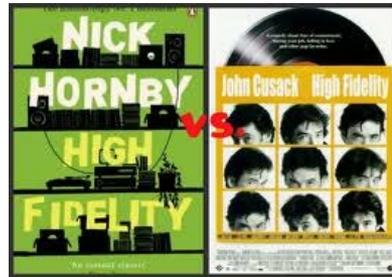


Using a Low-Fidelity Simulator for Training Fleet-level Command and Control in the Classroom

Dr Christofer Waldenström
Swedish National Defence College

Two assumptions that drives the development of military training simulators

The higher the fidelity, the better the training

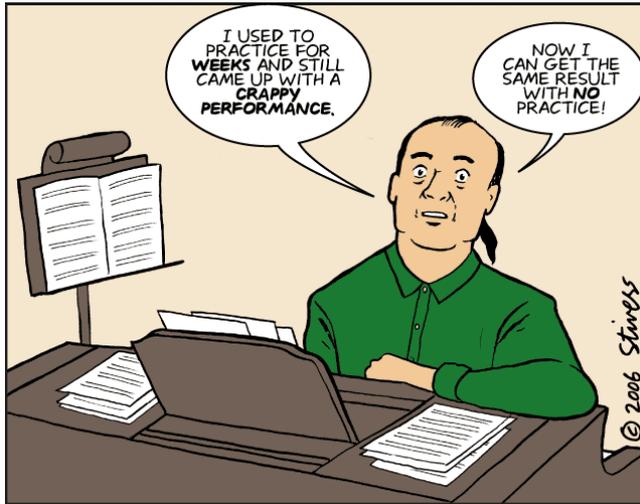


Training is good if an subject matter expert thinks the simulator is good



There is little evidence that support those assumptions

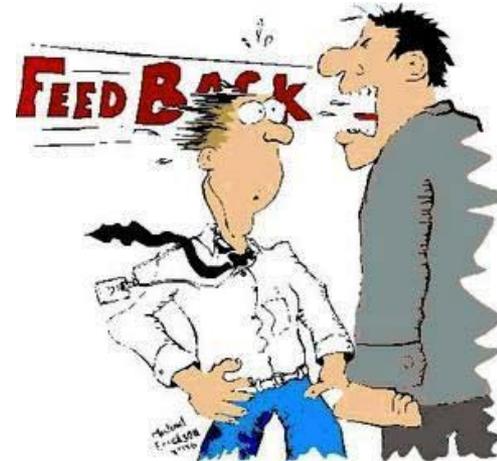
Other aspects of training are more important than fidelity...



Guided practice



Performance measurement



Feedback



Scenario construction

What do you gain from low-fidelity?

Models used in the game are easy to create and update

Saves time

Easy to learn

Engaging

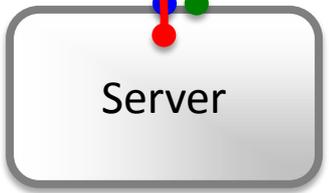
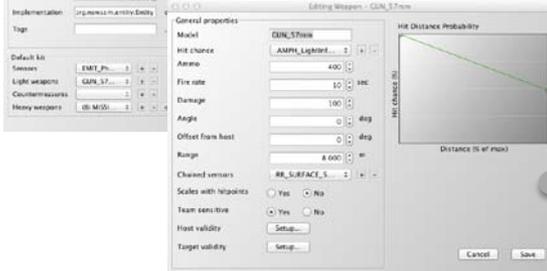
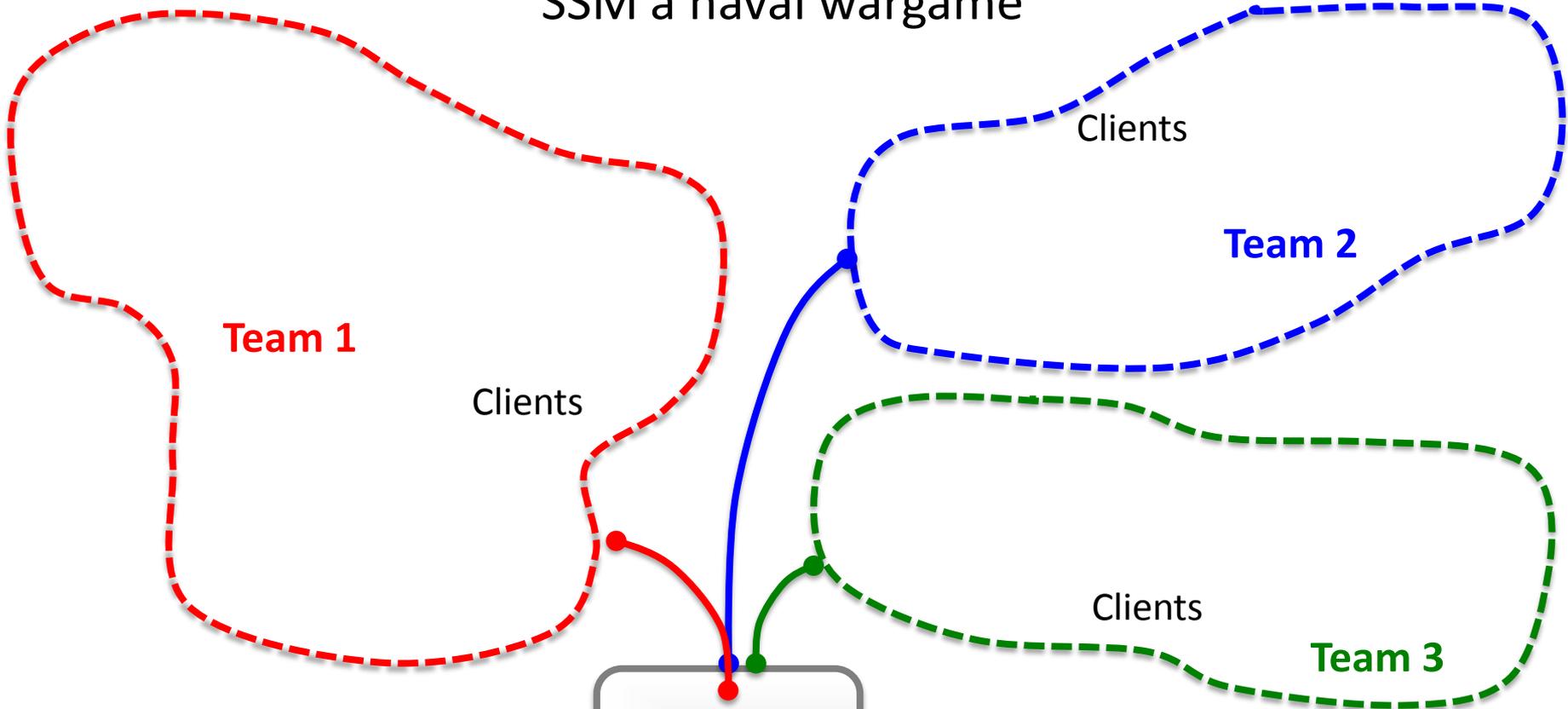
Saves money

Few number of operators to run the game

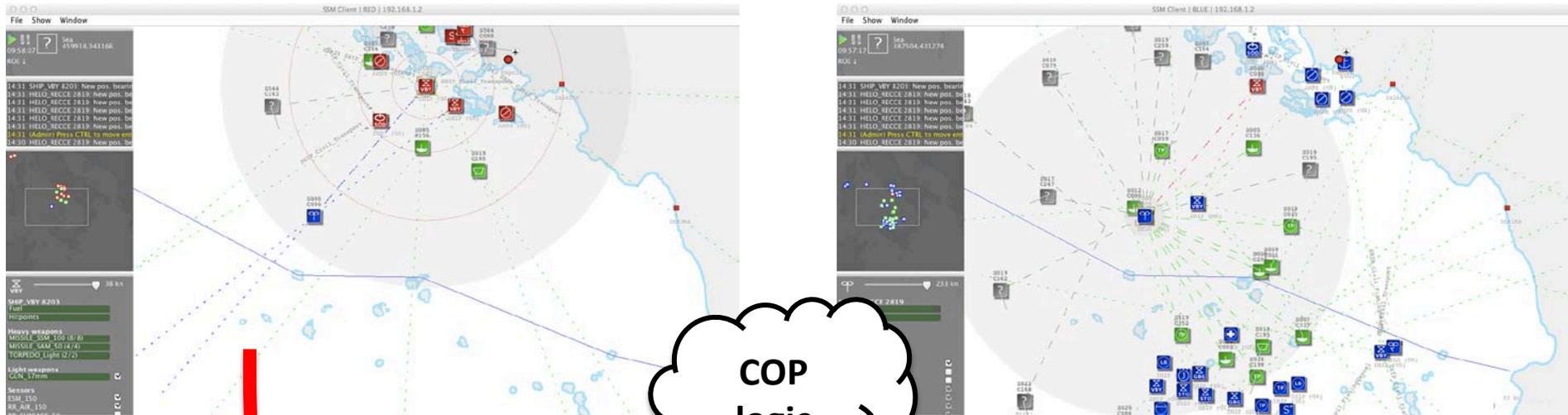
Development costs are low
(SSM≈\$300k)

Saves personnel

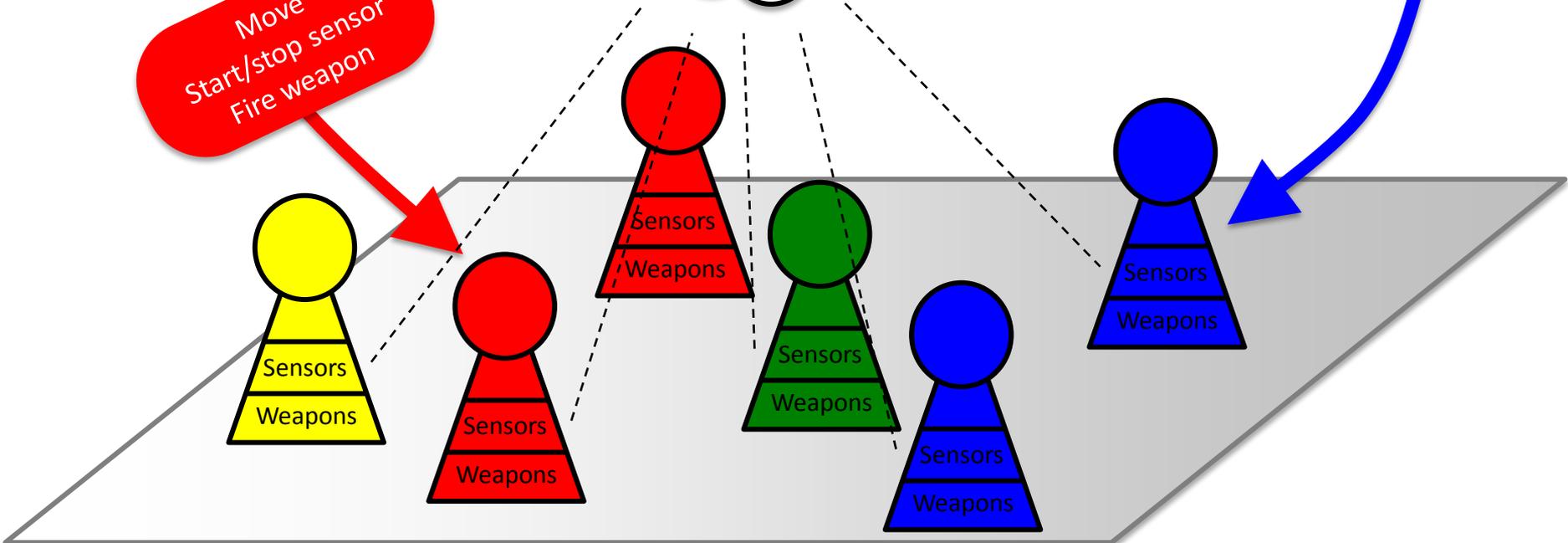
SSM a naval wargame



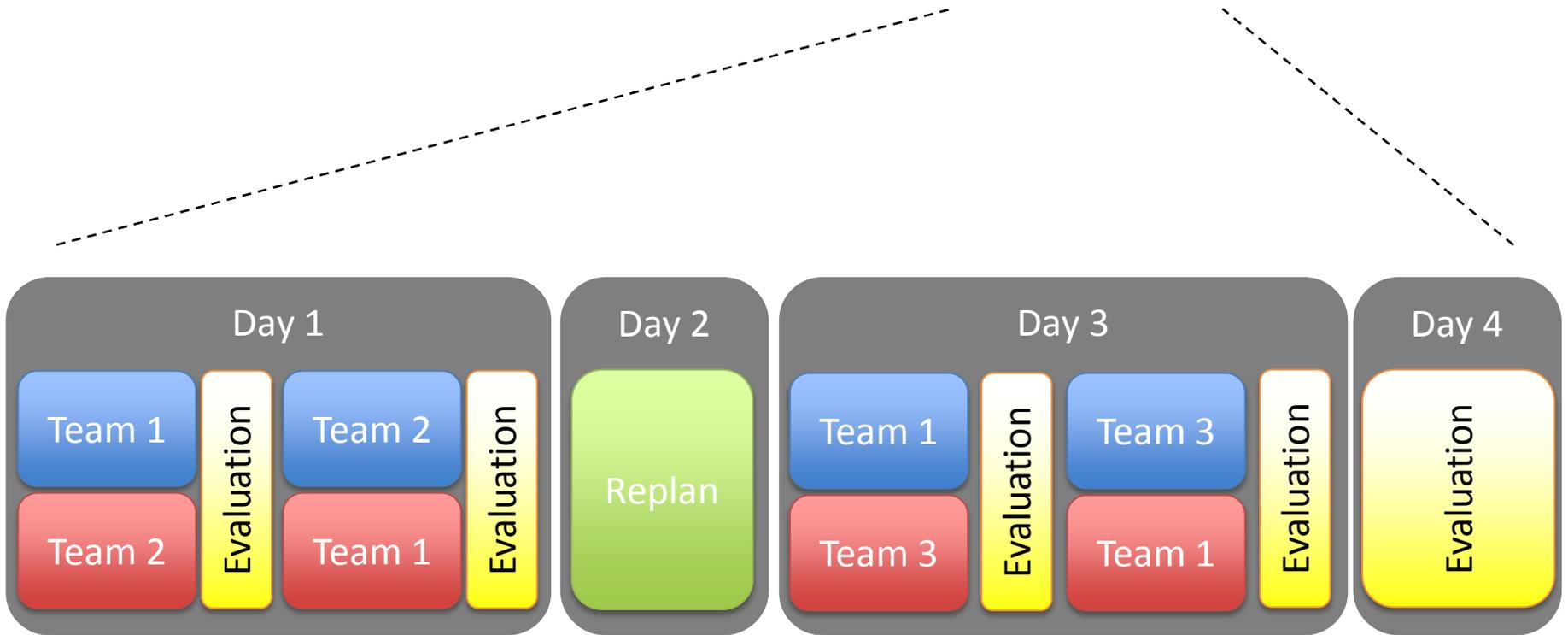
What the players do in the game



Move
Start/stop sensor
Fire weapon



Course setup



Staffs in action



Courses

Has been used for three years...

Officers Academy (Cadetts graduating as ensigns)

Staff Course (Liutenants graduating as Liutenant Commanders)

Higher Staff Course (Liutenant Commanders graduating as Commanders)

Despite the low fidelity both students and instructors are very pleased with the deeper understanding of naval theory and tactics they get after playing the game

References to the pictures used in the presentation

Slide 2

<http://reederreads.files.wordpress.com/2010/03/>

http://www.cwu.edu/~ccc/images/thumbs_up.jpg

<http://www.bananaq8.com/wp-content/uploads/1970/01/flight22.jpg>

Slide 3

<http://iwif.org/wp-content/uploads/2012/01/feedback-and-team-building.jpg>

<http://www.markstivers.com/wordpress/comics/2006-05-13%20Practice.gif>

<http://www.referenceforbusiness.com/photos/performance-measurement-110.jpg>

Slide 4

http://static3.depositphotos.com/1007467/228/i/950/depositphotos_2286124-Board-game-pieces.jpg