



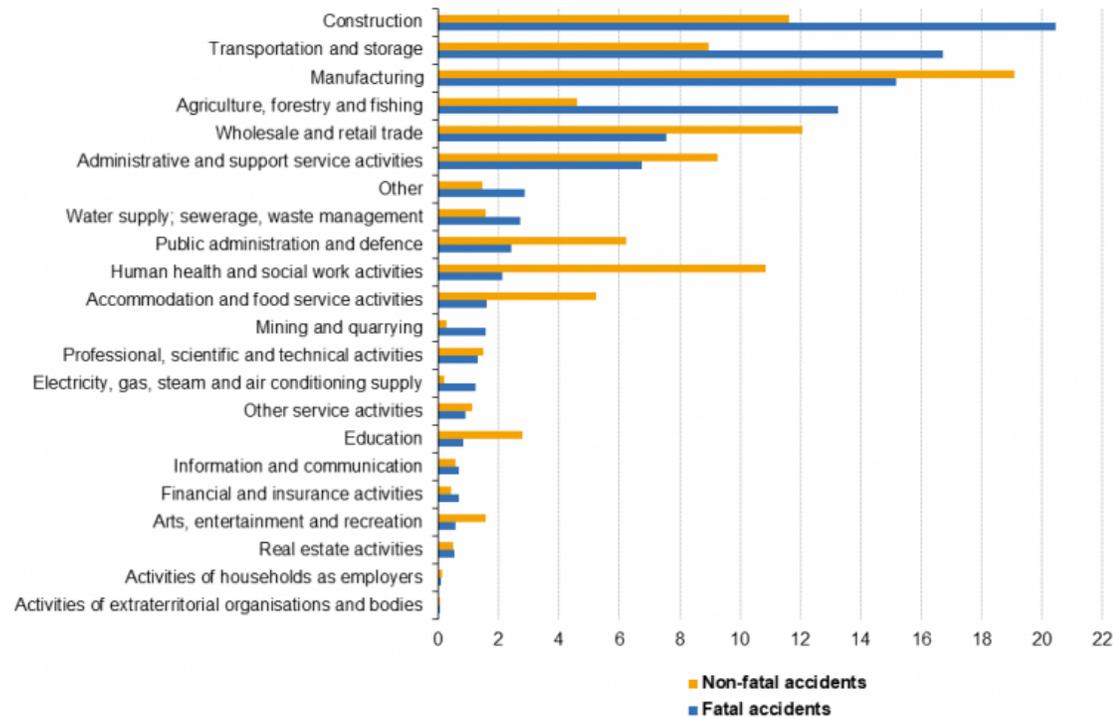
TRAINING SCENARIOS

VIRTUAL AND AUGMENTED REALITY

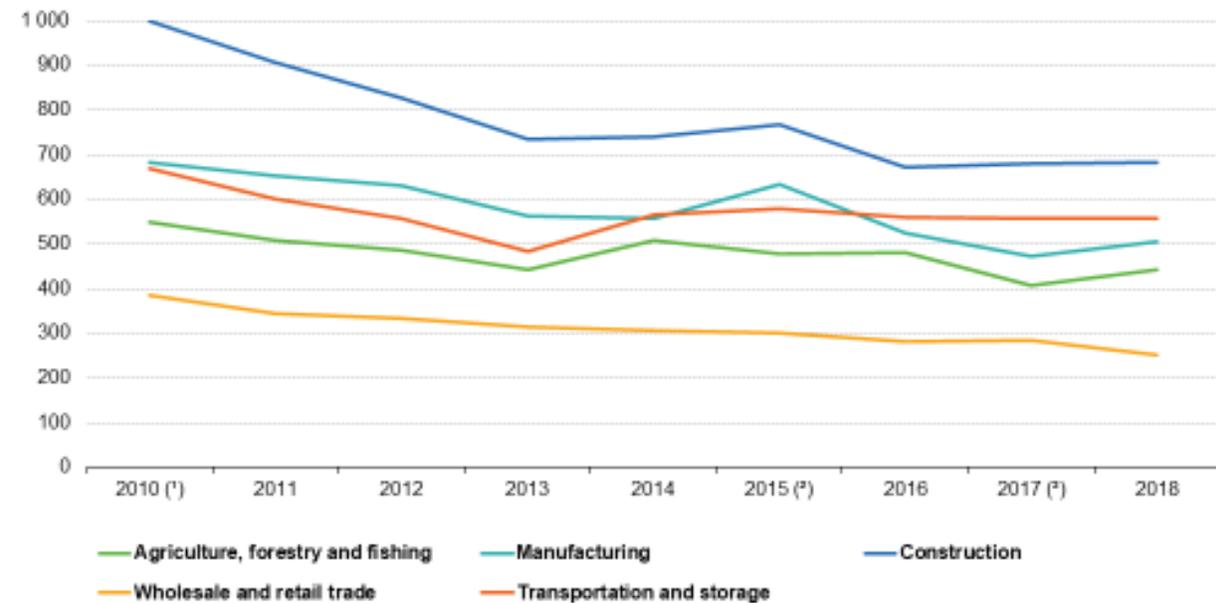
PROBLEM STATEMENT

The occurrence of serious accidents is still unacceptably high in the construction sector

Fatal and non-fatal accidents at work by NACE section, EU-27, 2018
(% of fatal and non-fatal accidents)



Development of fatal accidents at work for the five NACE sections with the highest risk levels, EU-27, 2010-2018
(persons)



(*) Estimates, except for agriculture, forestry and fishing and manufacturing.

(*) Agriculture, forestry and fishing and wholesale and retail trade: low reliability. Manufacturing, construction and transportation and storage: estimates.

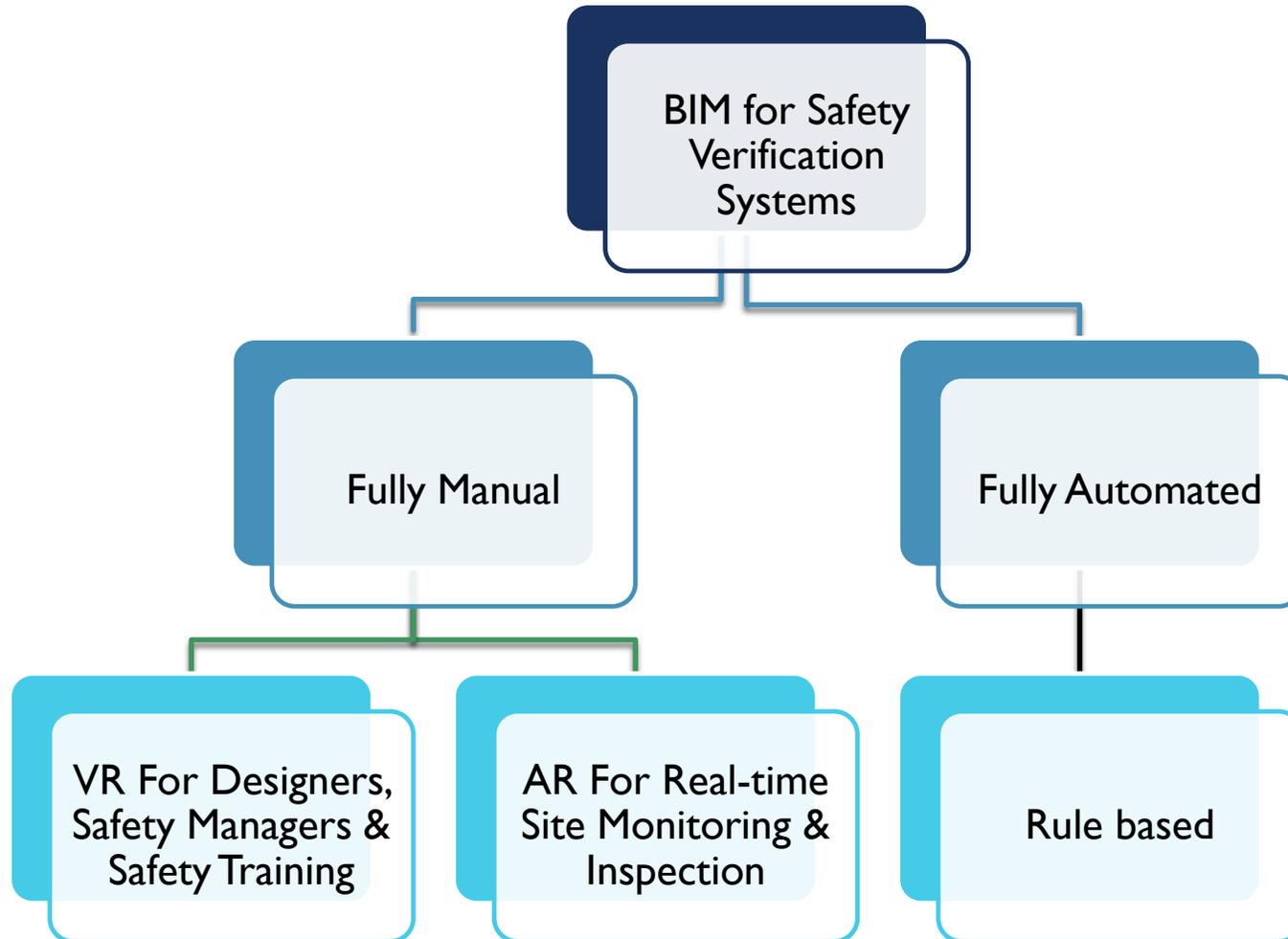
(*) Low reliability.

Source: Eurostat (online data code: hsw_n2_07)

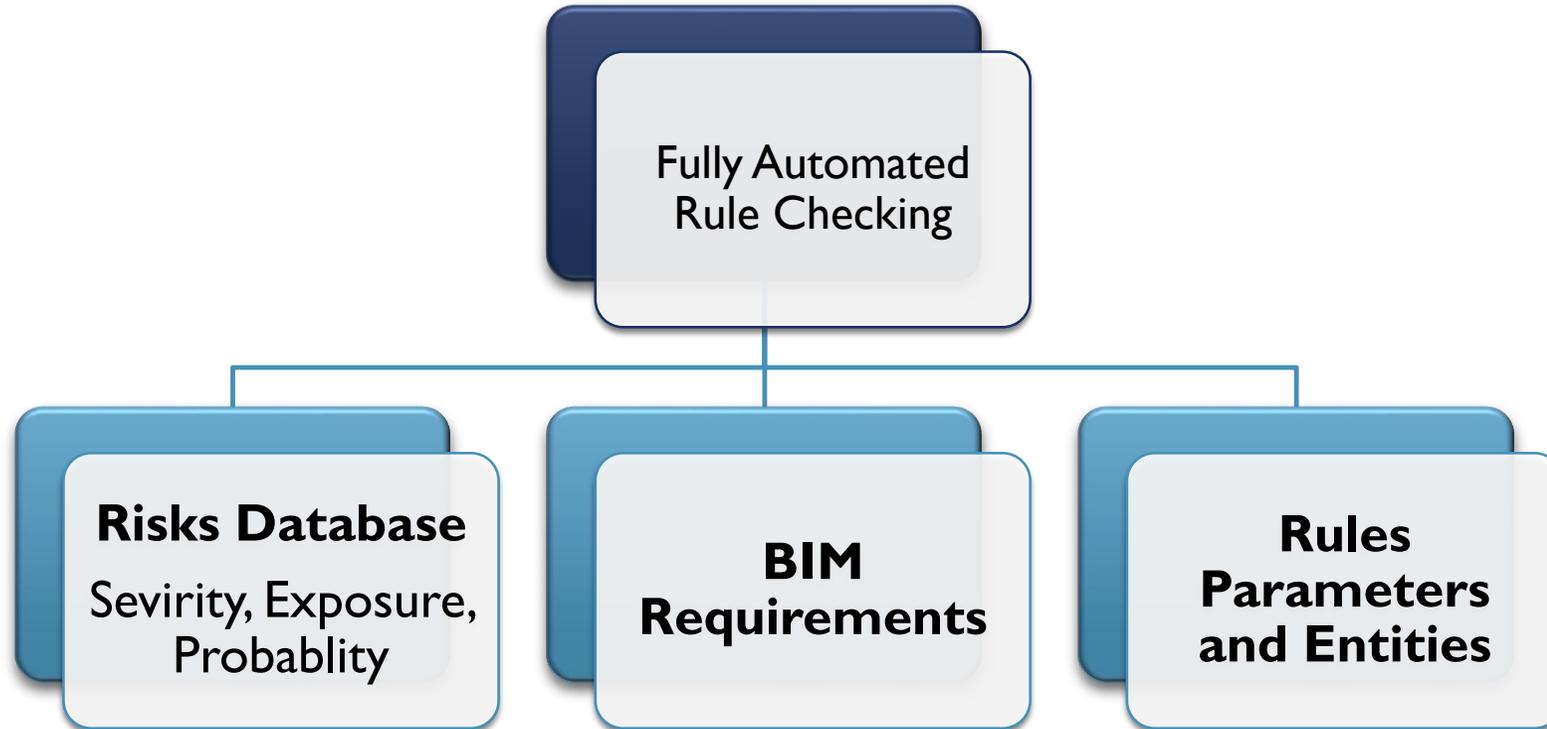
Note: non-fatal (serious) accidents reported in the framework of ESAW are accidents that imply at least four full calendar days of absence from work. Ranked on the values for fatal accidents.

Source: Eurostat (online data codes: hsw_n2_01 and hsw_n2_02)

BIM FOR SAFETY VERIFICATION SYSTEM



FULLY AUTOMATED RULE CHECKING COMPONENTS



INPUT

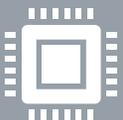


BIM can provide models with necessary geometric and non-geometric information.



This work is based on construction safety prevention manuals:

- International Labour Organization (ILO)
- Directive 92/57/EEC, implementing minimum H&S requirements at temporary or mobile construction sites.



Using Immersive Interfaces will allow users to access BIM content and simulate site conditions before entering the worksite.



Excavation /
Trenches



Falls



Formwork

SAFETY SCENARIOS

EXCAVATION AND TRENCHES

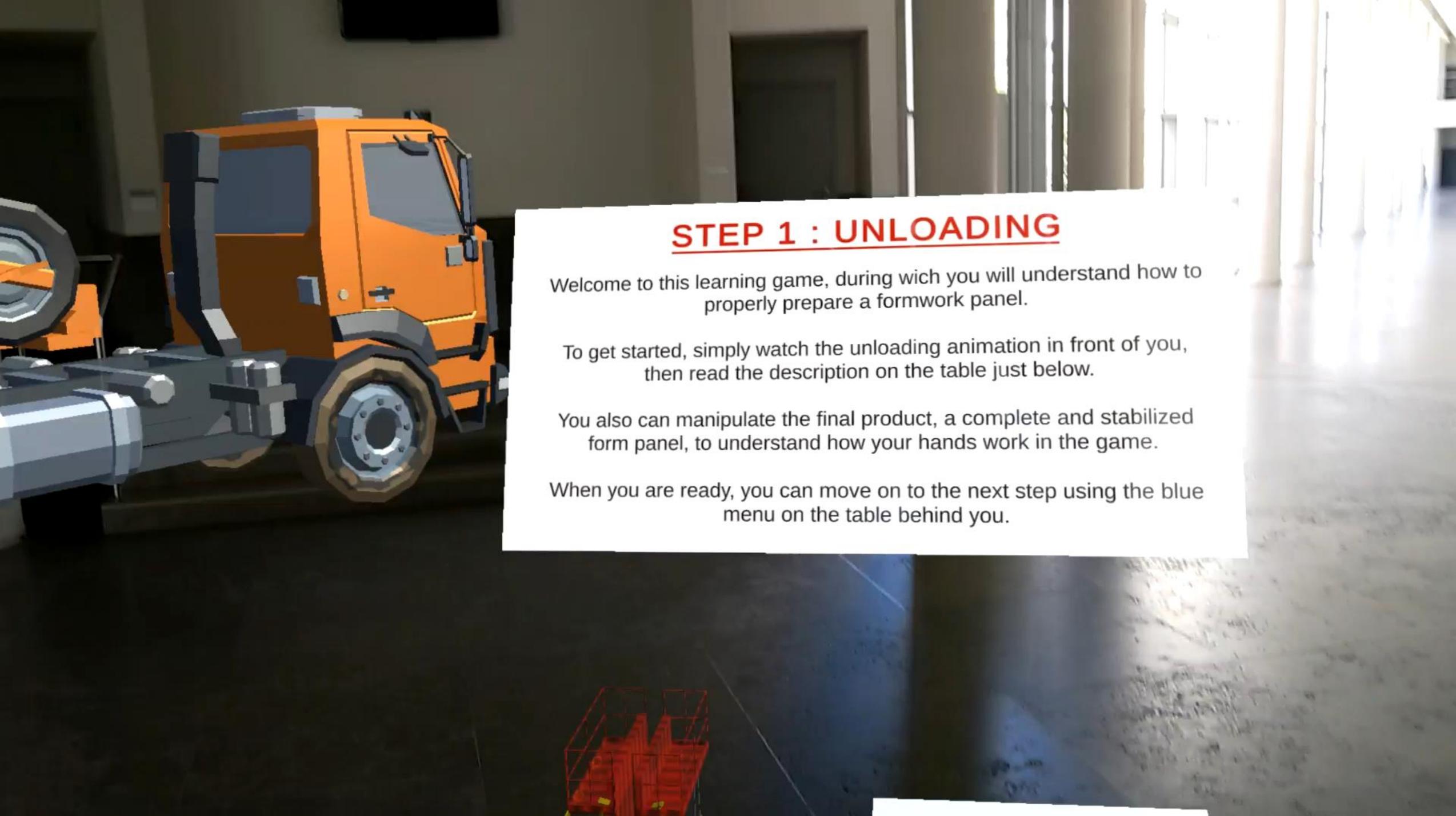


FALLS FROM HEIGHT



FORMWORK





STEP 1 : UNLOADING

Welcome to this learning game, during which you will understand how to properly prepare a formwork panel.

To get started, simply watch the unloading animation in front of you, then read the description on the table just below.

You also can manipulate the final product, a complete and stabilized form panel, to understand how your hands work in the game.

When you are ready, you can move on to the next step using the blue menu on the table behind you.

THANK YOU FOR YOUR ATTENTION

