



simcoach
SKILL ARCADE





Using Video Games for Workplace Safety Training

Pennsylvania Governor's Occupational Safety and
Health Conference, October 2018

Ken Smith, Simcoach Games

How I came to believe in using Video Games

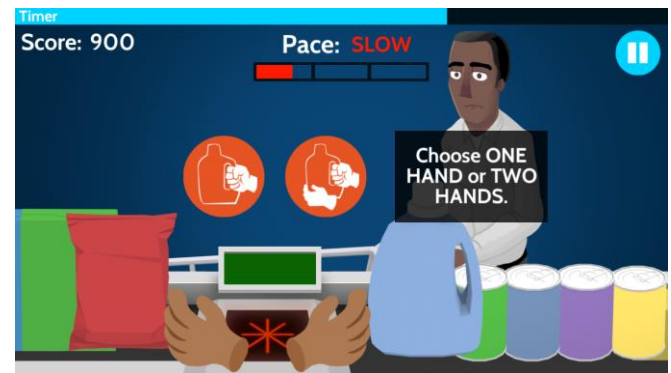
- 25 year career in workforce management consulting
- Started investing in tech start-ups that solve age old problems
- Simcoach Games – spinout of CMU's ETC
- Video games for workforce training & workforce development
- My first exposure yielded clear employee engagement and significant results



A Case for Video Games to support training

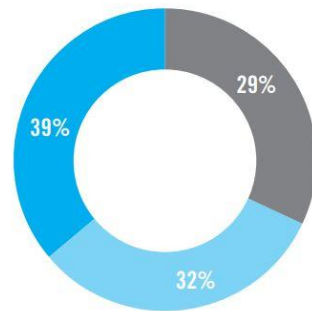
Challenge: retailer facing an increasing number of lost time incidents for cashiers

- Solution
 - Video game with player as cashier challenged on all dimensions of the job
 - Key focus of game is on key concepts to reduce sprains and strains
 - not over-reaching, proper grip, lifting heavy items and bags with two hands, turning not twisting, stretching, and using the hand scanner
- Results at regional grocer
 - Over 12,000 cashiers played the 20 minute training game over two months
 - Significant retention of key concepts 30+ days after training
 - 100% - at least one key concept, 88% - at least two concepts, 60% - three concepts
 - 30%+ reduction in seven-day lost-time incidents in first year
- Trainee feedback
 - 93% - said it was relevant to their work
 - 88% - have a better understanding of how to prevent strains and sprains”
 - 87% - would like more game-based training
 - “I liked how it addressed situations I encounter every day in my job.”

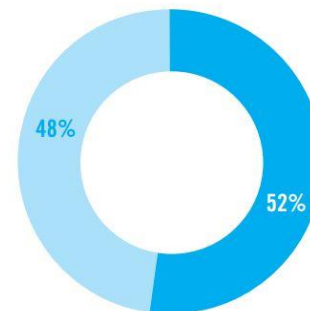


Why mobile video games?

Over 183 million Americans play video games
Americans spend upwards of 3 billion hours a week engrossed in a game
77% of U.S. adults own a smartphone (up from 35% in 2011)



AGE
of Game Players
29% under 18 years
32% 18-35 years
39% 36+ years



GENDER
of Game Players
52% male
48% female

Source: Pew Research Center 1/12/2017

Five qualities of video games proven to facilitate learning and motivate behavior change



Safety Games (free in app stores)



Harness Hero
20K downloads in 2017



Harness Hero:
Bridge Edition



Lift Coach:
Plan Your Route



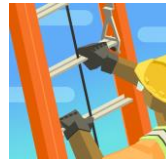
Lift Coach:
Plan Your Lift



ICRA for
Construction



Site Coach:
Start Smart



New Games Planned

Ladder Safety (now available)

Fall Protection (coming soon)

Electrical Safety (coming soon)

Future Safety Professionals

Scaffolding Safety

Silica Safety

Trench Safety

Traffic Control

Demonstration of Sample Games



Harness Hero (ABCs of fall protection)
- hard skill training/review



Site Coach: Start Smart (site safety orientation)
- hard skill training/review



“Electric Protector” (basics of avoiding shock & arc flash)
- hard skill training/review
