What is simulation?

As there is no spoken word in this animated video, here is a description of the content.

The opening scene is that of an automated packinging system in a warehouse. Yellow boxes move along a conveyor belt into a large yellow machine. They emerge from the machine packaged in carboard boxes with lables affixed and travel along another conveyor belt.

A worker wearing a hardhat is checking the process on a tablet computer.

In the top lefthand corner, Dr Ammar Al Bazi appears and is described as a Process Simulation Consultant. The words "Studying the existing process…" appear on screen as DR Amma Al Bazi watches the process taking place.

He shakes his head and looks unhappy as the words "… very inefficient" appear on the screen.

The question "Can we intervene with the live process?" appears on screen as Dr Ammar Al Bazi reaches out and tries to move one of the boxes along the conveyor belt. As he touches the box, alarms start to sound, red lights flash and the packaging system grinds to a shaky halt. Dr Ammar Al Bazi and the worker both look shocked.

The text "Intervention can cause: DISRUPTION and FINANCIAL LOSS" appear on the screen.

The warehouse scene fades out and is replaced by an identical scene drawn as a wireframe, as if in a computer simulation model of the same process. As the image pulls back we see that it is part of a computer screen display, with dials and gauges showing the Process rate.

Dr Ammar Al Bazi re-appears to the left (in front of the screen) and scratches his his as if thinking about what to do next. He has an idea and starts to make rapid changes to the simulation model using a tablet computer. New packing and processing machines appear at different points along the conveyor belts. As each machine is added, the Process rate dial shows an increase in performance.

A display window opens up and the following text appears on screen:

SIMULATION: the rocess of considering a system, or part of a system, as it evolves over time for the purpose of a) understanding, b) improvement.

Dr Ammar Al Bazi continues to make changes to the model until a guage at the top right of the screen flashes the word "OPTIMUM". Dr Ammar Al Bazi gives a thumbs up and disappears off-screen.

The computer model then fades through to the real packaging system with all the new machines now in place. The worker in the hardhat and Dr Ammar Al Bazi are both looking at the newly improved system appreciatively.

The text "OPTIMISED PRODUCTIVITY" appears at the top rights as Dr Ammar Al Bazi and the worker turn to the camera and give a thumbs up.

ENDS