**Theme 4: EY Badges**

**Introduction**

Thank you for joining the EY Badges webinar, being organized as part of the Radio – EY GDS Hackathon. In this session, we give you a quick overview about the theme, the expectations and answer some of the common questions that you may have.

**Business overview**

EY GDS teams offers its professionals a learning intervention called EY Badges which helps build competency across varying domains, such as innovation, analytics and others. Currently, there are over 100 badges on offer.

***The What*** **- What is the business problem statement**

EY GDS offers its employees a learning intervention called EY Badges which helps build competency across varying domains. Currently there are over 100 badges on offer and the challenge is to pick the correct one.

**How do we recommend the right EY badge to an employee? How do we ascertain its impact i.e. create a mechanism to correlate the effect of badges on an individual's performance?**

The challenge is to pick the correct EY badge, based on their role as well as capabilities and competence. From an expectation standpoint, we're looking at a solution that can recommend our people to select the right badge. How do we ascertain that the selected badge is going to have a great impact, in terms of the correlation between the work, an individual's performance, and other such things? We'll now move further to understand the theme in detail.

**Technical implementation**

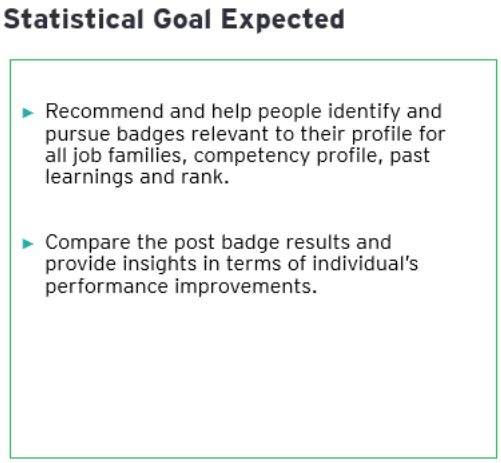
***Problem Statements Details***

*EY GDS has a digitized learning program where by all the employees can access the learnings available in the site and earn various levels of badges (Bronze, Silver, Gold and platinum) both in technical and non-technical domains. Currently, the employee has to select the badge they need to undergo based on their need and also interest. They manually scan through the list of badges that are available and start their learning.*

- Detailed steps
  1. Employee enters into the EY Badges site and navigates through the options available
  2. Employees select the badge based on their interest and need
  3. There is no mechanism to monitor or see the impact of badge on individual performance

We have 50 different sets of badges, with each badge having different levels. As you can see, there is a bronze badge, silver badge, gold and platinum badge. All these badges are actually dependent on the experience of that particular person in the current scenario, or any particular domain. If we take an example of robotic process

automation, then a person with some high-level experience in that, like 1 year of experience can actually apply for a bronze badge. Similarly, when it comes to silver, employees having 2 to 3 years of experience in the RPA space can actually apply. Usually, employees tend to apply for badges within their respective domain. For example, if I'm working in Robotic Process Automation (RPA), I will naturally apply for a badge within the same domain. Once the badge is completed, the next thing an employee needs to do is to go through all the other available badges and see which one suits them better – helping them build skills as well as the organization at large.




What we need is a recommendation system that will provide badge options based on rank, experience, domain, level, etc. For example, if a leader has completed a badge, the system should be able to provide recommendations on what badges can he do next. Similarly, if a new joiner wants to take a badge, they should also get some recommendations. Overall, we are looking for a recommendation-based system wherein employees get a better understanding of what badge they can take next and how it will help them improve their skill sets further.

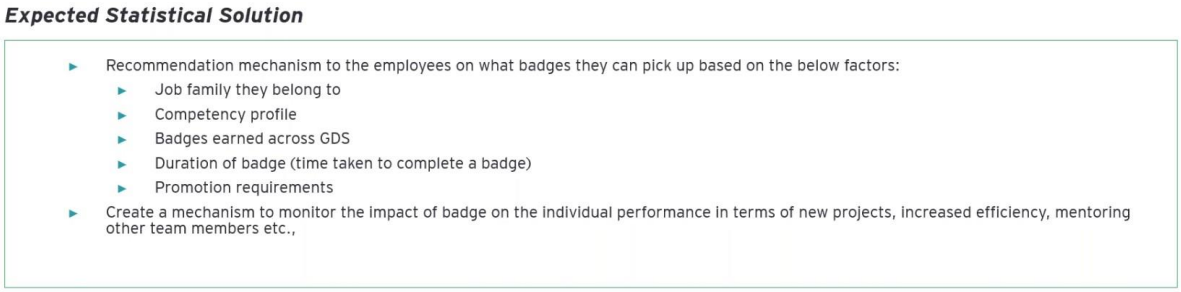
Another aspect of the whole badge process is related to improvement and how enhancing our skill set can help the organization in some manner. This badging exercise is actually a long process wherein:

- You have to complete a multiple courses
- You will be learning and have to show some experiences
- You will have to contribute to the organization and even to external to the organization

So, the other requirement is that we need a system which can actually track these changes in an individual once they have acquired a badge. Let's say I have taken a silver badge in data science. Once I have taken that badge, I need to actually track my areas of improvements and how that can help my team/ organization at large. How much time was I taking earlier? Has there been any improvement after taking the badge? Therefore, we are looking for a matrix that can give leadership an overview about employees who have taken the badge – areas of

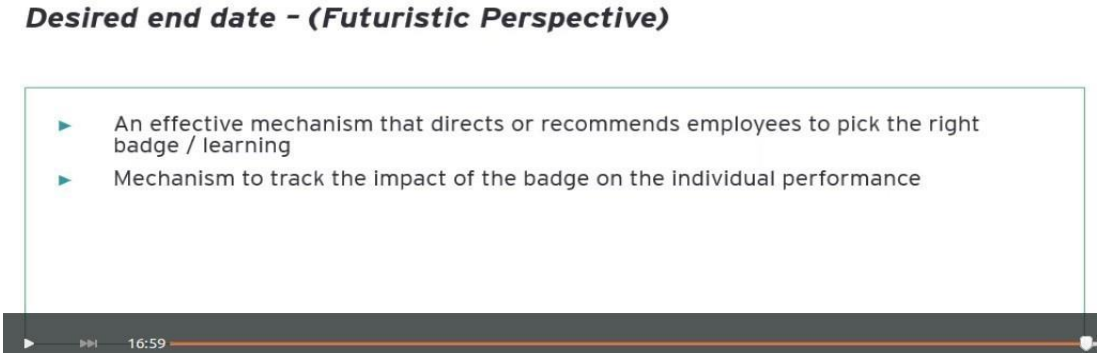
improvement and the value add they will bring to the team/ organization.

**Resource overview**




Here, we give you a brief about the kind of solution we are looking for. We have different categories of employees, with each employee belonging to a job family. If someone is a developer, their domain expertise will focus on development and they will have that competency profile as well. So, as mentioned earlier, the badges are available across different domains and EY employees are free to apply for any of these. However, there will be some pre-requisites in place such as experience, level, etc. We haven't provided you the raw data for that and have only shared high-level data, but you can actually create *n* number of information and based on that develop the recommendation system.
Another aspect is the duration of the badge – the amount of time an employee takes to complete the badge. If you have to take a gold badge in RPA, then you will have to spend at least 2 or 3 months. That's, depending on the history, how the other employees have actually done that. So, whenever an employee is starting and completing a badge, the time stamp will be recorded in the database. Based on the difference, the average time can be calculated.

Similarly, there should be focus on creating a mechanism to monitor that impact on individual as well as overall team performance. And when it comes to higher levels of management, they will have to see the level of improvement that has happened over a region, or a country office, likewise.




Overall, the desired end prospect is that we need an effective mechanism, wherein we can recommend a badge to employees and track the impact on their individual performance as well as the team/ organization performance.

**The recommendation system**

We have some set of data that has already been published on the microsite, wherein we have that set of information that we actually have within the organization. Like what is the domain, what would be the different kinds of badges. That information is already present on the HackerEarth page, within this particular challenge.

**Technology stack**

1. Solution should ideally suit for deployment in Azure cloud platform:

- The tools can leverage open source/ custom libraries/ Application Program Interface (API) from cloud platforms.
- Existing Software As A Service (SaaS)/ hosted solutions (Google Cloud Platform, Amazon Web Service etc.) except Azure should not be leveraged.

2. Preferable technology stack is C#, .net and Python for Artificial Intelligence (AI)/ Machine Learning (ML). You are also free to use libraries that are not licensed under Affero General Public License (AGPL).

**Q&A**

1. **Can you explain the badge structure?**

   Ans. There are four categories of badges – bronze, silver, gold and platinum. However, not all domains may have all four categories, some may only have bronze or silver.

   - Bronze badge – applicable for individuals who have beginner experience in the domain. These individuals usually do the core work in the domain.
   - Silver badge – applicable for individuals with more experience in the domain. These individuals usually lead a small team of developers.
   - Gold badge – applicable for individuals who lead a team of leads. Like a supervisor. They will have more experience in the domain and are subject matter experts.
   - Platinum badge – applicable for individuals who manage a team. They are closely associated with the clients.

While these are the main criteria for badges, EY GDS does not restrict people from taking badges at any level. If the individual can prove his expertise in the domain, he can take any badge.

2. **Why not Python?**

   Ans. We are okay with Python for creating machine learning algorithms. However, it would be better to leverage Azure as a platform.

3. **When you will be providing any sample data?**

   Ans. The redacted EY GDS data is already available on the microsite. However, you can easily create mockup data for this purpose based on the job family, competency profile, domain, etc.

4. **In the hierarchy, is bronze first, then silver second, and then the last is going to be platinum?**

   Ans. There is no sequence that needs to be followed for the badges. You can apply for any badge, irrespective of the category. If you want to start with a silver or platinum badge in a particular domain, you can do that.