Automated Release Pipeline - ROI Calculator

Before Automation (Manual Process)

Activity	Hours per Release	Hourly Rate ($)	People Involved
Release planning meeting	1.5	75	5
PR review coordination	0.75	75	2
Branch merging	1.0	75	1
Build verification	0.5	75	1
Deployment to staging	0.75	75	1
Deployment validation	0.5	75	2
Documentation & communication	0.5	75	1

Time & Cost Calculations - Before Automation

Repository Count	**9**
Releases per Week (Low Estimate)	**4**
Releases per Week (High Estimate)	**10**

Per Release Costs

Item	Calculation	Cost
Release planning meeting	1.5 hrs × $75 × 5 people	$562.50
PR review coordination	0.75 hrs × $75 × 2 people	$112.50
Branch merging	1.0 hrs × $75 × 1 person	$75.00
Build verification	0.5 hrs × $75 × 1 person	$37.50
Deployment to staging	0.75 hrs × $75 × 1 person	$56.25
Deployment validation	0.5 hrs × $75 × 2 people	$75.00
Documentation & communication	0.5 hrs × $75 × 1 person	$37.50
Total Cost Per Release		**$956.25**
Total Hours Per Release		**11.25 person-hours**

Weekly Costs (Low Estimate - 4 releases per week)

Item	Calculation	Cost
Cost per repository	4 releases × $956.25	$3,825.00
Total Weekly Cost (All Repos)	9 repos × $3,825.00	**$34,425.00**
Total Weekly Hours	4 releases × 11.25 hrs × 9 repos	**405 person-hours**

Weekly Costs (High Estimate - 10 releases per week)

Item	Calculation	Cost
Cost per repository	10 releases × $956.25	$9,562.50
Total Weekly Cost (All Repos)	9 repos × $9,562.50	**$86,062.50**
Total Weekly Hours	10 releases × 11.25 hrs × 9 repos	**1,012.5 person-hours**

After Automation

Activity	Hours per Release	Hourly Rate ($)	People Involved
Automated process monitoring	0.1	75	1
Exception handling (10% of releases)	0.5	75	1
Deployment validation	0.25	75	1

Per Release Costs

Item	Calculation	Cost
Automated process monitoring	0.1 hrs × $75 × 1 person	$7.50
Exception handling	0.5 hrs × $75 × 1 person × 10% of releases	$3.75
Deployment validation	0.25 hrs × $75 × 1 person	$18.75
Total Cost Per Release		**$30.00**
Total Hours Per Release		**0.4 person-hours**

Weekly Costs (Low Estimate - 4 releases per week)

Item	Calculation	Cost
Cost per repository	4 releases × $30.00	$120.00
Total Weekly Cost (All Repos)	9 repos × $120.00	**$1,080.00**
Total Weekly Hours	4 releases × 0.4 hrs × 9 repos	**14.4 person-hours**

Weekly Costs (High Estimate - 10 releases per week)

Item	Calculation	Cost
Cost per repository	10 releases × $30.00	$300.00
Total Weekly Cost (All Repos)	9 repos × $300.00	**$2,700.00**
Total Weekly Hours	10 releases × 0.4 hrs × 9 repos	**36 person-hours**

Cost Savings

Weekly Savings (Low Estimate - 4 releases per week)

Item	Before	After	Savings	Percentage
Weekly Cost	$34,425.00	$1,080.00	$33,345.00	96.9%
Weekly Hours	405	14.4	390.6	96.4%

Weekly Savings (High Estimate - 10 releases per week)

Item	Before	After	Savings	Percentage
Weekly Cost	$86,062.50	$2,700.00	$83,362.50	96.9%
Weekly Hours	1,012.5	36	976.5	96.4%

Annual Savings (Based on 50 working weeks)

Scenario	Weekly Savings	Annual Savings
Low Estimate (4 releases/week)	$33,345.00	$1,667,250.00
High Estimate (10 releases/week)	$83,362.50	$4,168,125.00

Implementation Costs (One-Time)

Item	Hours	Rate	Cost
Initial development	80	$75	$6,000
Testing & validation	40	$75	$3,000
Documentation	20	$75	$1,500
Training	10	$75	$750
Total Implementation Cost			**$11,250**

ROI Calculation

Scenario	Annual Savings	Implementation Cost	First Year ROI	Break-Even Time
Low Estimate	$1,667,250	$11,250	14,819%	2.5 days
High Estimate	$4,168,125	$11,250	37,049%	1 day

Additional Benefits (Not Quantified)

- Improved software quality due to consistent processes
- Reduced deployment errors and rollbacks
- Enhanced developer satisfaction and reduced context switching
- Faster time-to-market for new features
- Better alignment between development and business objectives

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Disclaimer

This ROI calculator provides estimated cost savings based on industry-standard assumptions and typical development workflows. Actual results may vary depending on organization-specific factors including team size, hourly rates, release complexity, existing tooling, and implementation approach. These figures are intended for planning and estimation purposes only and should not be interpreted as guaranteed cost savings or firm pricing quotes. Individual results will depend on specific organizational circumstances and successful implementation of the automated release pipeline system.