

**Connecting our Entire World  
Physically & Limitlessly**

**ANA** 



Akira Fukabori | Founder & CEO | avatarin Inc.





Akira Fukabori



6 %





# Issues with Existing Mobility



**Distance Factors**



**Time Constraints**



**Financial Constraints**



**Infrastructure**



**Environmental Impact**



**Psychological Stress**



**Physical Constraints**



**External Factors**



**Health Factors**



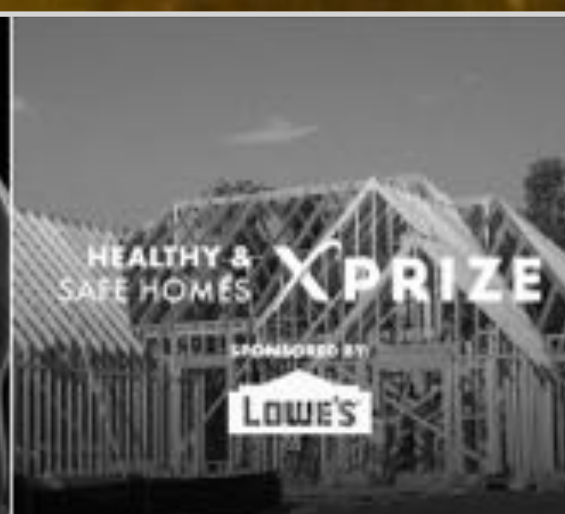
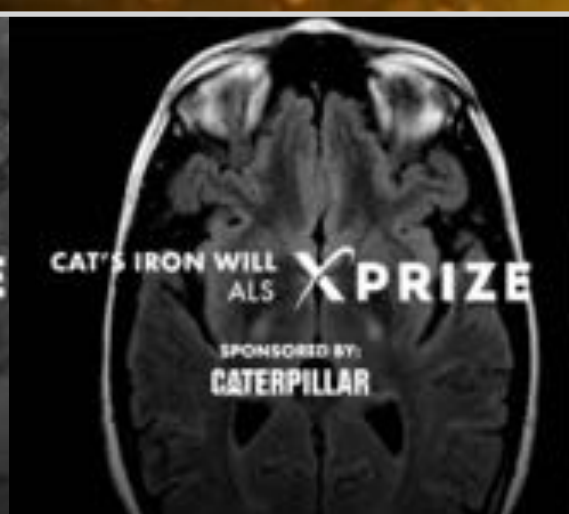
**Diplomatic Factors**



# XPRIZE<sup>®</sup> VISIONEERS

## 2016 SUMMIT

Presented by The Roddenberry Foundation









COMPLETE ALL 5 CHALLENGES & WIN  
15 MILLION DOLLAR PRIZE

# WHEN A DOCTOR EMBODIES AN AVATAR

NAVIGATES TO  
A DISASTER, FINDS  
& PROVIDES EXPERT  
MEDICAL CARE TO  
A HUMAN ANYWHERE,  
INSTANTLY.



EMBODY YOUR AVATAR  
ANNUAL AVATAR GAMES STARTING 2022



AVATARXPRIZE.COM

ANA XPRIZE





A photograph of two men smiling and holding a large ceremonial check. The man on the left is older with grey hair, and the man on the right is younger with dark hair. They are both wearing dark jackets over light-colored shirts. The background is dark with some blue and purple lighting and small white dots.

**ANA**

October 7, 2017

X PRIZE

\$ 22,000,000

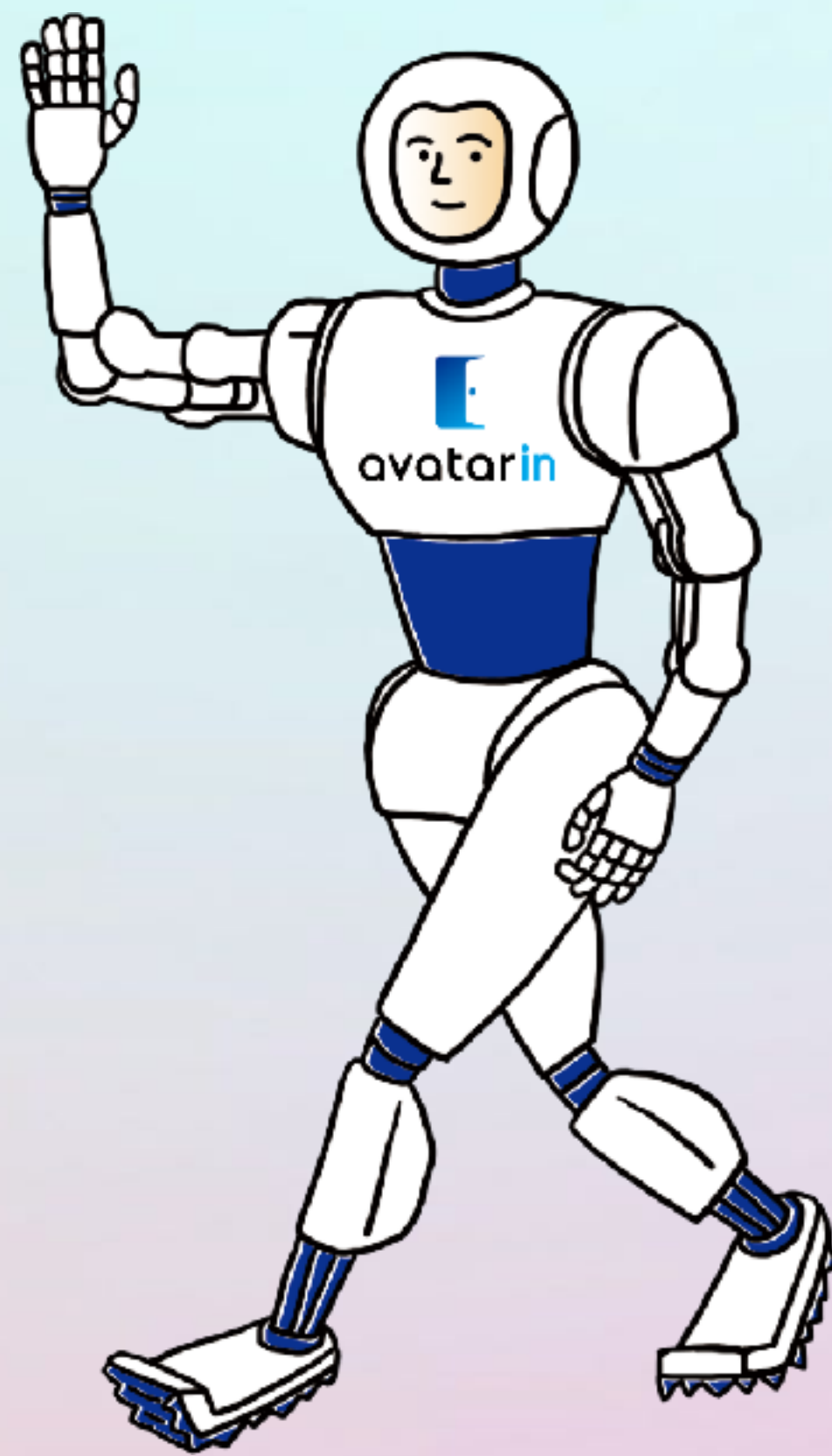




# XPRIZE AVATAR







## Global Prize Competition

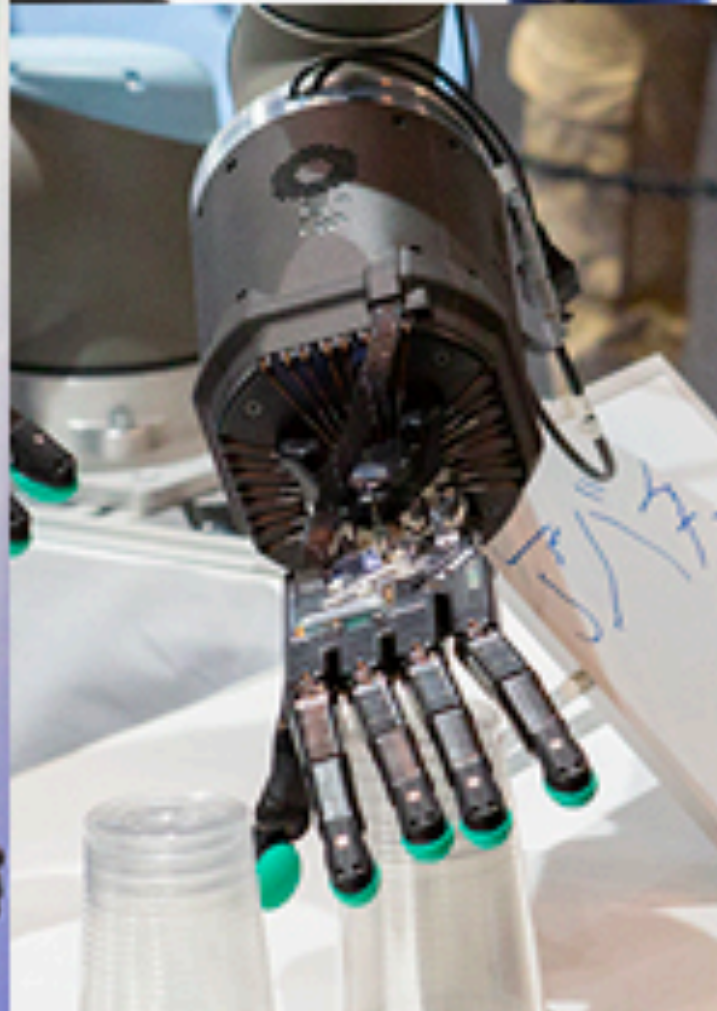
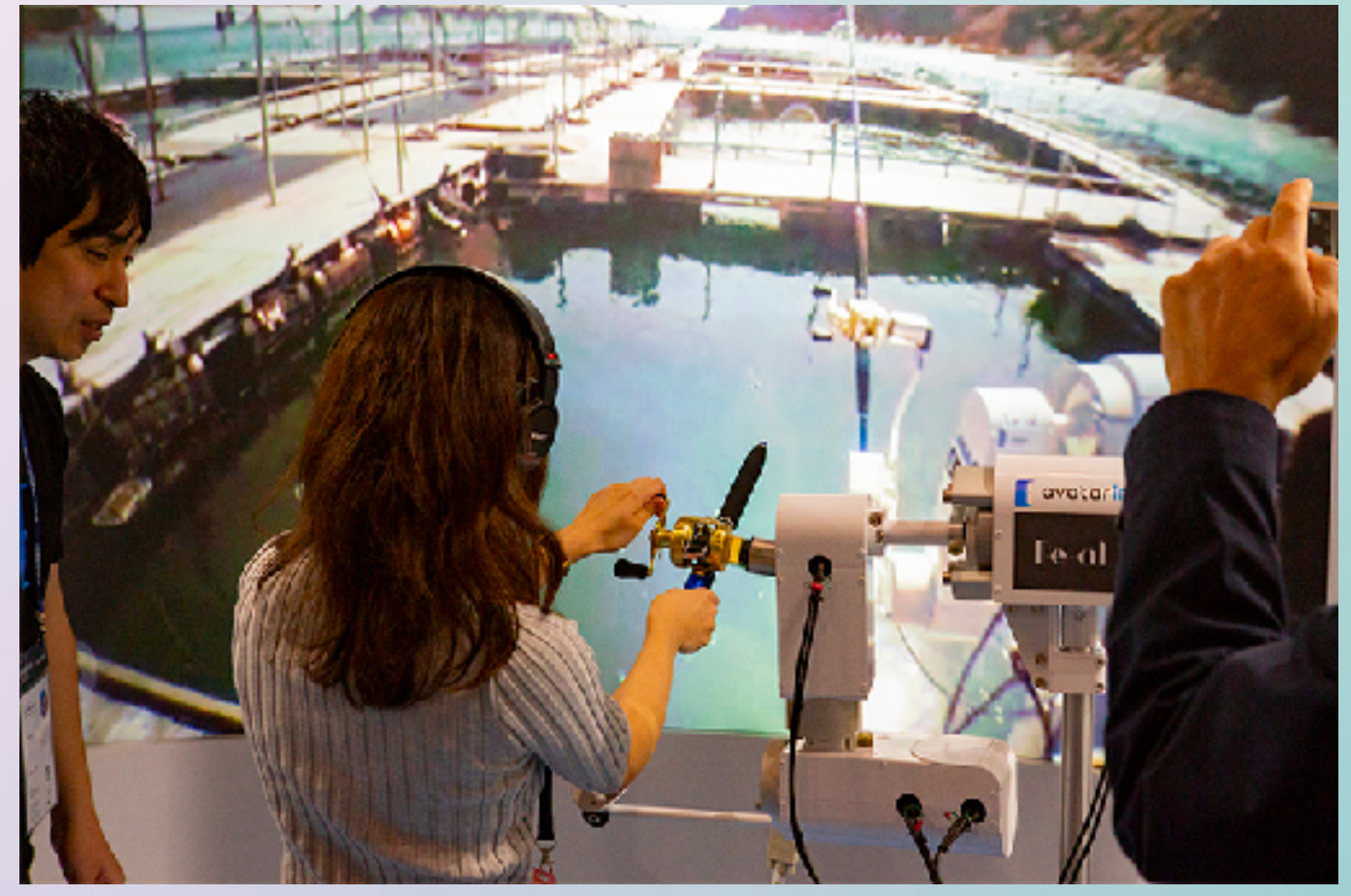
ANA Avatar XPRIZE

## Market Deployment

avatarin



# ANA AVATAR VISION 2019

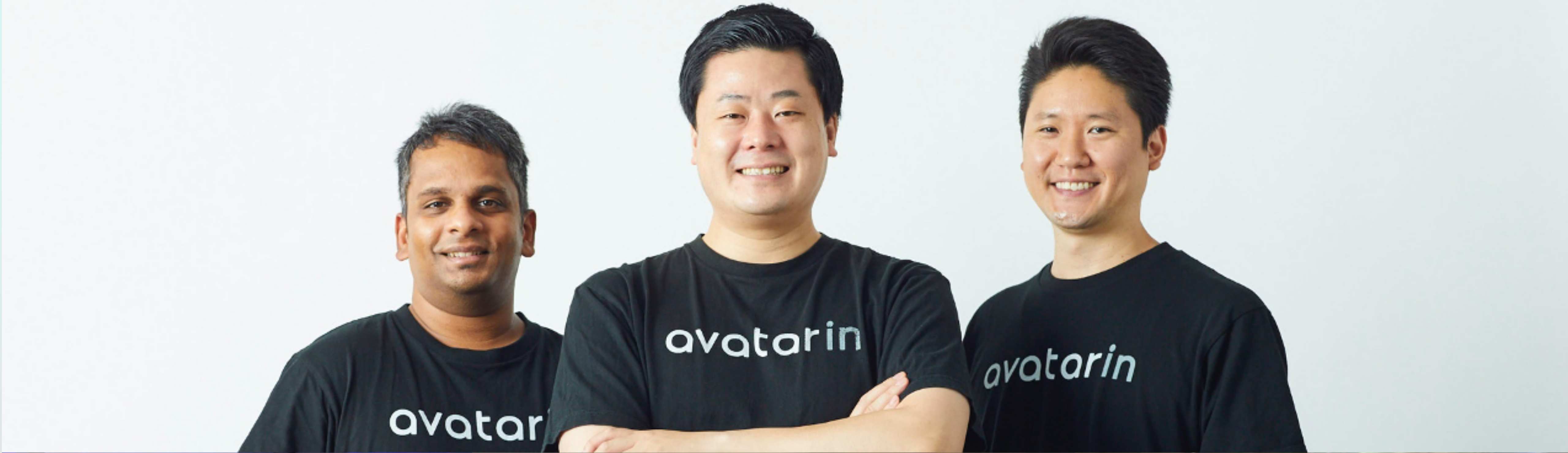






avatar mobility service  
2020







## アバター事業を担う「avatarin 株式会社」を設立 ～ANA ホールディングス発のスタートアップ誕生～



ANAホールディングスでは本日4月1日、これまでデジタル・デザイン・ラボにてプロジェクトとして進行していた「アバター」を、社会インフラ化し事業として立ち上げる「avatarin (アバターイン) 株式会社」を設立いたしました。当初より「アバタープロジェクト」をけん引してきた、深堀昂（ふかぼり あきら）が代表取締役CEOに、梶谷ケビン（かじたにけびん）が取締役COOに、それぞれ就任いたしました。ANAホールディングス（以下ANAHD）発の、初めてのスタートアップ会社です。

これまでANAHDのデジタル・デザイン・ラボでは、「すべての人を距離や身体的な制約から解放し、人々が支え合う社会を実現する」ことを基本理念に、当プロジェクトを進めてまいりました。

2016年10月に、米XPRIZE財団主催のコンペティションでのグランプリを受賞したことをきっかけに、高性能アバターを開発する賞金総額10億円の国際賞金レース「ANA AVATAR XPRIZE」がスタートしました。2018年には、正式に「アバタープロジェクト」を立ち上げ、様々なアバターの実証実験を産官学で進めると同時に、将来に向けたアバターの社会インフラ化をビジョンで表した「ANA AVATAR VISION (エーエヌエーアバタービジョン)」を発表いたしました。そして、2019年には「アバター準備室」にて事業化の準備を進め、この度正式に事業会社を設立する運びとなりました。

今後、世界中から各分野のエキスパートを積極的に採用し、アバターに関するサービス、テクノロジーおよびリサーチのさらなる強化、パートナー連携、外部資金調達などを通して、新規市場の開拓をスピーディに行っていきます。

喫緊の課題となっている新型コロナウィルスへの対応として、遠隔でのコミュニケーションを必要としている医療施設などに、独自開発した普及型コミュニケーションアバター「newme(ニューミー)」を優先して提供していきます。既に先行して一部の大学病院および医療法人への提供を開始しておりますが、必要に応じて提供先を順次拡大し、最前線に対応にあたる医療関係者への一助となりたいと考えております。今後は、アバターを社会インフラとして、医療、介護、教育、ショッピング、鑑賞、観光などの様々な用途で利用可能なサービスを展開していく予定です。



左から、社外取締役津田、代表取締役CEO深堀、取締役COO梶谷  
ANAホールディングス 広報・コーポレートブランド推進部 03-6735-1111



特集

## avatarin 設立

物理的な距離や身体的な制限を超えて、誰もがつながることができる  
未来のプラットフォーム、「avatarin(アバターイン)」。  
事業化により経営スピードを加速し、次世代の社会インフラとして  
「未来社会」の実現に貢献していきます。

2020年4月、ANAホールディングス発の初めてのスタートアップとなる「avatarin(株)」を設立しました。「アバター」は、疑似的な瞬間移動が可能となる遠隔操作分身ロボットです。当社では2018年からアバタープロジェクトを立ち上げ、ロボットの開発や、物理的な身体移動を伴わないモビリティの研究を進めてきました。「アバター」の活用は、教育や医療において様々な社会課題の解決に貢献するだけでなく、新たな旅行需要の創出につながるなど、多くの可能性を秘めています。グループ経営理念に掲げる「世界をつなぐ心の翼」「夢にあふれる未来」に向け、avatarin(株)は、エアラインの枠を超えた事業領域に挑戦し、ANAグループならではの新たな価値を創造していきます。

## Subject of a Harvard Business School Case Study



HARVARD | BUSINESS | SCHOOL

123-456  
MARCH 5, 2020LINDA A. HILL  
EMILY TEDARDS

### Akira Fukabori and Kevin Kajitani at avatarin (A)

*We foresee a future with alternative modes of travel. We think the future will include people accessing an avatar system to instantaneously transport their senses across the globe and beyond.*

-Kevin Kajitani and Akira Fukabori

*As we build avatarin, we are always thinking about what the win is for society and for every player involved. It is a novel way of doing business. We are creating an avatar movement, but it is not our concept. The concept is a shared concept that everybody has ownership of. That is how we keep the movement excited, motivated, and growing.*

-Kevin Kajitani

Akira Fukabori, co-founder and Chief Executive Officer of avatarin, Kevin Kajitani, co-founder and Chief Operating Officer, and their 12 employees were settling into their new office in Tokyo, Japan. It was April 1, 2020—the day that avatarin, a start-up on a mission to transform humanity with robotic avatars, spun out of its parent company, ANA Holdings, Inc. (ANA) (Exhibits 1 and 2).

avatarin's journey had started in 2016 when, after a series of intrapreneurial ventures within ANA, Akira and Kevin began to wonder why, in a world of accelerating globalization and digital connectivity, those who lived in far-remote villages or impoverished urban areas could not access high quality education or healthcare. With a faster, cheaper mode of transportation, they could democratize the world's resources—bring the right people or resources together to the right places at the right time. Although teleportation was still the “stuff of science-fiction,” teleporting human consciousness and skills to remote locations through robots was not. Their vision was to build an “avatar service platform”—a global infrastructure of general-purpose avatar robots that humans could rent, like Uber or AirBnB, to perform surgery, defuse a bomb, visit elderly grandparents, attend school, or vacation in distant physical environments.

While Akira and Kevin cultivated ambitions that were dizzying in both the opportunities and challenges they represented, the two were clear-eyed about the effort it would take to fulfill them. Not only did they need to figure out how to advance existing technologies to allow users to experience all five senses in a remote location over the internet, but they also had to build a market for avatar services—for that, they needed to change mindsets. With ANA's support, they had made significant progress in advancing market receptiveness of the technology and cultivating the global ecosystem of

Professor Linda A. Hill and Research Associate Emily Tedards prepared this case. It was reviewed and approved before publication by a company designee. Funding for the development of this case was provided by Harvard Business School and not by the company. HBS cases are developed solely as the basis for class discussion. Cases are not intended to serve as endorsements, sources of primary data, or illustrations of effective or ineffective management.

Copyright © 2020 President and Fellows of Harvard College. To order copies or request permission to reproduce materials, call: 1-800-545-7605, write Harvard Business School Publishing, Boston, MA 02163, or go to www.hbsp.harvard.edu. This publication may not be digitized, photocopied, or otherwise reproduced, stored, or transmitted, without the permission of Harvard Business School.



# Backed by big corporations

Japan's largest airline



**New!**

Development bank of Japan



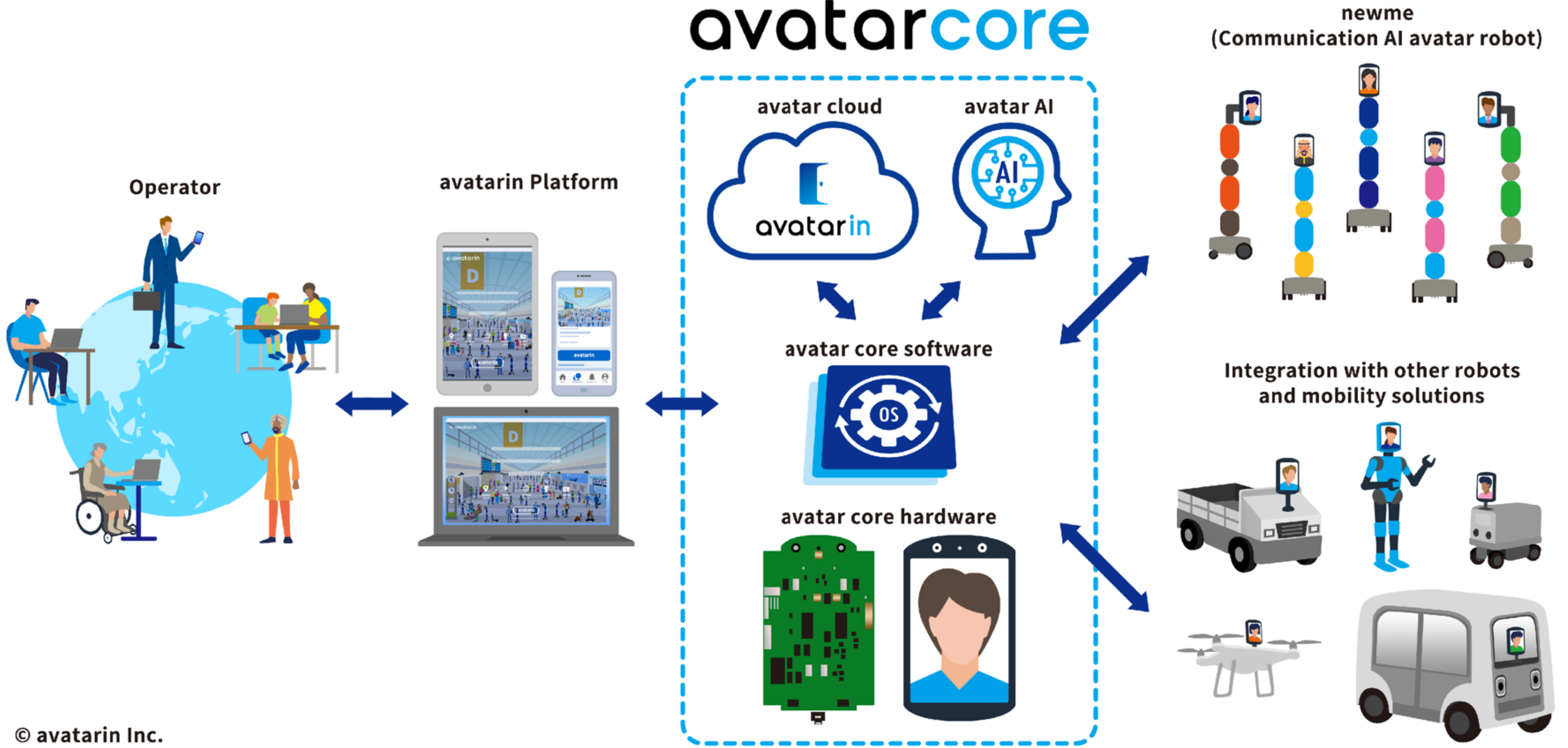
**New!**

Japan's largest bank





# avatarcore



© avatarin Inc.





# avatarin

Mobility for a better world.

Building the world's most instant, inclusive, and sustainable mobility infrastructure to catalyze more human experiences and solve the world's greatest challenges.

Instant

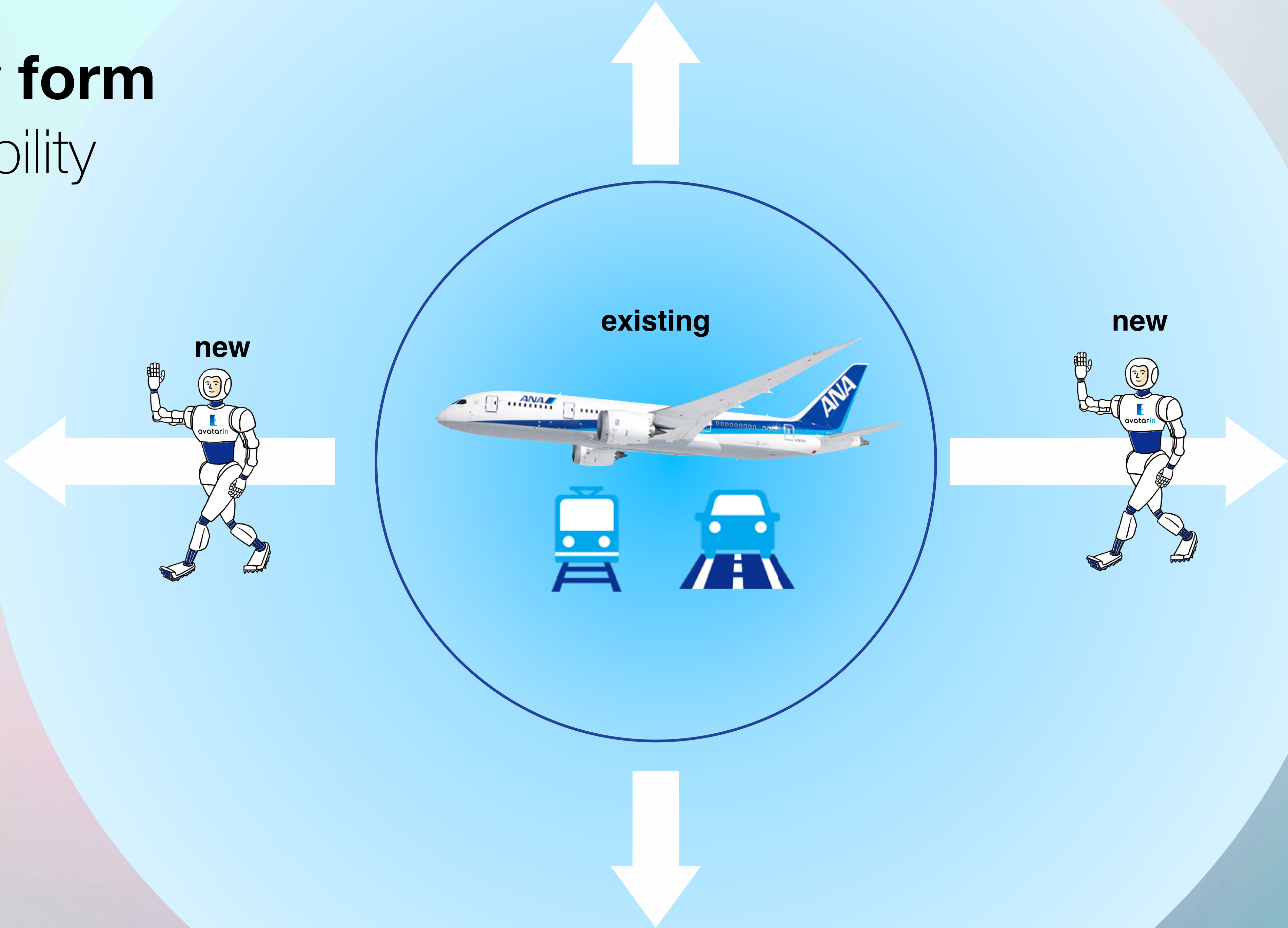
Sustainable

Inclusive





A new **form**  
of mobility

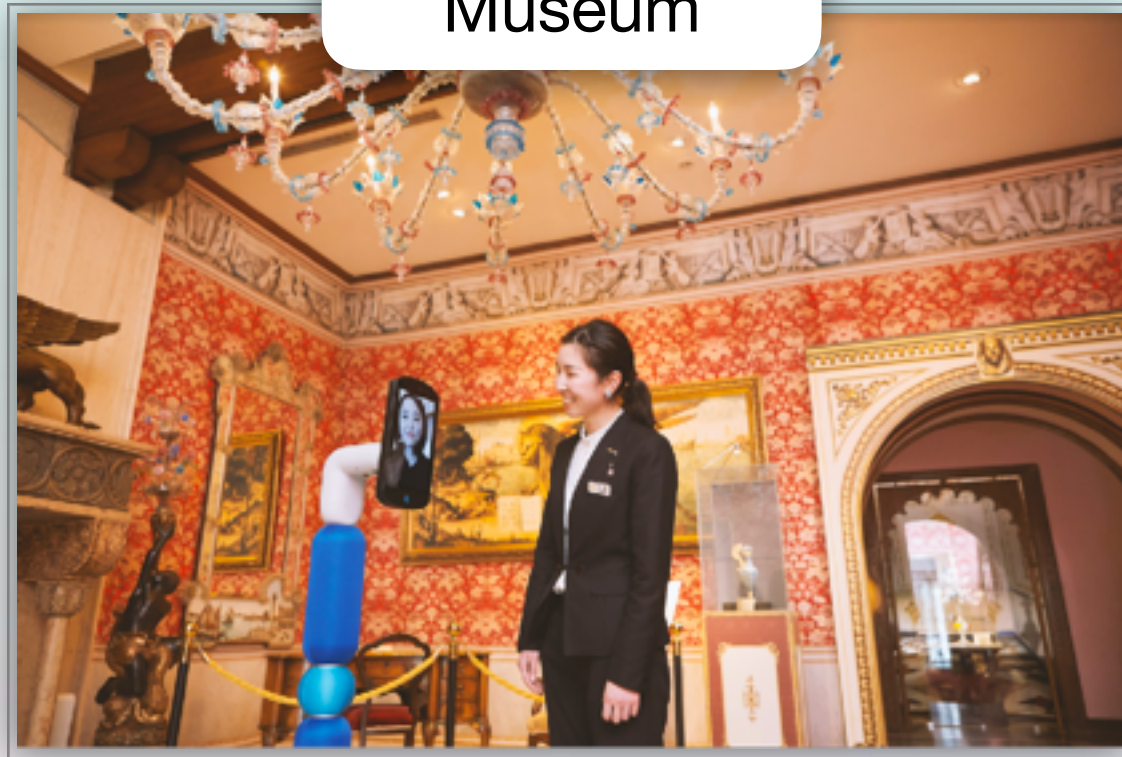




# The applications are endless...

## PUBLIC USE-CASES

Museum



Aquarium



Retail



Local Shops



## PRIVATE USE-CASES

Office



MICE



Healthcare



Security









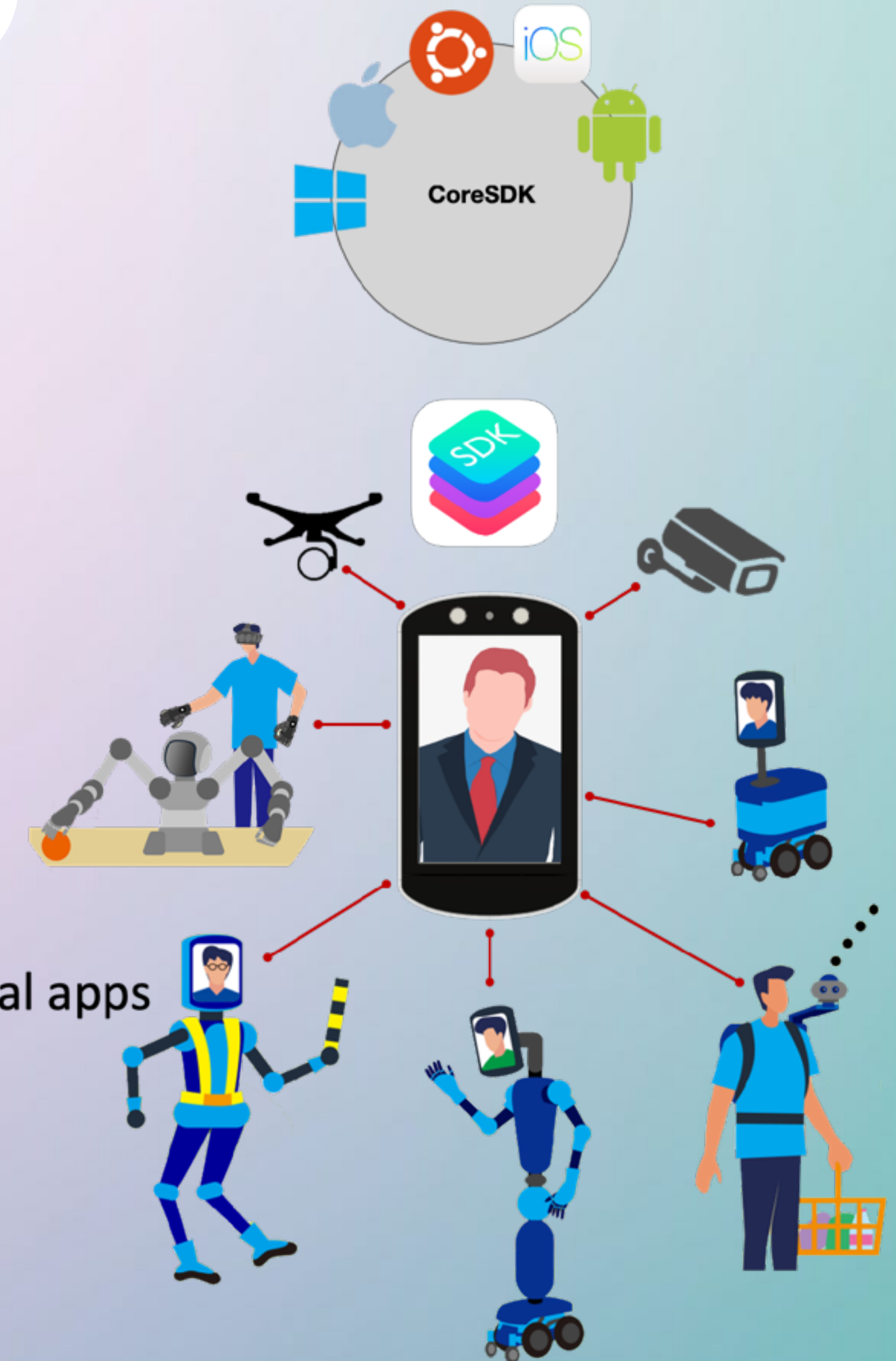




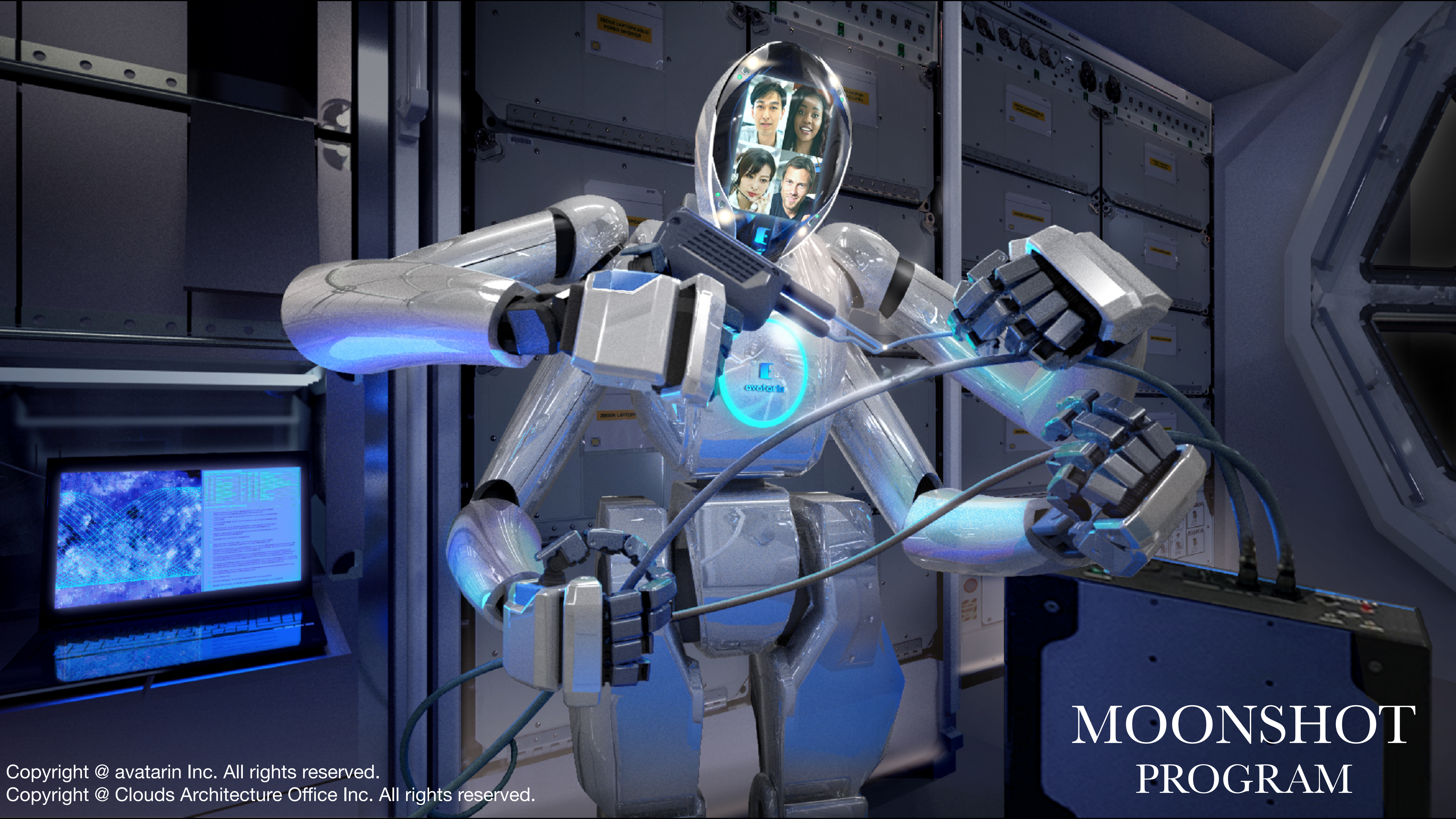
# avatarCore™ SDK



- Compatibility: Natively support major OS and architectures
- Performance: All base source code is developed and optimized in C++
- High level languages: SDK is ported to Python, JavaScript, Unity3D, ROS
- Resource Streaming: native ARTC Cloud/P2P streaming support
- Networking: Low latency large data Inter/Intra-communication
- Mobility: Optimized for mobile applications (Supports 5G/LTE/WiFi)
- Modularity: Services and applications can be developed and run separately
- Messaging: Publisher/Subscriber Messaging within Services or Applications
- Shared Resources: Zero-latency copy (images, audio, data) resources between local apps or services
- Remote Logging capabilities







# MOONSHOT PROGRAM

Copyright © avatarin Inc. All rights reserved.  
Copyright © Clouds Architecture Office Inc. All rights reserved.





User Point of View

Replay speed x3





SPACE FOR ALL





第4回 2022年  
日本オープンイノベーション大賞



JAPAN OPEN  
INNOVATION PRIZE

内閣総理大臣賞 受賞

第5回 2022年



内閣府  
Cabinet Office

宇宙開発利用大賞  
総務大臣賞 受賞

2022年

バンダイナムコ  
ガンダムオープン  
イノベーション  
パートナー



GUNDAM  
OPEN  
INNOVATION

We won the Prime Minister's Award

INNOVATION



# Thank you everyone for joining the ANA AVATAR XPRIZE!

Let's work together to make  
the world a better place  
using avatar technologies!

We are hiring!



avatarin  
Nice to meet you!



Scan here to follow us!

The complex block features the Avatarin logo, a QR code, and a call to action to follow them on LinkedIn. The background of this block is a white and blue geometric shape.

avatarin.com