

<p style="text-align: center;">System Request – Be’ety Project</p>
<p>Project Sponsor: Mohamed Galal, Ministry of Environment</p>
<p>Business Need: Egyptian cities face numerous environmental issues, such as garbage accumulation, air and water pollution, industrial waste, and sewage leaks. Currently, there is no unified digital system that allows citizens to report these issues instantly, leading to delayed responses from relevant authorities and worsening environmental conditions.</p>
<p>Business Requirements:</p> <ul style="list-style-type: none"> • Users can submit reports containing descriptions, images, or videos of the environmental issue. • Automatically records and shares the location of the reported issue. • Allows users to earn points for submitting reports, which can be redeemed for rewards such as discounts. • Enables users to track the status of their reports and receive updates on their progress. • Provides a platform for the responsible authorities to manage and assign reports to field teams. • Offers analytical tools to identify regions with the highest environmental concerns and trends. • Displays reported issues in real-time, enabling users to interact with their surrounding environmental concerns.
<p>Business Value:</p> <ul style="list-style-type: none"> • Enhances the efficiency of environmental issue reporting and provides a direct communication channel between citizens and authorities. • Reduces the response time for addressing reported issues, improving the overall effectiveness of the system. • Aims to improve the quality of the environment by addressing problems more swiftly and reducing pollutants in the affected areas. • Increases awareness among citizens regarding the importance of environmental conservation. • Facilitates partnerships with businesses by offering a system of rewards that benefits both the users and companies. • Helps reduce long-term costs associated with environmental degradation by promoting timely action to solve environmental problems.
<p>Special Issues:</p> <ul style="list-style-type: none"> • The project’s success depends on securing sustainable funding either through partnerships or government support. • Effective coordination with government and environmental authorities is necessary to ensure quick processing of reports. • The quality of location data may vary, affecting the precision of the reported issues. • Legal Challenges: Potential legal restrictions on sharing personal or location data and verifying the authenticity of the reports could affect the implementation.

Be'ety Project Executive Summary

Mohamed Galal created the following feasibility analysis for Be'ety Project. The System Request is attached, along with the detailed feasibility study. The highlights of the feasibility analysis are as follows:

Technical Feasibility:

The **Be'ety** project is technically feasible, as modern technologies are readily available to develop the required system. The web application will be built using technologies such as HTML, CSS, JavaScript (**Angular**) for the frontend, and ASP.NET Core for the backend. The system will rely on GPS-based location services and interactive mapping technologies, such as Google Maps API or OpenStreetMap. These technologies are reliable and widely used in similar applications.

For data storage, the project will use cloud-based databases like SQL to handle large volumes of user reports, images, and other data. Cloud hosting platforms such as Azure will be used to ensure scalability, high availability, and security.

The project will need to integrate with local authorities' platforms for report distribution, which may require API integrations or custom connectors. Security will be a key aspect of the project, and technologies such as SSL certificates for encryption and OAuth2 for user authentication will be used to ensure user data protection.

The system must also be scalable to handle growing user participation and a higher number of reports over time. With the proper cloud infrastructure and modern development practices, scalability can be achieved.

Economic Feasibility:

The **Be'ety** project is economically feasible, with various sources of funding and potential for revenue generation. Development costs will primarily include personnel (developers, designers, project managers), software tools (cloud services, APIs), and testing and maintenance. These costs can be managed with careful planning.

Funding for the project can come from multiple sources. Government grants could be available, especially since the project aligns with environmental goals. Corporate sponsorships are another potential funding stream, particularly if companies are willing to sponsor the rewards system. User fees or donations could also be explored, especially for premium features or ongoing support for the platform.

Revenue can be generated through partnerships with businesses offering rewards, as well as through targeted advertising. Once the platform gains significant user traffic, businesses interested in environmental conservation can be encouraged to advertise on the site, providing an additional source of income.

In terms of return on investment, the project's primary value lies in its **social impact**, particularly the improvement of environmental conditions. Financially, the project can remain sustainable through a mix of **business partnerships, sponsorships, and potential government support**.

Organizational Feasibility:

The **Be'ety** project is organizationally feasible, provided the organization has the necessary resources and expertise. The team required for this project should include professionals skilled in web development,

database management, and geolocation technologies. Additionally, project management expertise will be needed to ensure that the project stays on track and is delivered within the expected timeframe.

The organization must also have the infrastructure in place to manage the project, such as access to cloud services and project management tools. Collaboration with local authorities and environmental agencies will be essential to ensure that reports are processed and acted upon in a timely manner.

Stakeholder support is critical for the success of this project. The local government, environmental agencies, and private sector partners must be engaged early on to ensure their participation in the platform. Building strong relationships with these stakeholders will facilitate smooth implementation and usage.

Sustainability is another consideration. After the initial launch, the platform will need to be continuously maintained and updated. This requires securing ongoing funding, possibly through partnerships, sponsorships, or other revenue streams, to keep the platform operational in the long term.