# Simulation Results

Simulation count: **100**

## Total Profit for Year:

**Base Example**

$$90.21 * R_{f/d} + 112.76 * R_{df/d} + 22.55 * P_{tdf/d} - 179,790 - C_{others}$$

**With IT Org**
$$135.63 * R_{f/d} + 67.82 * R_{df/d} + 22.61 * P_{tdf/d} - 176,189 - C_{others}$$

**With Monitoring**

$$90.28 * R_{f/d} + 112.86 * R_{df/d} + 22.57 * P_{tdf/d} - 179,542 - C_{others}$$

**All Improvements**

$$135.72 * R_{f/d} + 67.86 * R_{df/d} + 22.62 * P_{tdf/d} - 175,988 - C_{others}$$

## Abbreviations

$R_{f/d}$ - Average revenue from a day of new feature development
$R_{df/d}$ - Average revenue from a day of fixing defects
$R_{tdf/d}$ - Average revenue from a day of improving application by fixing tech depth
C_{{others}} - Other costs

**Revenue from new feature development** inreases sales conversion rate, retention and feasibility of price increase
**Revenue from fixing defects** decreases churn rate and reputational losses
**Revenue from fixing tech depth** increases development speed, probability of occurrence of new defects

## Cost Description

**Total cost**

| Simulation | Value |
|---|---|
| Base Example | 179,790.24 |
| With IT Org | 176,189.22 |
| With Monitoring | 179,542.25 |
| All Improvements | 175,987.81 |

**Total cost contains:**

| Simulation | Total salary spent on non profit activities | Down time cost | Total salary spent on profit activities |
|---|---|---|---|
| Base Example | 24,831.47 | 7,304.4 | 147654.36 |
| With IT Org | 20,937.19 | 7,249.5 | 148002.52 |
| With Monitoring | 24,786.06 | 6,978.24 | 147777.94 |
| All Improvements | 20,899.12 | 6,986.52 | 148102.17 |

**Total salary spent on non profit activities contains:**

| Simulation | Total salary spent on meetings | Total salary spent on troubleshooting | Total salary spent on release |
|---|---|---|---|
| Base Example | 19,555.2 | 53.87 | 5222.4 |
| With IT Org | 15,667.2 | 47.59 | 5222.4 |
| With Monitoring | 19,555.2 | 8.46 | 5222.4 |
| All Improvements | 15,667.2 | 9.52 | 5222.4 |

**Down time contains:**

| Simulation | Downtime because of release (hours) | Downtime because of troubles (hours) |
|---|---|---|
| Base Example | 32.0 | 1.82 |
| With IT Org | 32.0 | 1.56 |
| With Monitoring | 32.0 | 0.31 |
| All Improvements | 32.0 | 0.34 |

## Troubles in the year:

| Simulation | Service errors because of lack of server's disk space | Error because of some service down in the chain of invocations |
|---|---|---|
| Base Example | 1.45 | 2.08 |
| With IT Org | 1.25 | 2.19 |
| With Monitoring | 0 | 2.11 |
| All Improvements | 0 | 2.41 |

## Time Spent for Year:

| Simulation | Spent on working with feature | Spent on working with defects | Spent on technical depth fixing | Spent on meetings | Spent on troubleshooting | S re |
|---|---|---|---|---|---|---|
| Base Example | 43,300.4 | 54,125.5 | 10,825.1 | 7,800.0 | 109.0 | 3,8 |
| With IT Org | 65,103.75 | 32,551.88 | 10,850.62 | 7,560.0 | 93.75 | 3,8 |
| With Monitoring | 43,336.64 | 54,170.8 | 10,834.16 | 7,800.0 | 18.4 | 3,8 |
| All Improvements | 65,147.58 | 32,573.79 | 10,857.93 | 7,560.0 | 20.7 | 3,8 |