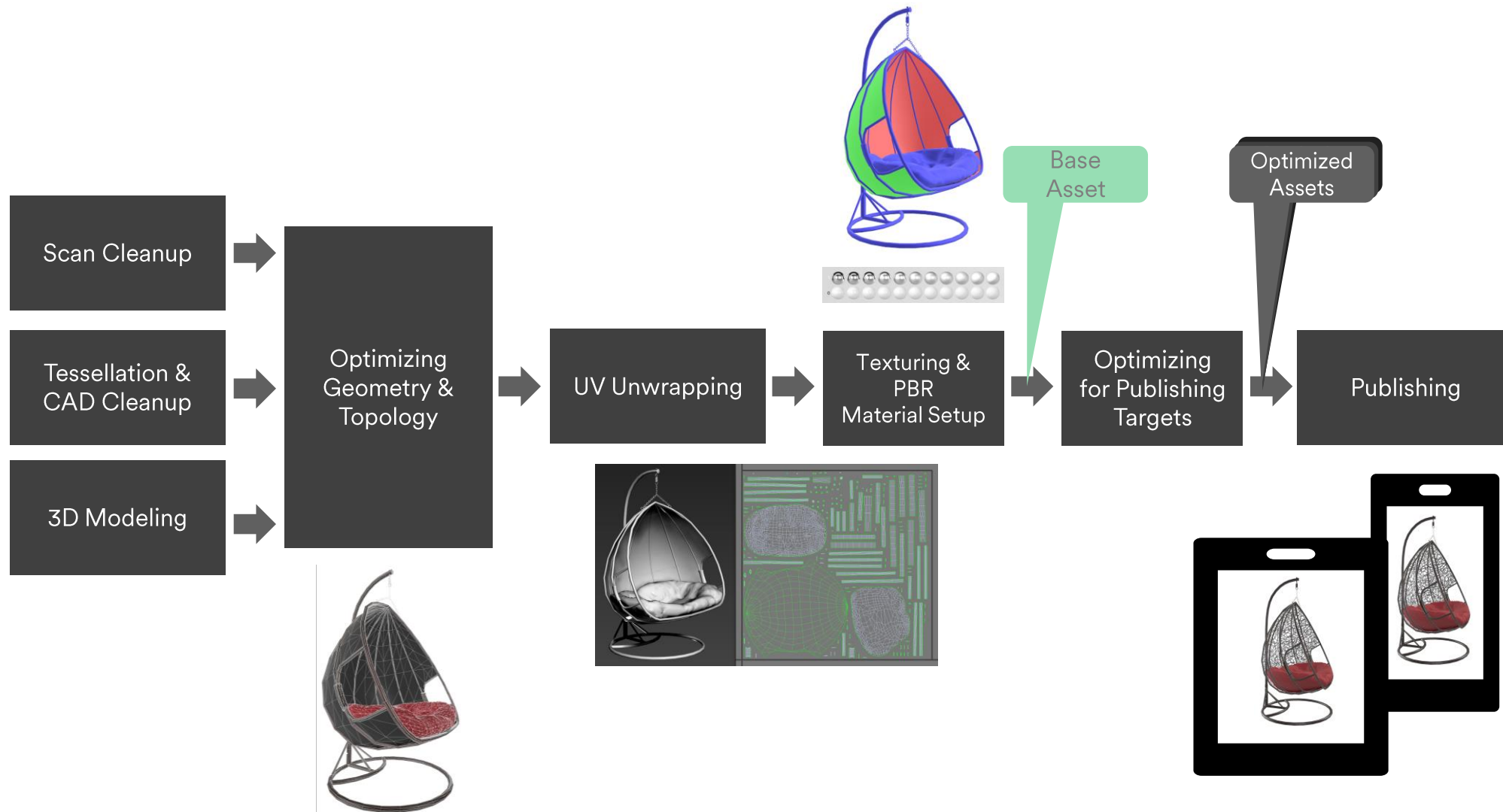


<https://github.com/KhronosGroup/3DC-Asset-Creation/blob/main/workflow/01-Optimizing-A-High-Resolution-Model-For-Realtime/01-workflow.md>

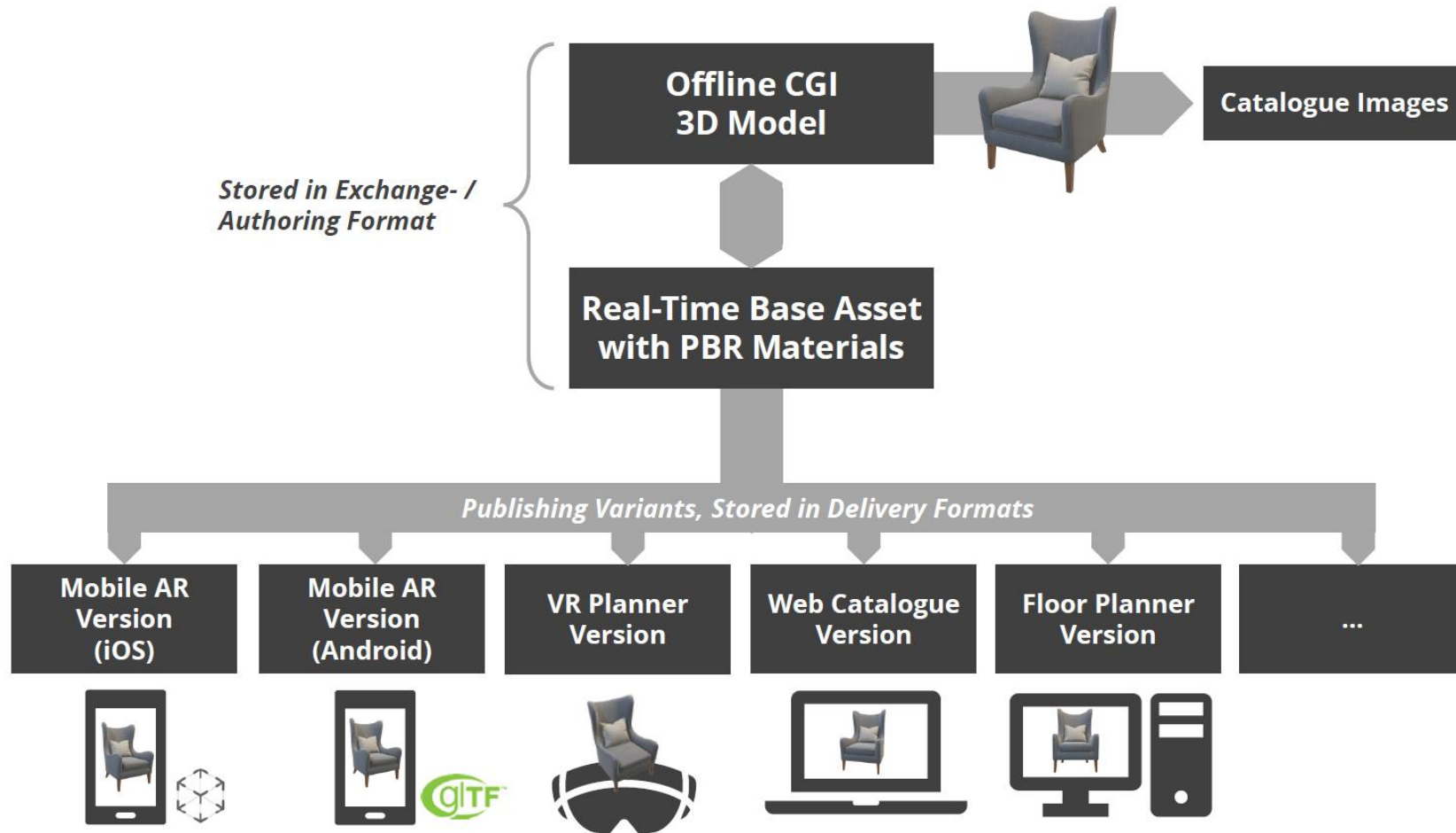
# 3D Asset Creation - A Challenging Process



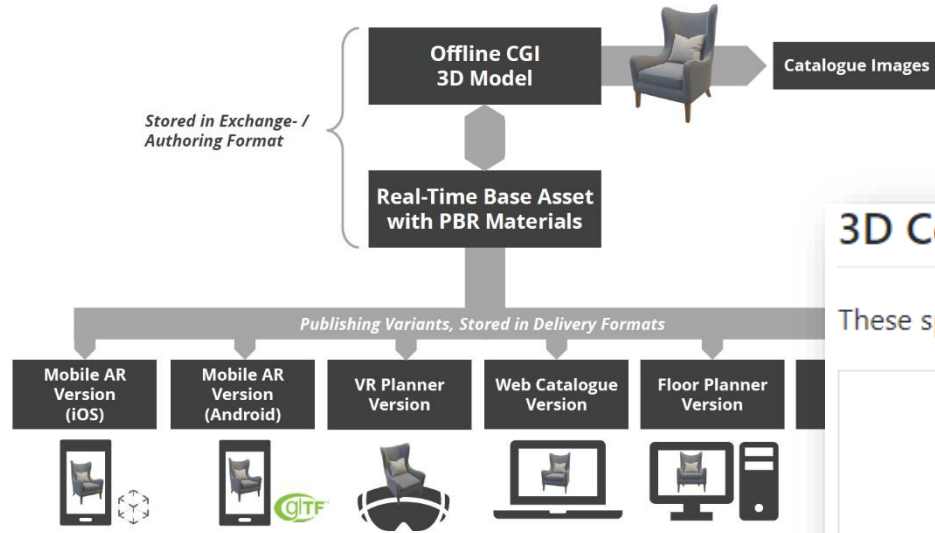
# 3D Asset Creation - A Challenging Process



# From Base Asset to Publishing Targets



# Publishing Targets: Guidelines v1.0



## 3D Commerce Publishing Guidelines v1.0

These specifications are likely to change rapidly as new hardware is adopted more widely.

Publishing Target	Max. Target File Size	Max. Target Triangle Count	Target (Max) Number of Draw Calls	Max. Target Bitmap resolution, to meet bandwidth requirements (JPG)
Single-Item Mobile AR or 3D Web Catalogue View	3MB	150,000	<20 (500)	2K
Banner Ad View	500KB	30,000	<5 (100)	512
Web-based Planning Tool (recommendations for one out of multiple items)	1MB	40,000	<5 (50)	1K
Single-Item Desktop 3D Web View	3MB	250,000	<100 (800)	2K



# Thanks for Your Attention!

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[@mlimper\\_cg](https://www.instagram.com/mlimper_cg)