

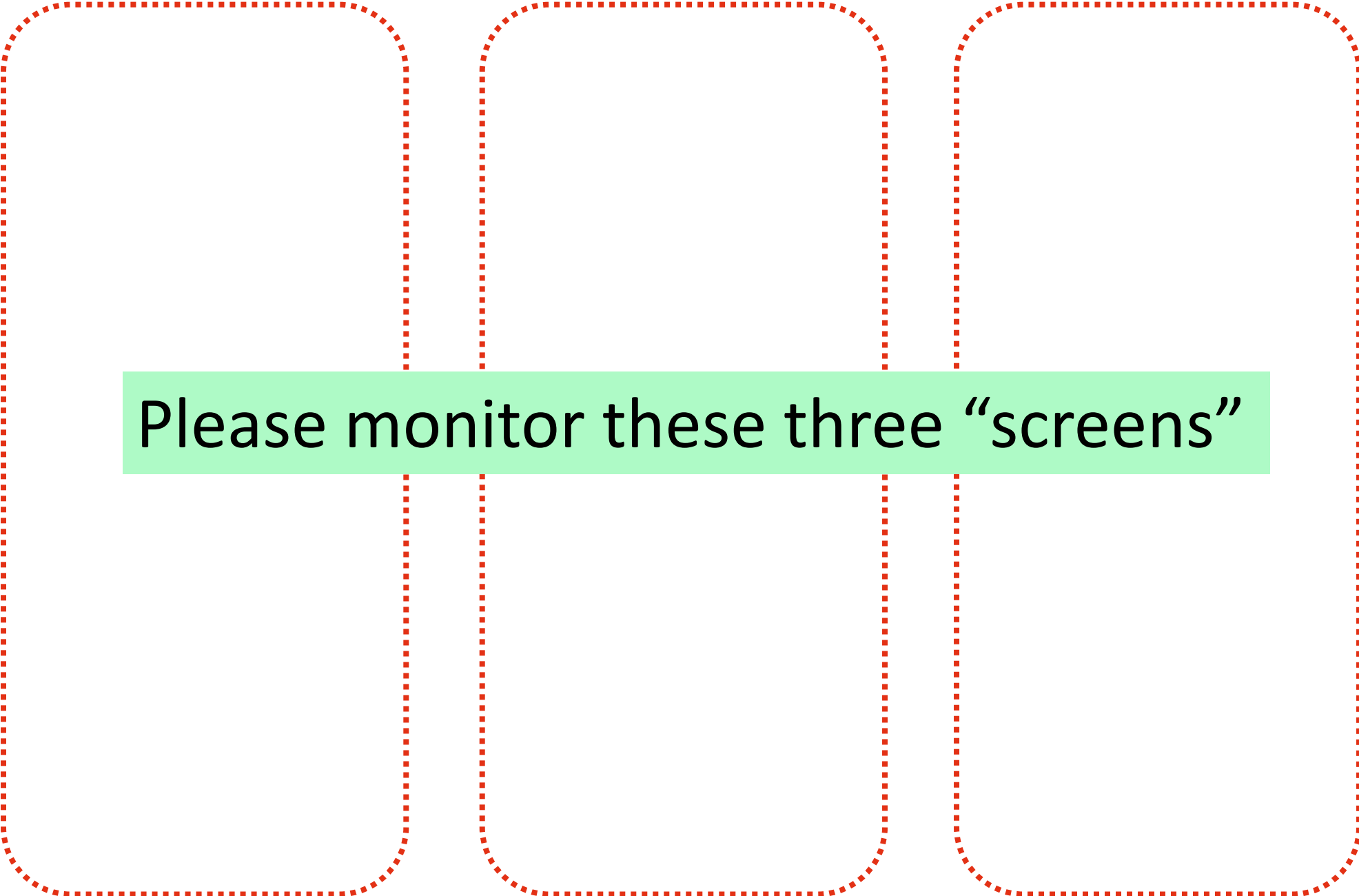
Many Screens, One Human: What Could Go Wrong and What Might Help?

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Many Screens: So What? Who Cares?





Please monitor these three “screens”

Can
you
read
these
words?

This
stream
contains
salient
stimuli

The
critical
message
is
here

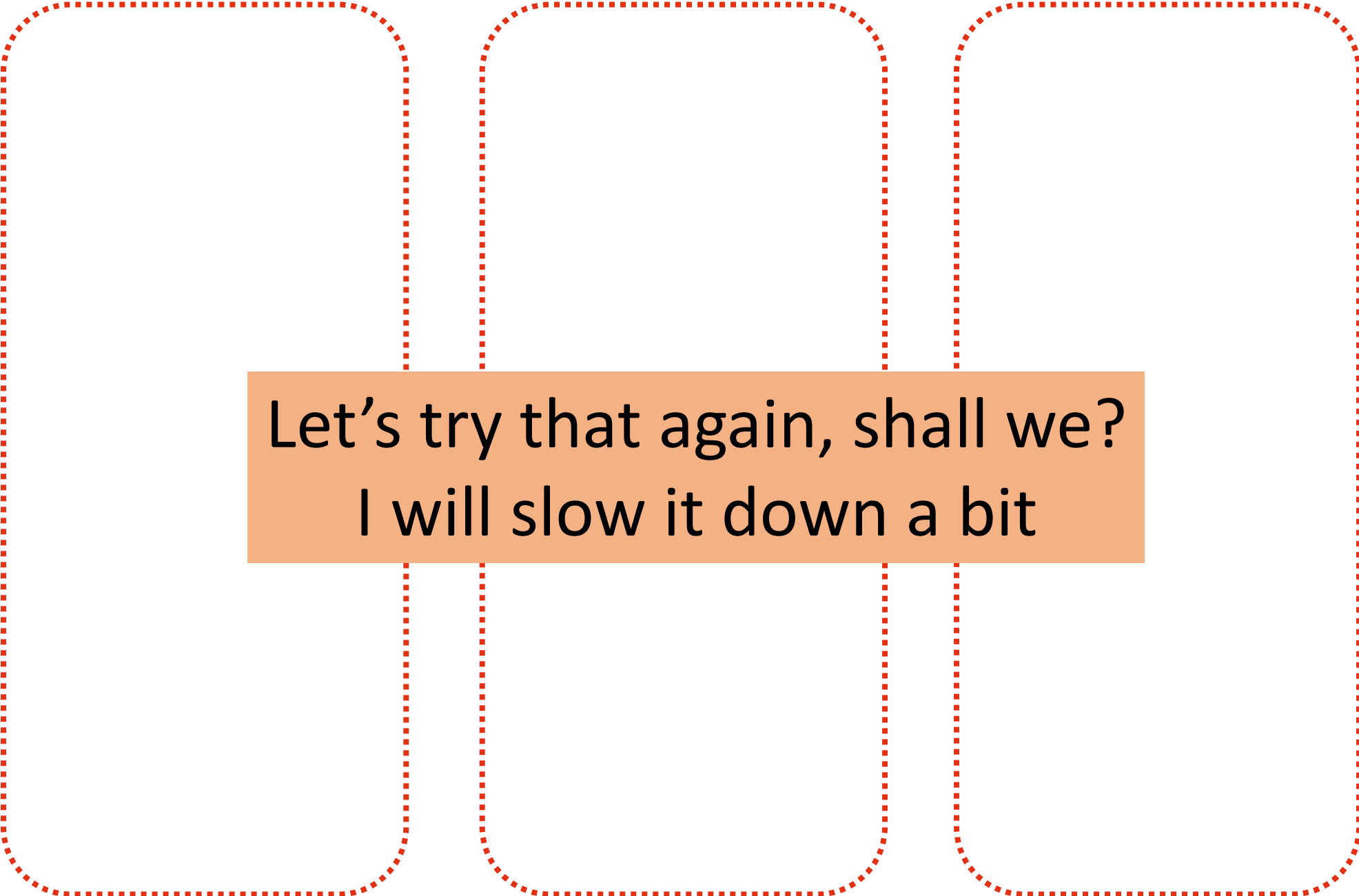
Who can report all three messages?

Who can report the critical message?

Can
you
read
these
words?

This
stream
contains
salient
stimuli

The
critical
message
is
here



Let's try that again, shall we?
I will slow it down a bit

Please

bang

on

the

table

Can

you

say

“hi,

Carl”

Would

you

please

clap

now.

Let's do
the "after
action"
version.

Just
monitor
this one

Please

bang

on

the

table

Can

you

say

“hi,

Carl”

Would

you

please

clap

now.

Not a visual problem

Please

bang

on

the

table

Can

you

say

“hi,

Carl”

Would

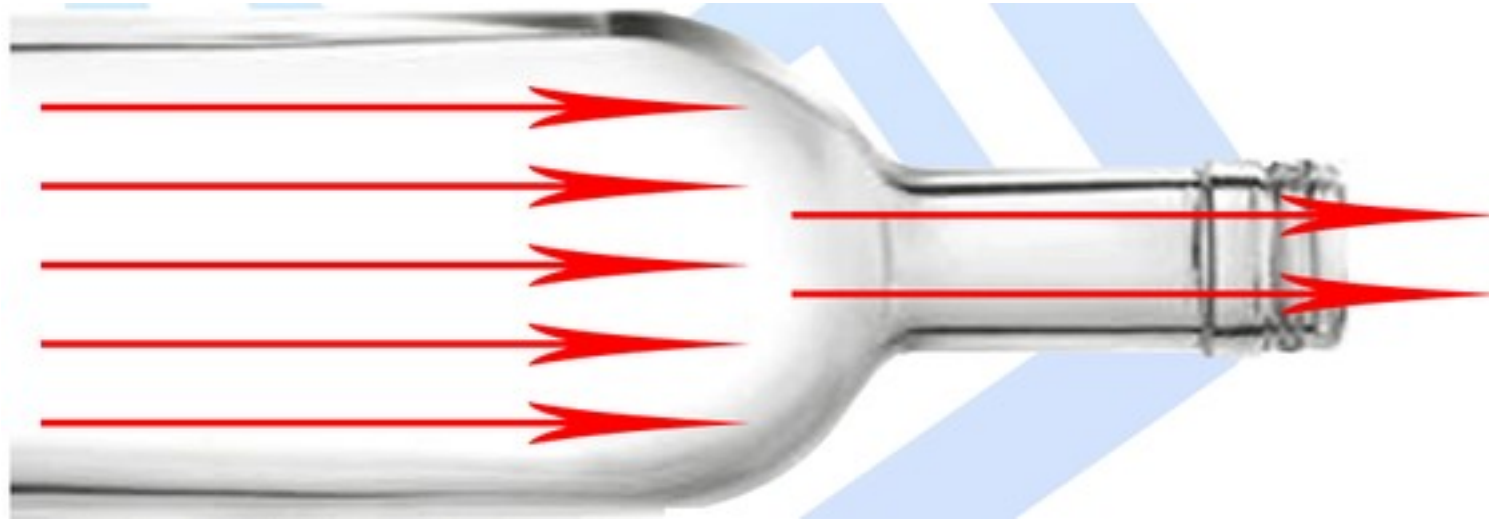
you

please

clap

now.

Just a version of the classic
“bottleneck of attention”



We could do a term-long course on this, but...

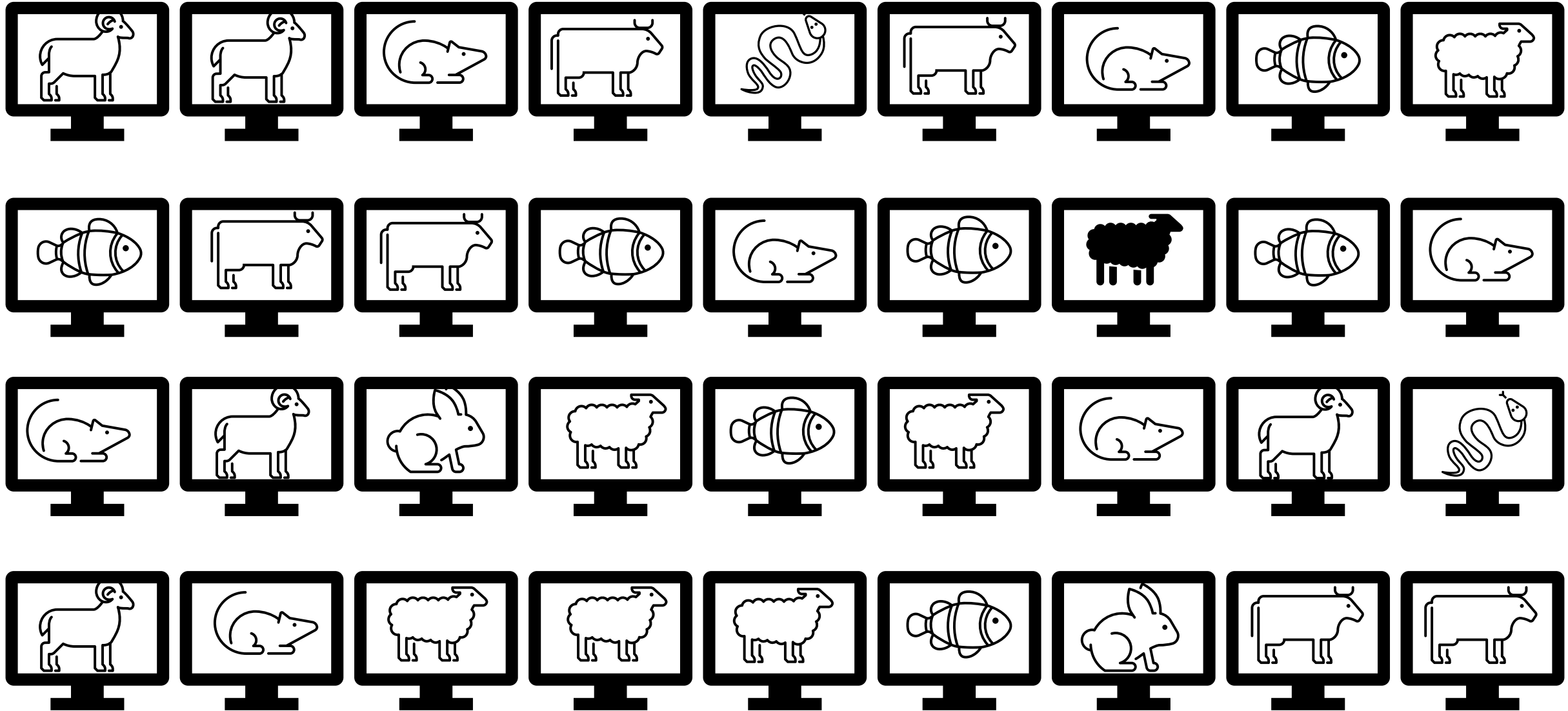
...what are your chances with this?



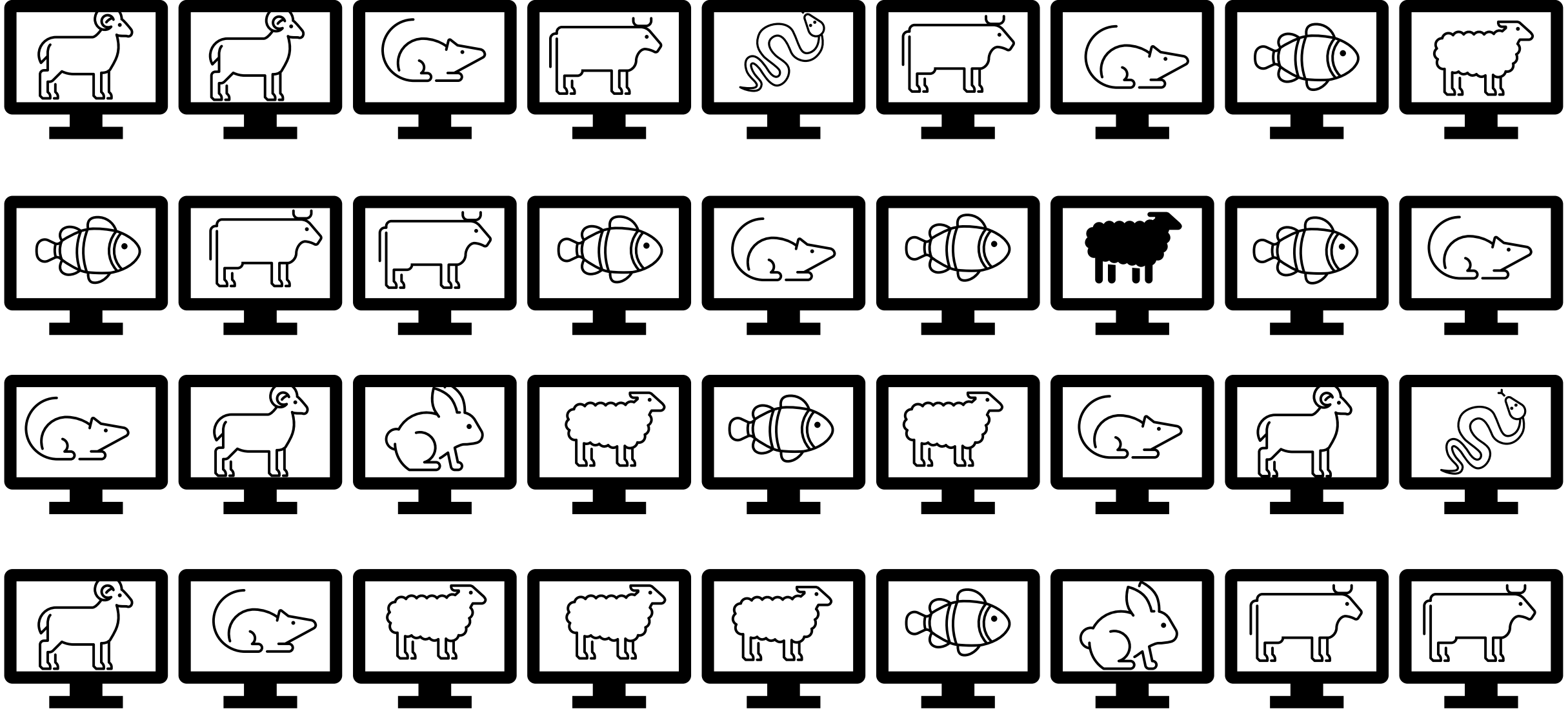
OK, it works if the stimulus is uniquely salient



OK, to search for a persistent specific target



Find the Rabbit



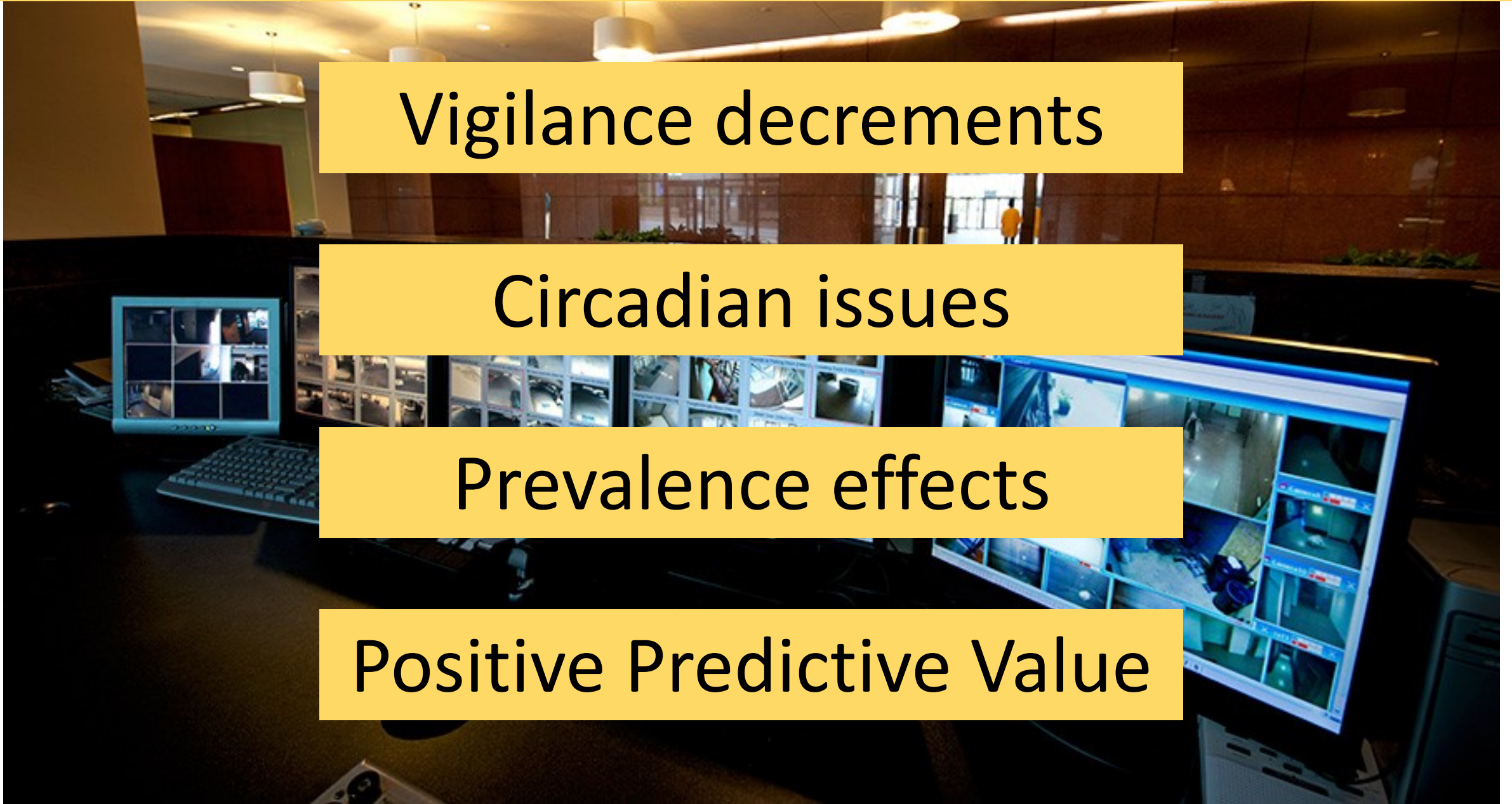
Surveillance tasks will be hard

Vigilance decrements

Circadian issues

Prevalence effects

Positive Predictive Value



Will AI save the day?

Well, yes, if it is perfect

Otherwise...

alerts have a PPV problem

Image triage could help

