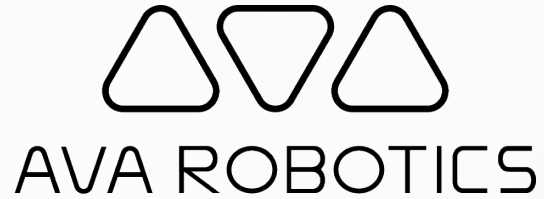


Mobile Service Robots are experiencing significant acceptance in warehouses and industrial applications. But what will it take for robots to be found in every workplace and in public spaces, performing a variety of tasks that increase productivity, safety and quality of life? Clearly, these robotic systems must be more than autonomous, they must be intelligent. In this session, Marcio Macedo, VP Product and Marketing at Ava Robotics will describe how AI and cloud-based platforms can augment and empower traditional autonomy with layers of intelligence that allow robots to perform their tasks more efficiently, and as a result, gain more acceptance from the humans they are designed to support. Topics include:

The state of the art in autonomous, intelligence robots for workplaces and public spaces

Case studies describing the use of mobile robots in the field (offices, hospitals, hospitality and retail)

How AI in robotics will shape what we consider autonomous in the coming 5-10 years



Service Robots for Commercial  
Spaces: The Path From  
Autonomous to Intelligent Robots

Marcio Macedo  
Co-founder, VP Products



# Agenda

Introduction

Autonomy versus intelligence

How we will get there

Final thoughts

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## Introduction

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# Ava Robotics

Technical heritage from iRobot, founded 2016

Our goal is to make intelligent mobile robots a part of everyday life in commercial spaces

Ava telepresence enables “practical teleportation”, announced in 2018



# Our experiences in hospitals, offices, hotels and more



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# Model for success





## What has worked

Robustness to physical environments

“Human-like” mobility

Reliable autonomous navigation

## Not Yet...

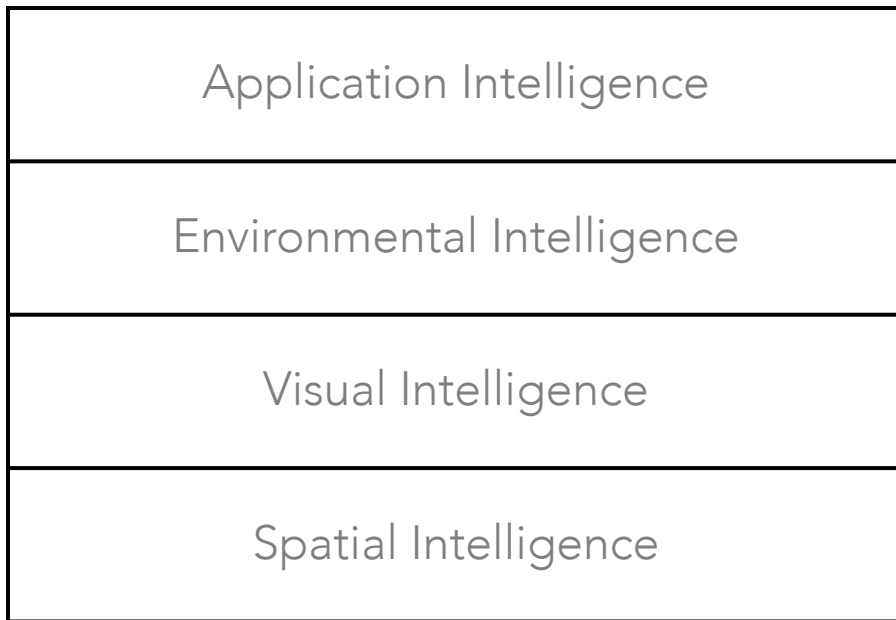
Self learning and adapting

(Really) Seeing people

Social navigation

Augmenting human productivity

# Intelligence stack



Autonomous → Intelligent

# Agenda

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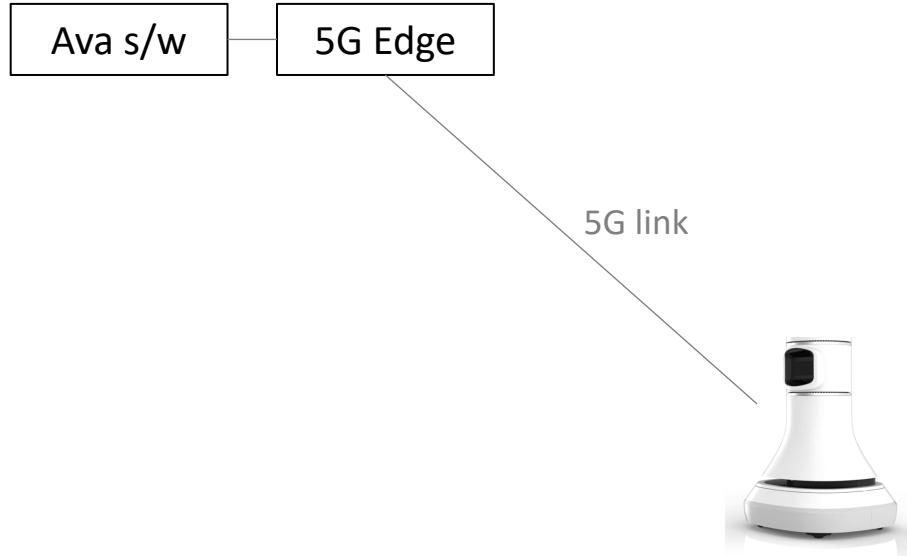
# Charting a path

Choice of architectural models and references

Balance of hardware and software

Priorities on the product roadmap

# Architecture from Verizon 5G Robotics Challenge



# Likely path for most solutions

SaaS reference architectural model, on top of on-board processing in robot

Careful hardware investment

Clear understanding of end user application and where augmentation of workflow is needed/has ROI

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# Summary

Commercial spaces are very different from industrial

Autonomy will not be sufficient for success

Each technical and roadmap decision must be carefully vetted



# Thank you

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# Ava Telepresence – Be Anywhere, Anytime.

Ava allows co-workers to cement relationships, be more productive and increase trust in a way that makes us feel better connected.



# Customer applications in remote work and meetings

## MIT Sloan Exec Ed



## Hilton Hotels

