New Edge Technologies Pvt Ltd
Applying Innovation
2nd floor, City mall, P.O. Box 1616, Thimphu, Bhutan

# CRM-IMS (Customer Relationship Management – Inventory Management System)

## 1. Project Overview

Project Title: CRM-IMS (Customer Relationship Management – Inventory Management System)

Target Organization: IT Company

Project Type: Final Year Capstone Project (BE IT)

Duration: Academic Year 2024-25

## 2. Problem Statement

IT companies today face significant challenges in managing dual aspects of their business operations: maintaining strong customer relationships while efficiently managing their technology inventory. Current systems often operate in silos, leading to:

- Disconnected customer data and inventory information  Inefficient resource allocation and project planning
- Poor visibility into customer requirements versus available resources  Manual processes leading to errors and delays
- Inability to predict inventory needs based on customer demands  Lack of integrated reporting and analytics

## 3. Project Objectives

- Develop an integrated system combining CRM and inventory management functionalities
- Streamline customer interaction tracking and inventory monitoring processes
- Provide real-time visibility into customer projects and resource requirements
- Enable data-driven decision making through comprehensive analytics
- Improve operational efficiency by reducing manual processes
- Enhance customer satisfaction through better service delivery
- Optimize inventory costs through demand forecasting
- Create scalable architecture for future enhancements

## 4. Scope of work

*Customer Relationship Management Module:*

- Customer profile management and contact database
- Lead tracking and opportunity management
- Project management and milestone tracking
- Communication history and interaction logs
- Customer support ticket system
- Sales pipeline and forecasting

*Inventory Management Module:*

- Hardware and software asset tracking
- Stock level monitoring and alerts
- Purchase order management
- Vendor relationship management
- Asset allocation to projects/customers
- Depreciation and maintenance tracking

*Integration Features:*

- Project-based inventory allocation
- Customer demand-based inventory planning
- Integrated reporting and dashboard
- Role-based access control
- Audit trails and compliance tracking

## 5. Technical Specifications

***Proposed Technology Sack:***

**Frontend**: React with responsive design

**Backend**: Node JS (Express)

**Database**: MySQL/PostgreSQL for relational data

## 6. Conclusion

The CRM-IMS project represents a comprehensive solution addressing real-world challenges faced by IT companies. By integrating customer relationship management with inventory management, this system will provide significant value in operational efficiency and business intelligence. The project scope is

appropriate for a final year BE IT capstone project, offering opportunities to work with modern technologies while solving practical business problems.

This integrated approach will not only benefit the target IT company but also provide students with valuable experience in enterprise software development, system integration, and project management essential skills for their professional careers in the IT industry.