

New Operator Training Help: Simlog's "Personal Simulators"



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Presentation Outline

- introducing Simlog
- our new "Personal Simulators"
- demonstrations

(Future trends to be addressed in the next part of the presentation.)

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Introducing Simlog

- "spin-off" from one of Canada's leading computer science research institutes
- single *business* focus: *training* simulation for heavy equipment operators in forestry, mining, and *construction*
- single *product* focus: "*Personal Simulators*"

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Simlog's Observation

Learning to operate heavy equipment:

- is hard to do, because learning skills requires
 - lots of "practice"
 - careful supervision
- is costly
 - seat-time (fuel, depreciation, insurance, etc.)
 - instructor's time
- can put people at risk

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Simlog's Message

It's time to

- reduce training costs
 - improve training programs
- with a new kind of *simulator-based* help to:
- better *select* new training candidates
 - better *prepare* new operators for time at the controls of real equipment
 - better *evaluate* and improve operator skills

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Simlog's Approach

Collaboration is key:

- equipment manufacturers and their distributors
- training professionals e.g. Vista Training

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Mobile & Tower Cranes



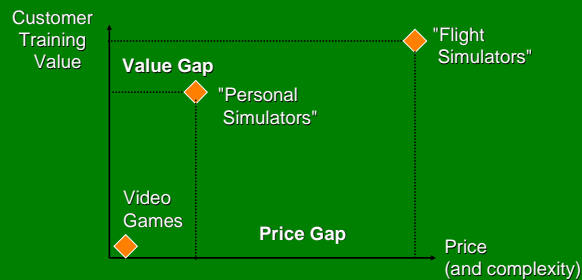
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Hydraulic Excavator



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Targeting Cost-Effectiveness



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There are just two “secrets”

- you use *your* Windows PC (and projector)
 - you use *off-the-shelf* “USB ready” controls
- ⇒ Simlog provides just the simulator “ingredients” !

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Special Instructional Design: Simulation Modules

- learn component skills *individually*, and then combine them
- exercises become increasingly difficult, to make learning easier and faster
- hundreds and hundreds of pre-defined “trials”, for many hours of continuous training
- training is self-paced and *unsupervised*: no trainer’s station, results are automatically saved

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Special Instructional Design: “Measurement Automation”

- carefully evaluate operator performance
 - what the machine is doing
 - what is happening in the work environment
- values of the “performance criteria” provide the right kind of feedback (immediate, objective, consistent, and comprehensive)
- data is for *measuring*, not judging!

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Saving Results

Two ways to save simulation results on *your* PC:

- individual files, named by date and time
- user-specific entries in a dedicated (and networked) database, in conjunction with Simlog's "Simulation Manager"

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Simulator Control Options: PC joysticks



- USB connectivity
 - low cost
- ... world-wide off-the-shelf *retail* availability

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Simulator Control Options: Industrial Joysticks



- USB connectivity
- intermediate cost
- "off-the-shelf" availability

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Simulator Control Options: "Replica" Controls



- joysticks with industrial control handles
- higher cost still

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Simple "Operator Chair"



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Custom "Operator Chairs"



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Multiple Simulator Stations



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Personal Simulator Demonstrations

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Personal Simulator Details

Mobile Crane, Tower Crane:

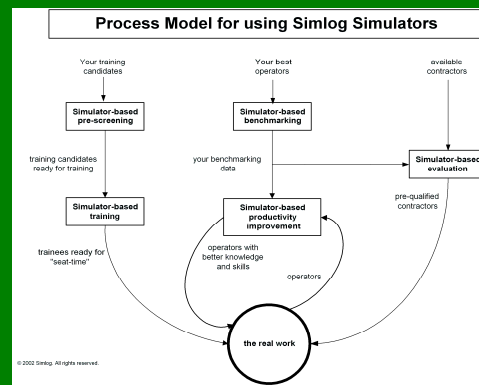
- English, Spanish, French
- software license: USD\$3,000

Hydraulic Excavator:

- English, French (Spanish in progress)
- software license: USD\$3,750

... available from Simlog *and* Vista!

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New Personal Simulators on the horizon

- off-highway truck (in progress)
- wheel loader (in progress)
- backhoe loader
- tele-handler
- dozer
- motor grader
- skid-steer

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"Personal Simulators" A Proven Concept

- hundreds of software licenses sold all around the world (since 2001)
- customers in Australia, Brazil, Canada, Chile, Denmark, Finland, France, Gabon, Ireland, Italy, Luxembourg, New Zealand, Nigeria, Romania, Saudi Arabia, Spain, Trinidad, United Kingdom, United States

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