

# **6COSC023C.Y – Final Project Report**

**Retain.ly**

## **An Employee Retention Management System for IT Industry**

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## **Abstract**

Employees are deemed a key asset to a company. Over the last two decades, Sri Lanka has been growing phenomenally in the Information Technology (IT) sector in this current competitive business environment. As a result, the retention of skilled employees within a company has been a vital task due to the high demand for the niche skills in IT employees. As most IT companies are functioning on project basis, having skilled employees within the company adds a massive advantage and high standards to an organization. As a result, in the process of achieving these project deadlines, if the niche skilled employees leave the company, it will become a substantial drawback, since it takes an extra-long time for someone else new to match that level of expertise and speed. This sort of voluntary attrition has been a huge issue for IT companies as a considerable amount of time, cost and knowledge has been invested for an employee during the initial stages.

This project aims to address this issue faced by IT companies in Sri Lanka and through comprehensive research and feedback from industry professionals, the author has come up with a modern IT solution named “Retain.ly”, which acts as Retention Management System to provide support for Human Resources (HR) in retaining employees to provide the organizational management with valuable insights to take corrective measures for the retention of skilled employees within the company.

This thesis focuses on applying advanced technologies such as Machine Learning, in producing a model to predict the turnover rate, time till turnover and performance level of employees based on employees personal and professional data using an online employee dataset. By utilizing industry questionnaires and interviews with IT employees and HR managers the issue was further accessed and the functionalities were identified for the design and development purposes. Other features such as satisfactory checks, personality types checking, and training options are also included. The main objective of developing Retain.ly system is for this to work as a decision support system for IT organizations to retain skilled employees, thus reducing the turnover rate, increasing employee performance and maintaining the company standards.

**Keywords:** Information Technology, IT industry, Sri Lanka, Retention Management, Employee Turnover, Prediction, Performance Prediction, Machine Learning,