

A-01

# Bringing Liveliness to an Uninhabited Metaverse -Providing NPCs that behave in a variety of ways through generative AI-

## Social Issues that we have focused on

The challenges to the widespread use of the Metaverse are a lonely metaverse with no one around and expensive development costs. Currently, many Metaverse spaces are depopulated with no liveliness, and the implementation of NPCs to create liveliness requires highly specialized skills and high development costs.

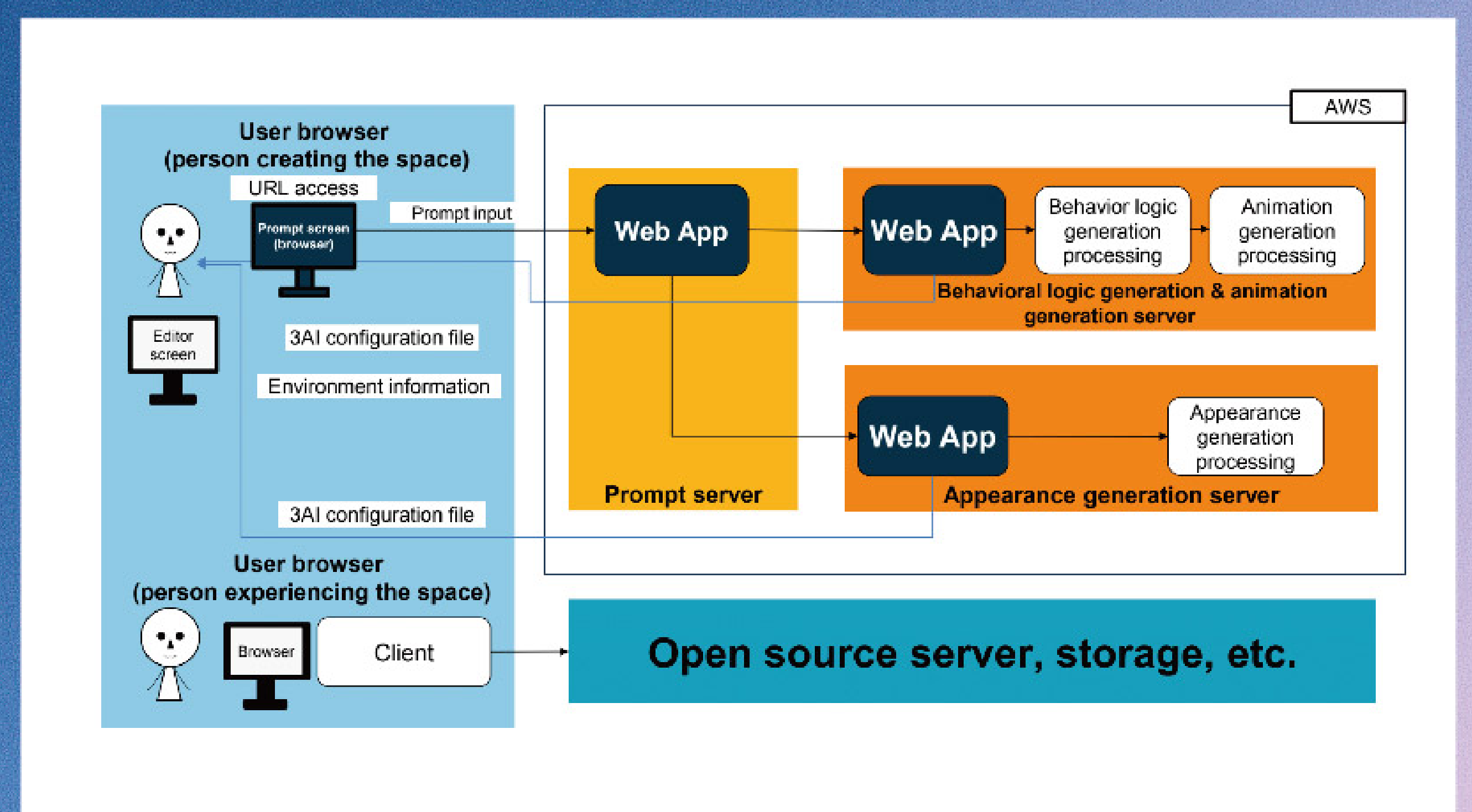
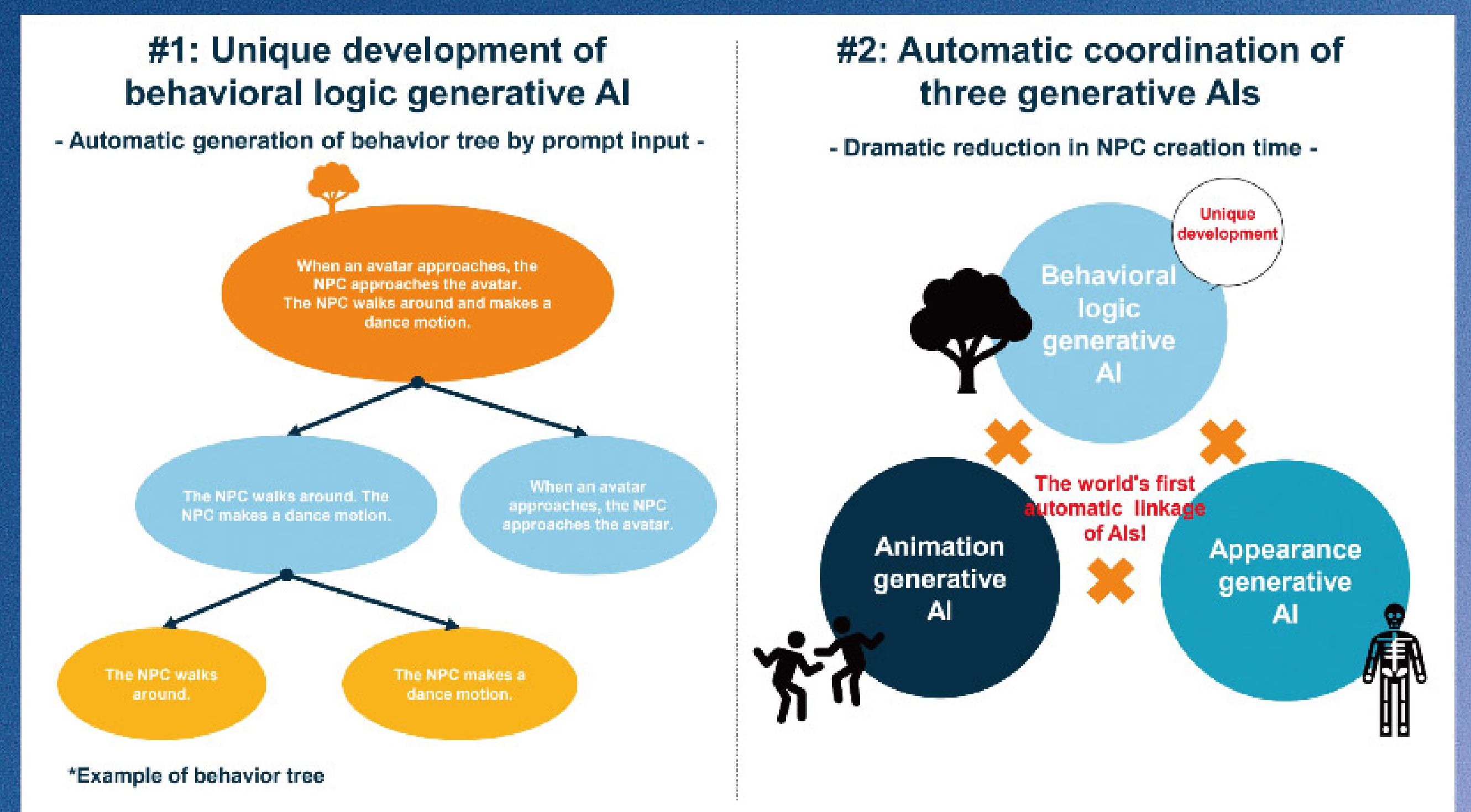
## Initiatives to resolve issues

### Overview

Focusing on non-player characters (NPCs), which are highly important content in the UX of the Metaverse, and generative AI technology that contributes to reducing development costs, We developed the first NPC automatic generation technology based on prompt input in the world. (docomo's research, December 2023). We also conducted verification through NPCs to advance behavior change technology that works on people's psychology.

### Technology to Support Initiatives

We have developed our own behavior logic generative AI that uses LLM to generate a behavior tree that defines the behavior of NPCs. We have also developed technology to automatically link the behavior logic generative AI, animation generative AI, and appearance generative AI, making it possible to generate NPCs easily and cost-effectively with only prompt input.



The utilization of automatic NPC generation technology allows anyone to easily and inexpensively create NPCs that behave in a variety of ways, creating a continuous liveliness in Metaverse spaces and making them fascinating places that people will want to visit again and again. For example, it can be used for regional Metaverse revitalization.

We will create a world where more attractive Metaverse spaces are available  
Metaverse is used naturally