An Activity Logging Dashboard for a Metrics-Oriented Security Champions Program

A step-by-step guide on how to create a simple Microsoft Forms and Excel dashboard to ensure you're measuring progress while appropriately recognizing and rewarding your champions
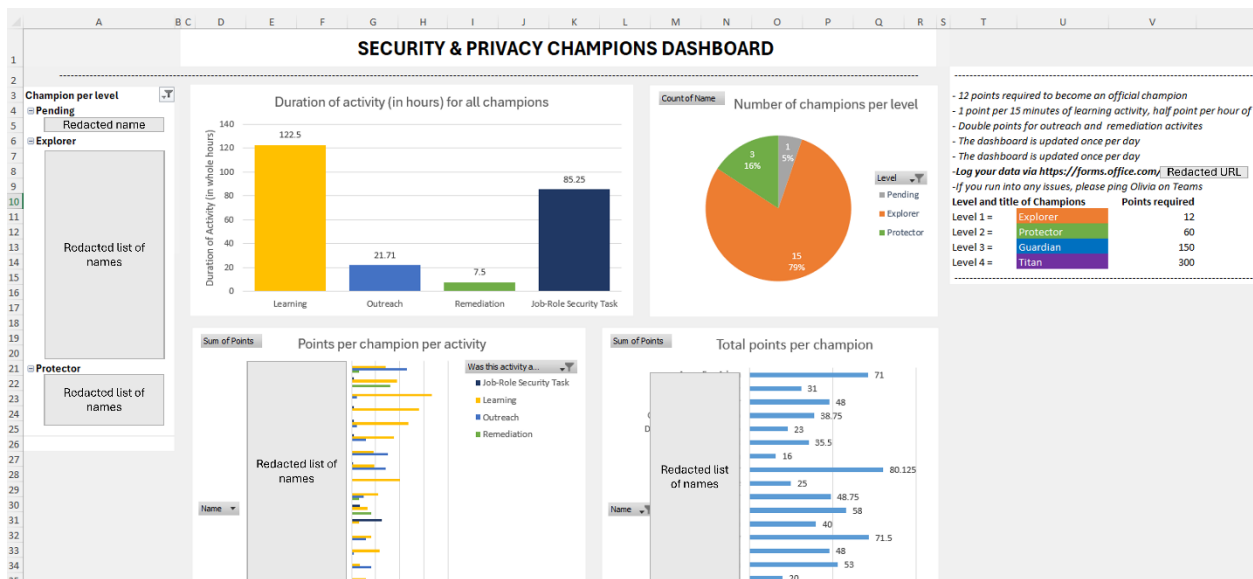

Figure 1: Extract from the dashboard

Shortly after the launch of our Security & Privacy Champions Program, I identified a dual need: to properly reward and recognize our high-performing champions, while also establishing a method to track their contributions for meaningful program metrics.

After some collaborative brainstorming and a bit of trial and error, I found that a simple approach worked best - creating a dashboard (figure 1) using tools champions were already familiar with: Microsoft Forms and a shared Excel spreadsheet in OneDrive. The dashboard's purpose was two-fold. Firstly, the aim was to incorporate the idea of *levels* to introduce an aspect of gamification and to indicate progress for each champion. Secondly, the dashboard was developed to provide real-time visibility into the key performance indicators (KPIs) and operational metrics of the security champions program, serving as a centralized reporting tool to support communication with stakeholders.

The form used for data input

Figure 2: Extract of the data input form

The first step in creating the dashboard was to make the platform that champions could use to input their data. This was done through Microsoft Forms, an easy-to-use tool that champions were already familiar with and that automatically sends the input data to an Excel spreadsheet that is also located on OneDrive. The link to this form was pinned in the Champions Teams channel to ensure easy access.

The main questions that must be included are:

1. Name (free text or via SSO)
2. Description of Activity (free text)
3. Type of activity (selection between *learning, outreach, remediation,* or *job-role related security task)*
4. Duration of activity in hours (free text)

The dashboard – excel formula calculations and pivot tables

The second step in creating the dashboard was to aggregate the input data. This required initial testing with dummy data to verify its functionality, but ultimately resulted in the spreadsheet accurately compiling the form input, with each row corresponding to a new entry (figure 3).

Figure 3: Extract from the Excel spreadsheet where the input form data is sent

The questions from the form (activity description, activity category, and activity duration) are each listed under column F, G and H. The input data in columns G and H were then used as the basis for additional calculations in columns I and J to calculate the total points as well as the champion level.

The first step to this calculation was therefore to decide the number of points that should be awarded based on the duration of the activity as well as the activity category. This required some trial and error (as discussed later in the *continuous improvements* section) but ultimately landed on being 1 point for every 15 minutes of training, 2 points for every 15 minutes of outreach or remediation, and 0.5 points per hour of job-role related security tasks. The goal of this points division was to incentivise outreach and remediation activities, whilst maintaining fairness for colleagues who have less opportunities to incorporate security elements as part of their work.

The calculation of points for column I was done through the below formula, also shown in Figure 4.

```
=IF([@[Was this activity a learning activity or a security outreach
initiative?]]="Job-Role Security Task", [@[Duration of Activity (in
whole hours)]] * 0.5, IF(OR([@[Was this activity a learning activity
or a security outreach initiative?]]="Outreach", [@[Was this activity
a learning activity or a security outreach
initiative?]]="Remediation"), INT([@[Duration of Activity (in whole
hours)]] * 8), INT([@[Duration of Activity (in whole hours)]] * 4)))
```


Figure 4: Excel formula to calculate the points for each activity input

The next step for calculations was to determine the level of the champion based on their total number of points. This is shown in the code snippet below as well as figure 5. This formula leveraged not only the previously calculated points (column I), but also the table in column K and L specifying the different levels as well as the number of points required to reach each one. The formula below therefore identifies the name of the champion associated with that row (column E), and then calculates all the points that name has (column I). It then has conditions, whereby if the total sum of points is >= 300, they are a Titan level; >= 150, they are a Guardian level; >= 60, they are a protector level, >= 12, they are an Explorer level, and if they do not yet have 12 points, they are a "pending" level.

```
=IF(SUMIF(E:E,E6,I:I)>=L$5,K$5,
IF(SUMIF(E:E,E6,I:I)>=L$4,K$4,
IF(SUMIF(E:E,E6,I:I)>=L$3,K$3,
IF(SUMIF(E:E,E6,I:I)>=L$2,K$2,
IF(SUMIF(E:E,E6,I:I)>=L$1,K$1))))))
```


Figure 5: Excel formula to calculate the level of each champion

The third step of the dashboard was to construct pivot tables based on the calculated data. This was done in a new tab in the Excel workbook and is the "backend" of the dashboard. The pivot tables I chose to create showcase the number of champions per level, the duration of activity for all champions per activity, the total points per champion, and the total points per champion per activity (figure 6).

Figure 6: pivot tables generated based on the previously calculated data

The last step of the dashboard creation was to incorporate the generated pivot tables into pivot *charts* in a new Excel tab, adjusting the layout to create a visual dashboard (figure 7). I also chose to include an information box on the right-hand side that includes a link to the entry form, to ensure people are easily able to navigate between the two pages.
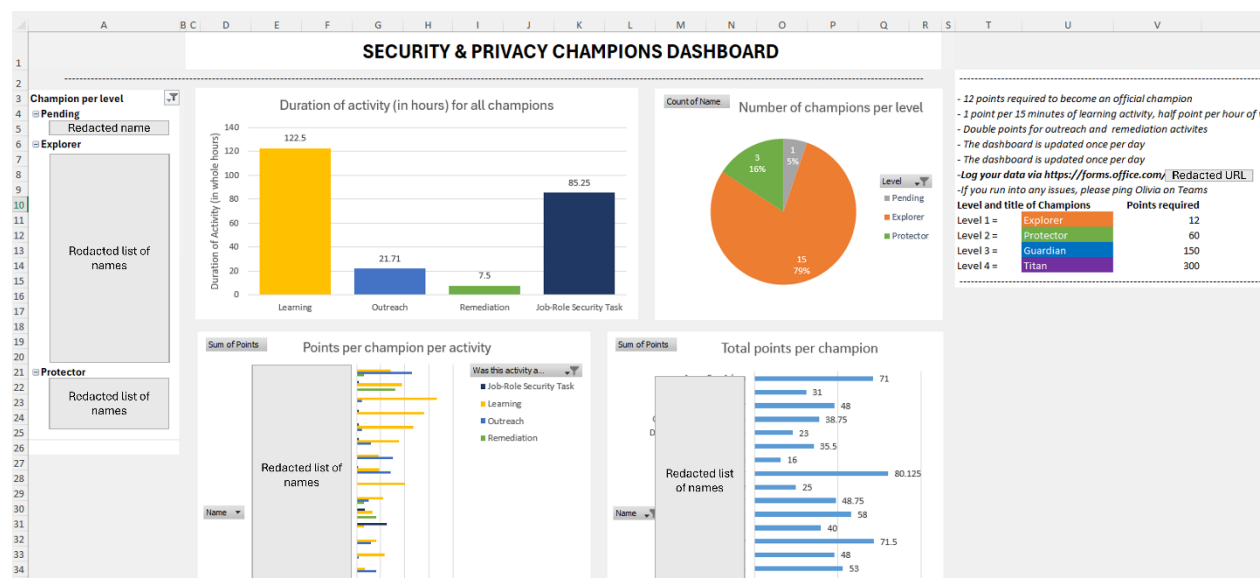

Figure 7: Extract from the dashboard

Although the input data is automatically added to the pivot tables, the pivot charts unfortunately need to be refreshed manually in order to showcase the new data in the pivot charts. This is done by clicking on *Data -> Refresh All*. This manual intervention is the primary limitation of this current system, for which I have not yet identified an automated solution. For now, I've implemented an email notification that alerts me whenever a champion records an activity (typically every few days), allowing me to update the dashboard when needed.

Continuous improvement – finetuning the points distributed & ensuring fairness

Throughout the piloting of this dashboard, I regularly spoke with champions individually to gather feedback on how the dashboard could be improved. One key issue that emerged was the fairness of points awarded for each activity. It was observed that some champions were able to perform outreach/remediation tasks as part of their job role and thus quickly gained an "unfair" number of points. To address this, the scoring system was refined by introducing a new category called "job-role related security tasks". This allowed champions to receive recognition and points for their security-related work done as part of their role, but at a lower rate compared to outreach or remediation activities done as part of their voluntary champion contributions.

The allocation of points is a difficult part to get right, and likely varies depending on your use-case, so I recommend working closely with the champions while piloting the dashboard to ensure the scoring system is viewed as fair.

Summary

Overall, this dashboard is a great way for security awareness practitioners to quickly get a simple solution up and running in order to create enhanced motivation and metrics for their champion programs. I recommend implementing this as a pilot in collaboration with your champions to ensure it remains aligned with their preferences and working styles, thereby increasing adoption rates and ensuring its long-term use. I also recommend associating appropriate reward and recognition mechanisms with each level to enhance your champions' motivations to both perform and log their champion-related activities.

Please don't hesitate to reach out if you require additional clarification or guidance, if you have any feedback, or if you would like to share your own experiences developing a dashboard. You can contact me via LinkedIn at https://www.linkedin.com/in/oliviafabreschi/.