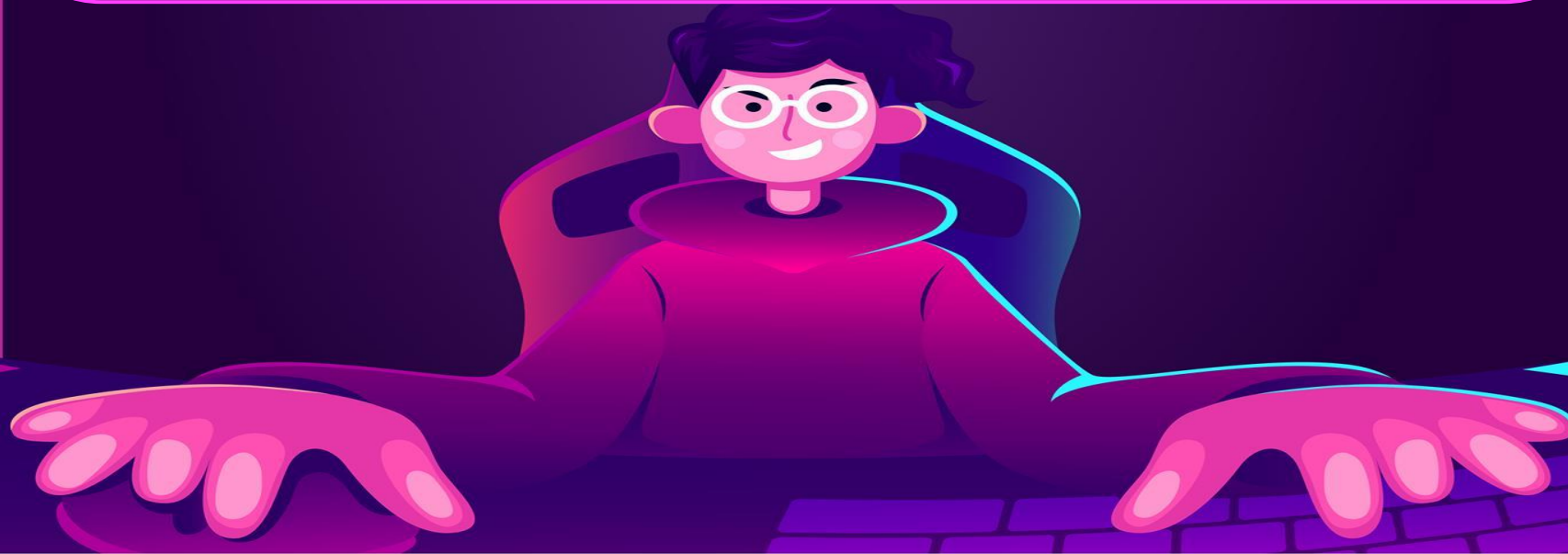


CREATIVE INDUSTRIES
Game, Animation, and
Film Development



CREATIVE INDUSTRY ROADMAP: Game, Animation, and Film

Legend
(Text Font)

DONE

ONGOING

TARGET

Updated as of 21 September 2023

OVERALL STRATEGIES

- Facilities and Services**
- Establishment of Animation Studio Facilities
 - Establishment of Extended Reality Laboratory
 - Establishment of "Pugad Sining" / Creative Innovation Hub for Graphics Design, Motion Capture, and Audio Post-Production
 - Establishment of Volume Technology Studio
 - Establishment of Holographic Environment Simulator
 - Establishment of a Creative City for Game, Animation, and Film

- Human Resources**
- Industry-defined trainings on game design and game theory
 - Publish standard / baseline processes
 - Capability and capacity building to produce hardware prototypes

- R&D Technologies**
- Game Development:
- Development of serious games and gamification apps in education, tourism, cultural preservation, and corporate sector
 - Development of game engine and framework
 - Development of input modalities for VR app simulation and training
 - Digitization of traditional sports and AI for game analytics
 - Development of proprietary software and software-as-a-service
 - Application of blockchain for asset management, royalty monitoring, and intellectual property processing
 - Prototyping of advanced gaming devices
 - Development of brain-to-computer interface
- Animation:
- Development of database for Philippine indigenous sounds
 - Automatic music generation and AI-assisted sound engineering
 - Process R&D for creative look and feel / graphics design technique
 - Motion capture technology for facial, body, and hand gestures
 - Integration of AI in 3D animation / character simulation
 - Development of real-time translation for bilingual conversation
 - Prototyping of advanced animation tools

R&D Technologies

- Film Development:
- Development of algorithmic video editing
 - Development of 3D pre-visualization software
 - Application of high-end real-time rendering technologies
 - Development of personalized sound control technology
 - Development of autonomous drone cinematography system
 - Intelligent screenplay writing through AI
 - Volume technology for immersive digital filmmaking

- S&T Policies**
- Development of policy on using blockchain in gaming industry
 - Protection of trade secrets and company pipelines
 - Strengthen policy on piracy

- 60 M**
- Establishment of Extended Reality Laboratory; Development of serious games for tertiary education, cultural preservation, and corporate sector; Development of proprietary software and software-as-a-service; Development of game engine and framework

- 50 M**
- Establishment of Animation Studio Facilities; Development of serious games for primary and secondary education and tourism; Development of human-computer interface products; Development of database for indigenous sounds

R&D SOLUTIONS

- 150 M**
- Establishment of Volume Technology Studio; Application of volume tech for immersive filmmaking; Application of blockchain in gaming industry; Motion capture technology for facial, body, and hand gestures; Development of input modalities for VR app simulation and training; Development of metaverse platform with digital NFT marketplace; Process R&D for creative look and feel / graphics design technique

- 150 M**
- Digitization of traditional sports and AI for game analytics; Development of algorithmic video editing; Automatic music generation and AI-assisted sound engineering; Integration of artificial intelligence in 3D animation; Development of real-time translation for bilingual conversation

- 150 M**
- Development of 3D pre-visualization software; Application of high-end real-time rendering technologies; Development of personalized sound control technology

- 200 M**
- Establishment of "Pugad Sining" / Creative Innovation Hub for Graphics Design, Motion Capture, and Audio Post-Production

- 200 M**
- Establishment of Holographic Environment Simulator; Prototyping of advanced gaming devices and animation tools; Development of autonomous drone cinematography system

- 200 M**
- Establishment of a Creative City for Game, Animation, and Film; Development of brain-to-computer interface in games; Intelligent screenplay writing

VISION

By 2030, the Philippines will become top creative economy in ASEAN in terms of size and value of our creative industries driving competitiveness and attractiveness of our creative talent and content in international market.

...2021

- Serious games for primary education; Human-computer interface products; Animation Studio Facilities; Database for indigenous sounds

- 2022**
- Serious games for secondary education and tourism

- 2023**
- Proprietary software and software-as-a-service

- 2024**
- Extended Reality Lab; Serious games for tertiary education, cultural preservation, and corporate sector; Game engine and framework; Algorithmic video editing

- 2025**
- Volume tech studio; Blockchain in gaming; Motion capture software; Metaverse platform; VR app simulation and training; Process documentation for graphics design technique

- 2026**
- Digitized traditional sports and AI-assisted game analytics; AI-assisted sound engineering; 3D animation with AI; Real-time translation; 3D previz; Real-time rendering software

- 2027**
- Creative innovation hub for graphics design, motion capture, and audio post-production; Personalized sound control device

- 2028...**
- Holographic Environment Simulator; Gaming and animation hardware prototypes; Autonomous drone cinematography system

MILESTONES

OVERALL OUTCOME

Locally developed software and hardware, established facilities, and trained personnel for the advancement of the Philippine creative industries

List of Creative Industry Projects (for the whole duration of the roadmap)

R&D Technologies	Project Title	Budget Allocation ('000)							Status
		2022	2023	2024	2025	2026	2027	2028	
Creatives (Gaming, Film, Animation)	Imahe Labs: An Educational Game in Chemistry for the Senior High School and Junior High School Sectors of Baguio City	2,785,200.50							Completed (PCIEERD-GIA)
	iJuanderer : An Augmented Reality-based Gamified Local Tourism and Cultural Heritage Promotion and Preservation	991,154.00							Completed (PCIEERD-GIA)
	Nurturing Interest in STEM Among Filipino Learners Using Minecraft	3,366,984.28							Completed (DOST-GIA)
	Stunt Science : A Physics Simulator Mobile Game	2,771,008.00							Completed (PCIEERD-GIA)
	A Game-based Mobile Learning Platform for Social Studies	1,540,501							Completed (PCIEERD-GIA)
	Haynayan AR : An Augmented Reality-Based Lesson for the Improvement of Learning Achievement in Cell Biology for the STEM Curriculum	955,754.00							Completed (PCIEERD-GIA)
	Handum: The Design, Implementation, and Analysis of a Digital/Mobile Game-based Learning Tool for Primary and Secondary Education	10,845,376.00							Completed (PCIEERD-GIA)
	Development of a Local Cloud-Based Digital Apparel Prototyping Platform of the PTRI-Textile Product Development Center as a Response to the "Now Normal"	3,563,963.53	1,772,726.33						Ongoing (DOST-GIA)
	SandPix: A Sand-Based Image Printing Technology	5,125,328.00	1,273,711.20	434,200.00					Ongoing (PCIEERD-GIA)



List of Creative Industry Projects (for the whole duration of the roadmap)

R&D Technologies	Project Title	Budget Allocation ('000)							Status
		2022	2023	2024	2025	2026	2027	2028	
Creatives (Gaming, Film, Animation)	A Laboratory and Game Engine /Framework for Tertiary-Level Virtual, Augmented, and Mixed Reality (VAMR) Applications		5,558,982.30	4,439,238.30					Ongoing (PCIEERD-GIA)
	Serious Games for Promoting Coherent Knowledge and Developing Critical and Problem Solving Skills in Tertiary Mathematics			5,355,144.00	4,615,144.00				Ongoing (PCIEERD-GIA)
	Volume Technology for Immersive Filmmaking				23,294,731.38	12,622,662.90			Ongoing (DOST-GIA)
	CrimeXperience: Immersive XR Crime Scene Simulation in the Philippine Context			6,114,771.20	4,787,846.20				Ongoing (DOST-GIA)

