

CASE STUDY: WEB APPLICATION STIMULATES CONSTRUCTION OF GREENER BUILDINGS ACROSS GLOBE



Arrk Group helps International Finance Corporation, part of World Bank Group, stimulate the development and construction of new resource-efficient buildings across the globe. EDGE is a new web application for construction developers, which provides fast, online access to comprehensive green information, approved auditors and certified accreditation.

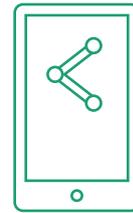
Key Benefits



Promotes the construction of energy and resource efficient buildings



View capital costs and pay back period on commercial buildings



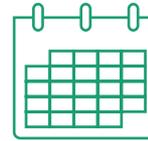
Mobile responsive design for developers and auditors to use EDGE on location



Web application built in Microsoft .NET and Angular JS



Fast access to location specific data to maximise green opportunity



Project delivered on-time and to the satisfaction of the customer

Customer

- ▶ A World Bank Group organisation
- ▶ Supporting the World Bank Group's two goals of ending extreme poverty and boosting shared prosperity
- ▶ Active in over 100 countries

International Finance Corporation (IFC) is part of World Bank Group and offers its customers a broad range of financial products and services as well as asset management in a range of verticals.

Created in the 1950s, IFC is the largest organisation of its type in the world, active in over 100 countries and reaching millions of people, it holds a \$49.6bn portfolio. The organisation's work helps to support World Bank Group's two goal strategy of ending global extreme poverty and boosting shared prosperity.

By stimulating the construction of greener buildings, IFC aims to save investors money by lowering operating costs and increasing efficiency, while reducing the impact modern development has on local and national environments.

Situation

- ▶ IFC required a tool to assist in the design and development of more resource-efficient buildings
- ▶ Aimed at emerging economies
- ▶ Pre-existing complex Microsoft Excel spreadsheet tool
- ▶ Partner with local organisations to offer Green Building certification

IFC was already helping property developers and builders by using a hugely complex, offline Microsoft Excel spreadsheet tool, however they wanted to build a robust web application to reach more locations and help more companies.

By making this tool freely available, it allows developers to quickly and easily incorporate energy saving ideas and materials at the design stage of a project. Green building accreditation is then offered for a nominal cost.

Aimed at emerging economies, the EDGE application was envisaged to help both investors and homeowners by stimulating the building of resource efficient buildings.



Enabling the
Digital Enterprise

Want to find out more? Contact the team today on:

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IFC wanted to partner with local providers and auditors to ensure a sophisticated green building certification programme.

Solution

- Web application required to interact with existing Excel spreadsheet
- Mobile responsive design
- Tight time-scales imposed on project

Although a relatively straightforward web application, the web application needed to accurately present a hugely complex Microsoft Excel spreadsheet in a mobile responsive design web application to ensure usability of the digital product while on location.

Furthermore the solution needed to bring together local organisations which run green building accreditation programmes, with approved auditors and appeal to property developers.

Outcomes

- Launched across South Africa, South East Asia and India
- Positive financial and environmental impact on new construction projects

The tool has been launched around the globe, giving property developers and builders access to a free resource to make smart choices in building more sustainable developments.



The digital solution features five building typologies - homes, hospitals, retail, hotels and offices - and allows developers to build a complete picture of efficient materials in the design phase of the project. Developers are able to reconfigure design choices to calculate potential energy savings and return on investment.

Following existing brand guidelines, developed by IFC, the application also required a new user management system which recognises different user groups and locations.

By promoting the building of green buildings, IFC is helping to tackle climate change in a commercially responsible way. Official Green certification is offered at a nominal cost to drive engagement with the tool across all locations.

Arrk Group delivers award-winning digital systems through collaborative partnering and high performing software engineering.