

Cybersecurity through Crowdsourcing

Deloitte

Use Case Four

Task Recruitment through Crowdsourced Employees

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Targeted Issue

Small and medium-size businesses (SMBs) with few methods to defend against cyber-attacks become easy targets for cyber criminals or hackers who look for intellectual property, unprotected credit card numbers, or even the computing power of computers that can be cashed in.¹ It's urgent for them to find efficient ways to defend these attacks.

Managers of consulting companies sometimes have trouble finding employees to work on certain client requests.

Solution Purpose

For SMBs, they need to

Get sustainable and constant help for various cyber security issues

Take less time and get precise cyber security services at relatively low cost

To be specific, there are the issues that SMBs wish to settle down:

- Reacting to and preventing various malware
- Correctly using social media
- Protecting information with passwords
- Getting critical about internet security
- Getting security partners, not just vendors
- Writing up their own policies to teach employees and re-teach them about security requirements, such as requiring strong passwords, internal and external communications, clarifying email encryption solutions and proper use of a company-issued computer

For big consulting companies, they need to:

- Have convenient and efficient ways to find employees for their clients
- Get more approaches to make profit
- Get their names out

¹ Flows, Capital. "5 Ways To Protect Yourself From Cyber Attacks." *Forbes*, Forbes Magazine, 15 July 2014, www.forbes.com/sites/realspin/2014/02/07/5-ways-to-protect-yourself-from-cyber-attacks/#59003ec5afb6.

Crowdsourcing Approach

An internal task recruitment system can be built for big consulting companies to find employees for their clients. For this system, when a client company requests a certain task, a consulting company with the internal task recruitment system can take these tasks and post them in the system. They can then set any preferences like location, language, skills, and time. All of the employees in this company will be able to see these posts and apply for them. These tasks, such as pen-testing and behavioral detection on malicious PowerShell use, are specific and clear.

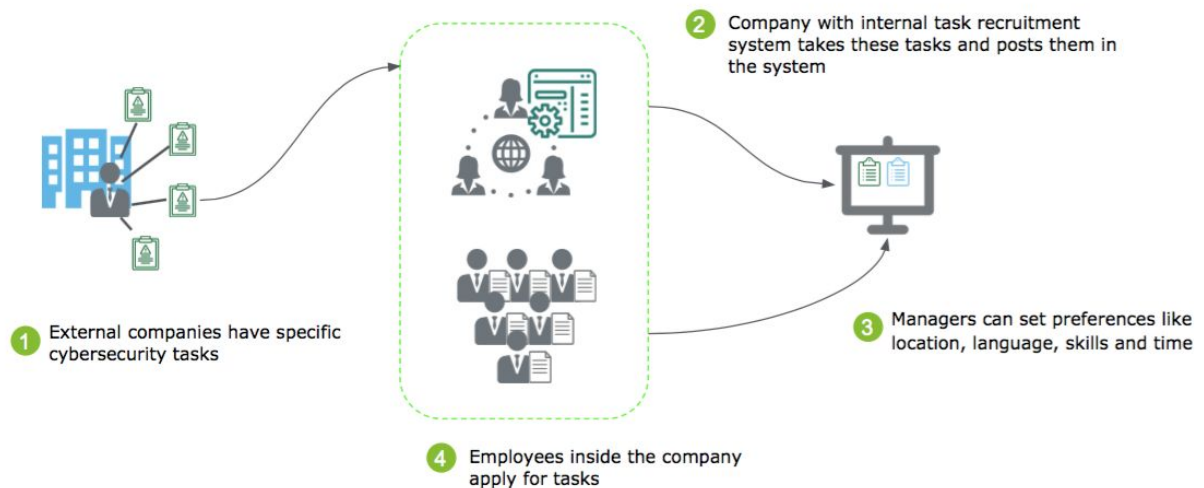


Figure 1. Crowdsourcing Approach for internal recruiting system

Potential Clients

There are mainly two types of users of this internal recruitment system: the small or medium-sized companies looking for consulting services and big consulting companies with internal recruitment systems.

List of Requirements for the Crowd

To ensure the security and privacy of this platform itself and its users, all the users' identities will be verified before they are registered, especially consulting companies who are looking to offer services and solutions. They can choose to either have their identity as public or hidden to other users based on how they wish to interact with the community.

Potential Issues

There are two concerns:

- A. How will an applicant be selected when there are multiple applicants for a task?
- B. How will this platform generate profit?

Possible Solutions

For the first issue, the company can choose to base their selection on the preferences that they set or the skills that are required for the task. The system will allow applications to be filtered and sorted.

Regarding the second issue, there are two possible ways to generate profit:

1. Commission

Serving as an agent between the two types of users, the platform will collect commission fees after every successful transaction.

2. Subscription fee

SMBs (client companies) will need to pay a subscription fee in order to register for this platform since they will use this platform to search for cybersecurity services.