A Forrester Total Economic Impact™ Study Commissioned By Xceptor June 2020

# The Total Economic Impact™ Of Xceptor

Cost Savings And Business Benefits Enabled By Xceptor



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#### **Investment Benefits**



Average improvement in trade processing-handling time:1



Reduction in annual overtime hours:

1,872 hours



Reduction in trade capture error incidence:

86%

# **Executive Summary**

Intelligent automation technologies, where automation and AI combine, are unrivalled in their ability to deliver levels of efficiency and quality and are critical to every firm's ability to win, serve, and retain its customers. Forrester predicts that intelligent automation will release US\$134 billion in labor value in 2022, with around a quarter of financial services and insurance firms using or planning to use AI to improve business automation.2

Xceptor is a no-code enterprise automation platform that integrates an extensive data engine with process digitization. Delivered in a single integrated solution, Xceptor enables customers to leverage the right technology at the right time to drive the right outcomes. The platform is configured by business users, transforms any type of data, and is capable of handling simple to complex end-to-end processes across an enterprise.

Xceptor commissioned Forrester Consulting to conduct a Total Economic Impact™ (TEI) study and examine the potential return on investment (ROI) enterprises may realize by deploying Xceptor. The purpose of this study is to provide readers with a framework to evaluate the potential financial impact of the Xceptor on their organizations.

To better understand the benefits, costs, and risks associated with this investment, Forrester conducted in-depth interviews with four customers with two to more than ten years of experience using various components of the Xceptor platform.

For this study, Forrester has created a composite organization of a typical Xceptor client, Deagon Capital, to illustrate the quantifiable benefits and costs of investing in Xceptor. Based on characteristics of the interviewed customers, Deagon Capital is a global financial institution with a 50,000-strong workforce and 500 employees working in the global operations team. Deagon Capital deploys Xceptor as part of a broader digital transformation strategy and specifically to improve the efficiency of its operations and better handle the scope of data it faces. For more information, see the section titled Composite Organization.

# **Key Findings**

**Quantified benefits.** The composite organization, Deagon Capital, achieves the following risk-adjusted present value (PV) quantified benefits across four core processes totaling £4.2 million over a three-year period:

- Improved trade capture productivity (£100,862). This benefit focuses on efficiency gains in the trade capture process. Prior to using Xceptor, the trade operations team handling trade capture was inundated with manual processes that involved copying and pasting data from source files to documents or spreadsheets saved on local desktops. With the use of Xceptor, handling time for simple and complex transaction files improves by 88% and 83% respectively.
- ➤ Reduced trade capture error incidence (£1,287,319). This benefit is associated with the financial loss avoidance achieved with an automated trade capture process. Deagon Capital achieves an 86% reduction in the annual volume of error incidences with Xceptor, avoiding financial losses of just under £1.3 million at present value.





Benefits PV £4.2 million



NPV £3.1 million



Payback <6 months

- Increased bank debt-processing efficiency (£47,644). The use of Xceptor reduces manual work involved in the processing of bank debts. The composite achieves employee productivity gains as the team of 13 employees no longer needs to work overtime during month-end periods. Deagon Capital eliminates an annual total of 1,872 overtime hours in the process.
- Improved trade reconciliation productivity (£1,535,394). Prior to using Xceptor, an average employee in the trade reconciliation team spent about 50% of their time engaged in manual work to support the front office. With the use of Xceptor, these employees can build their own reconciliation workflows without heavy reliance on the IT team. Overall, the composite achieves a productivity gain of 30% with reduction in manual work.
- Costing savings due to retirement of legacy solutions (£1,259,609). With the adoption of Xceptor, Deagon Capital retires two legacy solutions, yielding cost savings of nearly £1.3 million at present value. Unquantified benefits. The interviewed organizations experienced the following benefits, which are not quantified for this study:
- Enhanced employee experience (EX). The deployment of Xceptor involves doing away with manual, time-consuming processes or the use of complicated and non-user-friendly systems, improving EX of both the trade operations team and the IT team and enabling upskilling to focus on higher-value work.
- Improved cross-team collaboration. The business user-centric features of the Xceptor platform mean that the trade operations and IT teams can develop or modify trade operations applications in a more collaborative and agile working model.
- Increased process transparency and operational control. The creation and maintenance of automation and digitization processes in one single platform provide an oversight of the multiple trade operations processes running in the organizations.

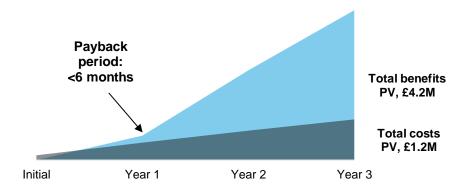
**Costs.** The composite organization, Deagon Capital, experiences the following risk-adjusted PV costs:

- > Xceptor solution cost (£869,901). The solution cost for this study mainly consists of the annual subscription fees, based on scope of use.
- Initial setup cost (£129,495). This cost accounts for costs associated with the implementation of the on-premises Xceptor platform. The cost includes internal efforts in planning, setting up, and deploying the solution, as well as a one-off fee paid to Xceptor for professional services and training.
- Ongoing resource cost (£154,927). This cost covers the time spent by trade operations employees in developing and maintaining business rules configuration, as well as support from the IT team in performing ongoing system maintenance.

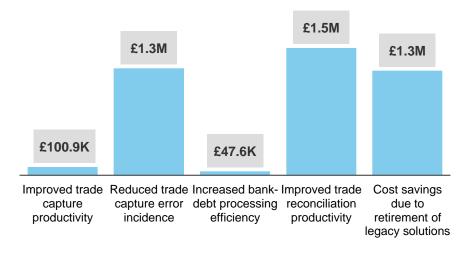
Forrester's interviews and subsequent financial analysis found that Deagon Capital experiences benefits of £4.2 million over three years versus costs of £1.2 million, adding up to a net present value (NPV) of £3.1 million and an ROI of 267%.



#### **Financial Summary**



#### **Benefits (Three-Year)**



## TEI Framework And Methodology

From the information provided in the interviews, Forrester has constructed a Total Economic Impact™ (TEI) framework for those organizations considering implementing Xceptor.

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 Xceptor can have on an organization:

The TEI methodology helps companies demonstrate, justify, and realize the tangible value of IT initiatives to both senior management and other key business stakeholders.



#### **DUE DILIGENCE**

Interviewed Xceptor stakeholders and Forrester analysts to gather data relative to Xceptor.



#### **CUSTOMER INTERVIEWS**

Interviewed four organizations using Xceptor to obtain data with respect to costs, benefits, and risks.



#### **COMPOSITE ORGANIZATION**

Designed a composite organization, Deagon Capital, based on characteristics of the interviewed organizations.



#### FINANCIAL MODEL FRAMEWORK

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



#### **CASE STUDY**

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

#### **DISCLOSURES**

Readers should be aware of the following:

This study is commissioned by Xceptor 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 report to determine the appropriateness of an investment in Xceptor.

Xceptor 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.

Xceptor provided the customer names for the interviews but did not participate in the interviews.



# **The Xceptor Customer Journey**

#### BEFORE AND AFTER THE XCEPTOR INVESTMENT

#### **Interviewed Organizations**

For this study, Forrester conducted four interviews with Xceptor customers, all of which are huge global financial services institutions. Details of interviewed customers are as follows:

INDUSTRY	REGION	EMPLOYEE SIZE	INTERVIEWEE(S)
Financial services	Headquartered in Europe	~50,000	Global head of trade validation
Financial services	Headquartered in North America	~85,000	Associate director, head of reconciliation
Financial services	Headquartered in North America	~50,000	Vice president, global trade operations Director, trade operations and services
Financial services	Headquartered in North America	~260.000	Director, operations transformations

#### **Key Challenges**

The four interviewed organizations use Xceptor to automate a wide variety of processes. For example, one organization has over 3,000 users utilizing Xceptor to process more than 75,000 data formats and more than 900 processes. For the purpose of this framework, we have identified three key typical challenges organizations experienced before deploying Xceptor:

- wising Xceptor, data flowed across counterparties and internal departments via several end user-developed (EUD) and end user-configured (EUC) processes such as spreadsheets, emails, and paper-based documents. Teams performed data entry, calculation, and transformation manually to capture, process, and consolidate required information across files of various different formats. The challenge of document version control was also apparent, as individual employees worked on and saved files and spreadsheets within their own desktops. As the volume of trade activities scaled, firms urgently needed to reduce the inefficiencies caused by these tedious, error-prone, and protracted trade operations processes.
- Inflexible and complex legacy systems. Legacy systems were in place to support certain trade operations activities, although they offered limited value. These legacy platforms were not only costly to maintain but also complicated with poor integration capabilities. Knowledge of operating these platforms existed at times only within a small group of users. Developing and modifying trade operations applications on these platforms heavily relied on the IT team, which often become a bottleneck in the inflexible process due to the long queue of request backlogs.

"My operations team previously had to review every single email and categorize them for further processing. They usually spend two to three days per month working overtime."

Vice president, global trade operations, financial services



> Lack of visibility and control over trade operations processes. With the mixed use of legacy systems and manual processes, teams took inconsistent approaches in the execution of trade operations activities. The lack of a single view of processes across the organizations resulted in poor visibility, transparency, and control over trade operations. This posed a huge operational risk, especially for a highly regulated industry like financial services.

#### Solution Requirements

The interviewed organizations searched for a solution that could:

- > Automate workflows to minimize human intervention.
- Ingest and transform data formats ranging from structured to unstructured from a wide variety of channels.
- Provide business user-friendly workflow configuration capabilities, reducing reliance on IT teams.
- > Enable better governance and oversight of trade operations processes.
- Ensure compliance to stringent regulatory requirements in trade operations.

Key Results

The interviews revealed that key results from the Xceptor investment include:

- A more streamlined and flexible approach to trade operations activities. With the end-to-end automation capabilities of Xceptor, organizations could streamline and configure various trade operations workflows on a single platform, heavily reducing the need for human intervention. In simpler processes with higher-quality data input, firms enable a high level of straight-through processing (STP). For more complex processes that are not fully automatable and require stakeholder review, Xceptor can also incorporate these workflows onto the platform and provide a digitized option. For instance, post data ingestion and transformation, legal teams can receive notifications to review documents, which are then passed downstream once approved. The intuitiveness and user-friendliness of the platform also means that business users can easily build, modify, and manage trade operations workflows independent of the IT team. Previously bureaucratic application development processes that were IT-centric are now more agile and collaborative, with a 30% reduction in development cycle time.
- Redeployment of employees for higher-value tasks. The automation and digitization of previously inefficient processes have also brought about employee productivity gains. For example, in trade capture, the time taken to handle simple and complex transaction files has decreased by 88% and 83% respectively in our composite model, based on interviewee feedback. In other cases, such as bank debt processing, organizations have eliminated regular month-end overtime work with Xceptor. The time savings thus allow employees to focus their time and energy on higher-value tasks to further drive business growth.

"You can easily develop an application even if you do not have programming skill sets."

Director, trade operations and services, financial services

"Xceptor has helped to shift the time and effort that my team used to spend on manual work to other less mundane and higher-value activities."

Associate director, head of reconciliations, financial services





- Improved IT and business user experience. The user-friendliness and intuitiveness of the simple, no-code platform are another key differentiator of Xceptor. The learning curve is low, as both IT and business users can familiarize themselves with the platform and acquire the expertise to build new automation processes quickly. Teams can easily make changes to the workflows and rules while ensuring they do not compromise control procedures. Teams can also rapidly create user-configurable graphical dashboards to aid data analysis.
- Screater process transparency and reduced operational risks. The creation and maintenance of automation and digitization processes in one single platform provide an oversight of the multiple trade operations processes running in an organization. Furthermore, users have a real-time view of actions being performed in real time, allowing immediate intervention and resolution if a problem is identified. Organizations can easily measure performance against service-level agreements (SLAs), with clear audit trials that ensure regulatory compliance. There are thus greater visibility and transparency over trade operation processes, enhancing operational control and minimizing operational risks.

Composite Organization

Based on the interviews, Forrester constructed a TEI framework, a composite company, and an associated ROI analysis that illustrates the areas financially affected. The composite organization is representative of the four companies that Forrester interviewed and is used to present the aggregate financial analysis in the next section. The composite organization that Forrester synthesized from the customer interviews has the following characteristics:

## **Deagon Capital**

**Description of composite.** Deagon Capital is a global financial institution headquartered in London and active in major capital markets. Out of its 50,000-strong workforce, 500 employees work in the global trade operations team. This team sits in the middle office and executes various trade-processing activities, such as trade capture, trade reconciliation, and exception management. Deagon receives high volumes of data daily from counterparties and internal departments in various disparate, nonstandardized formats, ranging from documents and emails to PDF files.

**Deployment characteristics.** Prior to using Xceptor, the trade operations team faced challenges with tedious and complicated methods of data processing — either manually or in legacy systems, supplemented by the use of EUDs and EUCs such as spreadsheets and databases.

Deagon Capital thus sought to improve the efficiency of its trade operations processes. After as extensive business case process evaluating multiple vendors, it chose Xceptor for its user-friendly, business user-centric workflow configuration and data transformation capabilities and began deployment. For data confidentiality reasons, it opted for an on-premises deployment of Xceptor.

Deagon develops and implements three main trade operations applications by the end of Year 1: trade capture and exception management; bank debt processing; and failed trade management. The

"We have reduced the annual number of error incidences from 43 instances three years ago to about six instances currently."

Vice president, global trade operations, financial services





# Composite assumptions:

- 50,000 employees globally, headquartered in London
- 500 trade operations employees

# Q Did you know?

Besides a traditional on-premises deployment, Xceptor also offers a software-as-a-service solution.



organization launches a fourth application — trade reconciliation — in Year 2, involving a user base of 300 employees. As the use of Xceptor continues to scale, the organization continually explores more use cases to enable more efficient trade operations processes across the organization.

# **Analysis Of Benefits**

#### QUANTIFIED BENEFIT DATA AS APPLIED TO THE COMPOSITE

Tota	Total Benefits								
REF.	BENEFIT	YEAR 1	YEAR 2	YEAR 3	TOTAL	PRESENT VALUE			
Atr	Improved trade capture productivity	£39,439	£40,623	£41,841	£121,903	£100,862			
Btr	Reduced trade capture error incidence	£517,650	£517,650	£517,650	£1,552,950	£1,287,319			
Ctr	Increased bank debt-processing efficiency	£18,630	£19,189	£19,764	£57,583	£47,644			
Dtr	Improved trade reconciliation productivity	£0	£959,445	£988,220	£1,947,665	£1,535,394			
Etr	Cost savings due to retirement of legacy solutions	£170,000	£700,400	£700,400	£1,570,800	£1,259,609			
	Total benefits (risk-adjusted)	£745,719	£2,237,307	£2,267,876	£5,250,902	£4,230,828			

#### Improved Trade Capture Productivity

Deagon receives information of trades executed outside the organization in various formats, ranging from spreadsheets to emails and PDFs. Prior to using Xceptor, the trade operations team handling trade capture was inundated with manual processes that involved copying and pasting data from these source files to documents or spreadsheets saved on local desktops. Depending on the volume of data stored on these source files, the amount of time needed to review, capture, and consolidate required information varied greatly.

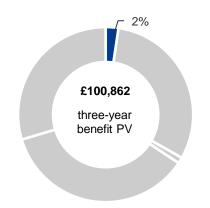
The deployment of Xceptor provides huge relief to the team, as the inefficiencies associated with this tedious, error-prone process are eliminated. Xceptor can ingest and read data across the various file formats before transforming the captured data, all via an Al-enabled process. Codes and formulas preset by the team then direct the platform to run calculations and produce the required reports.

The organization thus achieves employee productivity gains in the trade capture process, with handling time improvements of 88% and 83% for simple and complex transaction files, respectively. Simple transaction files include email messages and documents while complex transaction files include PDFs and images. Trade capture for simple transaction files that would have previously taken approximately 12 minutes per file can now be completed under 1.5 minutes per file. Similarly, for complex transaction files where trade capture automation is further enhanced by Xceptor's optical character recognition (OCR) technology, the organization observes a reduction in handling time from 18 minutes to around 3 minutes.

Forrester adjusts productivity formulas with a productivity conversion ratio to be realistic and conservative in modeling. Productivity conversion considers that not every minute gained in productivity is put directly back into productive work; employees could use the time to take a longer break, leave work on time, etc. The productivity conversion ratio for this study is 50%.

Companies should also consider the potential impact of productivity and

The table above shows the total of all benefits across the areas listed below, as well as present values (PVs) discounted at 10%. Over three years, the composite organization expects risk-adjusted total benefits to be a PV of more than £4.2 million.



Improved trade capture productivity: 2% of total benefits

Impact risk is the risk that the business or technology needs of the organization may not be met by the investment, resulting in lower overall total benefits. The greater the uncertainty, the wider the potential range of outcomes for benefit estimates.



what it could allow employees to achieve (e.g., perform one more trade capture activity on simple or complex transaction files). Forrester does not suggest speculating on the values of these potential actions and incorporating them into an ROI model, but companies should consider these as potential and flexibility factors.

The model also accounts for risks that could impact the value of benefits:

- Variance in volume of simple and complex transaction files.
- > Variance in handling time of employees.
- Variance in salaries by role and geography.
  To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV of £100,862.

REF.	METRIC	CALCULATION	YEAR 1	YEAR 2	YEAR 3
A1	Annual volume of simple transaction files		7,800	7,800	7,800
A2	Annual volume of complex transaction files		10,400	10,400	10,400
А3	Pre-Xceptor handling time per simple transaction file (minutes)		12	12	12
A4	Pre-Xceptor handling time per complex transaction file (minutes)		18	18	18
A5	Post-Xceptor handling time improvement per simple transaction file		88%	88%	88%
A6	Post-Xceptor handling time improvement per complex transaction file		83%	83%	83%
A7	Post-Xceptor handling time per simple transaction file (minutes)	A3*(1-A5)	1.44	1.44	1.44
A8	Post-Xceptor handling time per complex transaction file (minutes)	A4*(1-A6)	3.06	3.06	3.06
A9	Productivity value for simple transaction files (hours)	A1*(A3-A7)/60	1,373	1,373	1,373
A10	Productivity value for complex transaction files (hours)	A2*(A4-A8)/60	2,590	2,590	2,590
A11	Total trade capture productivity value (hours)	A9+A10	3,963	3,963	3,963
A12	Average trade operations employee fully loaded salary	Year 1: Assumption Years 2 and 3: A12 <sub>py</sub> *103%	£46,000	£47,380	£48,801
A13	Productivity conversion	Assumption	50%	50%	50%
At	Improved trade capture productivity	A11*(A12/2,080)*A13	£43,822	£45,136	£46,490
	Risk adjustment	↓10%			
Atr	Improved trade capture productivity (risk-adjusted)	<u> </u>	£39,439	£40,623	£41,841

# Reduced Trade Capture Error Incidence

The use of Xceptor in trade capture processes not only enables employee productivity gains, but also significantly reduces the annual volume of error incidences from 43 instances three years prior to the implementation of Xceptor to the current figure of five instances. As such, the organization avoids potential financial losses, saving hundreds of thousands per year. With the successful reduction in error rate, further refinement of trade capture rules and formulas are in place between the



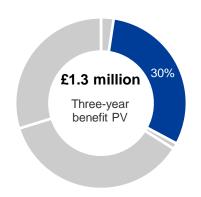
trade operations and IT teams to achieve an error-free trade capture process.

Forrester adjusts revenue gains with an earnings before interest, taxes, depreciation, and amortization (EBITDA) margin and revenue attribution rate to be realistic and conservative in modeling. EBITDA margin in this case considers earning from both interest and noninterest revenue, less noninterest expenses. The EBITDA margin used in this study is a financial services industry average of 14%. Rezzvenue attribution ratfe assumes that not all revenue retained from a reduction in trade capture error incidences is solely attributed to the use of Xceptor. While Xceptor is a huge factor in the reduction of incidents, improved standard operating procedures (SOPs) and the establishment of an instant error management process could have been contributing factors as well.

The model accounts for risks that could impact the value of benefits:

- > Variance in proportion of error incidences resulting in financial loss.
- > Variance in financial loss per error incidence.

To account for these risks, Forrester adjusted this benefit downward by 15%, yielding a three-year risk-adjusted total PV of £1,287,319.



Reduced trade capture error incidence: 30% of total benefits

ed Trade Capture Error Incidence: Calculation Table	е			
METRIC	CALCULATION	YEAR 1	YEAR 2	YEAR 3
Pre-Xceptor annual volume of error incidences		43	43	43
Pre-Xceptor error incidences resulting in financial loss	Assumption	80%	80%	80%
Pre-Xceptor annual volume of error incidences resulting in financial loss	B1*B2	34	34	34
Post-Xceptor reduction in error incidence	Composite	86%	86%	86%
Post-Xceptor annual volume of error incidences resulting in financial loss	B2*(1-B4)	5	5	5
Average financial loss per error incidence	Assumption	£300,000	£300,000	£300,000
EBITDA margin	Assumption	14%	14%	14%
Attribution rate	Assumption	50%	50%	50%
Reduced trade capture error incidence	(B3- B5)*B6*B7*B8	£609,000	£609,000	£609,000
Risk adjustment	↓15%			
Reduced trade capture error incidence (risk-adjusted)		£517,650	£517,650	£517,650
	Pre-Xceptor annual volume of error incidences Pre-Xceptor error incidences resulting in financial loss Pre-Xceptor annual volume of error incidences resulting in financial loss Post-Xceptor reduction in error incidence Post-Xceptor annual volume of error incidences resulting in financial loss Average financial loss per error incidence EBITDA margin Attribution rate Reduced trade capture error incidence Risk adjustment	Pre-Xceptor annual volume of error incidences         Pre-Xceptor error incidences resulting in financial loss       Assumption         Pre-Xceptor annual volume of error incidences resulting in financial loss       B1*B2         Post-Xceptor reduction in error incidence       Composite         Post-Xceptor annual volume of error incidences resulting in financial loss       B2*(1-B4)         Average financial loss per error incidence       Assumption         EBITDA margin       Assumption         Attribution rate       Assumption         Reduced trade capture error incidence       (B3-B5)*B6*B7*B8         Risk adjustment       ↓15%	METRICCALCULATIONYEAR 1Pre-Xceptor annual volume of error incidences43Pre-Xceptor error incidences resulting in financial lossAssumption80%Pre-Xceptor annual volume of error incidences resulting in financial lossB1*B234Post-Xceptor reduction in error incidenceComposite86%Post-Xceptor annual volume of error incidences resulting in financial lossB2*(1-B4)5Average financial loss per error incidenceAssumption£300,000EBITDA marginAssumption14%Attribution rateAssumption50%Reduced trade capture error incidence(B3-B5)*B6*B7*B8£609,000Risk adjustment↓15%	METRICCALCULATIONYEAR 1YEAR 2Pre-Xceptor annual volume of error incidences4343Pre-Xceptor error incidences resulting in financial lossAssumption80%80%Pre-Xceptor annual volume of error incidences resulting in financial lossB1*B23434Post-Xceptor reduction in error incidenceComposite86%86%Post-Xceptor annual volume of error incidences resulting in financial lossB2*(1-B4)55Average financial loss per error incidenceAssumption£300,000£300,000EBITDA marginAssumption14%14%Attribution rateAssumption50%50%Reduced trade capture error incidence(B3- B5)*B6*B7*B8£609,000£609,000Risk adjustment↓15%

## Increased Bank Debt-Processing Efficiency

Every month, in the organization's term loan space, there are investments where the trading desk purchases primary and secondary loans. Deagon Capital carries out these transactions with banks, which individually send across information on principal interest via emails during the month-end period. Prior to using Xceptor, the trade operations team involved in bank debt processing would have to manually review every single email received and sort them manually for processing. This thus resulted in overtime work for about 13 employees, at about 12 hours per month.

With the use of Xceptor, employees do not need to handle this manual task. Xceptor can read the incoming emails, sieve out information from required fields, and classify and consolidate them for bulk upload onto



the organization's core application system. As such, the 13 employees can execute and manage the processing of bank debts more efficiently, leading to an elimination of overtime work.

Forrester applies a productivity conversion ratio of 50% in the calculation of this benefit, with the assumption that only 50% of the time saved is actually converted into productive output.

The model also accounts for risks that could impact the value of benefits:

- Variance in salaries by role and geography.
- > Variance in overtime of employees.

To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV of £47,644.

Increa	ncreased Bank Debt-Processing Efficiency: Calculation Table						
REF.	METRIC	CALCULATION	YEAR 1	YEAR 2	YEAR 3		
C1	Number of employees involved in bank debt processing		13	13	13		
C2	Number of overtime days per month per employee		3	3	3		
C3	Number of overtime hours per day		4	4	4		
C4	Annual total number of overtime hours	C1*C2*C3*12	1,872	1,872	1,872		
C5	Average trade operations employee fully loaded salary	A12	£46,000	£47,380	£48,801		
C6	Productivity conversion	Assumption	50%	50%	50%		
Ct	Increased bank debt-processing efficiency	C4*(C5/2,080)*C6	£20,700	£21,321	£21,960		
	Risk adjustment	↓10%					
Ctr	Increased bank debt-processing efficiency (risk-adjusted)		£18,630	£19,189	£19,764		

## Improved Trade Reconciliation Productivity

About 300 employees across the organization are involved in the day-to-day trade reconciliation activities, which involve reviewing executed trades to identify and resolve trade breaks. Before the deployment of Xceptor, these employees have to frequently engage in manual work to support the front office as the IT team takes about one to two weeks to make the change requirements on the reconciliation system. While individuals across the team of 300 spend varying amounts of time on trade reconciliation activities, the average is about 50% per employee.

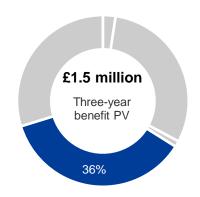
With Xceptor, the employees can build their own reconciliation workflows. The trade reconciliation process is also much more streamlined and standardized across the organization. Deagon achieves a productivity gain of 30%; these employees can spend the time saved on other ad hoc projects such as supporting system upgrades and writing reconciliation requirements.

Forrester applies a productivity conversion ratio of 50% in the calculation of this benefit, with the assumption that only 50% of the time saved is actually converted into productive output.

The model also accounts for risks that could impact the value of benefits:

- > Variance in salaries by role and geography.
- Variance in handling time of employees.

To account for these risks, Forrester adjusted this benefit downward by



Improved trade reconciliation productivity: 36% of total benefits



10%, yielding a three-year, risk-adjusted total PV of £1,535,394.

Impro	ved Trade Reconciliation Productivity: Calcul	ation Table			
REF.	METRIC	CALCULATION	YEAR 1	YEAR 2	YEAR 3
D1	Number of employees involved in trade reconciliation		0	300	300
D2	Amount of time spent on trade reconciliation activity per employee		50%	50%	50%
D3	Pre-Xceptor trade reconciliation handling time per employee per year (hours)	D2*2,080	1,040	1,040	1,040
D4	Post-Xceptor annual trade reconciliation handling time improvement per employee	Composite	30%	30%	30%
D5	Post-Xceptor trade reconciliation handling time per employee per year (hours)	D3*(1-D4)	728	728	728
D6	Average trade operations employee fully loaded salary	A12	£46,000	£47,380	£48,801
D7	Productivity conversion	Assumption	50%	50%	50%
Dt	Improved trade reconciliation productivity	D1*(D3- D5)*(D6/2080)*D7	£0	£1,066,050	£1,098,023
	Risk adjustment	↓10%	·	·	
Dtr	Improved trade reconciliation productivity (riskadjusted)		£0	£959,445	£988,220

# Cost Savings Due To Retirement Of Legacy Solutions

The use of legacy tools was not only inflexible and bureaucratic, but also costly to maintain. As the volume of trade operations activities in the organization continued to grow, the organization sought an alternative platform that enabled end-to-end management of trade operations processes in a flexible, scalable, and cost-efficient manner. Deagon considered multiple automation platform vendors, but the team eventually decided on Xceptor due to its affordability, business-user friendliness, and strong integration capabilities with core systems.

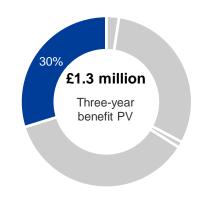
With the deployment of Xceptor, the team retires two legacy systems that it no longer needs to upgrade, maintain, and support. One retired system was for failed trades and reporting, which did not provide the team clear visibility and audit trial of the process. The other retired system was for reconciliation purposes, which was largely IT-centric.

To estimate the associated system cost savings, Forrester assumes:

- The legacy systems are retired at the go-live date of Xceptor, i.e., the beginning of Year 1.
- There is no increase in the costs of legacy systems across the threeyear period.

The model accounts for a risk that could impact the value of benefits: uncertainty of avoided upgrade and maintenance costs.

To account for this risk, Forrester adjusted this benefit downward by 15%, yielding a three-year, risk-adjusted total PV of £1,259,609.



Cost savings due to retirement of legacy solutions: 30% of total benefits



Cost S	Cost Savings Due To Retirement Of Legacy Solutions: Calculation Table									
REF.	METRIC	CALCULATION	YEAR 1	YEAR 2	YEAR 3					
E1	Cost of legacy system for failed trades resolution and reporting		£200,000	£200,000	£200,000					
E2	Cost of legacy tool for reconciliation		£0	£624,000	£624,000					
Et	Cost savings due to retirement of legacy solutions	E1+E2	£200,000	£824,000	£824,000					
	Risk adjustment	↓15%								
Etr	Cost savings due to retirement of legacy solutions (risk-adjusted)		£170,000	£700,400	£700,400					

#### **Unquantified Benefits**

In addition to the quantified benefits gained from the use of Xceptor, the composite organization also attained benefits in other unquantifiable areas, based on insights from the customer interviews:

- > Enhanced EX. The deployment of Xceptor involves doing away with manual, time-consuming processes and the use of complicated and non-user-friendly systems. Trade operations employees not only achieve productivity gains, but can also refocus their time on other higher-value tasks, both of which contribute to a higher level of job satisfaction and employee engagement. IT users are no longer inundated with a long queue of change requests, and their responsibilities in the development of trade operations applications shift to be more support based.
- Improved cross-team collaboration. With the business user-centric features of the Xceptor platform, the IT team is no longer the bottleneck in the development or modification of trade operations applications. In fact, the working dynamics between the two teams have become a lot more agile and collaborative in nature. For instance, in developing more complex applications, the trade operations employees involve the IT team right from the start, via a hybrid working model.
- Increased process transparency and operational control. The creation and maintenance of automation and digitization processes in one single platform provide an oversight of the multiple trade operations processes running in the organization. There is thus greater process transparency and operational control, which is especially important in the highly regulated financial services industry.

## Flexibility

The value of flexibility is clearly unique to each customer, and the measure of its value varies from organization to organization. There are multiple scenarios in which a customer might choose to implement Xceptor and later realize additional uses and business opportunities, including:

Flexibility, as defined by TEI, represents an investment in additional capacity or capability that could be turned into business benefit for a future additional investment. This provides an organization with the "right" or the ability to engage in future initiatives but not the obligation to do so.



- Deploying Xceptor for greater volume of trade operations processes. The positive return of investment gained from the use of Xceptor builds a strong business case for further deployment of Xceptor in trade operations processes beyond the organization's current applications or for other asset classes. With the growing need for better control and operational efficiency, leveraging Xceptor for a greater volume of processes would further enhance the end-to-end efficiency of trade operations processes across the organization.
- Extending the deployment of Xceptor to other business functions. On top of trade operations processes, the adaptability and intuitiveness of the Xceptor platform allow for extension of use cases in other business functions. For instance, organizations can simplify and automate complex and highly manual processes in the administration of tax documentation via Xceptor, reducing the number of employees required in the tax team to keep the process running.

Flexibility would also be quantified when evaluated as part of a specific project (described in more detail in Appendix A).

# **Analysis Of Costs**

#### QUANTIFIED COST DATA AS APPLIED TO THE COMPOSITE

Total Costs								
REF.	COST	INITIAL	YEAR 1	YEAR 2	YEAR 3	TOTAL	PRESENT VALUE	
Ftr	Xceptor solution cost	£0	£349,800	£349,800	£349,800	£1,049,400	£869,901	
Gtr	Initial setup cost	£129,495	£0	£0	£0	£129,495	£129,495	
Htr	Ongoing resource cost	£0	£47,960	£69,566	£71,653	£189,179	£154,927	
	Total costs (risk-adjusted)	£129,495	£397,760	£419,366	£421,453	£1,368,075	£1,154,323	

#### **Xceptor Solution Cost**

In this study, the composite organization opts for an on-premises deployment of Xceptor. The largest portion of costs are the license fees, charged on an annual basis, typically with three- to five-year contracts. The scale of the investment relates largely to the volume and complexity of data being ingested and processed in the platform and the number of applications being developed. This license fee also includes ongoing support from Xceptor, as well as supplementary services and capabilities available.

For the composite organization, the license fees are £318K per year. In Years 2 and 3, the cost remains per the contract.

The model accounts for risks that could impact the value of costs:

» Variance in deployment model and organizational needs for Xceptor. To account for these risks, Forrester adjusted this cost upward by 10%, yielding a three-year, risk-adjusted total PV of £869,901.

The table above shows the total of all costs across the areas listed below, as well as present values (PVs) discounted at 10%. Over three years, the composite organization expects risk-adjusted total costs to be a PV of less than £1.2 million.

Xceptor Solution Cost: Calculation Table									
REF.	METRIC	CALCULATION	INITIAL	YEAR 1	YEAR 2	YEAR 3			
F1	Xceptor annual subscription cost			£318,000	£318,000	£318,000			
Ft	Xceptor solution cost	F1		£318,000	£318,000	£318,000			
	Risk adjustment	↑10%				_			
Ftr	Xceptor solution cost (risk-adjusted)		£0	£349,800	£349,800	£349,800			

## **Initial Setup Cost**

Initial setup costs account for the professional services engaged and internal efforts required to plan, set up, and implement the solution. Before the full deployment of Xceptor, the composite organization spent a total of six months with the setup of Xceptor. A core group of six employees across the trade operations and IT teams devoted 30% of their time throughout the 24 weeks in supporting the integration of Xceptor with existing systems, configuration of business rules, and undergoing training. In addition, stakeholders from the business were



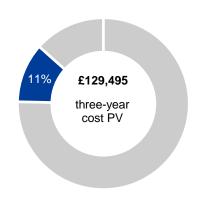
involved on an ad hoc basis.

The interviewed organizations also solicited help from Xceptor to build the solution, which includes template design and training sessions. The composite paid a one-off fee of £75,000 for professional services while training fees amounted to £7,000.

Deagon deployed a train-the-trainer model in getting employees up to speed with the use of Xceptor. After a two week-long training from Xceptor, the core group ran training for the other Xceptor users.

The model accounts for risks that could impact the value of costs:

- > Complexity of environment and deployment.
- > Variance in training needs.
- Variance in salaries by role and geography.
  To account for these risks, Forrester adjusted this cost upward by 10%, yielding a three-year, risk-adjusted total PV of £129,495.



Initial setup cost: 11% of total costs

Initial	Setup Cost: Calculation Table	e				
REF.	METRIC	CALCULATION	INITIAL	YEAR 1	YEAR 2	YEAR 3
G1	Professional services cost	Composite	£75,000			
G2	Training cost	Composite	£7,000			
G3	Number of trade operations employees involved in initial setup	Composite	3			
G4	Number of IT support employees involved in initial setup	Composite	3			
G5	Proportion of time spent on initial setup per employee	Composite	30%			
G6	Internal planning and deployment duration (weeks)	Composite	24			
G7	Total internal planning and deployment hours	(G3+G4)*G5*G6*5*8	1,728			
G8	Average trade operations employee fully loaded salary	Assumption	£46,000			
G9	Average IT support employee fully loaded salary	Assumption	£40,000			
G10	Internal planning and deployment cost	(0.5*G7*(G8/2080))+(0.5*G7*(G9/2080))	£35,723			
Gt	Initial setup cost	G1+G2+G10	£117,723	£0	£0	£0
	Risk adjustment	↑10%				
Gtr	Initial setup cost (risk-adjusted)		£129,495	£0	£0	£0

## Ongoing Resource Cost

The ongoing resource cost consists of internal trade operations employees maintaining business rules configuration, IT support employees performing ongoing system maintenance, and effort from both on the development of new Xceptor applications.

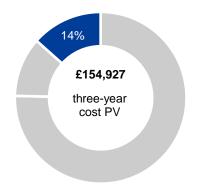


The composite organization allocates six trade operations employees and two IT support employees in the ongoing management on Xceptor. In Year 1, the trade operations employees spend 10% of their time developing new applications while the two IT support employees each spend 20% of their time on Xceptor-related activities. The proportion of time spent for both groups of employees increases in Years 2 and 3 with the addition of new applications.

The model accounts for risks that could impact the value of ongoing resource cost:

- Variance in proportion of time spent by employees managing Xceptor platform.
- > Variance in salaries by roles and geography.

To account for these risks, Forrester adjusted this cost upward by 10%, yielding a three-year risk-adjusted total PV of £154,927.

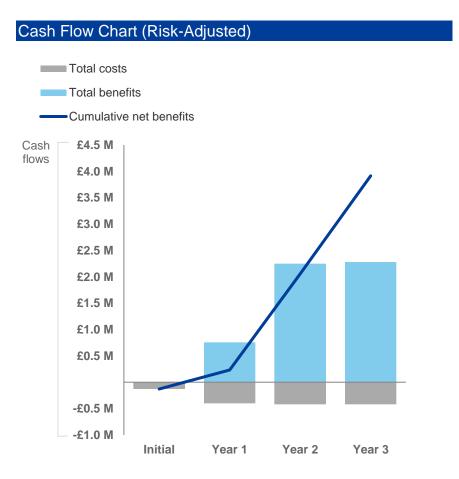


Ongoing resource cost: 14% of total costs

ng Resource Cost: Calculation Table					
METRIC	CALCULATION	INITIAL	YEAR 1	YEAR 2	YEAR 3
Number of trade operations employees involved in developing applications	Composite		6	6	6
Proportion of time spent	Composite		10%	15%	15%
Average trade operations employee fully loaded salary	Year 1: Assumption Years 2 and 3: H3 <sub>py</sub> *103%		£46,000	£47,380	£48,801
Ongoing trade operations resource cost	H1*H2*H3		£27,600	£42,642	£43,921
Number of IT support employees	Composite		2	2	2
Proportion of time spent	Composite		20%	25%	25%
Average IT support employee fully loaded salary	Year 1: Assumption Years 2 and 3: H7 <sub>py</sub> *103%		£40,000	£41,200	£42,436
Ongoing IT support cost	H4*H5*H6		£16,000	£20,600	£21,218
Ongoing resource cost	H4+H8		£43,600	£63,242	£65,139
Risk adjustment	↑10%				
Ongoing resource cost (risk-adjusted)		£0	£47,960	£69,566	£71,653
	METRIC  Number of trade operations employees involved in developing applications  Proportion of time spent  Average trade operations employee fully loaded salary  Ongoing trade operations resource cost  Number of IT support employees  Proportion of time spent  Average IT support employee fully loaded salary  Ongoing IT support cost  Ongoing resource cost  Risk adjustment	METRICCALCULATIONNumber of trade operations employees involved in developing applicationsCompositeProportion of time spentCompositeAverage trade operations employee fully loaded salaryYear 1: Assumption Years 2 and 3: H3py*103%Ongoing trade operations resource costH1*H2*H3Number of IT support employeesCompositeProportion of time spentCompositeAverage IT support employee fully loaded salaryYear 1: Assumption Years 2 and 3: H7py*103%Ongoing IT support costH4*H5*H6Ongoing resource costH4+H8Risk adjustment†10%	METRICCALCULATIONINITIALNumber of trade operations employees involved in developing applicationsCompositeProportion of time spentCompositeAverage trade operations employee fully loaded salaryYear 1: Assumption Years 2 and 3: H3py*103%Ongoing trade operations resource costH1*H2*H3Number of IT support employeesCompositeProportion of time spentCompositeAverage IT support employee fully loaded salaryYear 1: Assumption Years 2 and 3: H7py*103%Ongoing IT support costH4*H5*H6Ongoing resource costH4+H8Risk adjustment†10%	METRICCALCULATIONINITIALYEAR 1Number of trade operations employees involved in developing applicationsComposite6Proportion of time spentComposite10%Average trade operations employee fully loaded salaryYear 1: Assumption Years 2 and 3: H3py*103%£46,000Ongoing trade operations resource costH1*H2*H3£27,600Number of IT support employeesComposite2Proportion of time spentComposite20%Average IT support employee fully loaded salaryYear 1: Assumption Years 2 and 3: H7py*103%£40,000Ongoing IT support costH4*H5*H6£16,000Ongoing resource costH4+H8£43,600Risk adjustment†10%	METRICCALCULATIONINITIALYEAR 1YEAR 2Number of trade operations employees involved in developing applicationsComposite66Proportion of time spentComposite10%15%Average trade operations employee fully loaded salaryYear 1: Assumption Years 2 and 3: H3py*103%£46,000£47,380Ongoing trade operations resource costH1*H2*H3£27,600£42,642Number of IT support employeesComposite22Proportion of time spentComposite20%25%Average IT support employee fully loaded salaryYear 1: Assumption Years 2 and 3: H7py*103%£40,000£41,200Ongoing IT support costH4*H5*H6£16,000£20,600Ongoing resource costH4+H8£43,600£63,242Risk adjustment↑10%

# **Financial Summary**

#### CONSOLIDATED THREE-YEAR RISK-ADJUSTED METRICS



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.

	INITIAL	YEAR 1	YEAR 2	YEAR 3	TOTAL	PRESENT VALUE
Total costs	-£129,495	-£397,760	-£419,366	-£421,453	-£1,368,075	-£1,154,323
Total benefits	£0	£745,719	£2,237,307	£2,267,876	£5,250,902	£4,230,828
Net benefits	-£129,495	£347,959	£1,817,940	£1,846,422	£3,882,827	£3,076,505
ROI						267%
Payback period			·	•	•	< 6 months

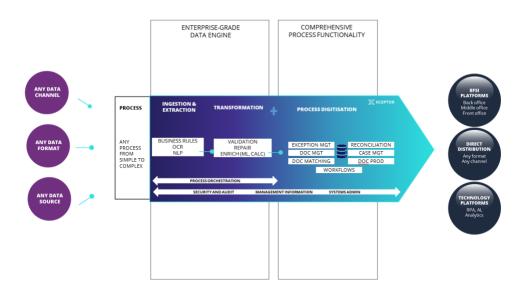
# **Xceptor: Overview**

The following information is provided by Xceptor. Forrester has not validated any claims and does not endorse Xceptor or its offerings.

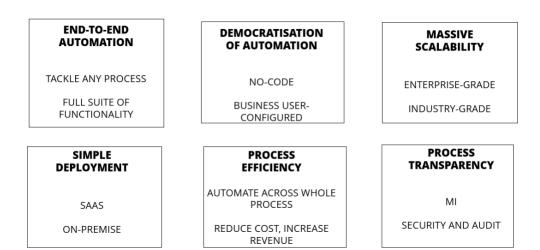
#### THE XCEPTOR PLATFORM

Xceptor is a no-code enterprise automation platform. The single, integrated platform comprises an enterprise-grade data engine and extensive process digitization functionality. It can handle simple to complex processes and enables clients to leverage the right technology at the right time to drive the right outcomes.

All clients have access to the same functionality, no matter their size or scale of challenge. Xceptor's no-code platform is configured by business users, lessening the burden on IT and data scientists.



#### **BENEFITS OF XCEPTOR**



Xceptor is a banking, financial services, and insurance specialist. Its partners are specialists in other verticals. Its platform is the same.



# **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

Forrester Analytics Business Technographics® Global Data & Analytics Survey, 2019

"Beyond The Hype: How Banks Use AI To Drive Operational Efficiency," Forrester Research, Inc., December 6, 2018

# **Appendix C: Endnotes**

<sup>1</sup> This is an average of the improvement in trade processing-handling time for both simple transactions (88%) and complex transactions (83%). Please refer to the benefit section Improved Trade Capture Productivity for further details.

<sup>2</sup> "Intelligent Automation (RPA Plus AI) Will Release \$134 Billion In Labor Value In 2022," Forrester Research, Inc., February 21, 2020.