

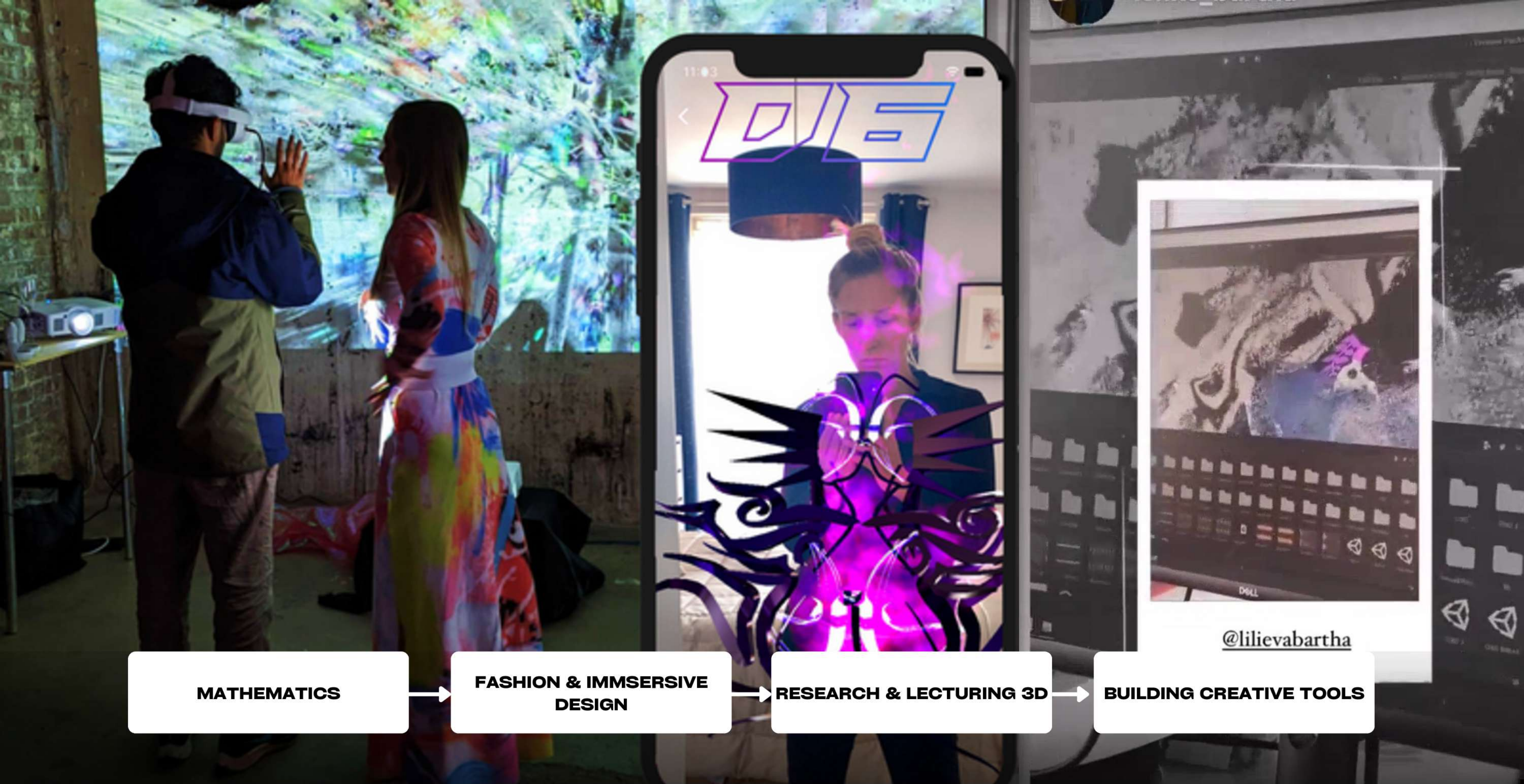
FASHION, IDENTITY, AND THE VIRTUAL LAYER

VIRTUAL SELF-EXPRESSION, CULTURAL TOOLING, AND
GENERATIVE PIPELINES

LILI EVA BARTHA
FOUNDER & CEO
GENERA LABS

1.

NEM CONFERENCE - 2025 OCTOBER 21TH



MATHEMATICS



**FASHION & IMMERSIVE
DESIGN**



RESEARCH & LECTURING 3D



BUILDING CREATIVE TOOLS

FROM DESIGNER TO BUILDER

WHAT DOES BY CREATORS FOR CREATORS REALLY MEAN?



ENVIRONMENTAL IMPACT FASHION & TEXTILE INDUSTRY

FASHION PRODUCTION
ACCOUNTS FOR **10%** OF
TOTAL GLOBAL CARBON
EMISSIONS

10-40% OF THE 80BN - 150BN
GARMENT MADE ARE **NOT
SOLD** BUT END UP IN
LANDFILL

9 PERCENT OF SHOPPERS
IN BRITAIN ADMITTED TO
BUYING CLOTHES **ONLINE
FOR INSTAGRAM**

MCKINSEY 2019, WGSN 2023, BARCLAYS SPEND REPORT 2022
WRAP 2023, VOX 2020

2014-2018 PHYSICAL FASHION CAREER



2018 ONWARDS - PHYSICAL TO DIGITAL FASHION (FIRST AR OUTFIT USING CLO3D AND VUFORIA)

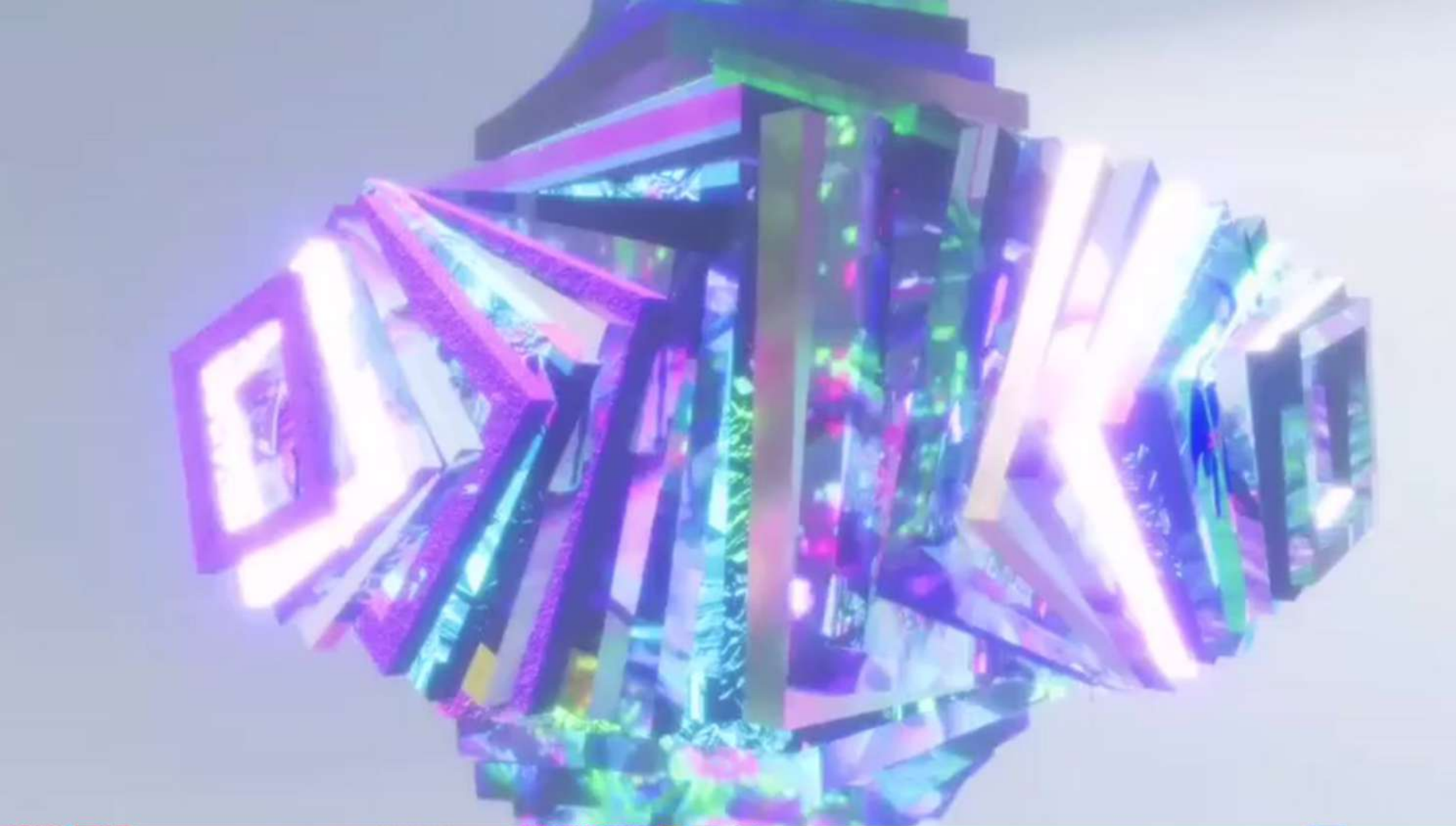


BEYOND VISION



Amsterdam University
of Applied Sciences

2020-2021 - VR WORK CREATED AS ARTIST IN RESIDENCE - IDEATION STAGE FOR THE DFF SYSTEM



2021 - FINAL OUTPUT: 6DOF VR PIECE PRESENTED AT MOZILLA FESTIVAL

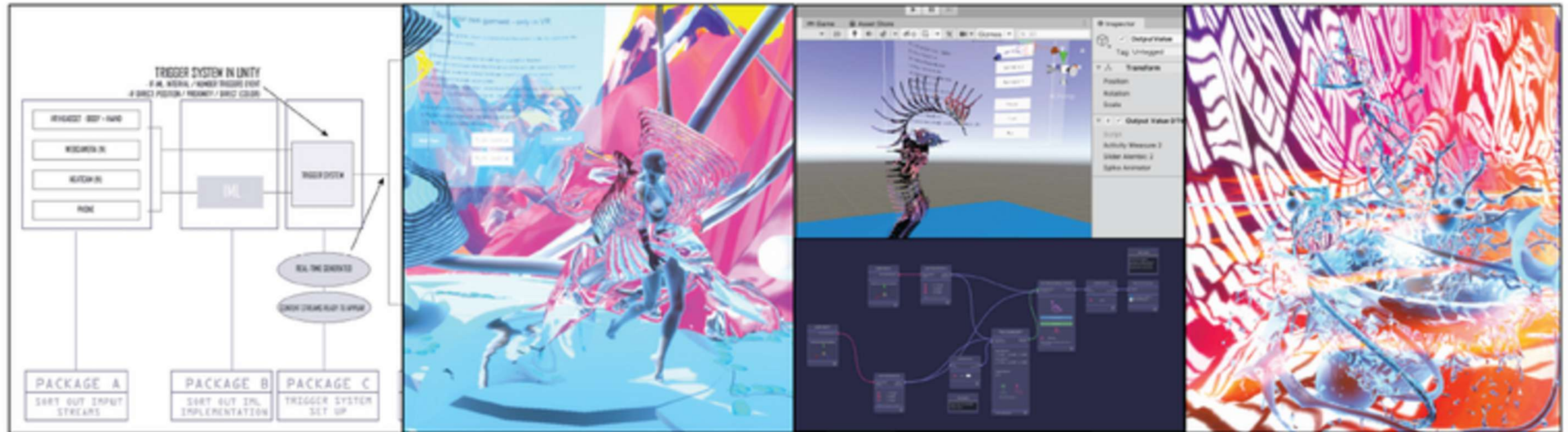
Beyond Vision: Designing a 'digital-self' through embodied creative interactions

TROY NACHTIGALL and LILI EVA BARTHA*, Amsterdam University of Applied Science, The Netherlands

LISETTE VONK, Amsterdam University of Applied Science, The Netherlands

DANIEL SOUTHWICK, Ryerson University, Canada

FRANK KRESIN, Amsterdam University of Applied Science, The Netherlands



KEY OBSERVATIONS

- User testing creative interactions in XR led to a surprising insight:
 - Testers wanted tools that are immersive and intuitive, not just content
- Lecturing industry standard CAD, researching future software showed:
 - Students struggled with existing 3D tools: CAD logic too rigid
- Current pipelines aren't built for future creators...
- Creative tools need rethinking:
 - What if creation was as intuitive as play?
- **Design principles: accessible, intuitive, easy-to-use, enjoyable**

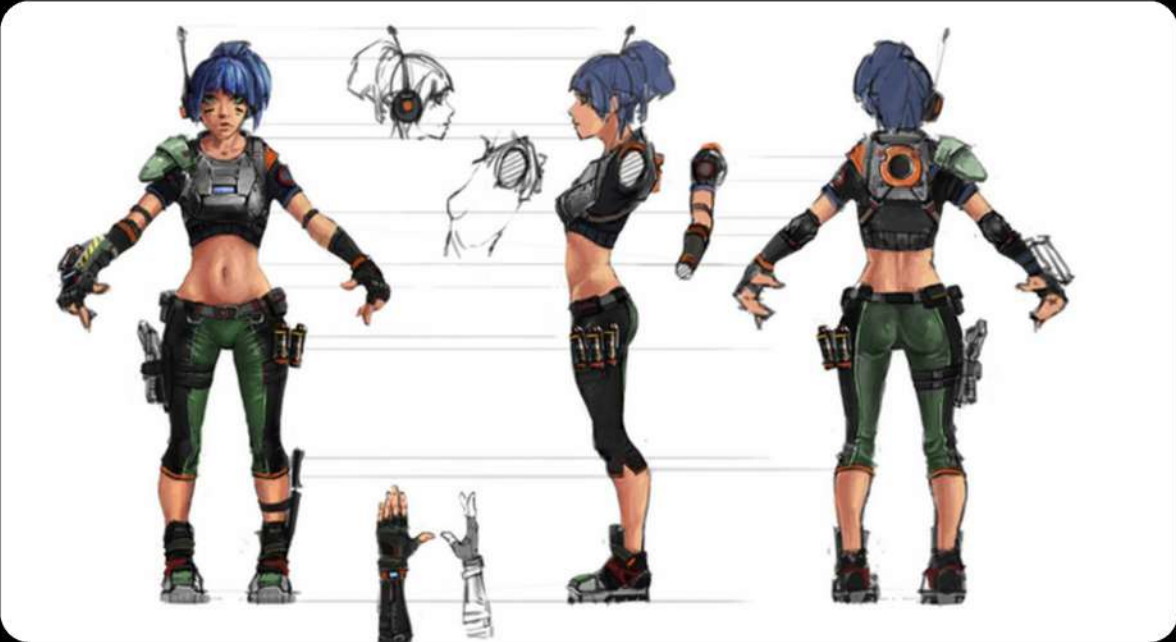
**How do we design tools that
enable & empower, not
overwhelm?**

VIRTUAL WORLDS & VIRTUAL CLOTHING

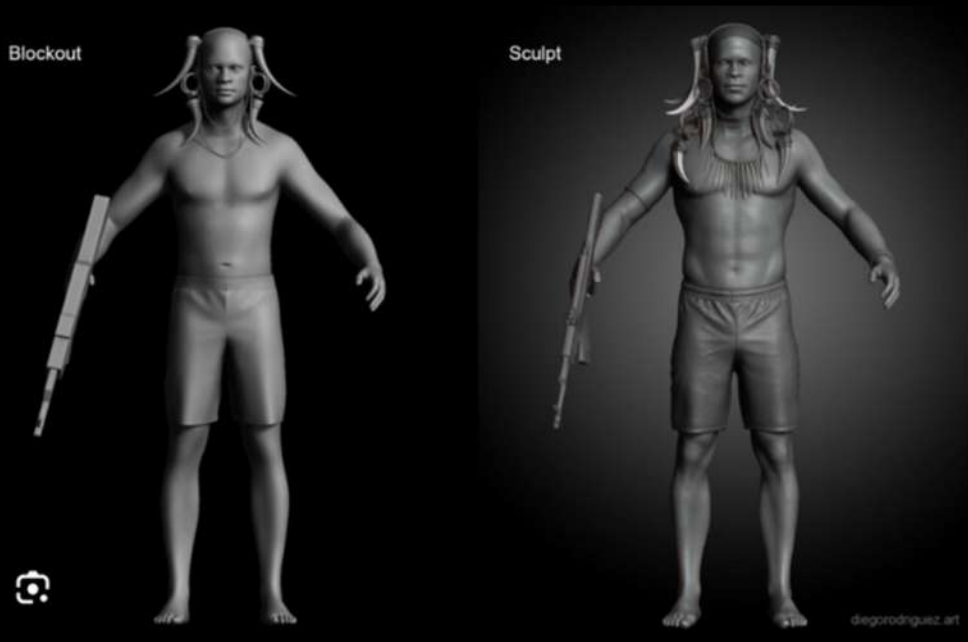
FASHION IN GAMES AND MMOS

INDUSTRY STANDARD AA/AAA GAME ASSET CONTENT PIPELINE

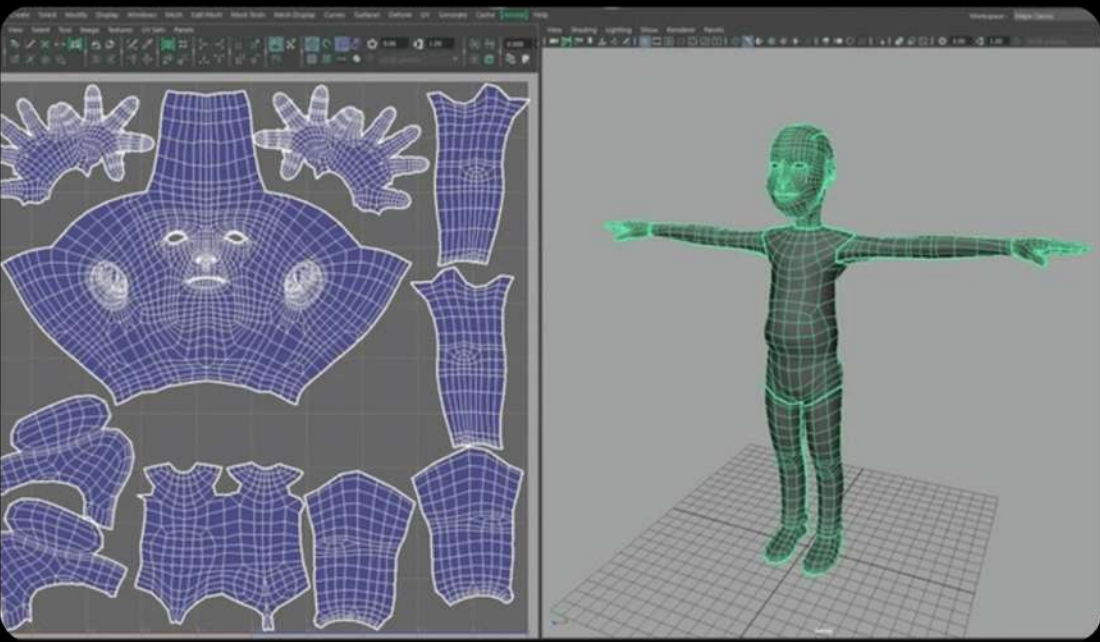
CONCEPT ART



BLOCKOUT TO DETAILING



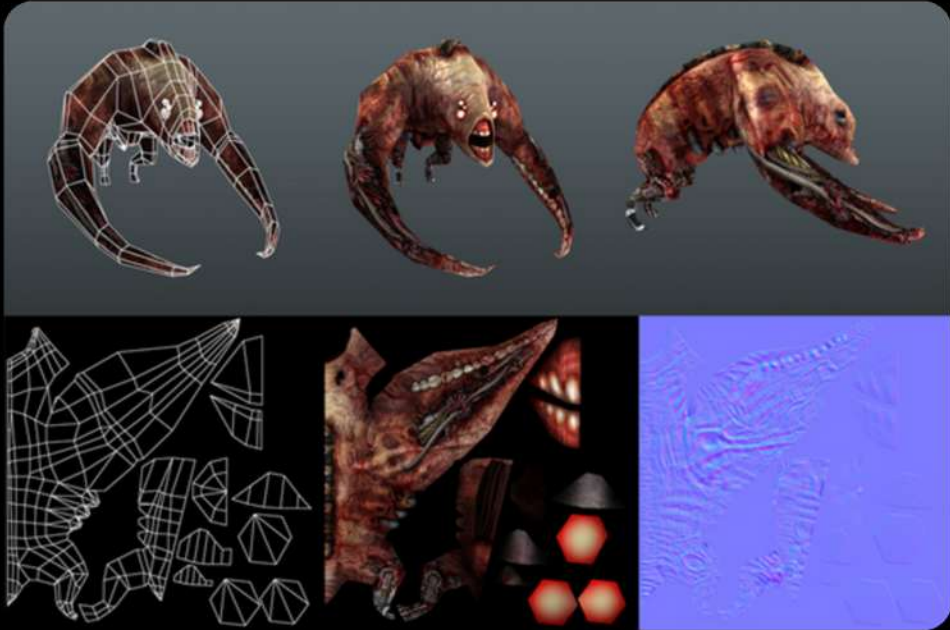
UV MAPPING



RETOPOLOGY



FLOW EXAMPLE



TEXTURING

CONCEPT ART

MODELING

TEXTURING

RIGGING

ANIMATION

LIGHTING

TOOLS TOO COMPLEX, WORKFLOWS OUTDATED

- STEEP LEARNING CURVES
- COMPLICATED PIPELINES
- LICENSING COSTS ADD UP
- SLOWS DOWN ITERATION
- MARKETPLACE ASSETS CAN BE UNRELIABLE



Outdated, industry-standard workflow
for optimised 3D assets

ROBLOX



A SOCIAL CO-CREATION PLATFORM, NOT JUST A GAME ENGINE.

NOT JUST HYPE, BUT ACTUAL USER BEHAVIOR, ECONOMIC ACTIVITY, AND CULTURE.

MMO
MASSIVELY MULTIPLAYER
ONLINE GAME

251 MILLION MAU
69 MILLION DAU
21% PAYING USERS

40% IS **UNDER 13 YEARS OLD**
17-24 DEMOGRAPHIC
FASTEST GROWING

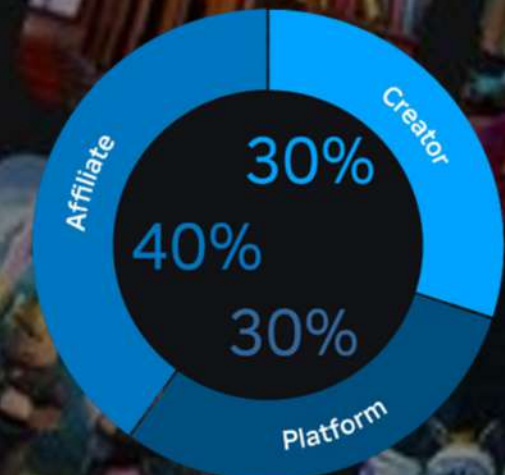
40 MILLION USER-
GENERATED GAMES AND
EXPERIENCES

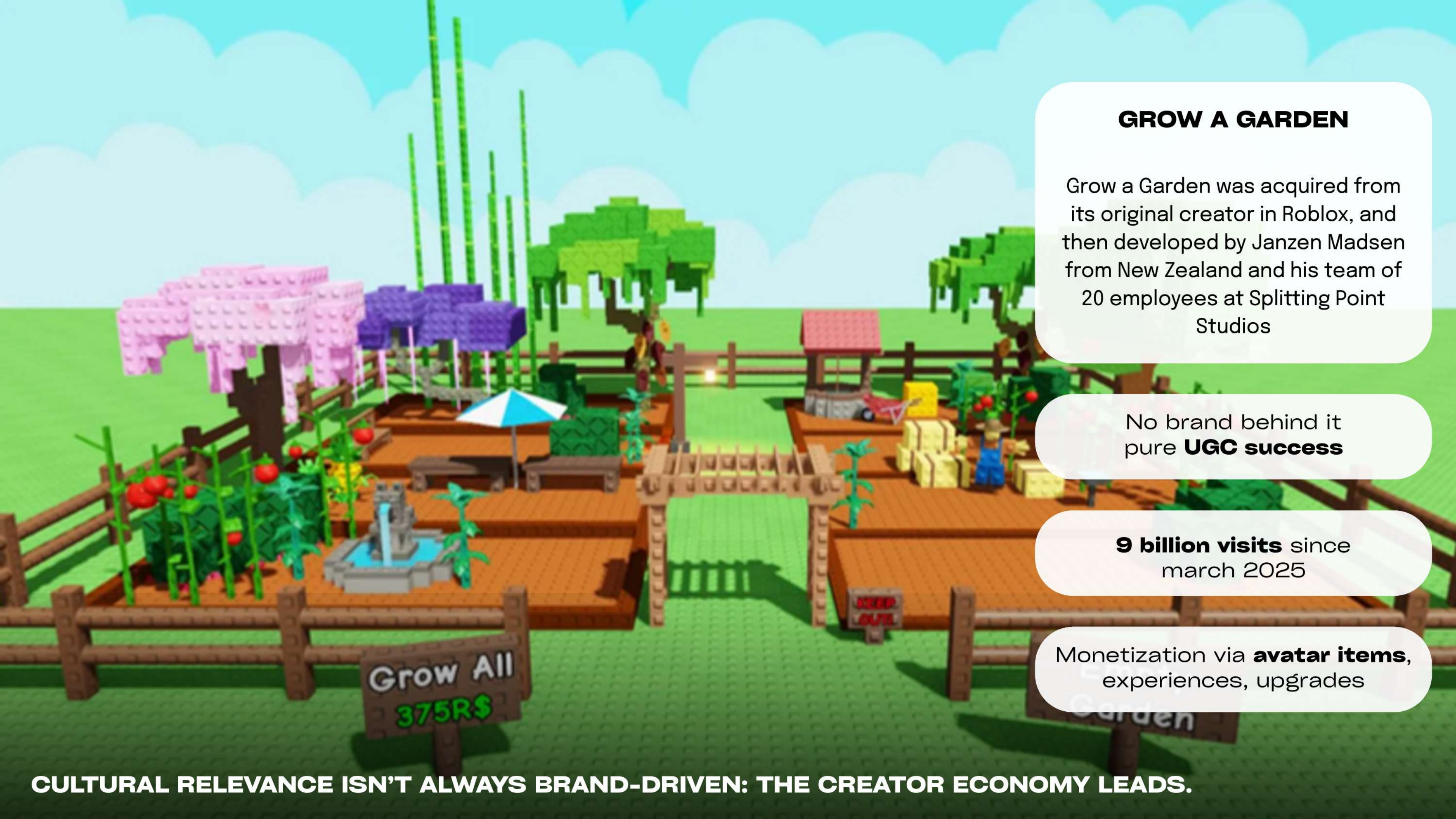
2.5M+ DEVELOPERS ON
THE PLATFORM

500 MILLION \$
DEVELOPER REVENUE IN
Q1 2025 ALONE

ROBLOX: THE GATEWAY TO GEN ALPHA

CONTENT CREATION
CHARGE FOR ACCESS
IN-EXPERIENCE PURCHASES





GROW A GARDEN

Grow a Garden was acquired from its original creator in Roblox, and then developed by Janzen Madsen from New Zealand and his team of 20 employees at Splitting Point Studios

No brand behind it
pure **UGC success**

9 billion visits since
march 2025

Monetization via **avatar items**,
experiences, upgrades

CULTURAL RELEVANCE ISN'T ALWAYS BRAND-DRIVEN: THE CREATOR ECONOMY LEADS.

PREMIUM SHOP

Merch

Gamepasses

Boosts

Coins

Stellaris
Hoodie

Mielebee
T-Shirt

Fayrah
Hoodie

- Shopify integration allows in-game purchases of real-world goods
- In-game items can unlock physical rewards, and vice versa
- Digital storefronts for brands inside games
- Not just play: it's commerce infrastructure



Roblox
roblox.com



Stellaris Hoodie

\$50.00

Sold by Twin Atlas Official Store

Color: Navy

Size: S

S

M

L

XL

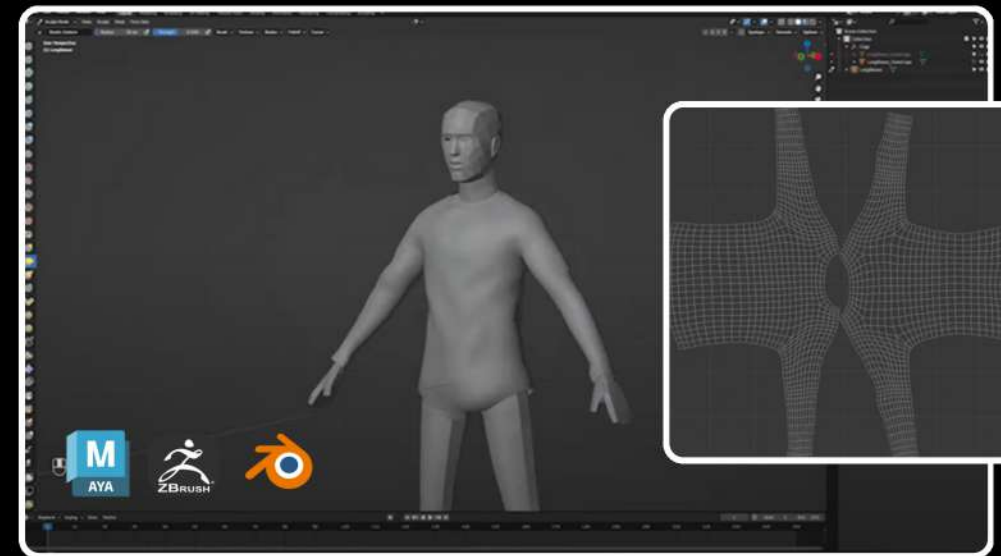
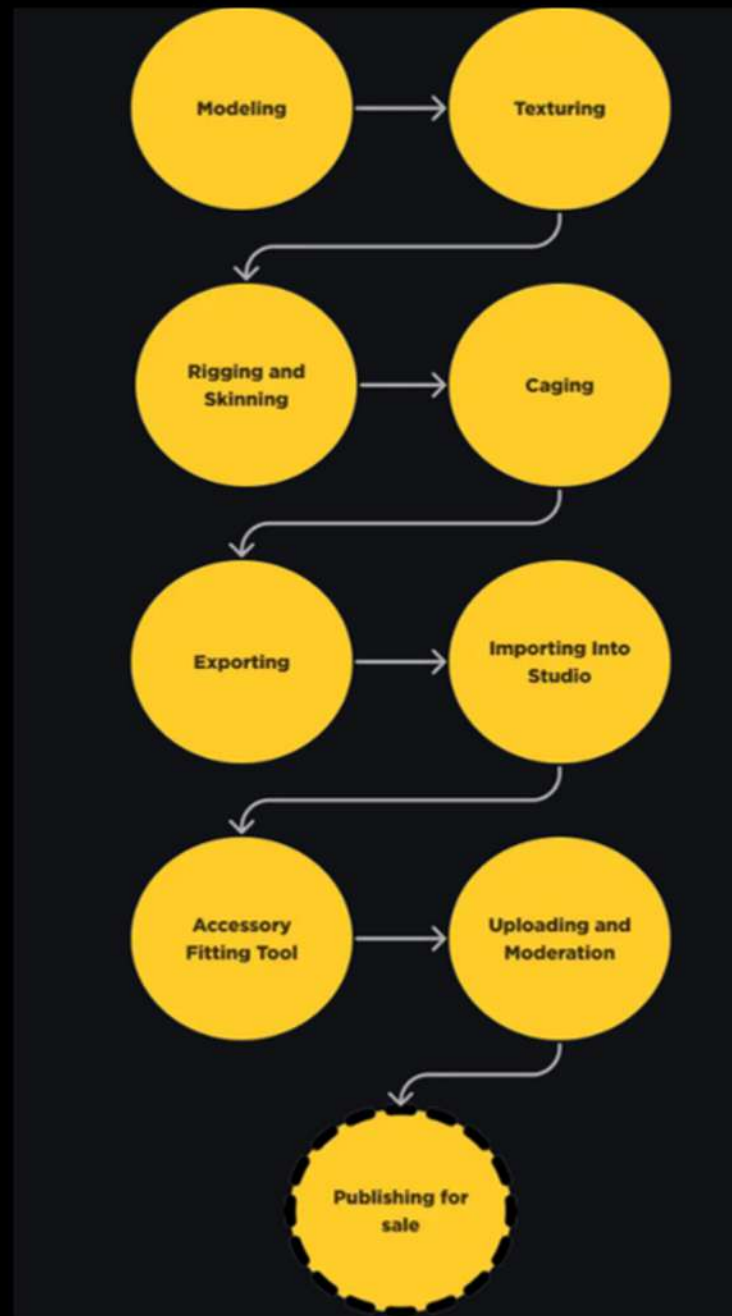
2XL

3XL

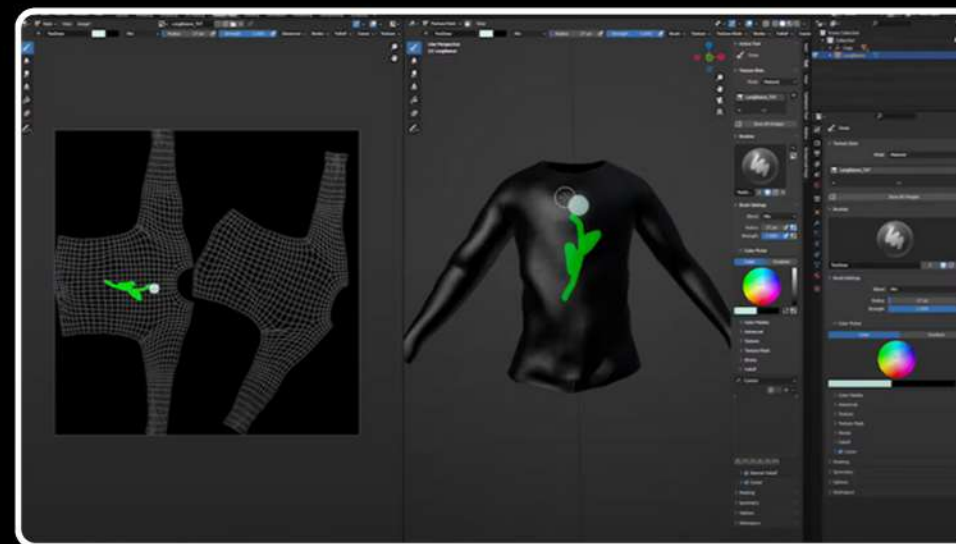
A new model for omnichannel retail, born in games.

Twin Atlas reportedly generated six-figure revenue in weeks
~90% of orders were via in-game commerce, with many repeat customers.

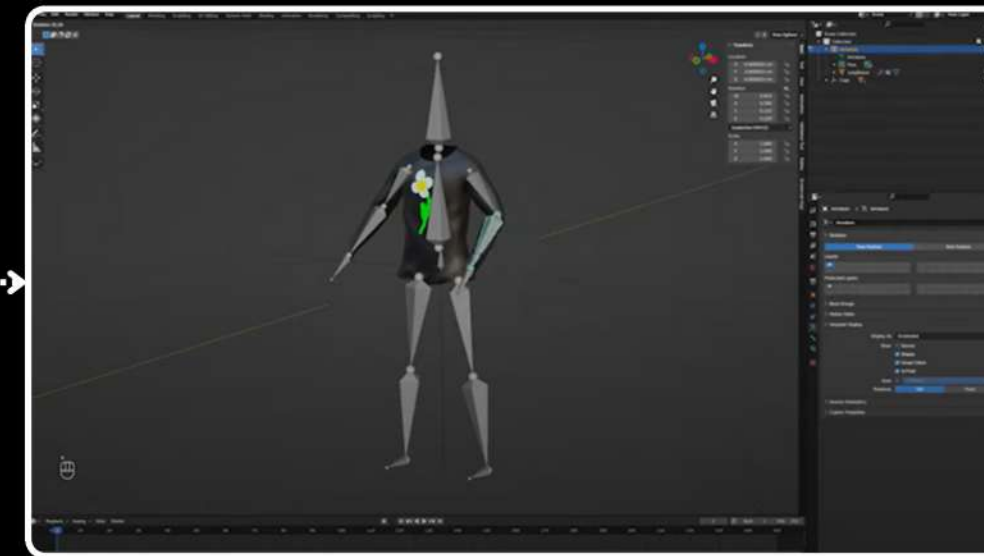
ROBLOX STUDIO STILL REQUIRES TECHNICAL FLUENCY



MODELING, UNWRAPPING



TEXTURING



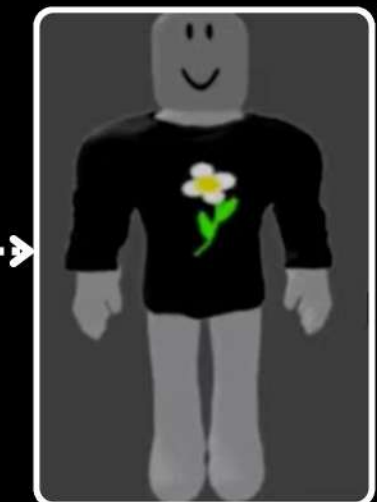
RIGGING



CAGING



UPLOAD TO ROBLOX STUDIO



REFIT

THE NEW CREATOR: HYBRID, PLAYFUL, EMPOWERED

- The boundaries between players, builders, and designers are disappearing.
- Today's creators are:
 - Thinkers: shaping digital identity and expression
 - Players: creating inside the worlds they inhabit
 - Makers: using intuitive, real-time tools to build, test, and share
- Yet the tools they need remain complex, fragmented, and inaccessible.
- New creation tools must feel like play: yet deliver professional-grade output.

**DEMOCRATIZING CREATION
STARTS WITH REIMAGINING WHO
THE CREATOR IS.**



COAST UGC

HIGH-END VIRTUAL STREETWEAR

Forbes

A Roblox Fashion Startup Now Sells Over
A Million Items A Month

TOPCAT IS ONE OF THE LARGEST SELLERS OF USER-GENERATED CONTENT (UGC) ON THE PLATFORM. IN JULY 2025 ALONE, THE **THREE-PERSON** TEAM SOLD OVER **A MILLION VIRTUAL CLOTHING ITEMS**.

THE BUSINESS HAS GROWN INTO A **SEVEN-FIGURE ANNUAL ENTERPRISE**, DRIVEN BY A CONSISTENT OUTPUT OF NEW DESIGNS AND TREND ANALYSIS.

NEW CREATORS ARE YOUNGER, SELF-TAUGHT

ON TOP OF TRENDS

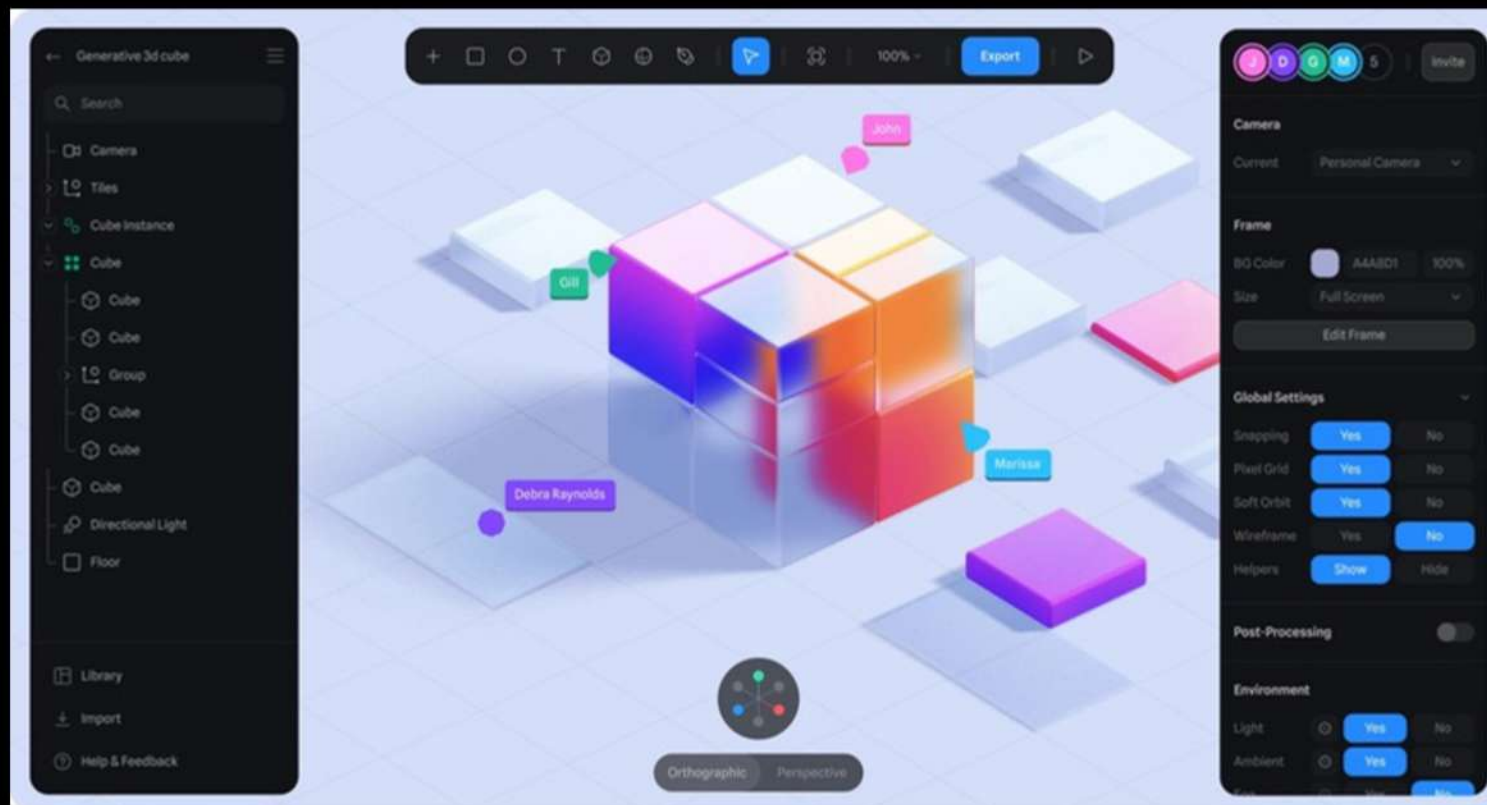
FROM PLAYING TO BUILDING

THE LOGIC OF BUILDING IS CHANGING

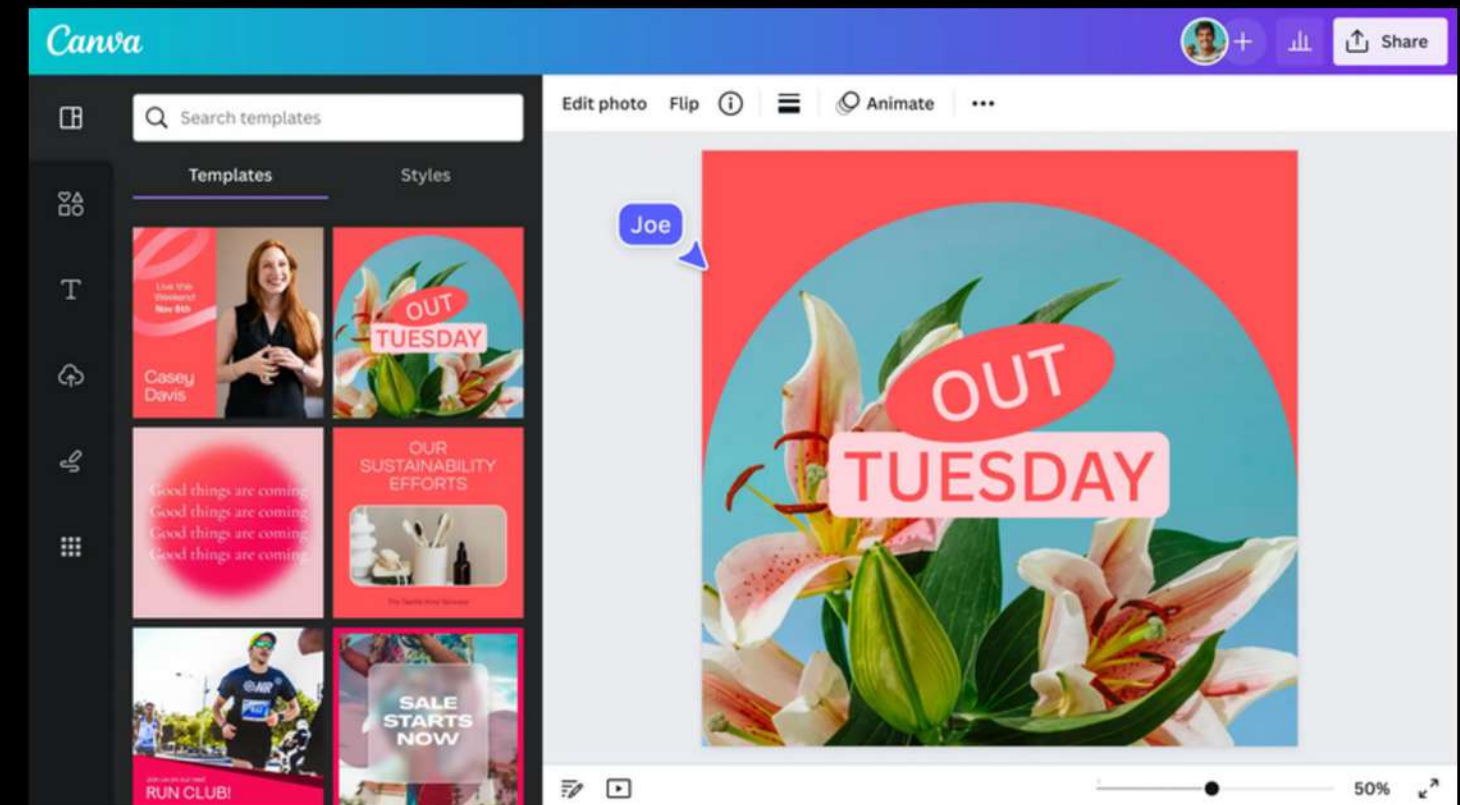
WHAT GOOD UX LOOKS LIKE NOW

WHAT ONCE TOOK STUDIOS, NOW TAKES ONE PERSON

- Fast onboarding
- Visual and instant feedback
- Playful interfaces – fun, not fear
- A sense of agency from the first click
- Web-native workflows
- Asset libraries
- Modular templates
- Open learning



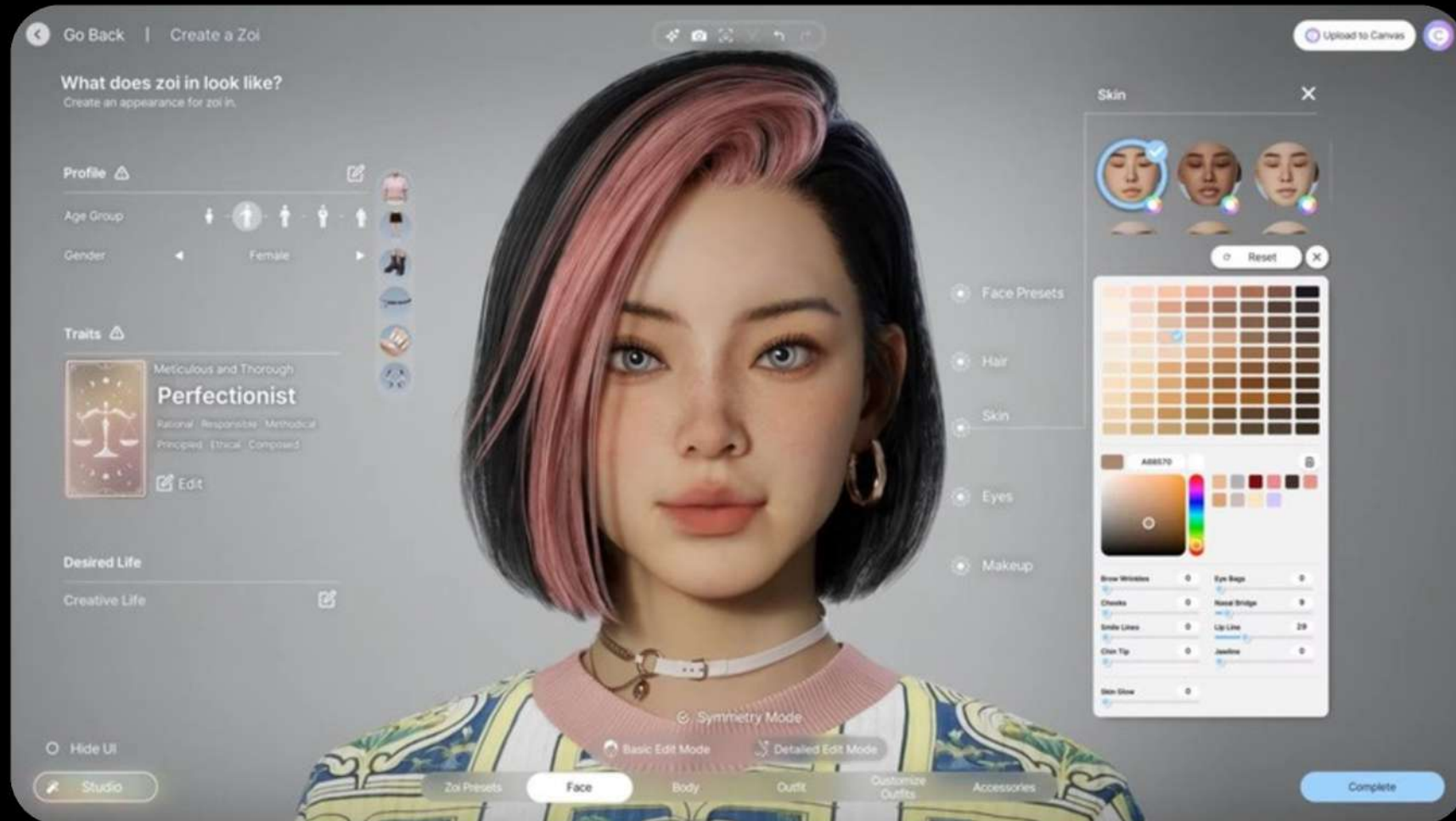
SPLINE DESIGN



CANVA

GAME-INSPIRED INTERFACES

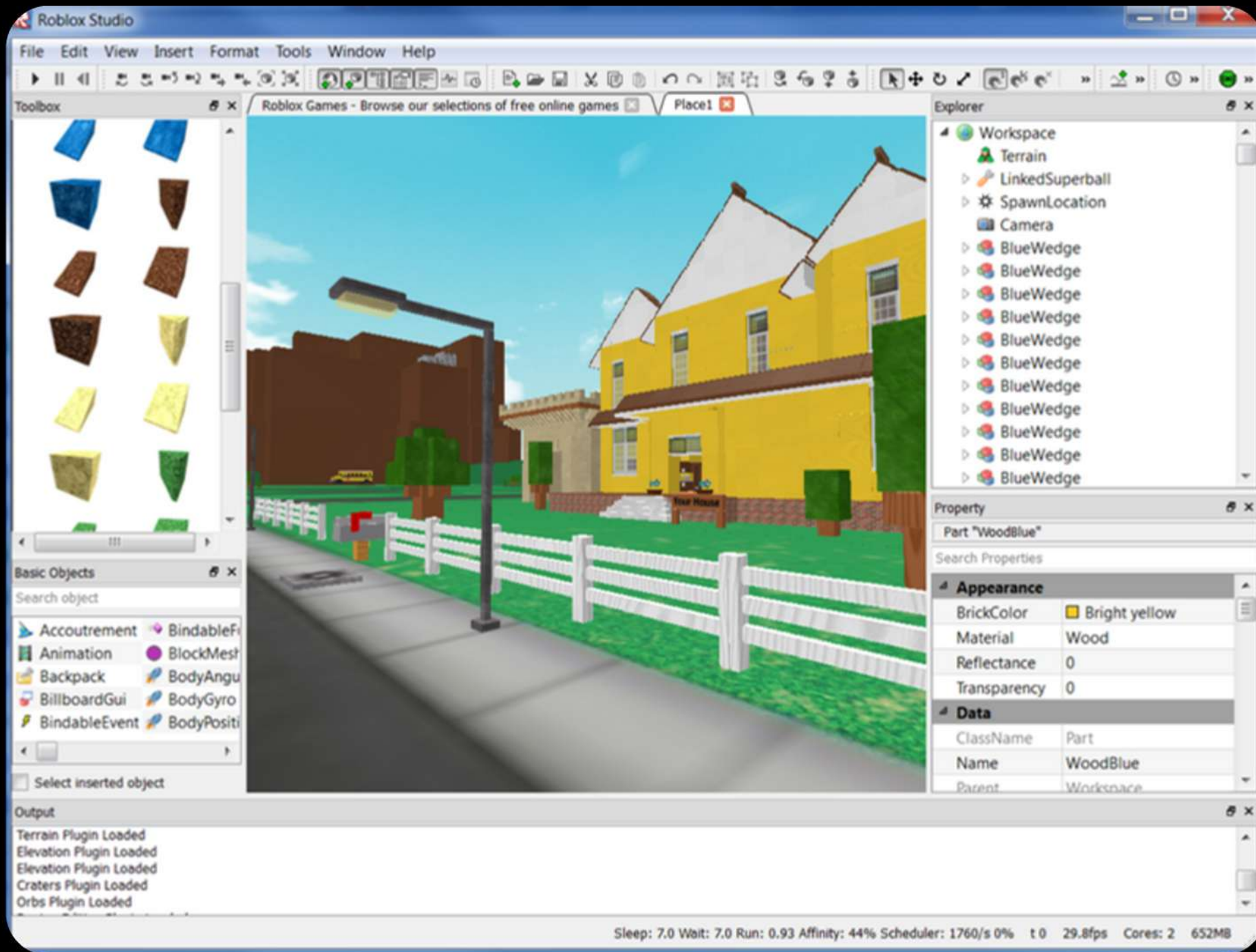
CREATORS DON'T WANT CONTROL PANELS



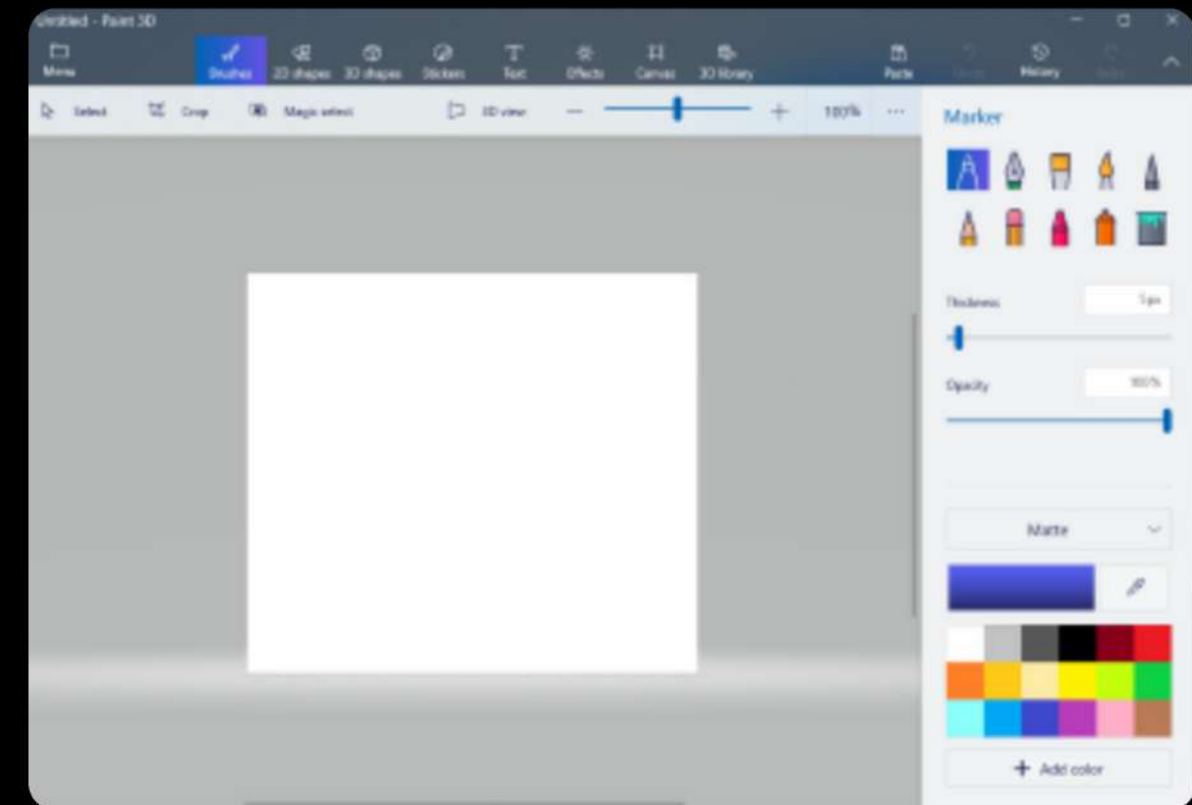
Games: teach through doing

Design patterns from games = instant familiarity

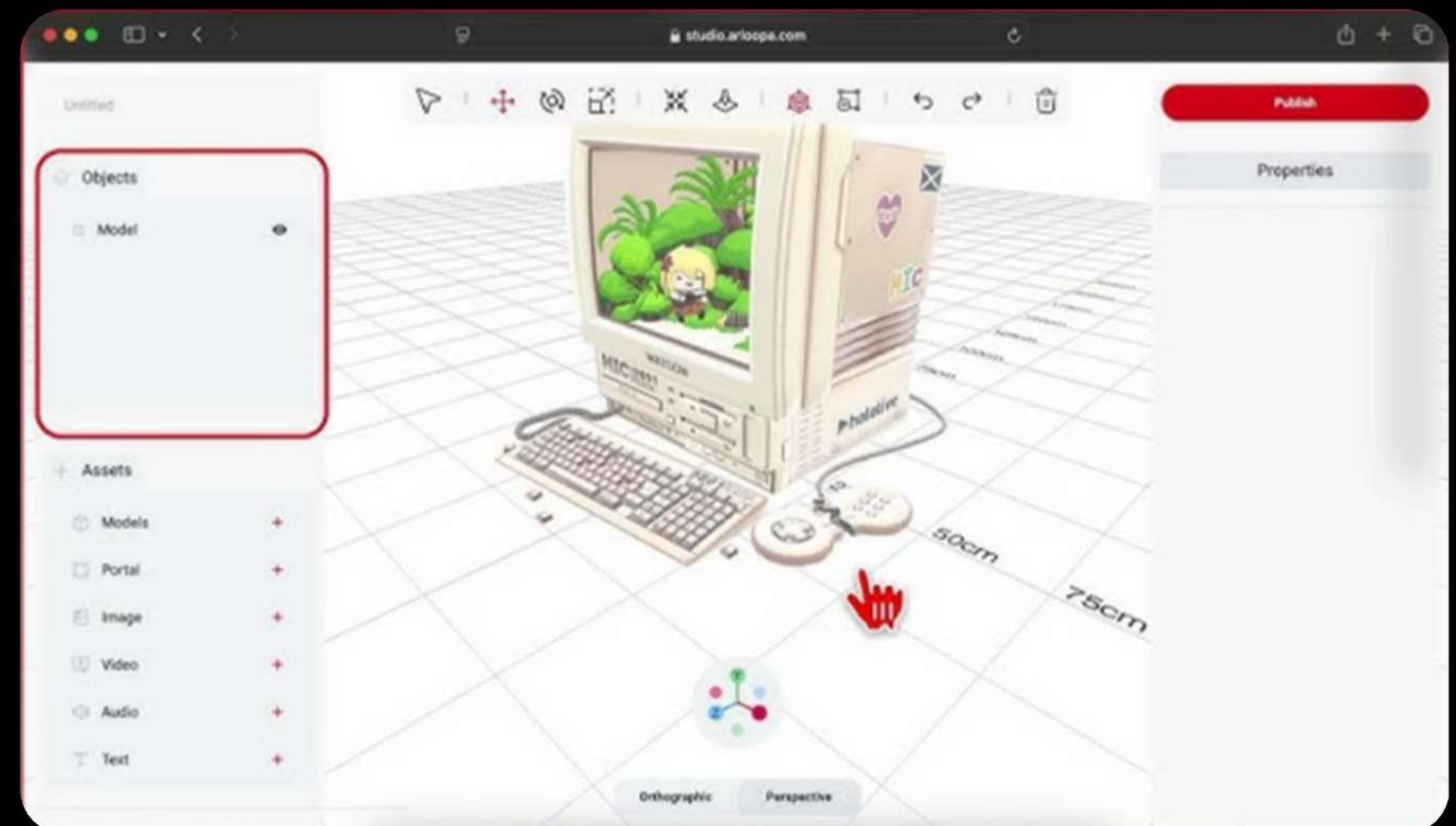
Limitless options, choice = an inclusive and diverse creation experience



ROBLOX STUDIO



PAINT3D



ARLOOPA AR STUDIO



GENERA LABS

GENERA STUDIO

CLOUD-BASED CHARACTER CLOTHING CUSTOMISATION

CHARACTER CLOTHING IN MINUTES

"The process of creation is super easy & brings so much positive energy into your day!"



GENERA STUDIO

3D Templates

My Projects

Import 3D file BETA

Join Discord

What will you design today?

MetaHuman

Roblox

Snapchat AR

Accessories

Tops

Sweaters

Jacket

Trousers

Tops

Tops

Tops

Tops

Template name

Template name

Template name

Template name

Template name

Template name

Template name

Template name

Pop art with hearts

Generate

"Co-creating with GENERA was incredibly inspiring! I can't contain my excitement for this incredible platform!"

CANVA FOR METAHUMANS

AND ROBLOX

Optimised
Assets
1000+



PBR
Materials
350+



Decals
100+



High-poly



Vertices	36,856
Edges	72,844
Faces	36,124
Triangles	69,922

Low-poly



Vertices	2,269
Edges	4,480
Faces	2,209
Triangles	4,413





The latest version of MetaHuman Creator is only available as part of Unreal Engine. Please follow the link below to install Unreal Engine and start creating your MetaHumans.

[Get Unreal](#)

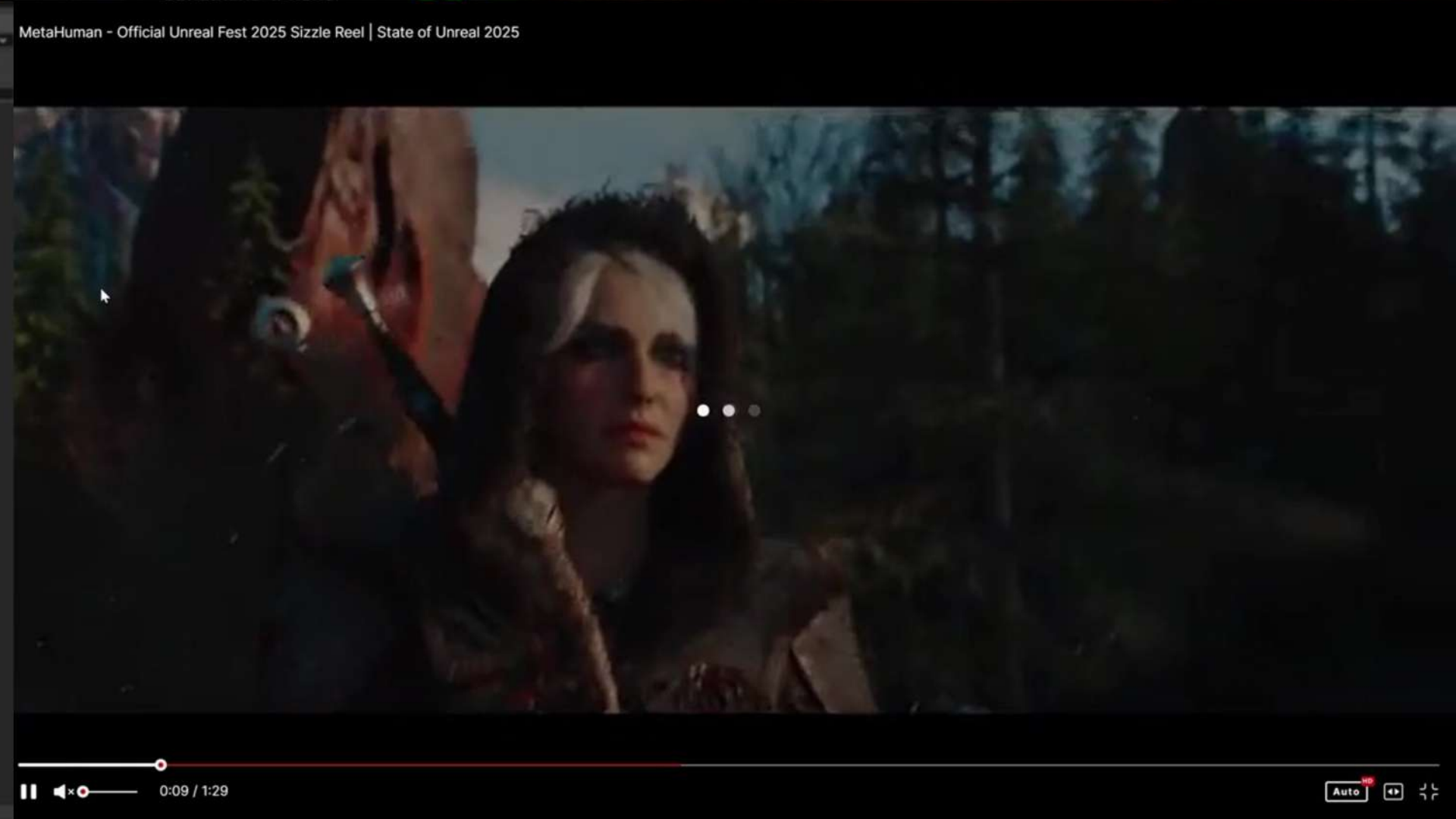
MetaHuman Version Selection

Version Unreal Engine 5.5 

 You have selected a legacy version

- New features will not be available in this version.
- Generates MetaHumans compatible with the selected UE version.
- MetaHumans created with this version will need to be migrated to MetaHuman Creator in Unreal Engine in order to use them with newer versions of Unreal Engine.

[Launch MetaHuman Creator](#)





Test_MH x

Create Full Rig Create Joints Only Rig Remove Rig Download Texture Source v Refresh Preview

★ Presets

↑ Body

⬇ Head

⚙ Materials

👤 Hair & Clothing

🔧 Assembly

Hair & Clothing

Selection Details



The Asset you're editing is rigged. Preset and Material selections, and Modelling operations, require that the rig is deleted to unlock editing.

Status
Rig State: Joints and Blend Shapes
Texture Sources: 1k (face), 4k (body)
Body Type: Parametric



0 | 47 | 94 | 141 | 188 | 235 | 282 | 329 | 376 | 423 | 470 | 517 | 564 | 611 | 658 | 705 | 752 | 799 |

Preview...Details x

Search

▼ Animation

Animation Controller **AnimSequence** vPlay Rate **1.0**

▼ Face Animation

Face Animation Type **Template Animation** vFace Template Animat... **BodyROM** v

▼ Body Animation

Body Animation Type **Template Animation** vBody Template Anima... **BodyROM** v

▼ Grooms

Preview **Visible** v

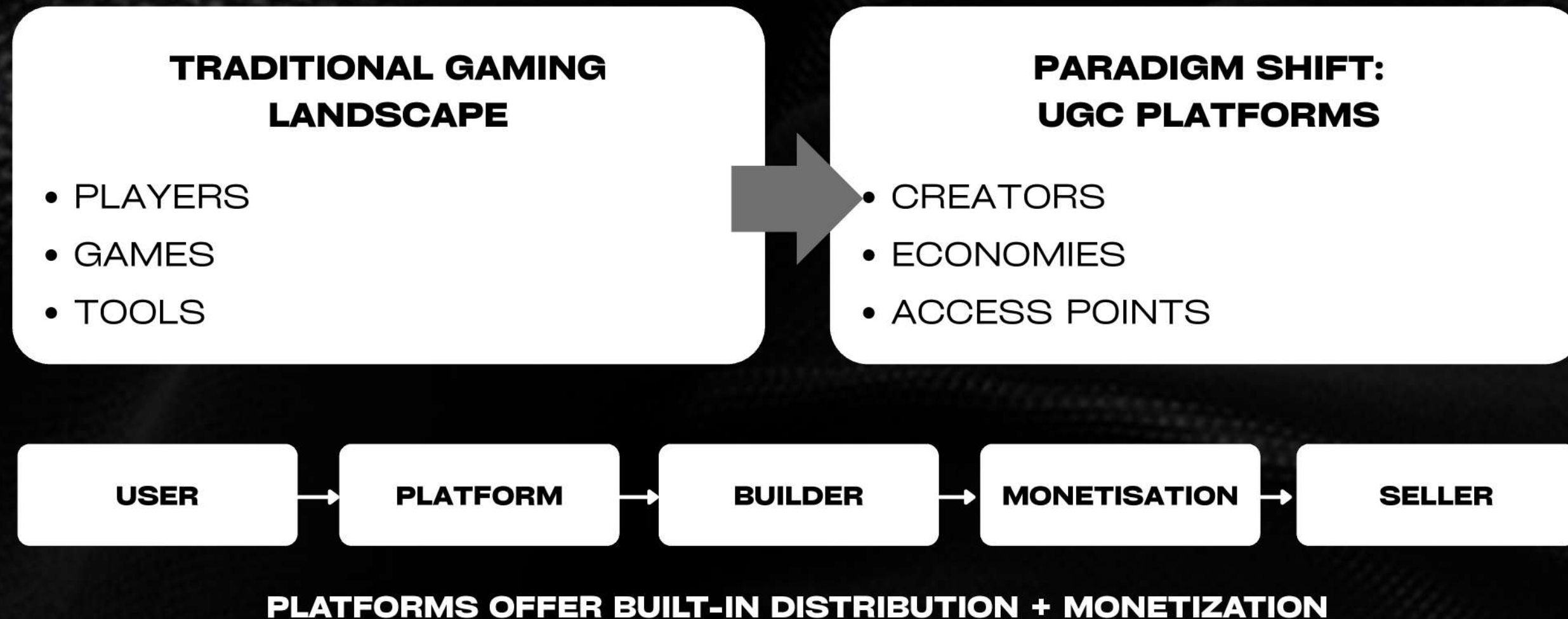
▼ Outfit Clothing

Preview **Visible** v

CLOSING THOUGHTS

REDEFINING CRAFT, DESIGN & AUTHORSHIP

- Designers are builders of systems
- Users are becoming performers, distributors, co-authors
- Cultural production is no longer linear or hierarchical
- Building the right tools = shaping who gets to participate.



WHAT KIND OF FUTURE ARE WE BUILDING?

- THE CHALLENGE IS NOT JUST BUILDING FOR VIRTUAL WORLDS, IT'S **DESIGNING AGENCY, INCLUSION, AND INFRASTRUCTURE**
- TOOLS ARE THE NEW CULTURAL INSTITUTIONS
- LET'S BUILD SYSTEMS THAT EMPOWER MODULAR, CO-AUTHORED FUTURES
- WHAT HAPPENS WHEN EVERY USER BECOMES A CREATOR?"



CONTACT US



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+447467539956

As seen in...

IMMER
SIVE | TECH
WEEK

FASHION
DISTRICT
FESTIVAL



WWD

VOGUE



HACKERNOON

Forbes

LONDON
TECH
WEEK

JING DAILY 精奢
THE BUSINESS OF LUXURY IN CHINA 商业精英