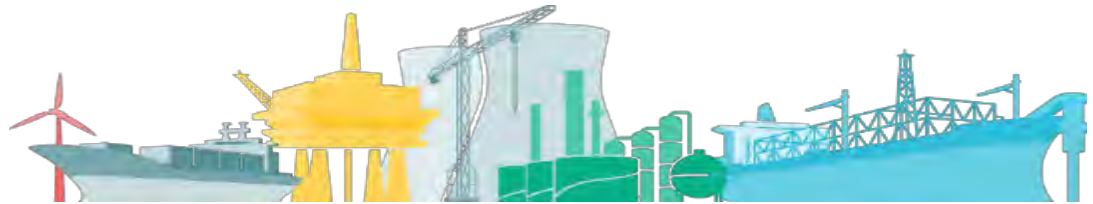




Training mit Virtuellen Welten - Mehr Nutzen aus 3D Modellen

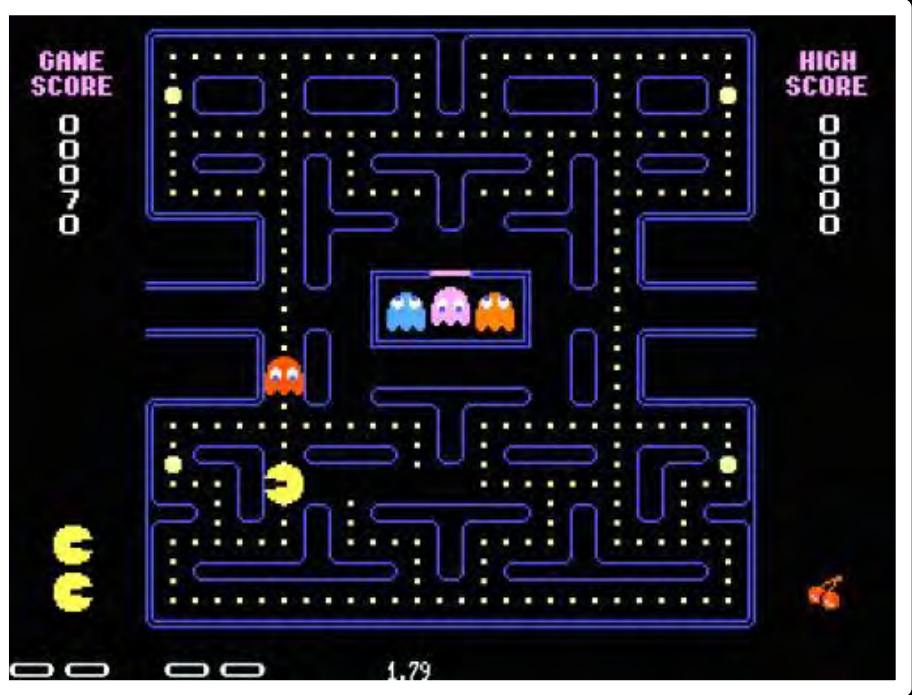
Arne Winkler
Deputy Group CTO



Emergence of Gaming Technology



Namco Galaxian



Namco Pac Man



3 days
£1bn



Today's Gaming Experience

Today's Gaming Experience



EUROGAMER

∞

Objective Completed

?



X360

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The background of the image is a night-time photograph of an industrial facility, likely a refinery or chemical plant. The scene is filled with complex piping, structural steel, and various pieces of equipment. Numerous lights are visible, including bright blue and white lights from process units and red lights from tall distillation columns. The sky is a deep, dark purple. Overlaid on the upper half of the image is a diagonal band of yellow and black hazard tape. The word 'INDUSTRIAL' is printed in bold, black, sans-serif capital letters on a yellow rectangular section of this tape.

INDUSTRIAL

GAMING

has arrived





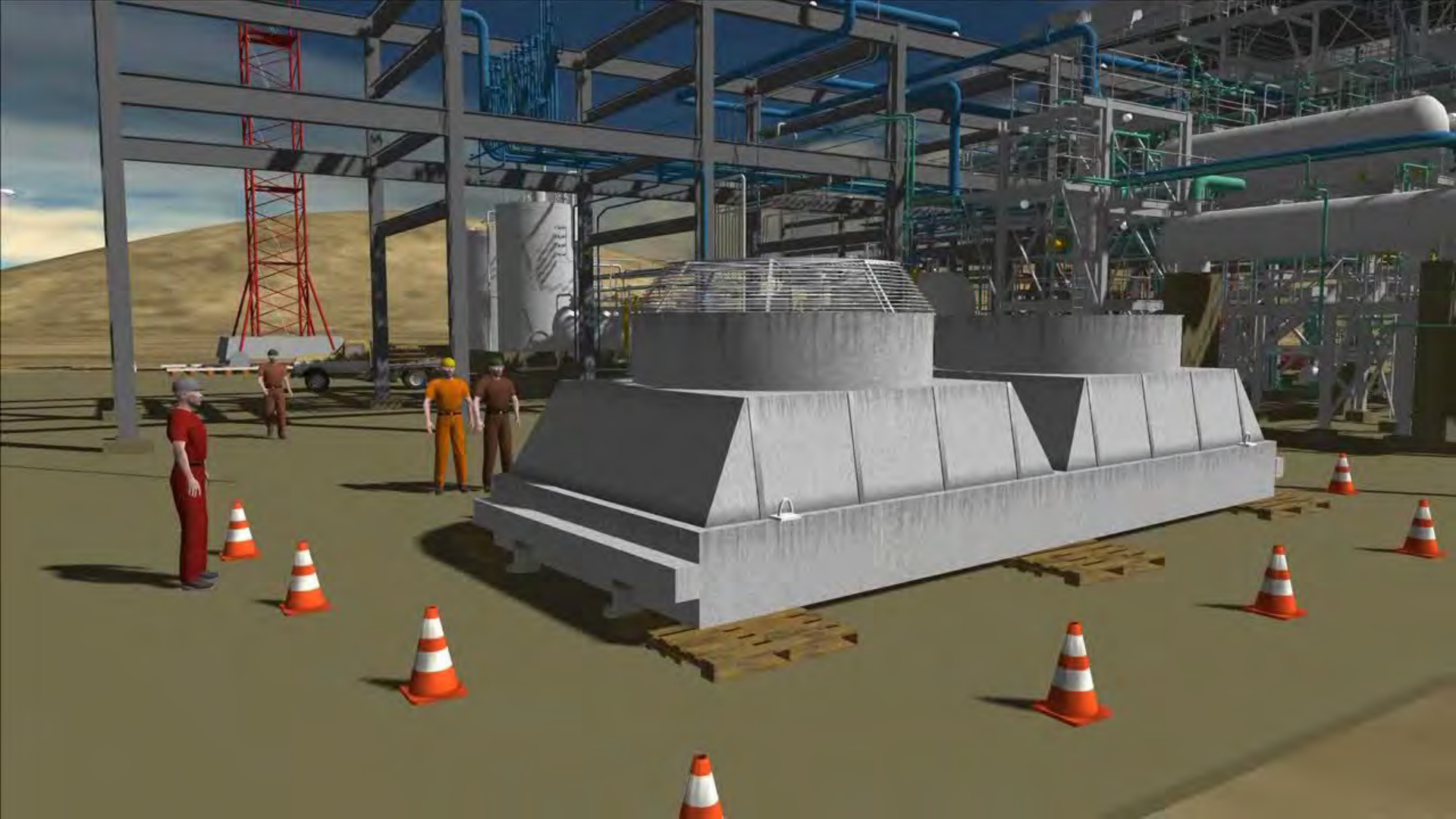


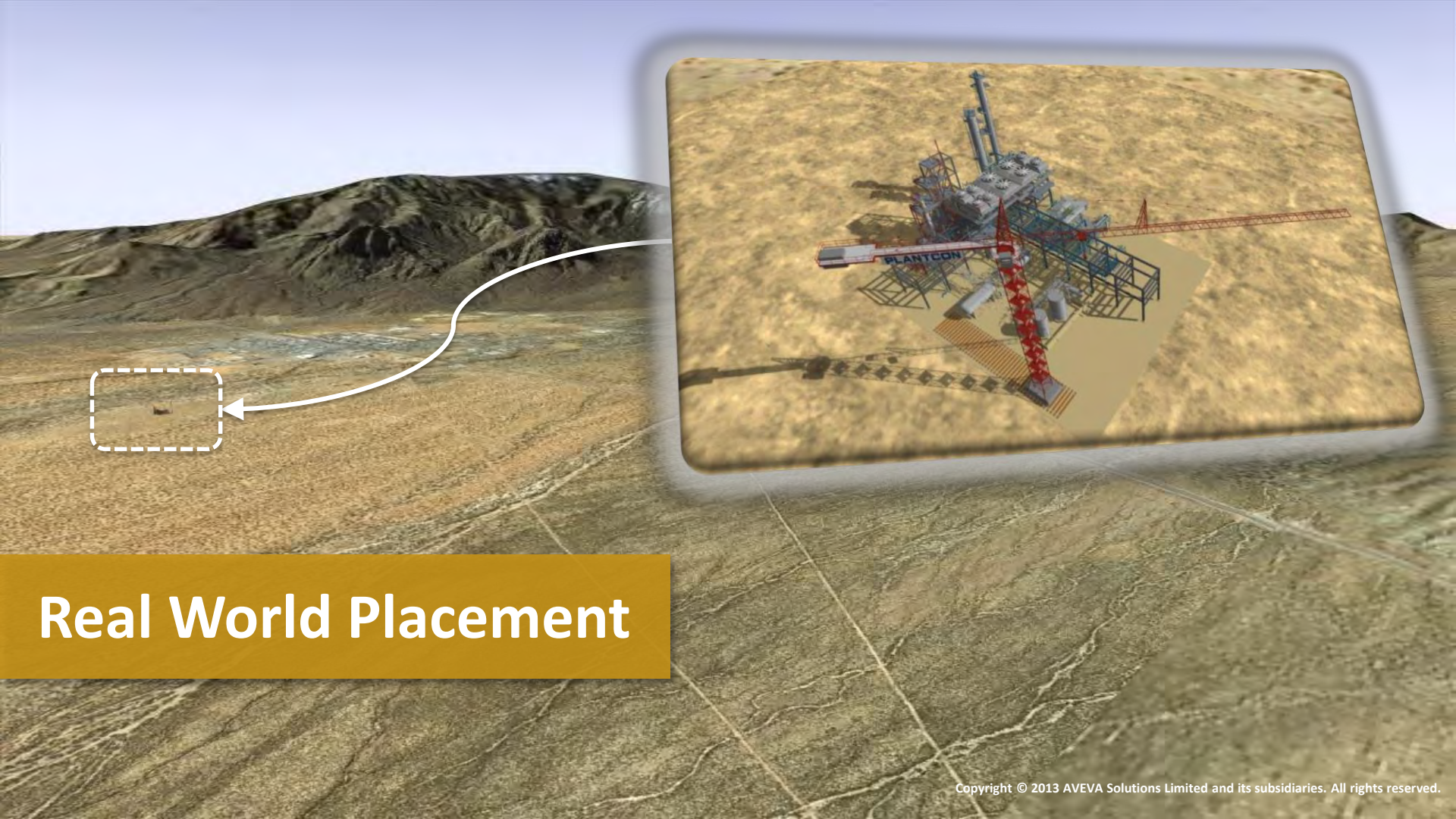




Modern Challenges







Real World Placement





Complex Rehearsal

Photo Courtesy of Alcan Inc.

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Minimising Incidents

1/\$500m
TIC

A green pen is shown writing a checkmark in a box on a checklist. The checklist has five boxes, with the first four containing green checkmarks. The pen is positioned over the fifth box, which is currently empty. The background is white.

Easier Compliance

**Virtual plant
walkthroughs**

**View punch lists
prior to site visit**

Supporting the next generation



A photograph of a person in a crowd, seen from behind, covering their eyes with both hands. The person is wearing a blue and white checkered shirt. The background is blurred, showing other people in a crowd. The image is used as a background for a presentation slide about training pitfalls.

Training pitfalls

Limited training expertise

Created by SMEs

Unclear objectives



BE READY
STAY SAFE



Mines Rescue

30%



AVEVAWORLD

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Current Tasks

▶ Operator

Mechanical Fitter Tasks

▶ Close valve V-9001

▶ Chain and Lock valve V-9001

▶ Open Valve 9002 to vent and drain Condenser

Open Valve 9002 to vent and drain Condenser 20-C-9001

▶ Verify Pressure readings

▶ Verify Temperature 1 reading

▶ Verify Temperature 2 readings

▶ Close valve 9002

▶ Chain and lock valve V-9002

▶ Informs Operator isolation complete



Avatar

Place Operator

Collaboration

69 73 18 139 9799

Connect...

Disconnect

Cameras

World Camera

Local Camera

Switches

☒ Lamp Lights

☒ First Floor Lights

☒ Second Floor Lights

☒ Third Floor Lights

☒ Fourth Floor Lights

☒ Fifth Floor Lights

177 Elwood 1 Label

Procedures:

Remove and Replace Pressure Valve PV-542

Steps in Procedure:

Status	Step	Description
	1	Navigate to Equipment F-8013
	2	Perform a visual inspection all around and underneath F-8013
	3	Check and inspect the level gauge LG-515. Check LGV-1 and LGV-2 for looseness by rotating each LGV back and forth 1/8 turn.
	4	Isolate the vessel F-8013 by closing Valve 4 (VALVE 1 of BRANCH /2"-15D-Y5-66004-ADP3.1/B1). This should turn clockwise 10 times.
	5	Drain the vessel by opening Valve 3 (VALVE 1 of BRANCH /2"-15D-Y5-66002-ADP3.1/B1)
	6	Return to the LG-515 or equivalent tag and watch the level go down. Once the level is down, close the LGV-1. Turn clockwise 5 times. Close LGV-2. Turn clockwise 5 times.
	7	Close Valve 1 (VALVE 1 of BRANCH /1-1/2"-15D-N-66011-ADP3.1/B1) by turning clockwise 10 times.
		Remove and replace PV-542 or from

Show Annotations

Reset

Review

Hint

Timeline

Play

Stop

Time Of Day

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ROYAL
AERONAUTICAL
SOCIETY

***“Significant improvements
in flight safety”***



AVEVAWORLD

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2,000,000

30,000

Risk: 1 every 45 million

Operator error is the
#1 cause
of process
industry
incidents





Remote working

Hazardous areas

Familiarisation



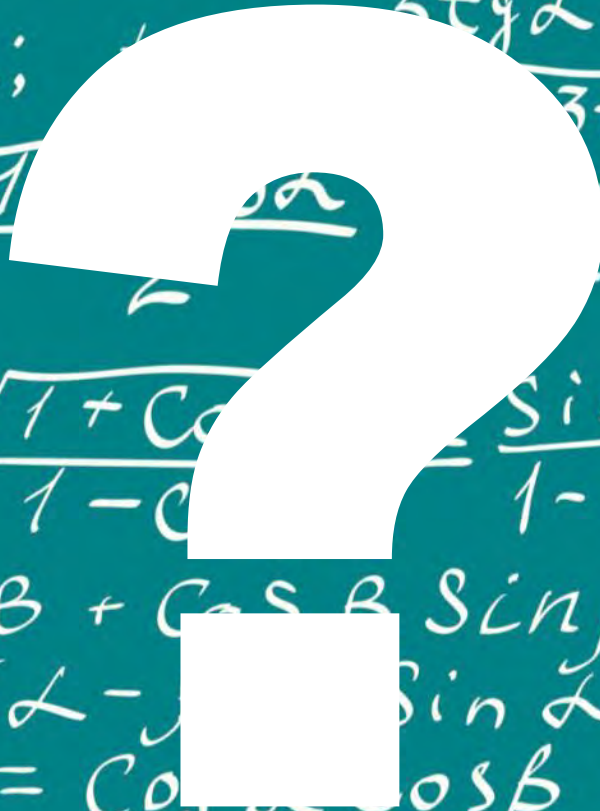
In-app browsing





Learn by doing

How difficult?



Introducing....

AVEVA Activity Visualisation Platform™



AVEVA AVP™

Available now



Vielen Dank

