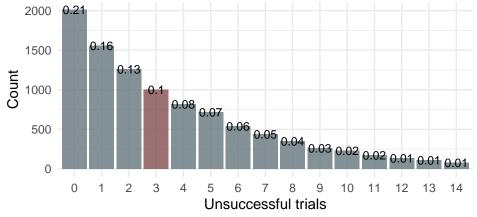
## Distribution of trials prior to first success

 $P(X = 3) | X \sim G(.2) = 0.1024$ 



simulation of n = 10,000 samples from geometric dist.