


# WHERE DO MALICIOUS ACTORS LEARN THEIR SKILLS?

## WHERE DO MALICIOUS ACTORS LEARN CRIMINAL SKILLS?



On their own



By reading tutorials and guides



From people they know in real life



Through social learning



On Public Online Forums




On Private Online Forums

## WHAT ARE THE STAGES OF KNOWLEDGE CREATION?



**1**

**TRIGGERING**  
A participant asks a public question.



**2**

**EXPLORATION**  
Participants offer possible solutions to the question.



**3**

**INTEGRATION**  
Participants test out possible solutions.




**4**

**RESOLUTION**  
The best solution is presented to all participants.

## KNOWLEDGE CREATION ON PUBLIC AND PRIVATE FORUMS

**PRIVATE FORUMS** are difficult to investigate and monitor due to access restrictions. How important is it to monitor private forums to understand where malicious actors learn their skills?



Threads on public forums reach resolution stage in 8% of the time vs 37% for private forums



Possible solutions are only tested 11% of the time in public forums; 4 times higher on private forums

## WHAT IS THE TIME TO KNOW ON FORUMS?

Time is of the essence for malicious actors. The time between asking a question, and designing the optimal solution is slow on public forums.



**196**  
DAYS

on average on public forums



**60**  
DAYS

on average on private forums

## ECOSYSTEM FRAGILITY



The GINI coefficient is the accepted method to measure the concentration of power in a community.

- **A coefficient close to 0** means that all power (knowledge creation) is concentrated in a single person
- **A coefficient close to 1** means that all power (knowledge creation) is distributed across many participants
- **A low coefficient** means a forum is vulnerable to attacks if their powerful contributor leaves the forum.


## EXTENDING COVERAGE TO PRIVATE FORUMS



A good digital risk protection service should cover private forums.



Private forums are more stable settings, and worth the time and resource investment.



Private forums are where more knowledge is created.