FORRESTER[®]

The Total Economic Impact™ Of Matrix42 Enterprise Service Management

Cost Savings And Business Benefits Enabled By Matrix42 Enterprise Service Management

MARCH 2021

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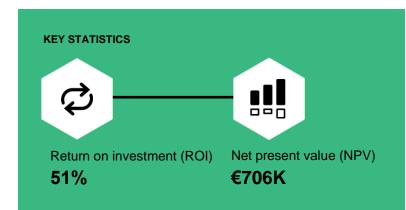
Executive Summary

Matrix42's Enterprise Service Management (ESM) is a cost-effective solution that empowers service desks, IT operations, and end users to be more agile, efficient, and effective. It allows midsize organizations to refocus their time and effort on business innovation and growth. Forrester's financial analysis found a three-year, risk-adjusted NPV of €706K and an ROI of 51% for an organization that has switched from an existing large-scale, third-party ESM to that of Matrix42, which fits the level of complexity required by midsize organizations.

Study overview. Matrix42 commissioned Forrester Consulting to conduct a Total Economic Impact[™] (TEI) study and examine the potential return on investment (ROI) an enterprise may realize by deploying the Matrix42 ESM solution as a replacement of their current solution.

Data and financial analysis. To better understand the benefits, costs, and risks associated with this investment, Forrester interviewed a current customer of Matrix42 ESM that has been using the solution for approximately two years. Forrester used this experience to project a three-year, risk-adjusted financial analysis on the impact of deploying a fullservice management solution for a potential midsize organization with approximately 7,500 supported end users.

Customer journey. Prior to using the Matrix42 ESM solution, the customer used a well-known, large-scale, and third-party solution for enterprise service management. This solution was considered advanced but also too complex and cost-inefficient for a midsize organization. The customer that Forrester interviewed therefore was considering alternatives for a less complex and more cost-efficient solution with similar functionalities. The goal was to find a solution that was even better at meeting their requirements in terms of speed and flexibility.



The customer identified four key drivers for their organization's investments in the Matrix42 ESM solution:

- Reduce acquisition and operational costs of the current ESM solution and service delivery via a less complex solution.
- Enhance the end-user experience and streamline processes with a consolidated, automated, easyto-use and high-quality IT and enterprise service desk.

"There used to be a lack of service understanding with our end users. With Matrix42, we see added value from setting up the service correctly with more business acceptance."

Service portfolio manager

- Improve business value and trust via higher data integrity and quality throughout the service delivery.
- Enable flexibility, scale, and resilience.

KEY FINDINGS

Quantified benefits. Risk-adjusted present value (PV) quantified benefits include:

- Eliminated costs of the legacy service desk solution, saving €1.4M. Migrating to Matrix42 ESM solution eliminated the licensing, cloud, infrastructure, and support costs for the legacy solution. As stated by the interviewee, the Matrix42 ESM solution was considered to be a much more cost-effective solution that enabled the customer to save nearly 44% in total costs. Besides having the significant cost decrease in comparison to the legacy solution, the interviewee reported having no drop in functionalities and features, and in fact, they realized additional quantifiable and qualitative benefits that are highlighted in the following sections.
- Improved end-user productivity by 10%, recapturing €505K. Ticket submission, management, and resolution is streamlined for end users via the automation and low code adaptability of workflow processes, avoided incidents, and improved UX granted by Matrix42 ESM. This saved 10% of the average labor time for end users struggling with IT-related tickets and service catalog-related tasks.
- Improved service desk efficiency to solve and handle tickets by 33%, recapturing further €83K. Service desk agents were able to collect information in a predefined knowledge structure to solve incidents and problems faster. Automated routing and analysis and improved data insights via the integrated reporting and personalized dashboarding of Matrix42 ESM reduced the need for data entry and

management and streamlined remediation. Due to this efficiency, Forrester calculated a recaptured productivity of IT service staff worth €83K.

- Enabled the reduction of IT service tickets by 15% through self-service and automation, recapturing €44K in IT service desk productivity. The Matrix42 solution provided consolidated, easy-to-navigate catalogs of IT and enterprise services and resources that are accessible via self-service portals, enabling the reduction in service desk tickets. The automated pipeline governance, discovery, and remediation can improve upon this even further. Overall, this benefit enabled the client to recapture productivity of IT service desk worth €44K.
- Saved 20% in offboarding effort per employee case, recapturing €33K in IT service staff productivity. The interviewed organization recognized benefits in the area of employee onboarding and offboarding. Since the onboarding benefits were considered equal to the legacy solution; they have not been taken into account for this study. Regarding the offboarding benefit, the customer reported recaptured productivity due to gains in efficiency and time savings enabled by automatic and more accurate allocation of devices, applications, and other employee IT assets.
- Decreased 15% time and effort in change request handling, recapturing €14K in IT operations productivity. The Matrix42 ESM solution helps to accelerate the remediation of change requests. The integrated service desk tooling reduces friction between IT and developer teams while end users avoid issue disruptions and enjoy greater productivity, speed, and employee experience (EX).

Qualitative benefits. The interviewed customer stated additional benefits from Matrix42 ESM that could not be quantified. They are as follows:

- More thorough end-user acceptance delivers better business outcomes and customer experience (CX). The interviewed customer reported that both the improved quality of the captured data and the increased automation influenced and significantly increased the acceptance of ESM on the end user/business side. End users not only increasingly adopted the ESM solution and process, but they also were able to realize the benefits of better and more reliable data.
- Improved incident and change management means better systems availability. This has significant downstream benefits, as systems are more stable, customers are served better, and employees are more productive.
- Improved decision-making due to better data integrity and availability. Employees used the improved data integrity and availability to generate better insights on application use and incident root cause analysis, resulting in enriched decision-making.
- Improved time-to-market. The interviewed customer explained that due to the improved ticket classification and prioritization that was enabled by Matrix42, the overall waiting time for end users was reduced by as much as two to three days.

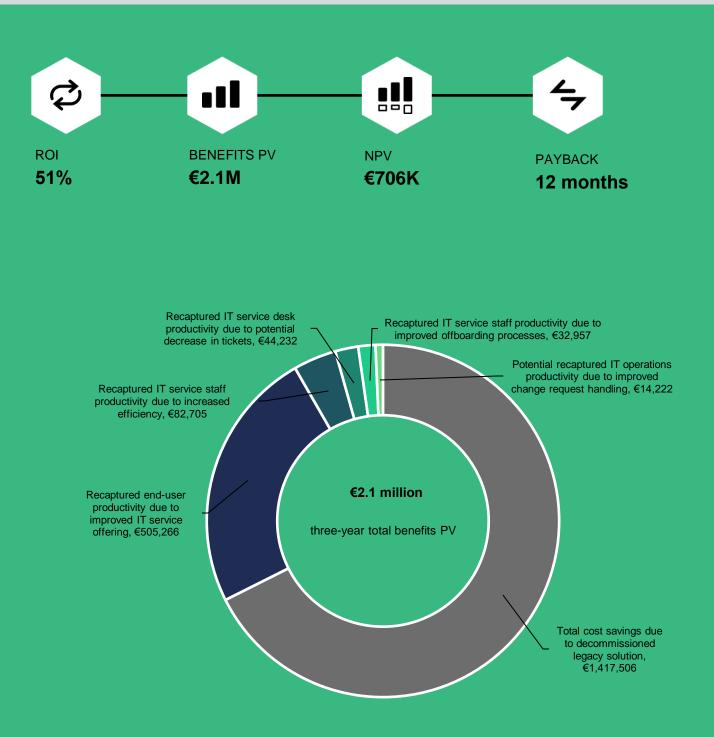
Flexibility. The interviewed organization looked to other potential use cases and outcomes, which are not quantified for this study; they include:

- Optimizing operations through field service management.
- Enabling further digital adoption of IT services via advanced service desk analytics.
- Increasing automation and self-service further by deploying a virtual support agent to handle basic requests.

Costs. Risk-adjusted PV costs include:

- Total technology subscription costs. The interviewed organization incurs approximately €1.12M of licensing fees in three years for Matrix42 ESM solution for a midsize company with 7,500 users. This was roughly about half of the fees incurred with the legacy solution.
- Costs for implementation and migration. The interviewed organization stated that the switch to Matrix42, including the implementation and migration, took about six months where the organization dedicated 1.75 internal FTEs worth €144K.
- Professional service fee for upgrades and ongoing premium support. The interviewed organization reported a fixed fee of €55K annually. The cost included a premium support service that was not only solving problems and incidents, but the dedicated support team also acted as a partner for questions on functionalities or features.

Synopsis. The customer interviews and financial analysis found that the interviewed organization is likely to have incurred benefits of €2.1M over three years versus costs of €1.39M, adding up to a net present value (NPV) of €706K and an ROI of 51%.



TEI FRAMEWORK AND METHODOLOGY

From the information provided in the interviews, Forrester constructed a Total Economic Impact[™] framework for those organizations considering an investment in the Matrix42 Enterprise Service Management solution.

The objective of the framework is to identify the cost, benefit, flexibility, and risk factors that affect the investment decision. Forrester took a multistep approach to evaluate the impact that the Matrix42 Enterprise Service Management can have on a midsize organization.

DISCLOSURES

Readers should be aware of the following:

This study is commissioned by Matrix42 and delivered by Forrester Consulting. It is not meant to be used as a competitive analysis.

Forrester makes no assumptions as to the potential ROI that other organizations will receive. Forrester strongly advises that readers use their own estimates within the framework provided in the study to determine the appropriateness of an investment in the Matrix42 Enterprise Service Management solution.

Matrix42 reviewed and provided feedback to Forrester, but Forrester maintains editorial control over the study and its findings and does not accept changes to the study that contradict Forrester's findings or obscure the meaning of the study.

Matrix42 provided the customer name for the interview but did not participate in the interview.



DUE DILIGENCE

Interviewed Matrix42 stakeholders and Forrester analysts to gather data relative to the Matrix42 Enterprise Service Management solution.



CUSTOMER INTERVIEW

Interviewed decision-makers at an organization using the Matrix42 Enterprise Service Management to obtain data with respect to costs, benefits, and risks.



FINANCIAL MODEL FRAMEWORK

Constructed a financial model representative of the interview using the TEI methodology and risk-adjusted the financial model based on issues and concerns of the interviewed organization.



CASE STUDY

Employed four fundamental elements of TEI in modeling the investment impact: benefits, costs, flexibility, and risks. Given the increasing sophistication of ROI analyses related to IT investments, Forrester's TEI methodology provides a complete picture of the total economic impact of purchase decisions. Please see Appendix A for additional information on the TEI methodology.

The Matrix42 Enterprise Service Management Customer Journey

Drivers leading to the Matrix42 Enterprise Service Management investment

MARKET DRIVERS

The COVID-19 pandemic requires enterprises to make transformative changes to meet the everchanging demands of regulation, customers, and employees. This means that more digitization, automation, and remote, flexible working conditions are on the horizon. Considering these transformative changes, firms must keep abreast of the evolving landscape and update their legacy technologies with new solutions to ensure access, dependability, innovation, compliance, and security, whilst also identifying opportunities of where to reduce costs.

Automated and digital technologies are crucial to ensuring business efficiency, reducing risk, and driving overall growth and speed. ESM, DevOps, hybrid multicloud operations and management, automation, and other IT services are all important enablers. Governance, security, and compliance remain as important as ever, but IT organizations must learn to look beyond the information technology infrastructure library (ITIL) to enable the necessary employee-centric processes to successfully adapt the organization for a new way of working needed to cope with the pandemic's impact. They can do so in the following ways:

- Enable innovation through streamlining the overall IT operating model, in particular supporting DevOps where appropriate.
- Curate a comprehensive catalog of available IT and enterprise services, from end user computing through facilities.
- Ensure data and insights are a core component of defining business value.
- Eradicate silos to provide better customer and employee experiences.

• Make sure employee productivity is enabled across the business.

Firms should aim to leverage technology by:

- Automating uneconomical tasks for service desk (e.g., via self-service, knowledge management, and chatbots) and IT operations teams to enable shift left testing and provide added business value.
- Streamlining and expediting the daily workflow with a concise view of the service offerings for IT and enterprise requirements with self-help capabilities.
- Enabling remote work and collaboration whilst ensuring the enterprise is safeguarded from risk.
- Applying AI-based tooling across the IT estate, including foundational processes like change and incident management
- Lowering friction between DevOps and IT teams to drive speed and agility whilst also guaranteeing good governance, compliance, and security.
- Deploying cognitive solutions and automation to reduce risk, enhance experience, accelerate overall speed, and enable business growth.

The future must be fast, agile, and cloud-native — with employee productivity and effectiveness at the center.

INTERVIEWED ORGANIZATION

Forrester interviewed one Matrix42 ESM customer with the following characteristics:

- **Industry:** Automotive supplier (active in 14 countries).
- Region: EMEA.
- Interviewee: service portfolio manager.

| Customer Organization | | | | | | | |
|-----------------------|--|---|--------------------|--|--|--|--|
| Ref. | Metric | Data Source | | | | | |
| XX1 | Number of end users supported by IT and enterprise service desk teams | Interview data | 7,500 end users | | | | |
| XX2 | Total annual IT andAssumptionenterprise ticket volumebased onbefore Matrix42data | | 8,500 tickets | | | | |
| XX3 | Potential reduction in tickets due to Matrix42 | Assumption based on interview data | 15% | | | | |
| XX4 | Total annual IT and enterprise ticket volume after Matrix42 deployment | XX2*(1-XX3) | 7,225 tickets | | | | |
| XX5 | Average time spend by IT service team to handle and solve ticket | Forrester assumption | 60 minutes | | | | |
| XX6 | Average decrease in time spent by IT service team to handle and solve ticket | Assumption based on interview data | 30% | | | | |
| XX7 | Average annual change requests before Matrix42 | Assumption based on interview data | 1,400 requests | | | | |
| XX8 | Average decrease in time needed in change request handling and deployment | Interview data | 15% | | | | |

INVESTMENT CONSIDERATIONS

Prior to using the Matrix42 ESM solution, the interviewed customer used a well-known, large-scale, and third-party solution. This solution was too complex and cost-inefficient for a midsize organization. The customer that Forrester interviewed therefore was considering alternatives for a less complex and more cost-efficient solution with similar functionalities, but at the same time, they wanted a solution that would better meet the requirements of their midsize business in terms of speed and flexibility.

The customer identified five key drivers for their organizations' investments in Matrix42 ESM:

- Reduce cost of ESM solution and service delivery via a less complex and flexible solution that is suitable for a midsize organizational structure. The customer's legacy solution was too advanced, and its focus was more for larger organizations that deployed very advanced process governance. This resulted in the customer paying high costs while not being able to reap all of the solution's benefits.
- Need to streamline processes with a consolidated, automated, easy-to-use ,and high-quality IT and enterprise service desk. The organization's legacy solution had already deployed self-help and agentless service delivery. However, Matrix42's knowledge-based pieces and further automation possibilities were an opportunity to further deflect ticket volume especially for wasteful basic demands. The customer organization also needed improved cataloging and governance of changes while mapping interdependencies, reducing issues, and streamlining remediation.
- Need for a solution that improved process governance with automation and increased transparency. IT service desk agents and IT operations employees were previously waste their time with manual data entry and redundant

work. The customer's goals was to shift their focus and time on more complex work and higher value tasks.

- Improve time-to-market. The customer needed a faster and more streamlined service delivery that allowed both end users and IT personnel to get relevant information quicker, instead of wasting time with the overall aim to increase time-to-market.
- Improve data quality and better decisionmaking for an increasingly complex IT
 Iandscape. Improving data quality and integrity would enable a more granular role and authorization concept in combination with additional analytical capabilities to monitor, manage, streamline, and orchestrate an increasingly complex IT landscape.

"The key driver for our investment is that we ended up reducing our costs dramatically and kept the scope the same as our legacy solution, which was incredibly beneficial to us. Business acceptance for this solution is higher. We have much more transparency and flexibility, with better IT governance overall."

Service portfolio manager

Analysis Of Benefits

Quantified benefit data

| Total E | Benefits | | | | | |
|---------|--|----------|----------|----------|------------|---------------|
| Ref. | Benefit | Year 1 | Year 2 | Year 3 | Total | Present Value |
| Atr | Total cost savings due to decommissioned legacy solution | €570,000 | €570,000 | €570,000 | €1,710,000 | €1,417,506 |
| Btr | Recaptured end-user productivity due to improved IT service offering | €203,175 | €203,175 | €203,175 | €609,525 | €505,266 |
| Ctr | Recaptured IT service staff productivity due to increased efficiency | €33,257 | €33,257 | €33,257 | €99,770 | €82,705 |
| Dtr | Recaptured IT service desk productivity due to potential decrease in tickets | €17,786 | €17,786 | €17,786 | €53,359 | €44,232 |
| Etr | Recaptured IT service staff productivity due to improved offboarding processes | €13,253 | €13,253 | €13,253 | €39,758 | €32,957 |
| Ftr | Potential recaptured IT operations productivity due to improved change request handling | €5,719 | €5,719 | €5,719 | €17,157 | €14,222 |
| | Total benefits (risk-adjusted) | €843,190 | €843,190 | €843,190 | €2,529,569 | €2,096,888 |

TOTAL COST SAVINGS DUE TO DECOMMISSIONED LEGACY SOLUTION

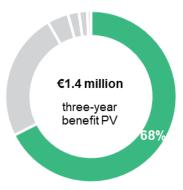
Evidence and data. The deployment of the Matrix42 ESM solution replaced the legacy solution and significantly impacted costs. These cost savings consisted of approximately €600,000 annually, which included the license cost as well as average costs for maintaining and upgrading.

Modeling and assumptions. Forrester's financial evaluation of this benefit assumes the following:

• The legacy solution cost approximately €600,000 annually in terms of licensing and maintenance.

Risks. Forrester recognizes that impacts will vary depending upon the unique characteristics of every organization. Specific risk considerations includes:

 Related licensing and hardware costs for legacy solution. To account for these risks, Forrester adjusted this benefit downward by 5%, yielding a three-year, risk-adjusted total PV of \in 1.4 million.



| Total | Total Cost Savings Due To Decommissioned Legacy Solution | | | | | | | |
|-------|--|--------------------------------------|----------|----------|----------|--|--|--|
| Ref. | Metric | Calculation | Year 1 | Year 2 | Year 3 | | | |
| A1 | Legacy solution license and maintenance fee (yearly) | Interview data | €600,000 | €600,000 | €600,000 | | | |
| At | Total cost savings due to decommissioned legacy solution | Interview data | €600,000 | €600,000 | €600,000 | | | |
| | Risk adjustment | ↓5% | | | | | | |
| Atr | Total cost savings due to decommissioned legacy solution (risk-adjusted) | | €570,000 | €570,000 | €570,000 | | | |
| | Three-year total: €1,710,000 | Three-year present value: €1,417,506 | | | | | | |

RECAPTURED END-USER PRODUCTIVITY DUE TO IMPROVED IT SERVICE OFFERING

Evidence and data. The Matrix42 ESM solution provided the customer with an intuitive self-service functionality to resolve their issues. With the increased automation and low-code adaptability of workflow processes, incidents were avoided and UX was improved. And as a result, ticket submission, management, and resolution was streamlined for end users. Prior to this, users found it challenging to find the correct information and support through the legacy solution, where they were required to navigate through multiple sites which made it confusing. The interviewed organization replaced this process with the Matrix42 ESM portal solution and reduced the average end-user time regarding IT-related tickets and service catalog use by 10%.

To achieve this benefit, the customer used the Matrix42 ESM solution to:

 Increase flexibility with low-code adaptability. Adaptable ESM technology that is secure and easily deployable helps organizations fast-track their growth while remaining nimble. The Matrix42 ESM solution gives the customer's IT teams the ability to engage in low-code development and build out applications internally without depending on the vendor; they can now make changes in minutes rather than in weeks.

- Provide more reliable information. The customer described how the Matrix42 ESM solution was increasing the quality of ticket information and prioritizing tickets more effectively, "The information on the system is now more reliable and there is an overall increase in the end-user productivity."
- Streamline the end-user process. The customer stated the Matrix42 solution provided an increase in overall end-user efficiency. With more self-service functionality and automation, users were able to solve their issues independently without intervention from the service desk.

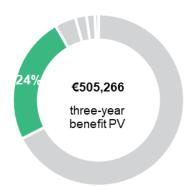
Modeling and assumptions. Forrester's financial analysis of this benefit assumes the following:

- Ten percent less effort to find and use services and self-service applications is reported due to better UX and more efficient use and visibility.
- By deploying a clear ticket submission process and governance with improved automation and self-service functionality, end users can submit tickets faster.
- With the ease in self-service and a better UX, the time previously spent finding services is now saved.

Risks. Forrester recognizes that the impact will vary depending on the unique characteristics of every organization. Specific risk considerations include:

- The average number of IT users supported by the IT and enterprise service desk teams.
- The average annual use of IT support, in terms of ticket submittal.
- The hourly salary for general office workers.

To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV of \in 505,266.



Recaptured End-User Productivity Due To Improved IT Service Offering

| Ref. | Metric | Calculation | Year 1 | Year 2 | Year 3 |
|------|--|-------------------------|---------------|----------|----------|
| B1 | Number of end users supported by IT and enterprise service desk teams | Interview data | 7,500 | 7,500 | 7,500 |
| B2 | Average time spent with IT-related tickets and service catalog per end user a year (in hours) | Forrester assumption | 14 | 14 | 14 |
| В3 | Average end-user labor time saved with IT-related tickets and service catalog because of improved UX, data quality, and self-help (in %) | Interview data | 10% | 10% | 10% |
| B4 | Average recaptured labor hours for all end users (in hours) | B1*B2*B3 | 10,500 | 10,500 | 10,500 |
| B5 | Average fully burdened annual salary on business side (hourly) | Forrester assumption | €43 | €43 | €43 |
| B6 | Productivity recapture rate | Forrester assumption | 50% | 50% | 50% |
| Bt | Recaptured end-user productivity due to improved IT service offering | B4*B5*B6 | €225,750 | €225,750 | €225,750 |
| | Risk adjustment | ↓10% | | | |
| Btr | Recaptured end-user productivity due to improved IT service offering (risk-adjusted) | | €203,175 | €203,175 | €203,175 |
| | Three-year total: €609,525 | Three-year pre | sent value: € | 505,266 | |

RECAPTURED IT SERVICE STAFF PRODUCTIVITY DUE TO INCREASED EFFICIENCY

Evidence and data. The Matrix42 ESM solution was leveraged to improve service desk efficiency and overall productivity. To achieve these benefits, the customer used the Matrix42 ESM solution to:

- Automatically route tickets to the correct teams. The customer wanted to improve the existing process of ticket handling and to enrich requests with more and better information, reducing the need for follow-up questions and shortening communication. The Matrix42 ESM solution increasingly automated the routing and prioritization of tickets which reduced time and effort of the involved IT service staff.
- Increase transparency of the service desk activities. The customer stated that integrated reporting was an imperative: "We have integrated reporting and personalized dashboarding with detailed analysis. We now have additional detail on service activities which is key for us." The Matrix42 ESM solution enabled the customer to create dashboards to monitor the effectiveness of the service desk in a consolidated view.
- Increase IT asset visibility and tracking. The customer mentioned the ability to present services, applications, and devices under a single uniform view. This helped them to understand the relationship between the components of a system and to track their configurations in a more detailed way. Further, it was reported that this has improved actions such as the reconstruction and linkage of IT assets to users.

Modeling and assumptions. Forrester's financial analysis of this benefit assumes the following:

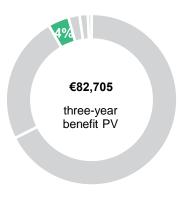
 The average amount of time spent by the IT service team to handle and solve tickets, in an exchange-exchange (E2E) process, is 60 minutes.

- The average reduction in time spent by the IT service team to handle and solve ticket is 33%.
- The fully burdened annual salary for IT service staff (hourly) is €31.

Risks. Forrester recognizes that impacts will vary depending upon the unique characteristics of every organization. Specific risk considerations include:

- Overall ticket volume which includes severity, complexity, and potential for automation.
- In some cases, automation handles easier tasks and remaining ticket volumes may go down, but individual time spent on each ticket goes up, as they are more difficult.
- Number of agents needed to handle tickets after automation.
- The average annual salary for service desk agents.

To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV of \in 82,705.



| Ref. | Metric | Calculation | Year 1 | Year 2 | Year 3 |
|------|--|---------------------------------------|----------------|---------|---------|
| C1 | Ticket volume with Matrix42 | Assumption based on interview data | 7,225 | 7,225 | 7,225 |
| C2 | Average time spent by IT service team to handle and solve ticket (in minutes) | Forrester assumption | 60 | 60 | 60 |
| C3 | Average reduction in time spent by IT service team to handle and solve ticket (in %) | Assumption based on interview data | 33% | 33% | 33% |
| C4 | Average recaptured labor hours for all tickets (in hours) | C1*(C2*C3)/60 | 2,384 | 2,384 | 2,384 |
| C5 | Fully burdened annual salary for IT service staff (hourly) | Forrester assumption | €31 | €31 | €31 |
| C6 | Productivity recapture rate | 50% | | | |
| Ct | Recaptured IT service staff productivity due to increased efficiency | C4*C5*C6 | €36,952 | €36,952 | €36,952 |
| | Risk adjustment | ↓10% | | | |
| Ctr | Recaptured IT service staff productivity due to increased efficiency (risk-adjusted) | | €33,257 | €33,257 | €33,257 |
| | Three-year total: €99,770 | Three-year pr | esent value: € | 82,705 | |

RECAPTURED IT SERVICE DESK PRODUCTIVITY DUE TO POTENTIAL DECREASE IN TICKETS

Evidence and data. With the improved automatic classification of service desk requests and the increase in self-service usage, Forrester assumes that IT service tickets have been reduced by 15%. This assumption does not take into account the potential increase in tickets due to the increased adoption of the ESM solution and business acceptance.

End users reported that they were able to more easily handle simple requests via the self-service portal, empowering them to quickly resolve issues themselves without having to speak to a service desk agent. The customer stated that the improved automated classification of tickets enabled faster fulfilment of common requests and appropriate assignment of tickets related to incidents.

To achieve these benefits, the customer used the Matrix42 ESM solution to:

Automatically classify service desk requests.

Ticket categorization is an important component of Matrix42's ESM tool. When an event is identified, it is logged, captured, and classified in accordance with a scheme/subject so that the nature of the issue can be determined by a service desk agent and the proper next steps can be taken to handle the issue. For example, when an event is detected by an automated system monitoring tool, if the event management process is using that same scheme, the process can classify the event in accordance with the same rules — it can even automatically trigger an incident based on that event. This has significantly improved the running and efficiency of the service desk overall and streamlined the service desk operations further.

Improve agent productivity via self-service • functionality. Self-service offerings such as selfhelp articles can handle common and simple requests, empowering users to resolve their needs quickly and easily without involving an IT

support agent. This improves the organization's overall productivity.

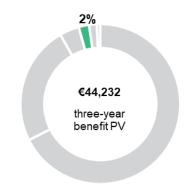
Modeling and assumptions. Forrester's financial analysis of this benefit assumes the following:

- The ticket volume was thought to be potentially reduced by 15% due to the implementation of Matrix42 which resulted in 1,275 less tickets annually (excluding benefits of increased adoption or acceptance by end users).
- The average amount of time spent by the IT service team to handle and solve a ticket is 60 minutes.
- Average recaptured IT service staff time was assumed to be 1,275 hours due to 15% less tickets.
- Fully burdened annual salary for IT service staff (hourly) was assumed to be €31.

Risks. Forrester recognizes that impacts will vary depending upon the unique characteristics of every organization. Specific risk considerations include:

- Existing IT ecosystem and any preexisting knowledge base.
- The average salary of service desk employees
- Training and adoption of self-service catalog and portal.

To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV of \in 44,232.



| Ref. | Metric | Calculation | Year 1 | Year 2 | Year 3 |
|------|--|------------------------------------|---------------|---------|---------|
| D1 | Ticket volume before Matrix42 | Assumption based on interview data | 8,500 | 8,500 | 8,500 |
| D2 | Potential reduction in tickets due to Matrix42 | Assumption based on interview data | 15% | 15% | 15% |
| D3 | Potential ticket volume saved with Matrix42 | D1*D2 | 1,275 | 1,275 | 1,275 |
| D4 | Average time spend by IT service team to handle and solve tickets (in minutes) | Forrester assumption | 60 | 60 | 60 |
| D5 | Average recaptured labor in hours | (D3*D4)/60 | 1,275 | 1,275 | 1,275 |
| D6 | Fully burdened annual salary for IT service staff (hourly) | Forrester assumption | €31 | €31 | €31 |
| D7 | Productivity recapture rate | 50% | | | |
| Dt | Recaptured IT service desk productivity due to potential decrease in tickets | D5*D6*D7 | €19,763 | €19,763 | €19,763 |
| | Risk adjustment | ↓10% | | | |
| Dtr | Recaptured IT service desk productivity due to potential decrease in tickets (risk-adjusted) | | €17,786 | €17,786 | €17,786 |
| | Three-year total: €53,359 | Three-year p | resent value: | €44,232 | |

Recaptured IT Service Desk Productivity Due To Potential Decrease In Tickets

RECAPTURED IT SERVICE STAFF PRODUCTIVITY DUE TO IMPROVED OFFBOARDING PROCESSES

Evidence and data. Alongside the benefits realized through offboarding, the interviewed organization mentioned that they will apply Matrix42 to further automate the onboarding process. However, since these benefits have not yet been recognized, they were not included in this study.

The customer reported that Matrix42 ESM's more efficient role and authorization concept and rights management allowed them to automatically and more accurately allocate devices, applications, and other IT assets to employees and their cost centers, organizational units, and locations. This resulted in an overall 20% reduction in time and effort by IT service staff. Additionally, the Matrix42 ESM helped the customer ensure that compliance with various regulations was upheld and that no errors were made, with regards to collecting company equipment, deactivating employees' accounts, and making sure no security risks were present once the employee leaves.

To achieve these benefits, the customer used the Matrix42 ESM solution to:

- Provide a consistent experience throughout the employee lifecycle. Matrix42 ESM allowed the customer to design a formal process to transition employees out of the company. The customer stated, "[There are] powerful configuration options for the complete mapping of the company, hierarchies, users, and their services, devices, and software." Whether an employee is made redundant or resigns, the customer was able to take appropriate measures and ensure that the offboarding process is conducted in an efficient way with the Matrix42 ESM solution.
- Provide time-saving benefits. The customer used the Matrix42 ESM solution to provide them

with an automated inventory of all end devices which was a real differentiator for the customer — as not many vendors provide this service. This includes linking IT assets and the allocation to cost centers, organizational units, and locations. By having this in place, the interviewed organization had the ability to track and locate employee devices/equipment without conducting manual checks, inadvertently saving time and effort.

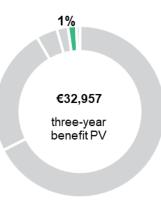
Modeling and assumptions. Forrester's financial analysis of this benefit assumes the following:

- Average offboarding effort for IT service staff per employee leaving is 4 hours.
- Twenty percent in time savings due to automation (rights management and admin were allocated more accurately).

Risks. Forrester recognizes that the impact will vary depending on the unique characteristics of every organization. Specific risk considerations include:

- Annual employee churn rate.
- Existing maturity level of automation in the offboarding process.

To account for these risks, Forrester adjusted this benefit downward by 5%, yielding a three-year, risk-adjusted total PV of \in 32,957.



| Reca | Recaptured IT Service Staff Productivity Due To Improved Offboarding Processes | | | | | | | | |
|------|--|-------------------------|----------------|---------|---------|--|--|--|--|
| Ref. | Metric | Calculation | Year 1 | Year 2 | Year 3 | | | | |
| E1 | Number of end users supported by IT and enterprise service desk | Interview data | 7,500 | 7,500 | 7,500 | | | | |
| E2 | Employee churn rate | Forrester assumption | 15% | 15% | 15% | | | | |
| E3 | Annual employees leaving | E1*E2 | 1,125 | 1,125 | 1,125 | | | | |
| E4 | Average offboarding effort (in hours) for IT service staff per employee leaving | Forrester assumption | 4 | 4 | 4 | | | | |
| E5 | Average decrease in time and effort by IT service staff per offboarding (in %) | Interview data | 20% | 20% | 20% | | | | |
| E6 | Total average labor hours saved during employee offboarding process with automation (in hours) | E3*E4*E5 | 900 | 900 | 900 | | | | |
| E7 | Average fully burdened annual salary for IT service staff (hourly) | Forrester assumption | €31 | €31 | €31 | | | | |
| E8 | Productivity recapture rate | 50% | | | | | | | |
| Et | Recaptured IT service staff productivity due to improved offboarding processes | E6*E7*E8 | €13,950 | €13,950 | €13,950 | | | | |
| | Risk adjustment | ↓5% | | | | | | | |
| Etr | Recaptured IT service staff productivity due to improved offboarding processes (risk-adjusted) | | €13,253 | €13,253 | €13,253 | | | | |
| | Three-year total: €39,758 | Three-year | present value: | €32,957 | | | | | |

POTENTIAL RECAPTURED IT OPERATIONS PRODUCTIVITY DUE TO IMPROVED CHANGE REQUEST HANDLING

Evidence and data. It is important to safeguard IT service delivery and support against unnecessary errors. Maintaining reliable business systems is essential for the survival of any organization in today's competitive market space. Not only does it reduce risk, increase collaboration, and improve system availability, but it also — in general — fosters a more mature digital organization. These fundamentals are core to stable, reliable service delivery.

Adjustments to any element within the IT infrastructure can disrupt service value and negatively impact productivity. The interviewed customer required a structured and planned change process to tackle the risks that came with significant infrastructure changes. Matrix42 ESM was reported to have enabled a well-structured and planned change request process that came with quantifiable benefits, such as:

- Fifteen percent decrease in time and effort for change request handling, saving €12K.
 Matrix42 ESM increased the quality and speed of change requests and accelerated the full remediation. The integrated service desk tooling reduced friction between IT and developer teams; additionally, end users ensured their productivity and improved the overall employee experience.
- Audit compliance is reduced. With Matrix42 ESM, the customer is able to streamline the process of responding to audits and addressing violations. The customer hoped to reduce the

number and scope of audit violations in the first place, through better ITIL practices and a centralized change management process via Matrix42. These efforts reduced the overall effort of IT teams.

Modeling and assumptions. Forrester's financial analysis of this benefit assumes the following:

 To handle a volume of 1,400 change requests, there was a 15% reduction of overall effort in change request handling by IT operations and admin staff.

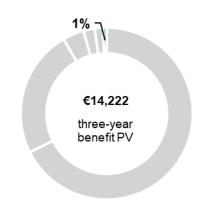
Risks. Forrester recognizes that the impact will vary depending on the unique characteristics of every organization. Specific risk considerations include:

- Volume and complexity of annual change requests.
- Hourly salary for IT operations engineers and admins.

tontial De

• Average hourly salary for developers.

To account for these risks, Forrester adjusted this benefit downward by 5%, yielding a three-year, risk-adjusted total PV of \in 14,222.



| Ref. | Metric | Calculation | Year 1 | Year 2 | Year 3 | |
|------|--|-----------------------------------|--------|--------|--------|--|
| F1 | Average annual change requests before Matrix42 | Interview data | 1,400 | 1,400 | 1,400 | |
| F2 | Average minutes spend by IT operations, service, and admins per change request (end to end) | Forrester assumption | 80 | 80 | 80 | |
| F3 | Average efficiency gain in change request handling and deployment | Interview data | 15% | 15% | 15% | |
| F4 | Average time saved for IT operations, service, and admins per change request (in minutes) | F2*F3 | 12 | 12 | 12 | |
| F5 | Average recaptured labor hours for all change requests (in hours) | F1*(F4/60) | 280 | 280 | 280 | |
| F6 | Fully burdened hourly salary for IT operations, engineers, and admins | Forrester assumption | €43 | €43 | €43 | |
| F7 | Productivity recapture rate | 50% | | | | |
| Ft | Potential recaptured IT operations productivity due to improved change request handling | F5*F6*F7 | €6,020 | €6,020 | €6,020 | |
| | Risk adjustment | ↓5% | | | | |
| Ftr | Potential recaptured IT operations productivity due to improved change request handling (risk-adjusted) | | €5,719 | €5,719 | €5,719 | |
| | Three-year total: €17,157 | Three-year present value: €14,222 | | | | |

QUALITATIVE BENEFITS

The customer also identified benefits with Matrix42 ESM that could not be quantified in this study but were equally as important in determining success:

- Providing more thorough end-user experience through self-service options and improved service catalog. The Matrix42 solution provides a simple way for users to find information without the need for submitting a ticket. End users now have the ability to resolve their issues more easily through the self-service portal with the advantage of searching for resolutions through the knowledge base. Additionally, Matrix42 was able to increase business acceptance and adoption of IT services by simplifying the IT service catalog and improving the classification and prioritization of the ticket process.
 - The improved guidance of giving end users the visibility into the project scope, its cost, and the required service level can also be considered a key factor for enabling remote work.
 - The improvements to the service catalog have allowed the service desk to successfully manage resource utilization while effectively controlling demand and providing improved UX.
- Improved data integrity and better generated insights. Improved ticket routing helps service desk agents prioritize issues more effectively and with more accuracy. Prior to the Matrix42 solution, there was a lack of truthfulness regarding ticket prioritization, as service desk agents were not able to distinguish between incidents and less important service requests.
- Improved time-to-market. The interviewed customer explained that due to the improved ticket classification and prioritization that was enabled by Matrix42, the overall waiting time for

end users was significantly reduced by as much as two to three days.

- Higher employee retention rate. Improved UX, automation, better data, and more flexibility have eliminated repetitive actions for the service desk and end users. Managers and agents can focus on more high-value tasks. The result being possibly more loyal employees and a higher retention rate overall.
- Increased efficiency of security and compliance. Matrix42 helps IT teams evaluate their service desk speed and effectiveness. While automation and productivity improvements increase SLA performance, Matrix42 can also more quickly identify and resolve SLA breaches. There is now a clear allocation of risk issues, with the right department/person being involved quickly and effectively.

FLEXIBILITY

The value of flexibility is unique to each customer. There are multiple scenarios in which a customer might implement Matrix42 ESM and later realize additional uses and business opportunities, including:

- Optimizing operations through field service management. By implementing field service management through Matrix42, it will enable an organization to improve management and control of all elements that are related to the provision of field-based services. The benefits include easier resource planning and allocation of field service agents, improved skills management and skills mapping, as well as better synchronization of assigned tasks and tickets.
- Low-code-based workflow management that allows for process modelling. The low-code SolutionBuilder allows a customer to easily adapt interfaces to existing or new, responsive UI, which can be created with less effort. This coupled with Matrix42's Digital Workspace Platform (DWP) gives the user the ability to dock

anywhere and easily create bidirectional connectors via drag and drop. This enables customers to digitalize and automate their IT and business processes in line with ITIL standards.

• Deploy a virtual support agent to handle basic requests. With the ability to communicate in both English and German to end users through Microsoft teams, the Virtual Support Agent "Marvin," is an asset that organizations can leverage to increase productivity and enhance their service desk. The chatbot can be fully integrated with the Matrix42 service desk, service catalog, and knowledge base enabling users to resolve their issues quickly and effectively, whilst updating the status of a request instantly (reducing manual backlog).

Analysis Of Costs

Quantified cost data

| Total Costs | | | | | | | | | |
|-------------|--|----------|----------|----------|----------|------------|---------------|--|--|
| Ref. | Cost | Initial | Year 1 | Year 2 | Year 3 | Total | Present Value | | |
| Gtr | Total license fee | €320,000 | €320,000 | €320,000 | €320,000 | €1,280,000 | €1,115,793 | | |
| Htr | Professional services for maintenance and upgrades | €0 | €52,500 | €52,500 | €52,500 | €157,500 | €130,560 | | |
| ltr | Implementation | €144,375 | €0 | €0 | €0 | €144,375 | €144,375 | | |
| | Total costs (risk-adjusted) | €464,375 | €372,500 | €372,500 | €372,500 | €1,581,875 | €1,390,728 | | |

TOTAL LICENSE FEE

Evidence and data. The interviewed customer stated that the licensing model of Matrix42 ESM was considered more flexible than in the case of the legacy solution as it allowed for a fixed cost agreement per user group; also, Matrix42 is considered to be a fair negotiation partner. However, for this study, Forrester based the license costs on the actual standard list pricing, excluding any actual discounts provided by Matrix42.

Modeling and assumptions Forrester's financial evaluation of this cost assumed the following:

 Software licensing fees are assumed to be €320,000 annually, and they have been based on the standard list pricings without taking discounts into considerations.

Risks. Forrester recognizes that costs will vary depending on the unique characteristics of an organization. However, due to the fact that the license costs have been based on the standard list prices, Forrester assumed there to be no upward risk adjustment because there is a stronger potential benefit for actual lower costs due to discounting offerings by Matrix42. Therefore, the total PV cost was considered to be €1,115,793.

| Total License Fee | | | | | | | | |
|-------------------|-----------------------------------|----------------|----------|-----------------|----------------|----------|--|--|
| Ref. | Metric | Calculation | Initial | Year 1 | Year 2 | Year 3 | | |
| G1 | Software license fees (yearly) | Interview data | €320,000 | €320,000 | €320,000 | €320,000 | | |
| Gt | Total license fee | | €320,000 | €320,000 | €320,000 | €320,000 | | |
| | Risk adjustment | 0% | | | | | | |
| Gtr | Total license fee (risk-adjusted) | | €320,000 | €320,000 | €320,000 | €320,000 | | |
| | Three-year total: €1,280,000 | | | ar present valu | ıe: €1,115,793 | | | |

PROFESSIONAL SERVICES FOR MAINTENANCE AND UPGRADES

Evidence and data. The professional service cost was reported to be a fixed fee of €50,000 annually. This was used for upgrades, maintenance, and consulting support to continuously improve the ESM solution. Moreover, the cost included a premium support service that helped with solving problems and incidents. This service included a dedicated support team that acted as a partner for any questions on functionalities or features.

Modeling and assumptions. Forrester's financial evaluation of this cost assumes the following:

 Matrix42 professional services (including upgrades and maintenance) has a fixed fee of €50,000 annually. **Risks.** Forrester recognizes that costs will vary depending upon the unique characteristics of every organization. Specific risk considerations include:

- The complexity, size, and type of software of the legacy tool deployment that is being upgraded.
- Whether work is conducted by Matrix42, thirdparty professional services, or by internal employees at the company.

To account for these risks, Forrester adjusted this cost upward by 5%, yielding a three-year, risk-adjusted total PV of €130,560.

| Profe | Professional Services For Maintenance And Upgrades | | | | | | | |
|-------|---|----------------|-----------------|---------------|---------|---------|--|--|
| Ref. | Metric | Calculation | Initial | Year 1 | Year 2 | Year 3 | | |
| H1 | Professional services for maintenance and upgrades (fixed yearly fee) | Interview data | | €50,000 | €50,000 | €50,000 | | |
| Ht | Professional services for maintenance and upgrades | H1 | €0 | €50,000 | €50,000 | €50,000 | | |
| | Risk adjustment | ∱5% | | | | | | |
| Htr | Professional services for maintenance and upgrades (risk-adjusted) | | €0 | €52,500 | €52,500 | €52,500 | | |
| | Three-year total: €157,500 | Tł | nree-year prese | ent value: €1 | 30,560 | | | |

IMPLEMENTATION

Evidence and data. The amount of labor and overall time spent on implementation of Matrix42 ESM was considered to be similar to the legacy solution. The overall time to implement, including the migration to Matrix42 ESM, was stated to be between nine and 12 months.

The customer had to provide roughly 1.8 FTEs for the implementation responsible for project management as well as system implementation support tasks.

Modeling and assumptions. Forrester's financial evaluation of this cost assumed the following:

 Total number of FTEs required is 1.8 for a nineto-12-month implementation.

Risks. Forrester recognizes that costs will vary depending upon the unique characteristics of every organization. Specific risk considerations include:

• The complexity, size, and type of software of the legacy solution that is being upgraded.

• The level of internal expertise and desired ratio of work being completed by Matrix42 internal employees or third-party professional services.

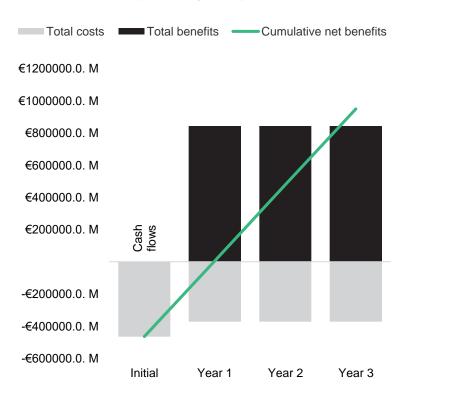
To account for these risks, Forrester adjusted this cost upward by 10%, yielding a three-year, risk-adjusted total PV cost of €144,375.

• Average IT salary for implementation staff.

| Implementation | | | | | | | | | |
|----------------|--------------------------------|----------------|------------------------------------|--------|--------|--------|--|--|--|
| Ref. | Metric | Calculation | Initial | Year 1 | Year 2 | Year 3 | | | |
| 11 | Planning and coordination FTEs | Interview data | 0.8 | | | | | | |
| 12 | Implementation FTEs | Interview data | 1.0 | | | | | | |
| 13 | Total FTEs for implementation | l1+l2 | 1.75 | | | | | | |
| 14 | Fully burdened IT salary | Assumption | €75,000 | | | | | | |
| lt | Implementation | 13*14 | €131,250 | €0 | €0 | €0 | | | |
| | Risk adjustment | 10% | | | | | | | |
| ltr | Implementation (risk-adjusted) | | €144,375 | €0 | €0 | €0 | | | |
| | Three-year total: €144,375 | | Three-year present value: €144,375 | | | | | | |

Financial Summary

CONSOLIDATED THREE-YEAR RISK-ADJUSTED METRICS



Cash Flow Chart (Risk-Adjusted)

The financial results calculated in the Benefits and Costs sections can be used to determine the ROI, NPV, and payback period for the composite organization's investment. Forrester assumes a yearly discount rate of 10% for this analysis.

> These risk-adjusted ROI, NPV, and payback period values are determined by applying risk-adjustment factors to the unadjusted results in each Benefit and Cost section.

Cash Flow Analysis (Risk-Adjusted Estimates)

| Initial | Year 1 | Year 2 | Year 3 | Total | Present Value |
|------------|------------|--------------------------------------|---|---|---|
| (€464.375) | (€372,500) | (€372,500) | (€372,500) | (€1,581,875) | (€1,390,728) |
| €0 | €843,190 | €843,190 | €843,190 | €2,529,569 | €2,096,888 |
| (€464.375) | €470.690 | €470.690 | €470.690 | €947.694 | €706,160 |
| () | , | , | | , | 51% |
| | | | | | 12.0 months |
| | (€464,375) | (€464,375) (€372,500) €0 €843,190 | (€464,375) (€372,500) (€372,500) €0 €843,190 €843,190 | (€464,375) (€372,500) (€372,500) (€372,500) €0 €843,190 €843,190 €843,190 | (€464,375) (€372,500) (€372,500) (€1,581,875) €0 €843,190 €843,190 €843,190 |

Appendix A: Total Economic Impact

Total Economic Impact is a methodology developed by Forrester Research that enhances a company's technology decision-making processes and assists vendors in communicating the value proposition of their products and services to clients. The TEI methodology helps companies demonstrate, justify, and realize the tangible value of IT initiatives to both senior management and other key business stakeholders.

TOTAL ECONOMIC IMPACT APPROACH

Benefits represent the value delivered to the business by the product. The TEI methodology places equal weight on the measure of benefits and the measure of costs, allowing for a full examination of the effect of the technology on the entire organization.

Costs consider all expenses necessary to deliver the proposed value, or benefits, of the product. The cost category within TEI captures incremental costs over the existing environment for ongoing costs associated with the solution.

Flexibility represents the strategic value that can be obtained for some future additional investment building on top of the initial investment already made. Having the ability to capture that benefit has a PV that can be estimated.

Risks measure the uncertainty of benefit and cost estimates given: 1) the likelihood that estimates will meet original projections and 2) the likelihood that estimates will be tracked over time. TEI risk factors are based on "triangular distribution."

The initial investment column contains costs incurred at "time 0" or at the beginning of Year 1 that are not discounted. All other cash flows are discounted using the discount rate at the end of the year. PV calculations are calculated for each total cost and benefit estimate. NPV calculations in the summary tables are the sum of the initial investment and the discounted cash flows in each year. Sums and present value calculations of the Total Benefits, Total Costs, and Cash Flow tables may not exactly add up, as some rounding may occur.

PRESENT VALUE (PV)

The present or current value of (discounted) cost and benefit estimates given at an interest rate (the discount rate). The PV of costs and benefits feed into the total NPV of cash flows.



NET PRESENT VALUE (NPV)

The present or current value of (discounted) future net cash flows given an interest rate (the discount rate). A positive project NPV normally indicates that the investment should be made, unless other projects have higher NPVs.



RETURN ON INVESTMENT (ROI)

A project's expected return in percentage terms. ROI is calculated by dividing net benefits (benefits less costs) by costs.



DISCOUNT RATE

The interest rate used in cash flow analysis to take into account the time value of money. Organizations typically use discount rates between 8% and 16%.



PAYBACK PERIOD

The breakeven point for an investment. This is the point in time at which net benefits (benefits minus costs) equal initial investment or cost.

Appendix B: Supplemental Material

Related Forrester Research "Overcome Change Management Paralysis," Forrester Research Inc., December 24, 2020

Forrester