

# ROI Methodologies

Providing Validation  
for  
RIM Programs

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## Origin

- **DuPont**
  - Ratio or Percentage
  - Overall Financial Effectiveness
  - Comparison among Companies

$$\text{ROI} = \frac{\text{Net Income}}{\text{Total Assets}}$$

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## Origin

- **DuPont**
  - Ratio or Percentage

$$\text{ROI} = \frac{\text{Net Income}}{\text{Total Assets}}$$

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## Development

- **Projects/Investments**

$$\text{ROI} = \frac{\text{Net Gains}}{\text{Total Costs}}$$

Net Gains = (Total Gains – Total Costs)

Value of investment is judged by how great  
the *positive* ROI is [expressed as a percent].

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## Development

- **Other ROI Calculations**

- Return on Invested Capital
- Return on Total Assets
- Return on Equity
- Return on Net Worth, etc.

Understand the definition of the specific terms in an ROI calculation before making comparisons

## Traditional RIM ROI

- **Space Savings**

$$\text{ROI} = \frac{\text{Net Space Cost Savings}}{\text{Mobile Shelving Cost}}$$

Net Space Savings =  
(Total Space Savings – Mobile Shelving Cost)

## Caveats

- **Variable ROI**

- Time Frame Changed
  - Shorter
  - Longer
- Different Calculations
  - Straight Line
  - Net Present Value

## Traditional RIM ROI

- **Imaging System 1**

- Archival Tool
- Replace Paper
- Offsite Cost Savings

## Traditional RIM ROI

- **Imaging System 1**

$$\text{ROI} = \frac{\text{Net Offsite Storage Costs}}{\text{Personnel + System Costs}}$$

Net Offsite Storage Costs =  
(Total Offsite Costs – [Personnel + System Costs])

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## Traditional RIM ROI

- **Imaging System 2**

$$\text{ROI} = \frac{([\text{PG} + \text{IP} + \text{RS}] - \text{PS})}{\text{Personnel + System Costs}}$$

**PG = Value of Productivity Gains**

**IP = Increase In Cash Payments**

**RS = Reduction in Space/Offsite Storage Costs**

**PS = Personnel + System Costs**

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## Traditional RIM ROI

- **Imaging System 2**

- **Business Process Improvement**

- **Increased Throughput**
- **Reduced Payment Cycles**
- **Improved Customer Service**

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## Caveat

**Not all RIM  
investments result  
in predictable  
financial outcomes!**

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## Alternative ROI

- **Result of Inaction**
- **Hypothetical Calculation**

$$\text{ROI} = \frac{-\text{FI} - \text{LI}}{\text{LI}} = \frac{-\text{FI}-0}{0} = -\infty$$

**FI = Financial Loss from Inaction [Negative]**

**CI = Lack of Investment = 0**

**In math, the result of dividing by zero approaches infinity.**

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## ROI Elements

- **Assumptions**
  - **Fully Documented & Explained**
    - **Average vs. Real Salaries**
    - **Processing Speed = Vendor**
    - **Growth Rate = Predicted Customer Increase**

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## Alternative ROI

- **Risk of Incarceration**
  - **Regulation**
    - **IRS Rev Proc 98-25**
  - **Statute**
    - **Sarbanes-Oxley**
  - **Criminal Penalties**

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## ROI Elements

- **Financial Measures**
  - **Organization vs. Team**
  - **Investment Decision Measures**
    - **Net/Discounted Cash Flow**
    - **Net Present Value**
    - **Internal Rate of Return**
  - **Data Element Values**

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## ROI Elements

- **Situation Description**
  - Create/Accomplish Task
  - Alternative Scenarios
    - Internal Implementation
    - Vendor Turnkey
    - 'Business-as-Usual'

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## ROI Elements

- **Data/Collection Methods**
  - Sources
    - Internal, Research
    - Vendors, Consultants
  - Methods
    - Sampling
    - Digital Inventory

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## ROI Elements

- **Objectives**
  - Descriptive
  - Focus on Gains
  - Concrete Result[s]
    - Response Time Down by X%
    - Staff Productivity Up by X%

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## ROI Elements

- **Complete Costs**
  - Hardware/Software [Licenses]
  - Operating & Maintenance
  - Training/Conversion
  - Allocated/Indirect
  - Segmented by Phase

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## ROI Elements

### • **Financial Results**

- **Obvious**
  - **Reduced Costs/Staff**
  - **Increased Revenues**
  - **Shorter Cycle Times**
- **Ancillary**
  - **Investment Tax Credits**
  - **Access to Technology**

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## ROI Elements

### • **Risk Analysis**

- **Identify**
  - **Delayed Equipment Delivery**
  - **Software Does Not Integrate**
  - **Reluctant Staff Participation**
- **Evaluate Depth of Risk**
- **Describe Avoidance**

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## ROI Elements

- **Non-Financial Results**
- **Supplement to Decisions**
- **Lack of Sufficient Information**
- **Unwillingness to Place a Value**
  - **Increased Staff Morale**
  - **Enhanced Corporate Image**

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**“Investing Wisely  
for the Future  
RIM & ROI”**

***Information Management Journal***

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