

# Reduction of Expenses and Empowerment of Leadership using Leading Indicators at SEC.

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## Abstract

The Occupational Safety and Health Management System “ OSH MS “ in the Saudi Electricity Company “ SEC “ has been experiencing in the last 10 years extensive direct and indirect expenses due to lack of proactive leading indicators and safety leadership effective procedures. And since there are no studies that are associated with this department of SEC’s company, this research has been conducted. In this study we used a mixed method approach containing aliterature review and experts' input, then qualitative and quantitative questionnaires related to expense sources were conducted so machine learning method can be used to analyze the received input. after that Deming cycle been used to create set of proactive leading indicators and been analyzed using SMART method to make sure of its effectiveness and suitability to the company. The objective of this research is to demonstrates the sources of expenses of SEC’s OSH MS, and provides a set of leading KPIs to contribute in making an efficient leadership role to the system. Therefore, an implementation of AI been conducted as a pilot run off an app, designed and empowered with our final results to contribute in supporting decisions making processes.

## Key Words:

Proactive Leading indicators, OSH MS, Safety Leadership, OSH expenses, Prevention Cost.