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ABOUT FORRESTER CONSULTING

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Executive Summary

Organizations use Appian to make their businesses more efficient. Through the Appian Low-Code Automation Platform, customers can develop more applications quickly and at a lower cost. They can also develop complex, automated workflows to further advance their employees’ work. Customers accelerated application development by 17x, improved time-to-value of applications by 50%, reduced their legacy application portfolio by 50%, and added 7,800 hours of productivity from a single automation use case.

Appian offers a low-code automation platform that allows organizations to build enterprise and customer-facing applications at enhanced speeds and reduced costs. It also helps integrate broad, complex workflow automations into their employee’s roles, making employees more efficient and accelerating revenue.

Appian commissioned Forrester Consulting to conduct a Total Economic Impact™ (TEI) study and examine the potential return on investment (ROI) enterprises may realize by deploying Appian.¹ The purpose of this study is to provide readers with a framework to evaluate the potential financial impact of Appian on their organizations.

To better understand the benefits, costs, and risks associated with this investment, Forrester interviewed five customers with experience using Appian. For the purposes of this study, Forrester aggregated the experiences of the interviewed customers and combined the results into a single composite organization.

Prior to using Appian, the customers suffered from environments that required a high amount of manual work to achieve their business goals. While some customers were using spreadsheets to manage and track workflows, others had invested in purpose-built applications in an attempt to make their environment more efficient. Despite their best efforts, customers suffered from disparate processes across their

KEY STATISTICS

Return on investment (ROI) 389%
Net present value (NPV) $10.68M

organizations with the added problem of application proliferation and its associated costs.

After the investment in Appian, the businesses became more efficient. Using Appian allowed the interviewees’ organizations to leverage low-code to build needed applications for their employees and customers in less time and at reduced cost compared to prior environments. Appian further enabled the organizations to deploy complex automation workflows that made employees more efficient and allowed for the decommissioning of multiple legacy applications.

Accelerated application delivery 17x
KEY FINDINGS

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

- **Accelerated application development by 17x.** Compared with customer-code environments, Appian enabled customers to leverage low-code development processes to speed up application development by 17x, reduce the number of resources required to develop by 40%, and decrease the cost of development resources by 50%.

- **Improved time-to-value of applications by 50%.** By speeding up time to develop by 17x, customer organizations reduced the time it took to take a customer-facing application to market or an employee-facing application to deployment by 50%. This also shortened the time-to-value of these applications by the same amount of time.

- **Simplification and automation of application portfolio reduced costs by 50%.** Appian enabled customers to link applications together into complex, automated workflows. This allowed certain legacy applications to be bypassed if they were not needed for the workflow. Because of a reduction in applications needed, customers saw cost savings related to software licensing, hardware licensing, and the data center space needed to house application hardware.

- **Improved employee efficiency by 7,800 hours annually through Digital Process Automation (DPA).** By applying Appian’s workflow automation, customers reduced the amount of manual work and work in legacy applications. The composite organization saves 7,800 hours of employee time annually by leveraging Appian in a single department.

Unquantified benefits. Benefits that are not quantified for this study include:

- **Application agnosticism.** Customers reported Appian works for low-code automation regardless of the specific applications or use cases to which it is applied.

“Something that used to take us five weeks to develop, we can now develop by tomorrow using Appian.”

— CIO, financial services
• **A platform for efficient growth.** Appian automation enabled customers to continue to grow their customer base without increasing the costs to operate their business.

• **Flexibility responding to client needs.** Appian provided flexibility in responding to client needs, reducing the need for specialized employees for particular work.

**Costs.** Risk-adjusted PV costs include:

• **Appian fees.** Appian prices its platform on a per user or per application basis, with additional consideration for the level of support needed. The price of the platform includes the use of an unlimited number of bots.

• **Training and ongoing management costs.** Customers experience internal costs related to training as well as ongoing management costs related to their Appian investment.

The customer interviews and financial analysis found that a composite organization experiences benefits of $13.42M over three years versus costs of $2.74M, adding up to a net present value (NPV) of $10.68M and an ROI of 389%.
EXECUTIVE SUMMARY

ROI
389%

BENEFITS PV
$13.42M

NPV
$10.68M

PAYBACK
<6 months

Benefits (Three-Year)

Reduced cost of development from low-code
$4.0M

Improved time-to-value of applications from low-code
$2.2M

Reduced technology costs from DPA
$6.4M

Improved efficiency from DPA
$724.1K

Financial Summary

Payback period: <6 months

Total benefits PV, $13.4M

Total costs PV, $2.7M
EXECUTIVE SUMMARY

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 Appian.

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 Appian can have on an organization.

DUE DILIGENCE
Interviewed Appian stakeholders and Forrester analysts to gather data relative to Appian.

CUSTOMER INTERVIEWS
Interviewed five decision-makers at organizations using Appian to obtain data with respect to costs, benefits, and risks.

COMPOSITE ORGANIZATION
Designed a composite organization 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 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.

DISCLOSURES
Readers should be aware of the following:

This study is commissioned by Appian 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 Appian.

Appian 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.

Appian provided the customer names for the interviews but did not participate in the interviews.
The Appian Customer Journey

Drivers leading to the Appian investment

Interviewed Organizations

<table>
<thead>
<tr>
<th>Industry</th>
<th>Region</th>
<th>Interviewee</th>
<th>FTEs</th>
<th>Revenue</th>
<th>Use case</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial services</td>
<td>APAC</td>
<td>CIO</td>
<td>70 FTEs</td>
<td>$100 million</td>
<td>Low-code</td>
</tr>
<tr>
<td>Financial services</td>
<td>EMEA</td>
<td>CIO Process digitalization analyst</td>
<td>20,000 FTEs</td>
<td>$4.8 billion</td>
<td>Low-code and DPA</td>
</tr>
<tr>
<td>Professional services</td>
<td>EMEA</td>
<td>Head of service delivery</td>
<td>63,000 FTEs</td>
<td>$5.2 billion</td>
<td>DPA</td>
</tr>
<tr>
<td>Professional services</td>
<td>US</td>
<td>Delivery manager</td>
<td>19,000 FTEs</td>
<td>$14 billion</td>
<td>Low-code</td>
</tr>
<tr>
<td>Telecom</td>
<td>US</td>
<td>IT architecture director</td>
<td>29,000 FTEs</td>
<td>$34 billion</td>
<td>DPA</td>
</tr>
</tbody>
</table>

KEY CHALLENGES

Before investing in Appian, customers described experiencing time-intensive and expensive workflows across a variety of use cases, stemming from manual processes and a lack of automation. The use of distinct processes in different offices exacerbated these problems. The interviewees’ organizations were adopting software applications in an effort to simplify processes; instead, they added to the complexity of their environments, as these apps proliferated to target individual use cases rather than organization-wide needs.

The interviewees’ organizations struggled with common challenges, including:

- **Time-intensive workloads from inefficient processes.** Customers described using manual processes to accomplish tasks, such as managing client requests or tracking the progress of specific projects in spreadsheets. Not only did these organizations lack a central location to access this information, but different offices were also using different documentation and tools for similar processes, hindering organization-wide visibility.

  “Because of the various processes followed across our different offices, we needed a tool that could provide visibility and support our organizational move to a more centralized model.”

  Delivery manager, professional services

- **Complicated workflows from application proliferation.** Some organizations adopted certain software applications in an effort to update their processes and provide some consistency across groups. However, the use of these applications was targeted, and many groups adopted their own applications not shared by other parts of the organization. The resulting application proliferation only served to add further complexity to customer environments.
“This is very important: I think some people may use Appian to cover obsolete processes. Instead, we used it as an orchestrator of enterprise-wide processes. That’s what we were looking for and that’s what we found.”

CIO, financial services

• Applying robotic process automation (RPA) to the wrong use cases. As process complexity and application proliferation took their toll on organizational efficiency, some customers recognized the potential for RPA to automate, simplify, and even unify their processes. However, the application of technology to solve a need ended up creating an additional need. In applying RPA, customers realized it was backfiring: They had implemented RPA for processes it was never intended for. They needed technology that could automate complex end-to-end business processes, and link and orchestrate people, technologies, and data across the organization.

COMPOSITE ORGANIZATION

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

Description of composite. The composite is a financial services organization that employs 26,000 full-time employees and generates $11 billion in revenue annually. In an effort to make its workforce more efficient and move away from manual processes, it adopted a number of applications over the past five years. However, the proliferation of purpose-built applications provides additional complexity to its environment, and the organization now seeks a low-code business process management solution to solve for this, while also improving the efficiency of its development efforts.

“The driver for us was to be able to take a disparate set of non-integrated, purpose-built applications and hook them together in a flow without having to build direct integration inside those applications.”

IT architecture director, telecom

Deployment characteristics. The composite organization chooses to deploy Appian in two ways: 1) To provide a low-code development environment to enhance its nascent application development practice and 2) to help orchestrate and automate enterprise-wide processes across its software application base. Over the course of three years, the organization develops 45 applications with Appian, orchestrates business processes that obsolete 50% of its current application portfolio, and provides further automation efficiency to its employee recruiting efforts.

Key assumptions

- $11 billion in annual revenue
- 26,000 FTEs
- 45 applications developed by Year 3
## Total Benefits

<table>
<thead>
<tr>
<th>Ref.</th>
<th>Benefit</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Total</th>
<th>Present Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atr</td>
<td>Reduced cost of development from low-code</td>
<td>$1,123,200</td>
<td>$1,652,400</td>
<td>$2,181,600</td>
<td>$4,957,200</td>
<td>$4,025,779</td>
</tr>
<tr>
<td>Btr</td>
<td>Improved time-to-value of applications from low-code</td>
<td>$624,375</td>
<td>$896,624</td>
<td>$1,248,749</td>
<td>$2,769,748</td>
<td>$2,246,829</td>
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<tr>
<td>Ctr</td>
<td>Reduced technology costs from DPA</td>
<td>$1,360,000</td>
<td>$2,640,000</td>
<td>$4,000,000</td>
<td>$8,000,000</td>
<td>$6,423,441</td>
</tr>
<tr>
<td>Dtr</td>
<td>Improved efficiency from DPA</td>
<td>$153,765</td>
<td>$297,135</td>
<td>$450,900</td>
<td>$901,800</td>
<td>$724,120</td>
</tr>
<tr>
<td></td>
<td>Total benefits (risk-adjusted)</td>
<td>$3,261,340</td>
<td>$5,486,159</td>
<td>$7,881,249</td>
<td>$16,628,748</td>
<td>$13,420,169</td>
</tr>
</tbody>
</table>

## Reduced Cost of Development Using Low-Code

**Evidence and data.** Interviewees noted that the Appian Low-Code Automation Platform reduced their organizations’ cost per development project by:

- Improving development speed by an average of 17x.
- Reducing the number of developers needed per development project by an average of 40%.
- Enabling the use of fewer senior development resources for low-code development projects, saving approximately 50% of these expenses.

Appian provides numerous functionalities that help achieve these cost savings, including:

- A drag-and-drop visual design.
- A library of reusable components.
- A common data foundation called Appian Records.
- One-click application deployment.

---

"Without Appian, we would need 1.5 to two times the number of developers."

*Delivery manager, professional services*

**Modeling and assumptions.** For the composite organization, Forrester estimates:

- Ten new application development projects in Year 1, 15 in Year 2, and 20 in Year 3.
- A prior average development time of five weeks per project and a prior average of six developer resources needed per project. This does not include testing, security assessment, and approvals for production.
- A prior fully burdened hourly rate per development resource utilized of $100.
- A fully burdened hourly rate per development resource utilized of $50 with Appian.
- Two new developers join the team each year, which would have required 800 hours of training.
before Appian. They can be trained 90% faster with Appian.

**Risks.** The improvement to application development costs will vary with:

- The number of development projects undertaken.
- The time it takes to develop an application without low-code.
- The number of resources it takes to develop without low-code.
- The fully burdened rate of pay of current development resources.
- The decision to use less expensive development resources when utilizing low-code.
- The rate of developer turnover annually and the prior number of hours needed to train new developers.

**Results.** To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of over $4 million.
ANALYSIS OF BENEFITS

Reduced Cost Of Development Using Low-Code

<table>
<thead>
<tr>
<th>Ref.</th>
<th>Metric</th>
<th>Source</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>Number of development projects annually</td>
<td>Interviews</td>
<td>10</td>
<td>15</td>
<td>20</td>
</tr>
<tr>
<td>A2</td>
<td>Prior average hours to develop per project</td>
<td>Interviews; five weeks</td>
<td>200</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>A3</td>
<td>Prior number of developers needed per project</td>
<td>Composite</td>
<td>6</td>
<td>6</td>
<td>6</td>
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<tr>
<td>A4</td>
<td>Prior fully burdened rate per developer (hourly)</td>
<td>Interviews</td>
<td>$100</td>
<td>$100</td>
<td>$100</td>
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<tr>
<td>A5</td>
<td>Average hours to develop per project with Appian</td>
<td>Interviews: 94% reduction</td>
<td>12</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>A6</td>
<td>Number of developers needed with Appian</td>
<td>Interviews: 40% reduction</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>A7</td>
<td>Fully burdened rate per developer with Appian (hourly)</td>
<td>Interviews: 50% reduction</td>
<td>$50</td>
<td>$50</td>
<td>$50</td>
</tr>
<tr>
<td>A8</td>
<td>Subtotal: Reduced development costs</td>
<td>(A1<em>A2</em>A3<em>A4)-(A1</em>A5<em>A6</em>A7)</td>
<td>$1,176,000</td>
<td>$1,764,000</td>
<td>$2,352,000</td>
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<tr>
<td>A9</td>
<td>Number of developers needing training due to turnover</td>
<td>Composite</td>
<td>2</td>
<td>2</td>
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<tr>
<td>A10</td>
<td>Prior hours required to train</td>
<td>Composite</td>
<td>800</td>
<td>800</td>
<td>800</td>
</tr>
<tr>
<td>A11</td>
<td>Reduction in time to train to develop from Appian</td>
<td>Interviews</td>
<td>90%</td>
<td>90%</td>
<td>90%</td>
</tr>
<tr>
<td>A12</td>
<td>Subtotal: Reduced training costs (per developer)</td>
<td>A9<em>A10</em>A11*A7</td>
<td>$72,000</td>
<td>$72,000</td>
<td>$72,000</td>
</tr>
<tr>
<td>At</td>
<td>Reduced cost of development using low-code</td>
<td>A8+A12</td>
<td>$1,248,000</td>
<td>$1,836,000</td>
<td>$2,424,000</td>
</tr>
<tr>
<td>Atr</td>
<td>Reduced cost of development using low-code (risk-adjusted)</td>
<td>$1,123,200</td>
<td>$1,652,400</td>
<td>$2,181,600</td>
<td></td>
</tr>
</tbody>
</table>

Three-year total: $4,957,200  
Three-year present value: $4,025,779

IMPROVED TIME-TO-VALUE OF APPLICATIONS USING LOW-CODE

Evidence and data. Similarly, interviewees realized a time-to-value benefit for their organizations from faster development. Faster time to develop led to faster release of applications, whether aimed at generating revenues or at improving employee productivity. On average the 94% reduction in time needed to develop applications led to a 50% reduction in the time to release of applications, meaning that customers added months of revenue and productivity to their organizations per application developed with Appian compared with prior methods.

Modeling and assumptions. For the composite organization, Forrester estimates:

- Roughly 50% of development projects are aimed at generating revenue while the remainder are aimed at improving internal productivity.
- A total prior time-to-value of six months per application is reduced by 50% thanks to Appian.
- Average annual revenue per relevant application of $1 million in the first year.
ANALYSIS OF BENEFITS

- A 10% profit margin per relevant application.
- Five percent of employees receive a 2% productivity increase from each relevant application.
- The average fully burdened hourly rate of these employees is $35.
- Productivity is recaptured at a rate of 25%.

**Risks.** The improvement in time-to-value of developed applications will vary with:

- The number of development projects pursued annually.
- The number of development projects impacting revenue and employee productivity.
- The impact to revenue and productivity from these applications.
- The profit margin of applications.
- The fully burdened hourly rate of pay of impacted employees.
- The ability of employees to recapture lost productivity.

**Results.** To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV of more than $2.2 million.
ANALYSIS OF BENEFITS

REduced technology costs from digital process automation

Evidence and data. Appian also leverages low-code development in another way: Building complex workflows to connect, orchestrate, and automate application portfolios. Customers explained that utilizing Appian allowed them to take employees' work done across multiple software applications, link the applications, and automate much of the human effort needed to complete the workflow. By developing smart workflows, customers cut out certain applications from the automation altogether, eventually decommissioning these applications as the new workflow was adopted over older processes.

By reducing their application portfolio, companies were able to reduce the cost of application licenses, licenses for the hardware needed to run the software,
and even the data center footprint required to house the hardware.

"Appian gave us a way to connect Application A with Application D, skipping B and C completely. Thanks to this, we've reduced our application portfolio by 50%.”

IT architecture director, telecom

Modeling and assumptions. For the composite organization, Forrester estimates:

- A total annual cost of legacy licensed applications and associated infrastructure of $10 million.
- A reduction in legacy application costs of 17% in Year 1, 33% in Year 2, and 50% in Year 3 as DPA is rolled out.
- Avoided lease costs accrue only in Year 3, when all 50% of applications that can be decommissioned have been decommissioned.

Risks. The reduced technology costs from DPA will vary with:

- The total annual cost of legacy licensed applications and infrastructure.
- The percentage of these that can be decommissioned thanks to decommissioning legacy applications.

Results. To account for these risks, Forrester adjusted this benefit downward by 20%, yielding a three-year, risk-adjusted total PV of more than $6.4 million.

"Once Appian helped us get rid of our legacy applications, we started saving on the software licenses, the hardware it ran on, and our data center footprint where the hardware was.”

IT architecture director, telecom

Reduced application portfolio costs

50%
ANALYSIS OF BENEFITS

Reduced Technology Costs From DPA

<table>
<thead>
<tr>
<th>Ref.</th>
<th>Metric</th>
<th>Source</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1</td>
<td>Cost of legacy licensed applications and infrastructure</td>
<td>Interviews</td>
<td>$10,000,000</td>
<td>$10,000,000</td>
<td>$10,000,000</td>
</tr>
<tr>
<td>C2</td>
<td>Reduction in legacy application and infrastructure costs from Appian</td>
<td>Interviews</td>
<td>17%</td>
<td>33%</td>
<td>50%</td>
</tr>
<tr>
<td>Ct</td>
<td>Reduced technology costs from DPA</td>
<td>C1*C2</td>
<td>$1,700,000</td>
<td>$3,300,000</td>
<td>$5,000,000</td>
</tr>
</tbody>
</table>

Risk adjustment ↓20%

| Ctr  | Reduced technology costs from DPA (risk-adjusted)                       |            | $1,360,000 | $2,640,000 | $4,000,000 |

Three-year total: $8,000,000

Three-year present value: $6,423,441

IMPROVED EFFICIENCY FROM DIGITAL PROCESS AUTOMATION

**Evidence and data.** In addition to reducing licensing and real estate costs, the interviewees’ organizations also experienced improvements in employee productivity from workflow automation. Depending on the workflow developed, customers were either improving the efficiency of their employees or providing more value to customers than before.

For example, the delivery manager from the professional services industry in the US built a workflow for employees that automated the process for analyzing prospective hires at their client firms. Using Appian, employees no longer had to check reference lists to find unique client requirements for potential new hires. They also no longer needed to manually check whether certain requirements had been met, including background checks, drug screenings, and I-9 verification. By doing this, the customer saved an average of 20 minutes per employee every day, with each employee saving between 10 and 30 minutes.

In another case, the head of service delivery from the professional services industry in EMEA built a system that allowed integration with its various clients’ systems, saving employee training costs. Previously, employees were trained on each of the various systems that clients used before becoming truly effective in their roles. With Appian, employees only needed to be trained on and access one application, which then acted as the interface layer for client systems. This in turn allowed the organization more flexibility to manage its resources serving clients, and even reduce its use of subject matter experts by 15% in one year.

Concerning revenue-generating use cases, the telecom company described using Appian to build and automate a part of its order processing function. With Appian, the business was able to order and install its equipment 25% faster, providing better service and realizing revenue earlier.

“Automating this workflow is saving us 20 days of work or more per employee.”

*Delivery manager, professional services*
Customers also described experiencing IT efficiencies with Appian. For example, the financial services firm from EMEA experienced savings from case management workloads after investing in Appian. As the customer reduced its use of legacy systems, internal IT professionals reduced their prior time spent troubleshooting such systems.

“We closed a sale, but we don’t start collecting revenue until the equipment is installed and traffic is flowing. Workflow automation with Appian allows us to get that equipment installed 25% faster than before.”

*IT architecture director, telecom*

**Modeling and assumptions.** For the composite organization, Forrester estimates:

- The organization develops DPA to automate compliance workflows within its human resources department.
- The organization receives approximately 30 applicants for each of its open positions. The total number of open positions is, on average, 3% of total employees each year.
- Employees can save time as applications are decommissioned in Years 1, 2, and 3, ultimately saving 20 hours per applicant by Year 3 when 50% of applications are decommissioned.
- A fully burdened hourly rate per HR employee of $45.
- A total 10,000 hours devoted to application case management by IT teams.
- IT employees can save 25% of their time once 50% of applications are decommissioned in Year 3 and save the relevant percentage of this time as less applications are decommissioned in Year 1 and Year 2.
- An average fully burdened hourly rate per IT professional of $60.

**Risks.** The improvement in employee efficiency from DPA will vary with:

- The number of applications decommissioned from DPA.
- The timeline for rollout of DPA.
- The amount of time IT spends on application-related case management.
- The fully burdened hourly rate per affected employee.

**Results.** To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV of $724,120.
UNQUANTIFIED BENEFITS

Additional benefits that customers experienced but were not able to quantify include:

- **Application agnosticism.** The interviewees stressed that one of the best features of Appian is that it is application agnostic. Regardless of the vendor, number, age, and type of applications being used, customers felt that Appian could help automate workflows between them.

FLEXIBILITY

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

- **A platform for efficient growth.** Interviewees noted that Appian provided a platform that allowed them to continue to grow to meet their customers’ needs without necessarily having to grow costs.

- **Flexibility responding to client needs.** Customers from the professional services industry noted that Appian workflow automation allowed them the flexibility to meet customer needs faster. For example, one firm could exchange resources serving a client without the need to train a new resource on the client’s systems.

---

### Improved Efficiency From DPA

<table>
<thead>
<tr>
<th>Ref.</th>
<th>Metric</th>
<th>Source</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1</td>
<td>Annual applicants for open positions</td>
<td>Composite</td>
<td>23,400</td>
<td>23,400</td>
<td>23,400</td>
</tr>
<tr>
<td>D2</td>
<td>Time saved per job application due to DPA (minutes)</td>
<td>Interviews</td>
<td>7</td>
<td>13</td>
<td>20</td>
</tr>
<tr>
<td>D3</td>
<td>Annual hours saved due to DPA</td>
<td>Composite</td>
<td>2,730</td>
<td>5,070</td>
<td>7,800</td>
</tr>
<tr>
<td>D4</td>
<td>Fully burdened rate per HR employee (hourly)</td>
<td>Composite</td>
<td>$45</td>
<td>$45</td>
<td>$45</td>
</tr>
<tr>
<td>D5</td>
<td>Subtotal: Cost savings reviewing applicants</td>
<td>D3*D4</td>
<td>$122,850</td>
<td>$228,150</td>
<td>$351,000</td>
</tr>
<tr>
<td>D6</td>
<td>Prior hours dedicated to case management</td>
<td>Interviews</td>
<td>10,000</td>
<td>10,000</td>
<td>10,000</td>
</tr>
<tr>
<td>D7</td>
<td>Reduction in hours from DPA</td>
<td>Interviews</td>
<td>8%</td>
<td>17%</td>
<td>25%</td>
</tr>
<tr>
<td>D8</td>
<td>Average fully burdened rate of IT employee (hourly)</td>
<td>Composite</td>
<td>$60</td>
<td>$60</td>
<td>$60</td>
</tr>
<tr>
<td>D9</td>
<td>Subtotal: Reduced cost of case management from DPA</td>
<td>D6<em>D7</em>D8</td>
<td>$48,000</td>
<td>$102,000</td>
<td>$150,000</td>
</tr>
<tr>
<td>Dt</td>
<td>Improved efficiency from DPA</td>
<td>D5+D9</td>
<td>$170,850</td>
<td>$330,150</td>
<td>$501,000</td>
</tr>
<tr>
<td>Dtr</td>
<td>Improved efficiency from DPA (risk-adjusted)</td>
<td>↓10%</td>
<td>$153,765</td>
<td>$297,135</td>
<td>$450,900</td>
</tr>
</tbody>
</table>

**Three-year total: $901,800**

**Three-year present value: $724,120**
Flexibility would also be quantified when evaluated as part of a specific project (described in more detail in Appendix A).

“Right now, we’re functioning well with four to five operating staff members per 10,000 or so customers. With Appian, even if we add another 10,000 customers, we don’t need to expand staff.”

CIO, financial services
Analysis Of Costs
- Quantified cost data as applied to the composite

## Total Costs

<table>
<thead>
<tr>
<th>Ref.</th>
<th>Cost</th>
<th>Initial</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Total</th>
<th>Present Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Etr</td>
<td>Cost of Appian fees</td>
<td>$234,740</td>
<td>$728,314</td>
<td>$920,537</td>
<td>$1,108,052</td>
<td>$2,991,644</td>
<td>$2,490,114</td>
</tr>
<tr>
<td>Ftr</td>
<td>Cost of training and ongoing management</td>
<td>$48,300</td>
<td>$82,800</td>
<td>$82,800</td>
<td>$82,800</td>
<td>$296,700</td>
<td>$254,211</td>
</tr>
<tr>
<td></td>
<td>Total costs (risk-adjusted)</td>
<td>$283,040</td>
<td>$811,114</td>
<td>$1,003,337</td>
<td>$1,190,852</td>
<td>$3,288,344</td>
<td>$2,744,325</td>
</tr>
</tbody>
</table>

### COST OF APPIAN FEES

**Evidence and data.** The number of users or number of applications, the amount of support required, and the use of unlimited bots determine the cost of Appian. At the “Fully Featured” tier, the monthly price for Standard users is $60, $18 for Infrequent users, and $2 for External Input users. There is also the option to go through a custom quote processes for the “Flat App” and “Enterprise” tiers.

**Modeling and assumptions.** For the composite organization, Forrester estimates:

- Total implementation fees of $213,400.

- Total Appian licensing fees of $662,104 in Year 1, $836,852 in Year 2, and $1,007,320 in Year 3.

**Risks.** The total cost of Appian fees will vary with:

- The complexity of implementation.
- The number of low-code users.
- The required level of support.

**Results.** To account for these risks, Forrester adjusted this cost upward by 10%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of $2.5 million.

### Cost Of Appian Fees

<table>
<thead>
<tr>
<th>Ref.</th>
<th>Metric</th>
<th>Source</th>
<th>Initial</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>E1</td>
<td>Implementation fees</td>
<td>Composite</td>
<td>$213,400</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E2</td>
<td>Licensing fees</td>
<td>Composite</td>
<td></td>
<td>$0</td>
<td>$662,104</td>
<td>$836,852</td>
</tr>
<tr>
<td>Et</td>
<td>Cost of Appian fees</td>
<td>E1+E2</td>
<td>$213,400</td>
<td>$662,104</td>
<td>$836,852</td>
<td>$1,007,320</td>
</tr>
<tr>
<td></td>
<td>Risk adjustment</td>
<td>↑10%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Etr</td>
<td>Cost of Appian fees (risk-adjusted)</td>
<td>E1+E2</td>
<td>$234,740</td>
<td>$728,314</td>
<td>$920,537</td>
<td>$1,108,052</td>
</tr>
</tbody>
</table>

Three-year total: $2,991,644  
Three-year present value: $2,490,114
COST OF TRAINING AND ONGOING MANAGEMENT

Evidence and data. Interviewees noted internal time costs related to training and ongoing management. Customers shared that training users took between one week and one month, while ongoing management of applications required between 3 and 5 FTEs at 30% of their time.

Modeling and assumptions. For the composite organization, Forrester assumes:

- Fifteen FTEs need to complete two weeks of training.
- A fully burdened hourly rate per trained employee of $35
- Two FTEs needed at 30% time to manage Appian.
- A fully burdened annual rate of pay of $120,000 for these employees.

Risks. The cost of training and ongoing management will vary with:

- The number of employees needing to be trained and needed for ongoing management.
- The fully burdened rates of pay of these employees.

Results. To account for these risks, Forrester adjusted this cost upward by 15%, yielding a three-year, risk-adjusted total PV of $254,211.

<table>
<thead>
<tr>
<th>Cost Of Training And Ongoing Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ref.</td>
</tr>
<tr>
<td>------</td>
</tr>
<tr>
<td>F1</td>
</tr>
<tr>
<td>F2</td>
</tr>
<tr>
<td>F3</td>
</tr>
<tr>
<td>F4</td>
</tr>
<tr>
<td>F5</td>
</tr>
<tr>
<td>F6</td>
</tr>
<tr>
<td>Ft</td>
</tr>
<tr>
<td>Fr</td>
</tr>
</tbody>
</table>

Three-year total: $296,700  Three-year present value: $254,211
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)

<table>
<thead>
<tr>
<th></th>
<th>Initial</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Total</th>
<th>Present Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total costs</strong></td>
<td>($283,040)</td>
<td>($811,114)</td>
<td>($1,003,337)</td>
<td>($1,190,852)</td>
<td>($3,288,344)</td>
<td>($2,744,325)</td>
</tr>
<tr>
<td><strong>Total benefits</strong></td>
<td>$0</td>
<td>$3,261,340</td>
<td>$5,486,159</td>
<td>$7,881,249</td>
<td>$16,628,748</td>
<td>$13,420,169</td>
</tr>
<tr>
<td><strong>Net benefits</strong></td>
<td>($283,040)</td>
<td>$2,450,226</td>
<td>$4,482,822</td>
<td>$6,690,397</td>
<td>$13,340,405</td>
<td>$10,675,844</td>
</tr>
<tr>
<td><strong>ROI</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>389%</td>
</tr>
<tr>
<td><strong>Payback period</strong> (months)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>&lt;6</td>
</tr>
</tbody>
</table>
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.”

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.

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.
Appendix B: Endnotes

1 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.

2 Digital Process Automation (DPA) comes in two varieties: DPA-deep and DPA-wide. DPA-deep is designed to handle sophisticated long-running processes, including designing, orchestrating, and monitoring processes that utilize most or all of the other intelligent automation technologies. DPA-wide is designed to drive wide-scale process automation of low to medium complexity and may have capabilities to utilize multiple intelligent automation technologies.