

# Return on Investment (ROI) in the Development of a Customer Relationship Management (CRM) System

**Course Title:** CS502052 – Enterprise Systems Development Concepts (ESDC)

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## Background

A mid-sized retail company, **RetailMax**, plans to implement a Customer Relationship Management (CRM) system to enhance its customer service, increase sales, and improve marketing efficiency. Currently, the company uses manual processes and disjointed spreadsheets to manage customer interactions, which often leads to inefficiencies, missed opportunities, and customer dissatisfaction.

## Objectives

RetailMax wants to evaluate whether developing and implementing the CRM system will be a worthwhile investment by analyzing its potential Return on Investment (ROI) during the feasibility analysis phase of the SDLC.

## Project Costs

### 1. Initial Development Costs:

- Software Development (custom-built system): \$200,000
- Hardware and Infrastructure: \$50,000
- Implementation & Training: \$30,000
- Maintenance & Support (Yearly): \$20,000

**Total Initial Investment:** \$280,000 (for the first year)

### 2. Ongoing Annual Costs (after year 1):

- Software Maintenance and Updates: \$15,000
- User Training and Support: \$5,000
- System Operation Costs: \$10,000

**Total Ongoing Annual Costs:** \$30,000 (from year 2 onwards)

## Projected Benefits

### 1. Increase in Sales:

- Improved customer targeting and personalized marketing will lead to an estimated 10% increase in sales annually. Current annual sales are \$2,000,000, and the expected increase in sales is \$200,000 per year.

## 2. Cost Savings:

- The automation of customer service and improved data management is expected to reduce operational costs by \$40,000 per year, through reduced labor hours and better resource allocation.

## ROI Calculation

### 1. Total Benefits (Year 1):

- Increase in Sales: \$200,000
- Cost Savings: \$40,000
- **Total Benefits: \$240,000**

### 2. Net Gain (Year 1):

- Total Benefits - Total Costs = \$240,000 - \$280,000 = - **\$40,000**
- The project would not yield a positive ROI in the first year due to the high initial investment.

### 3. Total Benefits (Year 2 and onwards):

- Benefits remain the same at \$240,000, but the ongoing costs drop to \$30,000 annually.
- Net Gain (Year 2 onwards) = \$240,000 - \$30,000 = **\$210,000 per year**

### 4. ROI Formula: $ROI = (Net\ Gain / Cost\ of\ Investment) * 100$

For Year 1:

- $ROI = (-\$40,000 / \$280,000) * 100 = -14.3\%$

For Year 2 onwards:

- $ROI = (\$210,000 / \$30,000) * 100 = 700\%$

## Conclusion

- **Year 1:** The CRM system has a negative ROI due to the upfront investment costs.
- **Year 2 and beyond:** The ROI becomes highly positive (700%), meaning that once the initial investment is recovered, the company will see a significant return on the project in subsequent years.

## Questions

1. Is it worth making the investment if the ROI is negative in the first year? Why or why not?
2. How can the company mitigate the high initial costs, and should they consider alternatives (e.g., off-the-shelf CRM systems)?

3. What are the potential risks of not developing the system?
4. How does the ROI metric help in making decisions during the feasibility analysis phase?

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