ABM with I-CubeX

Automated Behaviour Measurement with I-CubeX sensors, interfaces and software
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I-CubeX

• Real-Time Media Control development tools
• Sensors, Interfaces, Software and Support
• Since 1995 used world-wide
• R&D of music, exhibits, games, biomedicine
• www.ICubeX.com
• I-CubeX
I-CubeX
Procedure

- Design: define behaviour parameters
- Setup: instrument space, person(s)
- Observe: capture sensor data
- Process: annotate sensor data
- Analyze: calculate statistics
- Publish!
Equipment

- **Sensors:** cameras, biosensors, eye-tracker, GPS, switches, ..

- **Software:** Noldus Observer, TechSmith Morae, ..

- .. use/add 📐 I-CUBEX 🎈
New Procedure

- Design: define behaviour parameters
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- Observe: capture sensor data
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Demo

Consumer - Product Interaction Behaviours:

• Walk past/back
• Approach/Retreat
• Reach/Retract
• Pickup/Release
Equipment

- Sensors: MoveAlong, ReachClose, Touch
- Interface: USB-microDig
- Software: I-CubeX Editor, Keycode Mapper
- Software: Noldus Observer
Capture

- Walk past/back: MoveAlong
- Approach/Retreat: ReachClose
- Reach/Retract: ReachClose
- Pickup/Release: Touch
Overview

- Pickup/Release Sensor
- Product
- Reach/Retract Sensor
- Approach/Retreat Sensor
- Walk past/back Sensor
Why I-CubeX?

- Reduced data processing through *automated behaviour coding*
- Reduced data ambiguity through *behaviour specific capturing*
- Caution: design carefully to avoid false triggers
Why I-CubeX?

• Availability of high-resolution data
• Availability of real-time multi-modal feedback
• Lots of sensors, i.e., input modalities
• Easy to connect & setup
Thanks!

Feedback, Questions?

- Look up www.lCubeX.com/behaviour
- Contact me at Axel@ICubeX.com