# TEHOA TUOTANTOJÄRJESTELMIEN SUUNNITTELUUN 3D-SIMULOINNILLA

Mikko Urho 2.12.2016 Pori







### WORLDWIDE PARTNER NETWORK





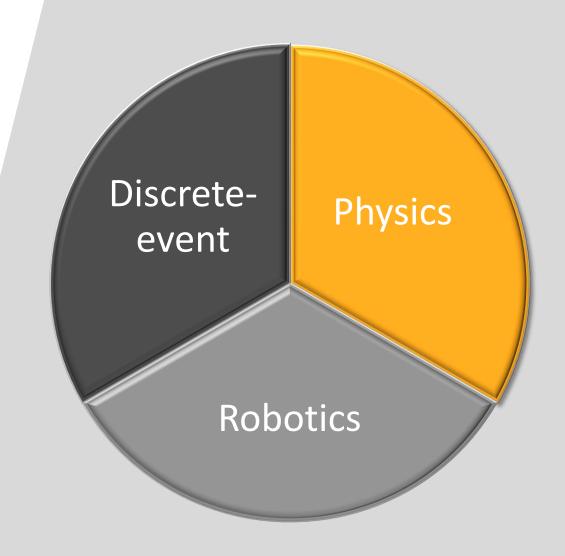
### 3D SIMULATION FOR EVERYONE I OPEN SOFTWARE PLATFORM



#### VISUAL COMPONENTS 4.0

### VISUAL COMPONENTS SOFTWARE PLATFORM

- Powerful simulation engine supports:
  - Discrete-event for material flow simulation
  - Robotics simulation
  - Physics (Rigid-body) for realistic cable and conveyor simulations
- Open API through .NET and Python

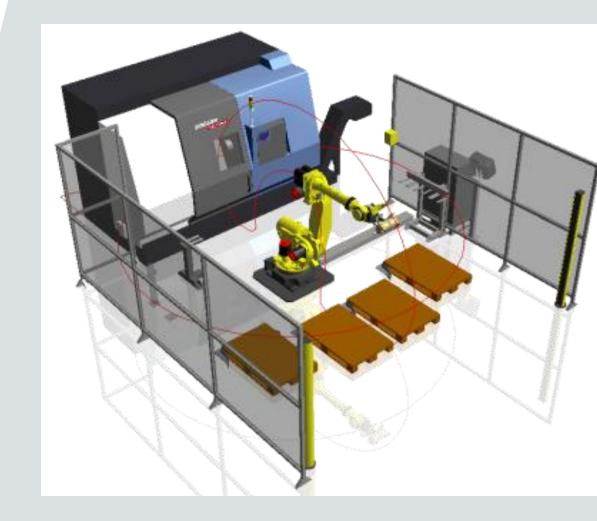




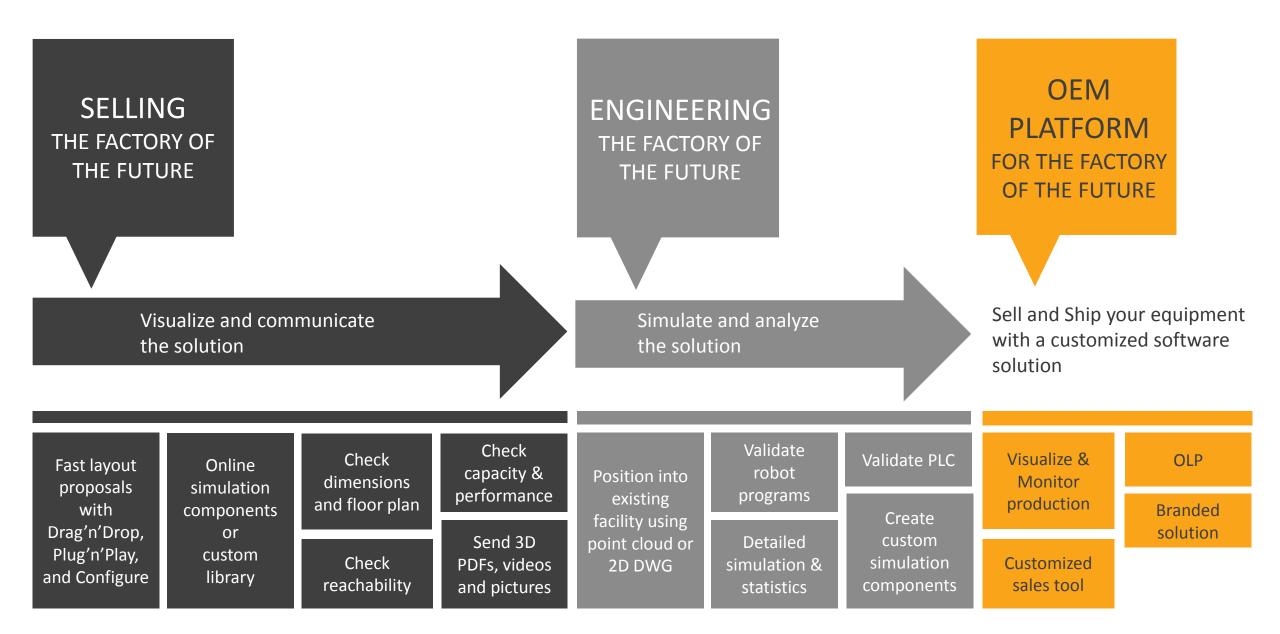
WHY 3DSIMULATION?

#### COMMON PROBLEMS IN FACTORY DESIGN

- Many layout alternatives
- Tools require expert resources
- Results are too technical and not very representative
- Hard to convince the decision
  makers

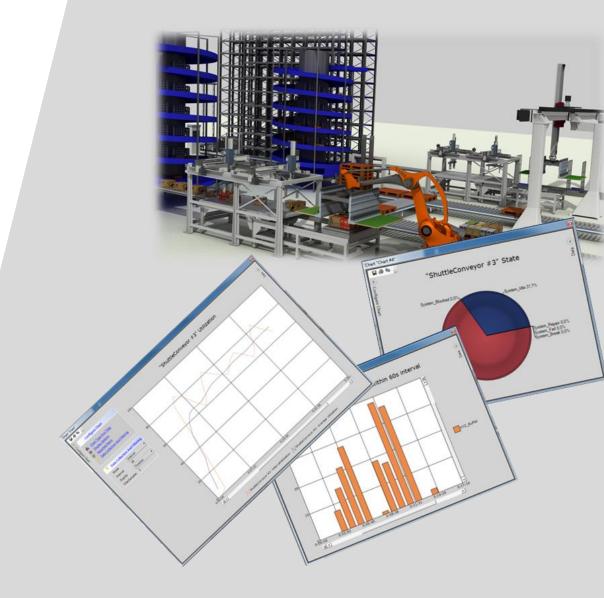


### DESIGN THE FACTORIES OF THE FUTURE



# BENEFITS IN MANUFACTURING

- Optimized layout, process, and productivity
- Tests with real production lists, peak production, and machine failures
- Reporting of process steps and KPIs



# MIKKO URHO MIKKO.URHO@VISUALCOMPONENTS.COM

# +358 44 56 101 56 WWW.VISUALCOMPONENTS.COM

