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# بسم الله الرحمن الرحيم

مركز الشبكات وتكنولوجيا المعلومات قسم التوثيق الإلكتروني





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# جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها على هذه الأقراص المدمجة قد أعدت دون أية تغيرات







# Ain Shams University Faculty of Engineering Architectural Engineering Department

### Impact of Applying the Sustainability Elements on Construction Risk Management in Egyptian Sports Clubs

A Thesis Presented in partial fulfilment of the requirements for Masters of Science Degree in Architectural Engineering

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### Abstract

In Egypt, sports clubs have experienced rapid growth and development in recent years. Furthermore, lots of new Sports Clubs are being built and will begin operations in the next years. In the absence of studies on Egyptian sports club projects, this study aims at showing, identifying, and assessing the impact of applying the sustainability elements into the construction of maintenance risk management in Egyptian sports club projects as a method for delivering a sustainable and safe community with a higher quality of life for the long-term life cycle project, taking into account many factors:

Firstly, the importance of applying the sustainability elements on the construction of maintenance risk management in the sports club projects in Egypt also if it is available or not. Secondly, investigate the role and the impacts of the sustainability elements on the construction of maintenance risk management in order to provide a sustainable and safe community with a better quality of life. Also, this study work entails integrating the sustainability elements into the construction of maintenance risk management that investigates how the sustainable and safety tools can be used in reducing the number of risks that facing the Egyptian sports club projects.

Through a comprehensive literature search, via open interviews, questionnaires and site visits, this study tried to highlight, identify and assess the impact of applying the sustainability elements into the construction of maintenance risk management in the Egyptian sports clubs projects in order to reduce costs and ensure that assets operate effectively for the duration of the life cycle of Egyptian sports clubs projects, as well as increase sustainability, efficiency, and safety.

In order to achieve this purpose, a study strategy is designed to achieve three goals. To begin, a comprehensive literature review of sustainability concepts, construction risk management, and sports club projects will be presented. Second, to present and synthesize the findings of a relevant study focused on identifying and evaluating the impact of applying sustainability elements on the Egyptian sports club's construction of maintenance risk management, and to approve how sustainability within the Egyptian sports club's construction of maintenance risk management can be used to reduce the number of risks that face this stage of the Egyptian sports club projects. Finally, draw conclusions and recommendations to improve the practice of delivering sustainable projects (sports club).

### Keywords

Sustainability elements, Construction of Maintenance Risk management, sustainable, and safe sports club projects.

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