Unity Robotics – Service Robot Solutions for Everyday Work Spaces
A Fraunhofer Spin-Out Company
Pains of Consumer Electronics Retailers

30-40% of customers leave electronic consumer market, without buying any products¹.

4 of 10 customers find Buying technical products stressful¹.

Up to 60% reconsidered despite strong intention to buy a certain product in a retail store and bought online².

¹Service Atlas Consumer Electronics 2012
²Statista Dossier Elektrofachhandel in Deutschland 2013
Pains of Consumer Electronics Retailers

**Root Causes**
- Raising Share Of Online Retail (e-Commerce) Business
- Sub-Optimal in-Store Sales Consultation & Service Quality
  - Qualified sales consultant sub-optimally utilized
  - Sales personnel turnover & high enablement costs
  - Ineffective incentive schemes

**Business Problems**
- Brick & mortar customer count stagnating or falling
- Revenues declining
- Cost pressure
- Already low operating margins squeezed further
- Need to differentiate and to increase value-add
  - Assortment (Choice)
  - Product availability (SCM)
  - High quality sales consultation (CX)
Meet Paul, Unity’s Autonomous Sales Assistant

The Solution

- **Functional Requirement:**
  - **Autonomous Sales Assistant** for the → 3 Common Use Cases
    - Is Product available in store?
    - What does it cost?
    - Where can I find it?

- **Non-Functional Requirement:**
  - Pro-active, safe, positive customer experience (CX)

- **Collaboration** with Human Sales Staff to provide High-Value adding Consultation

Live in Action…
Media Saturn’s Internal Corporate Video

Digital Innovations
Implementation with Care-O-bot 4

Body Gestures
3D Obstacle Detection

Localization
3D-Navigation

Speech Recognition
People Perception
Mimics
Head Postures

Connection to IT-Infrastructure
VOIP Client
Intermediate Results

- „Paul“ is recognized as character, not as robot
- User Acceptance: Differences between generations
- ROS Tools beneficial for remote assistance
- 3D-Navigation works
- Speech Recognition still challenging
- The last 10 % are hard...
Next Steps

- Live Period of 6 months
- Evaluation of Performance and Customer Feedback
- New Scenarios
- Further Deployments

Do you have any questions?