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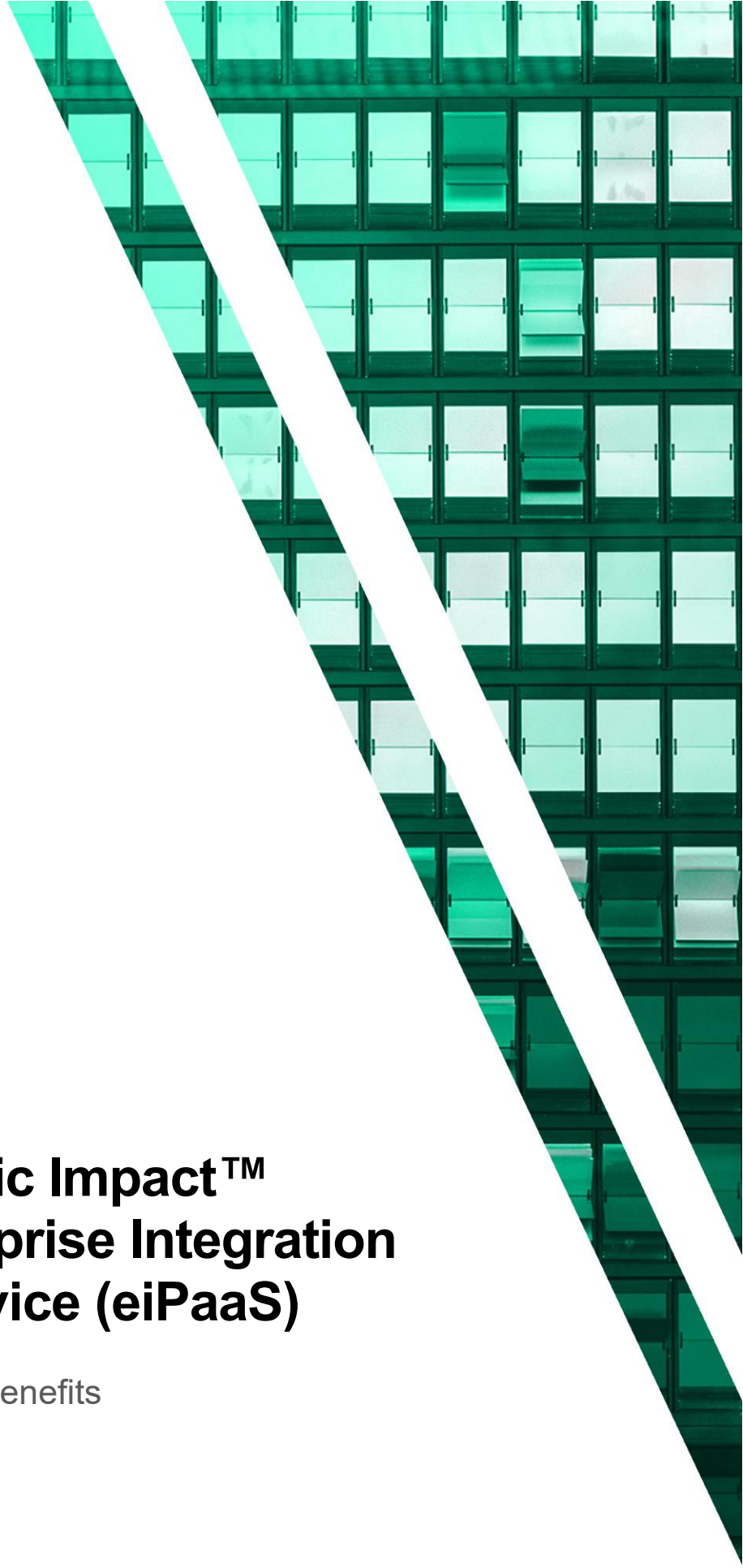

The Total Economic Impact™ Of Digibee's Enterprise Integration Platform As A Service (eiPaaS)

Cost Savings And Business Benefits Enabled By Digibee

NOVEMBER 2022

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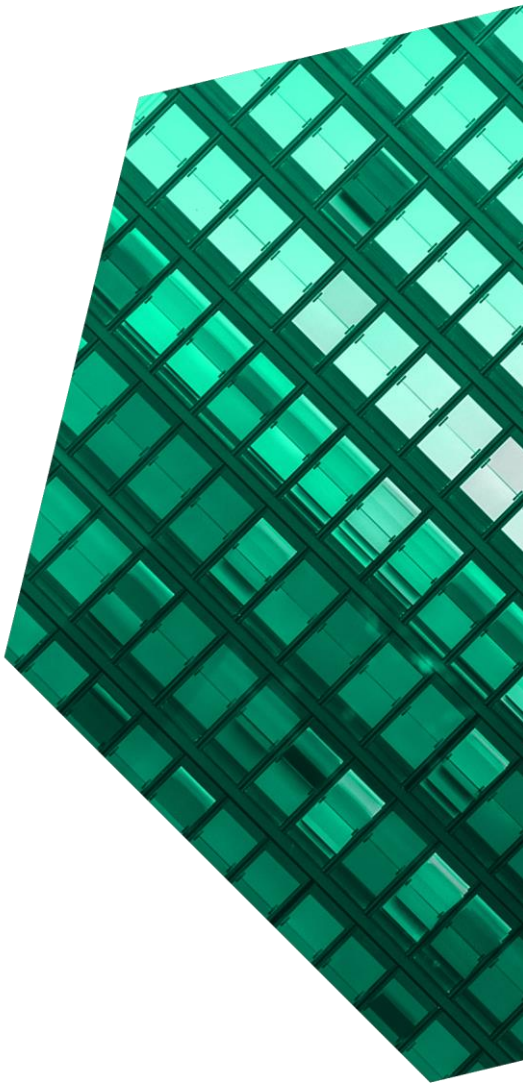

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Executive Summary

Digibee's enterprise integration platform makes developers and supporting IT professionals more productive in building and maintaining integrations. The low-code platform allows junior developers to do the work previously relegated to senior developers. This streamlines and reduces the cost of the entire development process and, along with Digibee's enablement delivery model, sets up customers to adopt an eiPaaS autonomously and with ease.

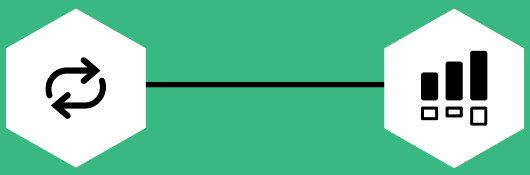
Digibee provides a low-code, cloud-native enterprise integration platform as a service (eiPaaS) that connects business applications and systems. It helps organizations automate workflows and transform business processes. The Digibee platform includes a visual drag-and-drop interface, supports reusability, and integrated monitoring and reporting. It manages the complexity of systems integration in an agile, simple, and efficient way.

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

To better understand the benefits, costs, and risks associated with this investment, Forrester interviewed five representatives with experience using Digibee. For the purposes of this study, Forrester aggregated the interviewees' experiences and combined the results into a single composite organization that is a financial services organization with 20,000 employees and revenue of $5 billion per year.

Prior to using the Digibee platform, these interviewees noted how their organizations built integrations with point-to-point solutions by writing custom code to connect applications. They typically used Java as their coding language and used file transfer connections to link applications.

KEY STATISTICS



Return on investment (ROI)
232%

Net present value (NPV)
$4.15M

However, legacy tools were difficult to manage and monitor, and point-to-point integrations were time-consuming to build and challenging to maintain.

Interviewees reported that after the investment in the Digibee platform, their organizations' development teams gained access to a broad range of end-to-end integration capabilities that opened up the flow of data within the organizations' internal business applications and with external partners. This new approach transformed how systems could exchange information and helped the interviewees' organizations handle the integration requirements of a more complex business environment.

> **"We turned to Digibee because it was faster, less expensive, and more reliable."**
>
> *IT director, telecom*

These transformations resulted in a significant reduction in developers' time building and maintaining integrations, a reduction in IT labor supporting the integrations, and the ability for junior developers to do the work previously done by senior developers. In addition, internal business users' tasks became more automated, and the organizations could bring products and services to market faster.

KEY FINDINGS

Quantified benefits. Three-year, risk-adjusted present value (PV) quantified benefits for the composite organization include:

- **Developer efficiencies building integrations valued at $2.1 million to the composite organization.** Developers can build integrations with the Digibee platform 50% to 75% more efficiently than point-to-point solutions. The visual drag-and-drop interface and the ability to reuse integrations make building integrations fast. In addition, the integrated logs and metrics allow the developers to quickly troubleshoot in-flight code and track workflows within the platform.
- **Developer efficiencies maintaining integrations valued at $370,000 to the composite organization.** After adopting the Digibee platform, the composite organization significantly reduces the maintenance effort of supporting existing integrations. It is easier and faster to identify, locate, and fix errors, and the amount of development rework is nearly eliminated.
- **Cost savings due to a reduction in IT labor valued at $678,000 to the composite organization.** The level of IT resources required to support integration development and maintenance is reduced with the Digibee platform. From development to testing and into production, the integration process demands less from the composite organization's IT operational resources.

> **"The reason we selected Digibee was to modernize our infrastructure. We also had a need to simplify and deliver our IT projects faster. The project was not doing well, and we needed to solve it quickly, so we brought in Digibee to fix it."**
>
> *IT director, telecom*

- **Cost savings due to hiring less experienced developers valued at $224,000 to the composite organization.** Because building and maintaining integrations are more straightforward with the Digibee platform, the composite organization implements its integration projects by leveraging the skill sets of less experienced developers. As a result, when hiring new developers, the composite organization saves money by bringing in lower-cost developers.
- **Internal business user efficiencies valued at $1.2 million to the composite organization.** After Digibee integrations are complete, the flow of data between applications increases as does the automation of tasks that developers previously performed manually. The beneficiaries of this workflow automation are internal business users who can complete tasks faster than before the integration was in place.
- **Revenue from faster time to market with new products and services valued at $1.3 million to the composite organization.** The integration development team creates new integrations more rapidly with the Digibee platform compared to its previous point-to-point development approach. The team can now connect systems and exchange data ahead of schedule, resulting in the ability to bring products and services to market faster.

Unquantified benefits. Benefits that provide value for the composite organization but are not quantified in this study include:

- **Greater reliability and reduced risk of failures.** The composite organization experiences an increase in availability and reliability between applications and systems with the Digibee platform. Embedded security allows the organization to harden its application landscape and reduce the risk of system failures.
- **Increased end-to-end visibility.** The Digibee platform provides improved visibility of data streams flowing through systems that previously were not possible with point-to-point integrations.
- **Increased time for senior developers to do more strategic work.** Because the Digibee platform is easy to use, junior developers can take over the work previously done by senior developers. Digibee manages the complexity of systems integration in an agile, simple, and efficient way.
- **Reduced pain around integrations.** The ease with which developers can create integrations with the Digibee platform reduces the angst and dread the composite organization's integrations development team experienced when the business presented the team with new application integration requirements.

Costs. Three-year, risk-adjusted PV costs for the composite organization include:

- **Fees to Digibee valued at $1.7 million to the composite organization.** The cost of the Digibee license is based on the number of total pipelines and new pipelines built each year. Costs include Digibee's enablement model, which includes the delivery of the first 50 pipelines, training, and ongoing support.

> **"We turned to Digibee because it was faster, less expensive, and more reliable."**
>
> *IT director, telecom*

- **Internal costs valued at $81,000 to the composite organization.** This includes costs for training and shadowing. The development team shadows Digibee for the first 50 pipelines.

The representative interviews and financial analysis found that a composite organization experiences benefits of $5.94 million over three years versus costs of $1.79 million, adding up to a net present value (NPV) of $4.15 million and an ROI of 232%.

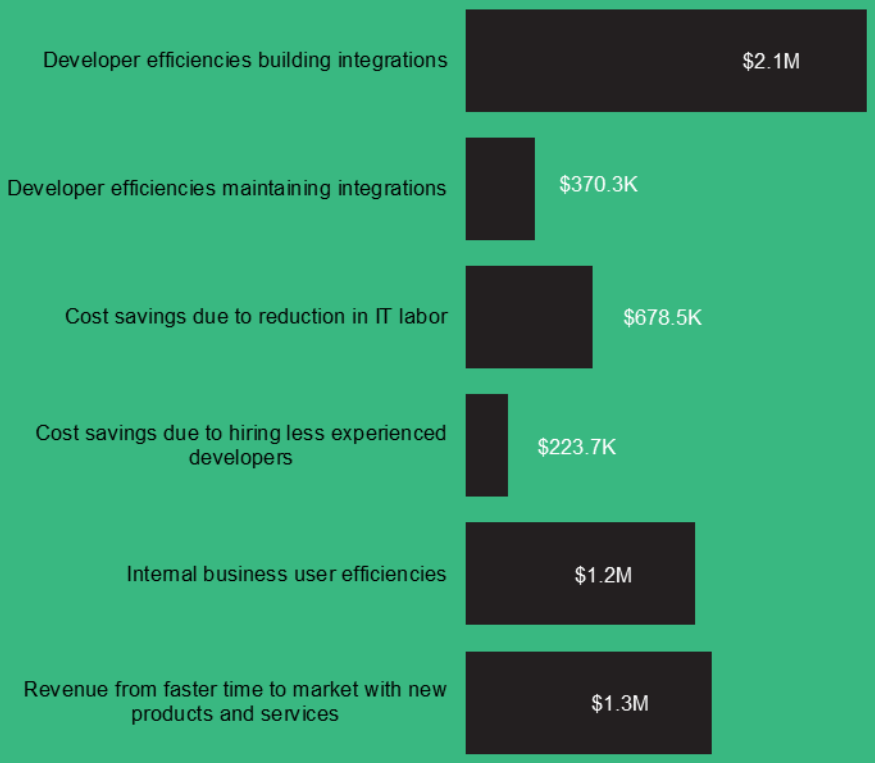
ROI
232%

BENEFITS PV
$5.94M

NPV
$4.15M

PAYBACK
<6 months

Benefits (Three-Year)



> "The principal benefit is the velocity of implementing in Digibee. Digibee has components that facilitate the construction of your implementation."
>
> *Sr. manager cloud enablement, telecom*

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 Digibee.

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 Digibee can have on an organization.

DISCLOSURES

Readers should be aware of the following:

This study is commissioned by Digibee 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 Digibee.

Digibee 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.

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

The Digibee Customer Journey

Drivers leading to the Digibee investment

Interviews

Role	Industry	Region	Number of new integrations per year
Technology architect	Financial services	Headquartered in Brazil	8 integrations
Sr. manager, cloud enablement IT director	Telecom	Headquartered in Brazil	1 integration/30 pipelines
IT project director	Retail	Headquartered in Brazil	30 integrations
Architect manager	Food production	Headquartered in Brazil	15 integrations

KEY CHALLENGES

Prior to using the Digibee platform, the interviewees' organizations built integrations with point-to-point solutions using custom code. They used file transfer connections to link applications. The interviewees' organizations did not use another integration-platform-as-a-service (iPaaS) solution before adopting the Digibee platform.

The interviewees noted how their organizations struggled with common challenges, including:

- **The development team was not able to deliver projects on time.** The interviewees' IT organizations had a bottleneck of projects in the pipeline, and the development team needed a solution to complete projects faster. Compounding the problem, the development team lacked the manpower and sufficient skilled resources to complete the work.

  The IT director at the telecom said: "Lack of resources is a problem for everyone. We didn't have enough people to do the work. Digibee reduces the number of people required to do an integration, so having a tool that reduces the amount of effort and facilitates our lives is certainly a must."

  The sr. manager of cloud enablement at the telecom explained: "The development team is small, and they have too many projects to handle. So, there is a bottleneck, and they cannot deliver on every project."

- **The integrations were too complex for point-to-point solutions to handle.** The existing solution could not support the increasing complexity of the integration requirements. The architect manager at the food production company said: "We had a big project in our company where we needed to connect SAP with legacy software in all five of our companies. We need to replace 100% of the integrations, and our in-house solution couldn't manage it."

- **The volume of transactions was too high for the existing solution.** The IT project director at the retail company explained how their organization processed millions of transactions per day between applications and the volume of data frequently broke the connections. Terabytes of data had to be moved and stored redundantly, and developers spent inordinate time rebuilding connections.

  They said: "We had a large volume of daily transactions between our point of sale [POS], commercial [enterprise resource planning] (ERP), and financial ERP. It's around 3 or 4 million

transactions per day. In the past, these integrations were file transfers, and it was so difficult. The transactions broke the files and broke our connections, and we lost a lot of time rebuilding the connections and the files."

INVESTMENT OBJECTIVES

The interviewees' organizations searched for a solution that could keep their digital transformation projects on time and within budget. Furthermore, they wanted to build new integrations in a more robust way and ensure that they were easier to maintain in the future. Specifically, the interviewees' organizations evaluated solutions that could support the IT department in its mandate to:

- Increase the capacity to complete more integrations at a faster rate.
- Modernize integrations by moving away from point-to-point solutions.
- Increase the ability to handle complex integrations with a straightforward, well-structured solution.
- Leverage the flexibility of a cloud-based integration platform vs. on-premises solutions.

COMPOSITE ORGANIZATION

Based on the interviews, Forrester constructed a TEI framework, a composite company, and an ROI analysis that illustrates the areas financially affected. The composite organization is representative of the five interviewees 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 organization is a financial services organization providing sales, service, and customer support to its millions of business and consumer customers. The composite organization has a strong brand and global operations with 20,000 employees and annual revenue of $5 billion. Its integration development team has 6 FTEs who spend half their time building and maintaining integrations. The composite organizations did not use another iPaaS solution before adopting the Digibee platform.

Deployment characteristics. The number of new pipelines the composite organization builds in Year 1 is 90; in Year 2, it is 120 for a total of 210 pipelines; and in Year 3, it is 175 for a total of 385 pipelines. Typically, one integration consists of six pipelines.

Integrations on Digibee's platform can be developed in two different ways. The most common approach is for an organization to use its own developers to build integrations supported by Digibee's enablement model. The second approach is to deploy Digibee's platform through a systems integrator. Digibee has established relationships with global systems integrators and has programs to ensure mutual customer success.

After engaging Digibee consultants to deliver the first 50 pipelines, the composite organization takes the first approach and uses its in-house developers to build integrations.

Key Assumptions

- **Global financial services company**
- **20,000 employees**
- **$5 billion annual revenue**
- **Six developer FTEs spend half their time building and maintaining integrations**

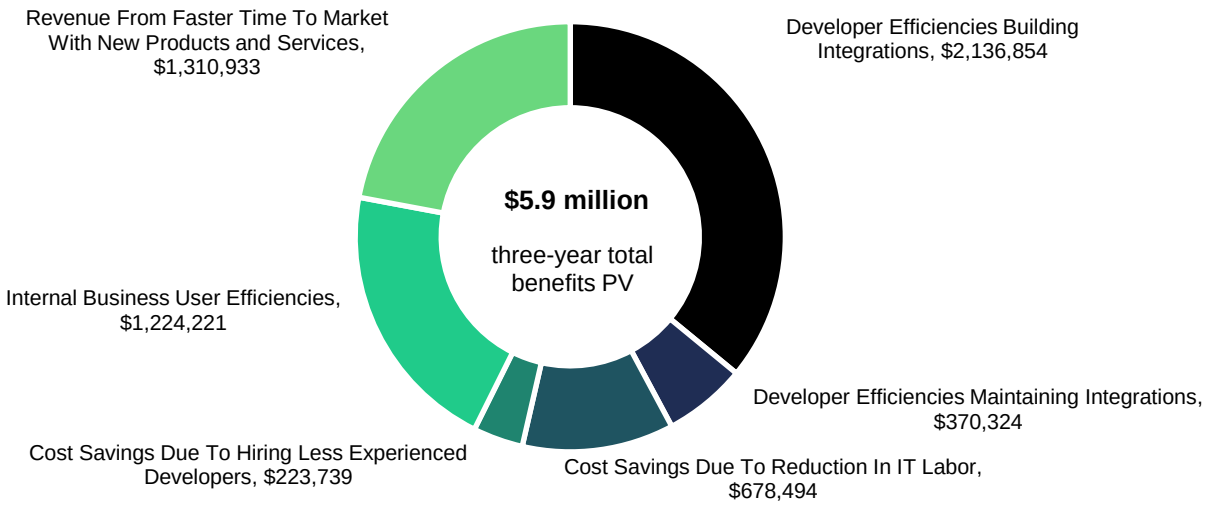
Analysis Of Benefits

Quantified benefit data as applied to the composite

Total Benefits

Ref.	Benefit	Year 1	Year 2	Year 3	Total	Present Value
Atr	Developer Efficiencies Building Integrations	$449,550	$899,100	$1,311,188	$2,659,838	$2,136,854
Btr	Developer Efficiencies Maintaining Integrations	$58,320	$189,540	$213,840	$461,700	$370,324
Ctr	Cost Savings Due To Reduction In IT Labor	$190,570	$274,550	$370,481	$835,601	$678,494
Dtr	Cost Savings Due To Hiring Less Experienced Developers	$25,650	$102,600	$153,900	$282,150	$223,739
Etr	Internal Business User Efficiencies	$492,278	$492,278	$492,278	$1,476,833	$1,224,221
Ftr	Revenue From Faster Time To Market With New Products and Services	$404,838	$404,838	$809,676	$1,619,352	$1,310,933
	Total benefits (risk-adjusted)	$1,621,206	$2,362,906	$3,351,362	$7,335,473	$5,944,565

BENEFITS BY CATEGORY



This section examines six quantified benefits and provides insight into the data points and evidence collected during the customer interviews, as well as the underlying models and assumptions used in the financial analysis for this use case.

DEVELOPER EFFICIENCIES IN BUILDING INTEGRATIONS

Evidence and data. Developers in the interviewees' organizations built integrations in a fraction of the time using the Digibee platform compared to point-to-point development. The interviewees said the Digibee platform's capabilities enabled efficiencies within their organizations' development team due to several key features:

- **The intuitive and visual drag-and-drop interface made building integrations fast.** The sr. manager of cloud enablement at the telecom said: "The development interface is easy to use. You can just take a look, understand what's going on, and just start building."

  The IT project director of the retail chain echoed this sentiment: "Digibee helped us grow because of how the integrations became drag and drop. Because Digibee has connectors to our ERP, this helped us add new stores. So, we connect, drag and drop, and all the APIs are created using a new store code. Before that, we had to create a new integration again and again and again."
- **The ability to reuse integrations saved development time.** The IT director of the telecom said: "When you do the integration once, you can reuse the integration from any system to any other system much quicker because the extraction is already there. If you're going to extract from system ABC, the pipeline is there, just a matter of connecting the dots. That's why I think it saves time and effort and reduces risk as well."
- **The integrated logs and metrics allowed developers to troubleshoot and track workflows all within the platform.** The sr. manager of cloud enablement at the telecom said: "They provide you with additional sets of tools that help the development and production process. You have integrated metrics and integrated logs, and you can try to understand the problems with the platform and with the flows just inside the tool — you don't need anything else, just the tool."

> **"Before Digibee, it would have taken 300 hours to complete an integration, now it takes 60 hours."**
>
> *Technology architect, financial services*

Modeling and assumptions. For the financial model, Forrester assumes the following about the composite organization:

- The composite builds 90 new pipelines in Year 1, 120 new pipelines in Year 2, and 175 new pipelines in Year 3.
- The development team size remains consistent from Year 1 to Year 3, since it can complete more integrations with the same number of developers over time.
- The average number of hours to build one integration before Digibee is 886 hours. Assuming one integration consists of six connections (pipeline equivalents), the average number of hours to build one connection before Digibee is 148 hours.
- The average number of hours to build one integration with Digibee decreases after Year 1 as developers become more efficient. The average number of hours to build one integration in Year 1 is 443 hours (50% more efficient than point-to-point development), and in Years 2 and 3 it is 222 (75% more efficient than point-to-point development).
- The average hourly loaded cost of a developer is $75.

Risks. The impact of this benefit will vary based on:

- The number of integration projects per year.
- The size of the development team.

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 $2.1 million.

"Developers make fewer errors due to the low-code framework that Digibee provides, making the system more reliable."

IT director, telecom

Developer Efficiencies In Building Integrations					
Ref.	**Metric**	**Source**	**Year 1**	**Year 2**	**Year 3**
A1	Number of net new pipelines	Composite	90	120	175
A2	Hours to complete one integration before Digibee	Interviews	886	886	886
A3	Hours to complete one connection before Digibee	A2/6	148	148	148
A4	Hours to complete one integration after Digibee	Interviews	443	222	222
A5	Hours to complete one pipeline after Digibee	A4/6	74	37	37
A6	Hours saved per pipeline	A3-A5	74	111	111
A7	Average fully burdened developer hourly rate	TEI standard	$75	$75	$75
At	Developer Efficiencies In Building Integrations	A1*A6*A7	$499,500	$999,000	$1,456,875
	Risk adjustment	↓10%			
Atr	Developer Efficiencies In Building Integrations (risk-adjusted)		$449,550	$899,100	$1,311,188
	Three-year total: $2,659,838		**Three-year present value: $2,136,854**		

DEVELOPER EFFICIENCIES MAINTAINING INTEGRATIONS

Evidence and data. Since adopting the Digibee platform, interviewees' organizations have also been able to reduce the effort involved with the maintenance of integrations. The Digibee platform made it easier and faster to identify, locate, and fix errors. As a result, the amount of application rework was nearly eliminated.

The sr. manager of cloud enablement at the telecom said: "It's easier to locate errors and fix them because every component is already there. You can just look at the screen and fix it because you can relate the workflow to the functional execution. Before Digibee, it would take a half day to locate and fix an error; with Digibee, it takes 1 hour."

Modeling and assumptions. This benefit has two parts. The first part of this benefit is the time developers save maintaining **legacy integrations**. For the financial model, Forrester assumes the following about the composite organization:

- The number of legacy point-to-point integrations in the composite organization is 24.
- In Year 1, the composite organization rewrites 12 of the legacy integrations in Digibee. In Year 2, the composite organization rewrites the remaining 12 legacy integrations in Digibee.
- There are on average 6 connections (pipeline equivalents)per integration.
- The number of times a developer must adjust each pipeline is 4 times per year, resulting in 288 adjustments in Year 1 and 576 adjustments in Years 2 and 3.
- The number of hours to make one adjustment is 4 hours before Digibee and 1 hour after Digibee resulting in 3 hours saved per adjustment.
- The average hourly loaded cost of a developer is $75.

The second part of this benefit is the time developers save maintaining **new integrations**. For the financial model, Forrester assumes the following about the composite organization:

- There are no new pipelines to maintain in Year 1 because they are built in Year 1. There are 90 in Year 2, and 120 in Year 3.
- A developer must adjust each pipeline four times per year, resulting in 360 adjustments in Year 2 and 480 adjustments in Year 3.
- The number of hours to make an adjustment is 4 hours before Digibee and 1 hour after the implementation of Digibee, resulting in 3 hours saved per adjustment.

The average hourly loaded cost of a developer is $75.

Risks. The impact of this benefit will vary based on:

- The number of legacy integrations to reconstruct.
- The number of new integrations.
- The number of annual adjustments to make per pipeline.
- The size of the development team.

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 $370,000.

> **“The greatest value Digibee provides to us is that it helped us integrate our partner marketplace with our user app. The integration allows the connections to send pricing information to our app. Before Digibee, it would have taken us more than three months to connect each partner. With Digibee, we can get up and running in just two weeks.”**
>
> *IT project director, retail*

Developer Efficiencies Maintaining Integrations					
Ref.	**Metric**	**Source**	**Year 1**	**Year 2**	**Year 3**
B1	Number of legacy integrations	Composite	12	24	24
B2	Number of legacy pipelines	B1*6	72	144	144
B3	Number of adjustments per year	B2*4 adjustments per year	288	576	576
B4	Number of hours saved per adjustment	Interviews	3	3	3
B5	Total number of hours saved maintaining legacy integrations	B3*B4	864	1,728	1,728
B6	Number of new pipelines	Composite	0	90	120
B7	Number of adjustments per year	B6*4 adjustment per year	0	360	480
B8	Number of hours saved per adjustment	Interviews	3	3	3
B9	Total number of hours saved maintaining new integrations	B7*B8	0	1,080	1,440
B10	Average fully burdened developer hourly rate	TEI standard	$75	$75	$75
Bt	Developer Efficiencies Maintaining Integrations	(B5+B9)*B10	$64,800	$210,600	$237,600
	Risk adjustment	↓10%			
Btr	Developer Efficiencies Maintaining Integrations (risk-adjusted)		$58,320	$189,540	$213,840
	Three-year total: $461,700		**Three-year present value: $370,324**		

COST SAVINGS DUE TO REDUCTION IN IT LABOR

Evidence and data. The level of non-developer IT resources required to support integration development and maintenance was reduced with the Digibee platform. From development to testing and into production, the integration process demanded less from IT operational resources. The technology architect at the financial services company said: "Before Digibee, team members from several groups, including quality, infrastructure, and database, were involved in the integrations. Now, their involvement is significantly reduced."

Modeling and assumptions. This benefit has two parts. The first part of this benefit is the time IT saves **during** integrations. For the financial model, Forrester assumes the following about the composite organization:

- The number of IT team members and application owners involved in each integration project before Digibee is 12.
- The average number of hours each IT team member spends in each integration before Digibee is 17.
- After Digibee, IT team members regain 65% of their time and are only required to invest an average of 6 hours per integration.
- The composite organization builds 15 net-new integrations in Year 1, 20 in Year 2, and 29 in Year 3.

- The average hourly loaded cost of an IT team member is $85.

The second part of this benefit is the time IT team members save from not having to be involved in escalations during the **maintenance** of integrations. For the financial model, Forrester assumes the following about the composite organization:

- The number of escalations application owners are not required to be involved with due to Digibee is 95 in Year 1, 190 in Year 2, and 190 in Year 3. This represents 33% of all integration maintenance incidents.
- It takes two application owners 2 hours each to resolve an escalation.
- The average hourly loaded cost of an application owner is $85.

Risks. The impact of this benefit will vary based on:

- The size of the IT team involved in integrations.
- The number of net-new integrations per year
- The number of escalations requiring resolution.

Results. To account for these risks, Forrester adjusted this benefit downward by 5%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of $678,000.

Cost Savings Due To Reduction In IT Labor

Ref.	Metric	Source	Year 1	Year 2	Year 3
C1	Number of IT team members involved in every integration before Digibee	Interviews	12	12	12
C2	Number of hours spent per integration per IT team member before Digibee	Interviews	17	17	17
C3	Number of hours spent per integration per IT team member after Digibee	Interviews	6	6	6
C4	Number of hours saved per integration per application owner	C2-C3	11	11	11
C5	Number of net new integrations per year	Composite	15	20	29
C6	Average number of hours saved for IT team members during integrations per year	C1*C4*C5	1,980	2,640	3,828
C7	Number of escalations per year before Digibee	Interviews	95	190	190
C8	Number of application owners involved per escalation	Interviews	2	2	2
C9	Number of hours to resolve each escalation per application owner	Interviews	2	2	2
C10	Average number of hours saved resolving escalations per year	C7*C8*C9	380	760	760
C11	Average fully burdened hourly rate for IT team member or application owner	TEI standard	$85	$85	$85
Ct	Cost Savings Due To Reduction In IT Labor	(C6+C10)*C11	$200,600	$289,000	$389,980
	Risk adjustment	↓5%			
Ctr	Cost Savings Due To Reduction In IT Labor (risk-adjusted)		$190,570	$274,550	$370,481
	Three-year total: $835,601		**Three-year present value: $678,494**		

COST SAVINGS DUE TO HIRING LESS EXPERIENCED DEVELOPERS

Evidence and data. Building integrations in the Digibee platform was easier than writing point-to-point integration code in Java because of the drag-and-drop interface, reusability of capsules, and low-code approach. With the Digibee platform, the interviewees' organizations implemented their integration projects by leveraging the skill sets of less experienced developers. As a result, when hiring new developers, the interviewees saved money by bringing in lower-cost developers.

The IT director of the telecom said: "Normally, when you talk about integration you think, 'Oh gosh, I need to hire a very expensive guy.' But it doesn't need to be a senior developer, so it was relatively simple to select our team."

Modeling and assumptions. For the financial model, Forrester assumes the following about the composite organization:

- The number of existing developers in the composite organization that the new hires replace due to turnover is 0.5 FTEs in Year 1, 2 FTEs in Year 2, and 3 FTEs in Year 3.
- A less experienced developer, on average, costs $57,000 less per year than a senior-level developer on the organization's current IT team.

Risks. Savings resulting from hiring less experienced developers could vary based on the IT team's turnover rate and the staff's willingness to take on the new responsibilities the Digibee platform presents.

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 $224,000.

Cost Savings Due To Hiring Less Experienced Developers

Ref.	Metric	Source	Year 1	Year 2	Year 3
D1	Number of new developer hires due to turnover	Assumption	0.5	2.0	3.0
D2	Fully burdened annual salary, senior. developer	TEI standard	$165,000	$165,000	$165,000
D3	Fully burdened annual salary, junior developer	TEI standard	$108,000	$108,000	$108,000
D4	Annual savings per newly hired developer	D2-D3	$57,000	$57,000	$57,000
Dt	Cost Savings Due To Hiring Less Experienced Developers	D1*D4	$28,500	$114,000	$171,000
	Risk adjustment	↓10%			
Dtr	Cost Savings Due To Hiring Less Experienced Developers (risk-adjusted)		$25,650	$102,600	$153,900
	Three-year total: $282,150		**Three-year present value: $223,739**		

INTERNAL BUSINESS USER EFFICIENCIES

Evidence and data. After integrations were completed using the Digibee platform, the flow of data between applications increased, as did the automation of tasks previously performed manually. The beneficiaries of this workflow automation were internal business users who completed tasks faster than before.

The technology architect of the financial services company gave an example of a process that was streamlined because of the new integration. They reduced the time required to process and resolve complex billing issues, resulting in providers being paid faster and an overall better customer experience. The interviewee said: "Now, payments are made faster and more accurately; doctors and providers get paid faster. There is less opportunity for misunderstandings and a better customer experience. Before Digibee, it took 7 hours to resolve the bill. After Digibee, it takes 3 hours."

In another example, this interviewee noted that the financial services company integrated systems with 1,000 broker partners. Before the Digibee platform was implemented, these systems were not connected, and the company had to resolve issues through phone calls and email. With the Digibee platform integration, the systems exchanged data and this workflow automation reduced the manual effort of resolving issues.

The technology architect said: "Before Digibee, 20 people across five departments spent half their time exchanging information with our 1,000 broker partners via email and phone to verify the insurance information was correct. Now that we are integrated, the effort is reduced by 85%. As a result, we canceled a contract for half of these people who were contracted through a third party."

Modeling and assumptions. For the financial model, Forrester assumes the following about the composite organization:

> **"We have 1,000 small broker partners we have to exchange information with, and we could not integrate these partners without Digibee."**
>
> *Technology architect, financial services*

- The number of clerical workers in the composite organization performing this clerical task is 75.
- The number of hours each clerical worker spends on this task before Digibee is 20 hours per week.
- After Digibee, the clerical worker is 55% more efficient and spends 9 hours per week on this task.
- The average hourly loaded cost of a financial, clerical worker is $45.
- This model assumes that 30% of this productivity increase is due to the Digibee integration. This assumes the composite organization would have eventually devised a way to automate this task using point-to-point integrations.

Risks. The impact of this benefit will vary based on:

- The number of internal business users performing the task.
- The level of efficiency realized.

Results. To account for these risks, Forrester adjusted this benefit downward by 15%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of $1.2 million.

Internal Business User Efficiencies					
Ref.	**Metric**	**Source**	**Year 1**	**Year 2**	**Year 3**
E1	Number of employees	Composite	75	75	75
E2	Hours on financial clerical task per week before Digibee per employee	Interviews	20	20	20
E3	Hours on financial clerical task per week after Digibee per employee	Interviews	9	9	9
E4	Hours saved per week per employee	E2-E3	11	11	11
E5	Average fully burdened hourly rate for financial clerical staff	TEI standard	$45	$45	$45
E6	Attribution to Digibee	Assumption	30%	30%	30%
Et	Internal Business User Efficiencies	E1*E4*E5*E6*52 weeks	$579,150	$579,150	$579,150
	Risk adjustment	↓15%			
Etr	Internal Business User Efficiencies (risk-adjusted)		$492,278	$492,278	$492,278
	Three-year total: $1,476,833		**Three-year present value: $1,224,221**		

REVENUE FROM FASTER TIME TO MARKET WITH NEW PRODUCTS AND SERVICES

Evidence and data. Building integrations with the Digibee platform was faster than creating point-to-point integrations in interviewees' organizations. As a result, development teams connected systems and facilitated the exchange of data ahead of schedule, resulting in the ability to bring products and services to market faster.

The senior manager of cloud enablement at the telecom gave an example of a new revenue stream that occurred earlier because of the speed at which their developers integrated systems using the Digibee platform: "We've finished the project three months early. As a result, we can expand the area of fiber coverage to the home, sign up more consumers, and increase revenue."

The IT project director at the retail chain gave an example of avoiding the loss of revenue because of the integration of their point of sales (POS) and enterprise resource planning (ERP) systems with Digibee. As a result, their stores no longer had outages where the POS system would go down and shut down the ability to make sales.

They said: "The main point of failure was the fixed integrations using data files transfer. If it fails, stores don't have a price list and cannot ring up sales. So, our IT support guys had to solve the problem, and we would lose 7 hours of store sales. It's a big problem, 7 hours without sales. This does not happen anymore with Digibee."

Modeling and assumptions. For the financial model, Forrester assumes the following about the composite organization:

- The organization brings one new product or service to the market faster in Year 1, one in Year 2, and two in Year 3.
- This product or service comes to market three months faster with Digibee.
- The number of new product or service sales during these three months is 14,875.
- This new product or service sells for $112.[2]

- This model assumes that 75% of this revenue increase is due to the Digibee integration.
- The operating margin for this new product or service is 12%.

Risks. The impact of this benefit will vary based on:

- The number of new products or services introduced each year.
- The speed at which the new product or service comes to market.

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 $1.3 million.

> **"Digibee not only helps us reduce costs, it enables us to bring more customers and more revenue to the company. So, that's why the team is happy with the Digibee platform."**
>
> *Sr. manager cloud enablement, telecom*

Revenue From Faster Time To Market With New Products And Services

Ref.	Metric	Source	Year 1	Year 2	Year 3
F1	Number of new products and services per year	Interviews	1	1	2
F2	Number of months faster to market	Interviews	3	3	3
F3	Number of new customers/policies per month	Interviews	14,875	14,875	14,875
F4	Average sales for new customer/policy per month	Insurance Information Institute	$112	$112	$112
F5	Attribution to Digibee	Forrester Standard	75%	75%	75%
F6	Operating margin	Industry Standard	12%	12%	12%
Ft	Revenue From Faster Time To Market With New Products and Services	F1*F2*F3*F4*F5*F6	$449,820	$449,820	$899,640
	Risk adjustment	↓10%			
Ftr	Revenue From Faster Time To Market With New Products and Services (risk-adjusted)		$404,838	$404,838	$809,676
	Three-year total: $1,619,352		**Three-year present value: $1,310,933**		

UNQUANTIFIED BENEFITS

Interviewees mentioned the following additional benefits that their organizations experienced but were not able to quantify:

- **Greater reliability and reduced risk of failures**. Interviewees' organizations experienced an increase in reliability between applications and systems with the Digibee platform. Overall, systems were on a firmer foundation and less prone to failure. The IT director at the telecom said: "More relevant than the amount of the reduction in hours and costs is the reduction of risk for the program because, if the integration fails, the program fails everywhere. Having a tool like this reduces the risk of failures." The interviewee continued, "Developers make fewer errors due to the low-code framework that

Digibee provides, making the system more reliable."

- **Increase in end-to-end visibility.** The Digibee platform provided visibility of data streams flowing through systems that were previously impossible with point-to-point integrations. The IT project developer in retail said: "With Digibee, we can see between the stores, our warehouse, and our suppliers. We didn't have this before."
- **Increased time for senior developers to do more strategic work.** Junior developers took over the work previously done by senior developers. These senior developers moved from building integrations to focusing on strategic business goals. The IT director at the telecom said, "It was relatively easy to select the team for the new integration project because it didn't need to be a senior developer."'
- **Reduced pain around integrations.** The IT director at the telecom said: "Integration is not a fancy topic. Nobody likes integration; everybody hates integration. Nobody sees [the value of] pipelines, but pipeline integrations represent about 40%, 50% of the complexity of any project. Ultimately, I think Digibee is good because it makes our life easier."

FLEXIBILITY

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

- **Digibee is a partner, not just a supplier.** Interviewees saw Digibee as a partner in their organizations' successes. For example, the IT project director in retail said: "We view Digibee as a partner and not just a supplier. If we need something from the platform, we work with Digibee and they build it. They bring new ideas to us and help us construct our future."
- **More functionality to unlock.** The architect manager at the food production company said: "Digibee has so many features that we want to take advantage of. As we learn the platform, we have space to explore new functionality and ways to connect with other legacy tools in the future."

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

SYSTEMS INTEGRATOR USE CASE

- One of the interviewees' organizations works with a systems integrator (SI) to deploy the Digibee platform.
- The company had a complex integration project that needed a quick turnaround, so they turned to the SI for guidance.
- The SI partnered with Digibee to deliver the integration in half the time compared to other solutions.

"We are partnering with Digibee in situations where the client needs to do a complex integration and to us, Digibee looks like a simple solution, very straightforward, very pragmatic, and very well-structured. Digibee was much faster in terms of the number of hours required to do integration. In this case we reduced 50% of the hours by using Digibee compared to [another iPaaS]."

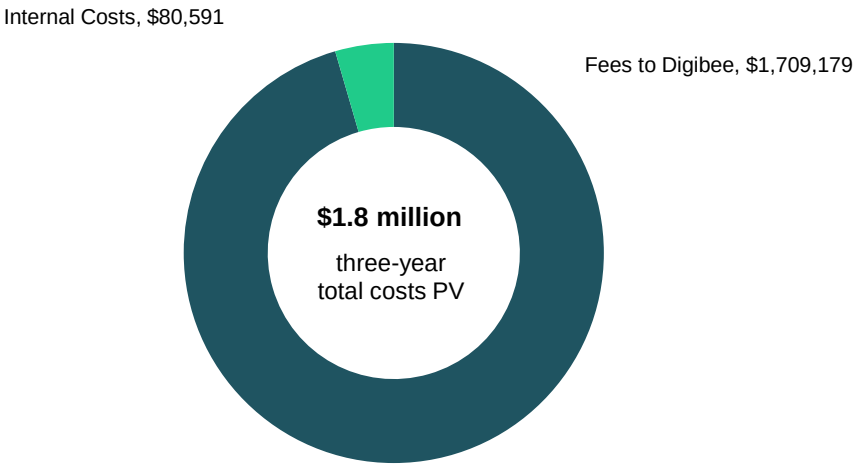
IT director, telecom (Systems Integrator)

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**
Gtr	Fees to Digibee	$0	$351,540	$691,740	$1,088,640	$2,131,920	$1,709,179
Htr	Internal Costs	$12,810	$37,800	$17,430	$25,305	$93,345	$80,591
	Total costs (risk-adjusted)	$12,810	$389,340	$709,170	$1,113,945	$2,225,265	$1,789,770

COSTS BY CATEGORY



This section examines the costs incurred with licensing, setting up, customizing, and managing the Digibee solution.

FEES TO DIGIBEE

Evidence and data. The cost of the Digibee platform license was based on the number of total pipelines and new pipelines built each year. Costs included Digibee's enablement model. This enablement model empowered interviewees' organizations to use the platform to build, run, and manage integrations autonomously with the support of the Digibee customer success team. This Digibee team worked with its customers to deliver the first 50 pipelines. As an eiPaaS, Digibee managed the infrastructure platform for its customers, freeing them up to focus on building and managing integrations.

Modeling and assumptions. For the financial model, Forrester assumes the following about the composite organization:

- Annual subscription fees in Year 1 are $334,800 for 90 pipelines, in Year 2 are $658,000 for a total of 210 pipelines (120 new pipelines), and in Year 3 are a total of $1,036,800 for a total of 385 pipelines (175 new pipelines).

> **"The usability, the easiness of use, it's really simple. The training required is minimal, and you can onboard people very quickly."**
>
> *IT director, telecom*

- The subscription includes implementation, development, training, maintenance, delivery of the first 50 pipelines, and the ongoing support of the Digibee customer success team.

Risks. Annual fees to Digibee will vary based on the number of total pipelines.

Results. To account for these risks, Forrester adjusted this cost upward by 5%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of $1.7 million.

Fees To Digibee

Ref.	Metric	Source	Initial	Year 1	Year 2	Year 3
G1	Digibee license costs	Digibee	$0	$334,800	$658,800	$1,036,800
Gt	Fees to Digibee	G1	$0	$334,800	$658,800	$1,036,800
	Risk adjustment	↑5%				
Gtr	Fees to Digibee (risk-adjusted)		$0	$351,540	$691,740	$1,088,640
	Three-year total: $2,131,920			**Three-year present value: $1,709,179**		

INTERNAL COSTS

Evidence and data. The interviewees' organizations implemented the Digibee platform quickly, involving developers and systems analysts. There was an initial training period where the team became familiar with the platform. Then, the team shadowed Digibee's enablement team to learn how to build and maintain integrations.

Modeling and assumptions. For the financial model, Forrester assumes the following about the composite organization:

- For the initial Digibee platform implementation, six developers and two systems analysts spend 20 hours becoming familiar with the platform.

- In Year 1, six developers spend 20 hours a week for four weeks working alongside Digibee developers to build the first 50 pipelines. The developers provide the data source connections for these first 50 pipelines.
- In Years 2 and 3, two and three newly hired developers, respectively, and one newly hired systems analyst spend 20 hours a week for four weeks working side by side with their peers to learn the platform. These new hires are a result of turnover.
- A developer's average hourly loaded cost is $75, and a systems analyst's average hourly loaded cost is $80.

"One of the biggest benefits is the short implementation time."

Architecture manager, food production

Risks. Internal costs will vary based on the turnover rate of developers and systems analysts.

Results. To account for these risks, Forrester adjusted this cost upward by 5%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of $81,000.

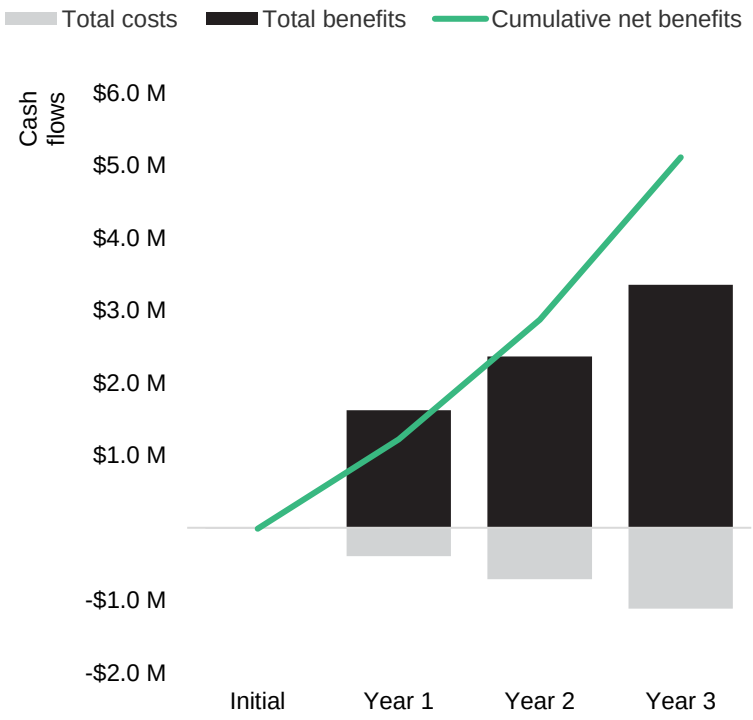
Internal Costs

Ref.	Metric	Source	Initial	Year 1	Year 2	Year 3
H1	Number of developers	Composite	6	6	2	3
H2	Number of hours training	Interviews	20	0	20	20
H3	Number of hours shadowing	Assumption	0	80	80	80
H4	Average fully burdened developer hourly rate	TEI standard	$75	$75	$75	$75
H5	Costs to train developers	H1*(H2+H3)*H4	$9,000	$36,000	$15,000	$22,500
H6	Number of systems analysts	Interviews	2	0	1	1
H7	Number of hours training	Interviews	20	0	20	20
H8	Average fully burdened systems analyst hourly rate	TEI standard	$80	$80	$80	$80
H9	Costs to train systems analysts	H6*H7*H8	$3,200	$0	$1,600	$1,600
Ht	Internal Costs	H5+H9	$12,200	$36,000	$16,600	$24,100
	Risk adjustment	↑5%				
Htr	Internal Costs (risk-adjusted)		$12,810	$37,800	$17,430	$25,305
	Three-year total: $93,345			**Three-year present value: $80,591**		

Financial Summary

CONSOLIDATED THREE-YEAR RISK-ADJUSTED METRICS

Cash Flow Chart (Risk-Adjusted)



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

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

Cash Flow Analysis (Risk-Adjusted Estimates)

	Initial	Year 1	Year 2	Year 3	Total	Present Value
Total costs	($12,810)	($389,340)	($709,170)	($1,113,945)	($2,225,265)	($1,789,770)
Total benefits	$0	$1,621,206	$2,362,906	$3,351,362	$7,335,473	$5,944,565
Net benefits	($12,810)	$1,231,866	$1,653,736	$2,237,417	$5,110,208	$4,154,795
ROI						232%
Payback period (months)						<6

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: 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] Source: "Facts + Statistics: Auto insurance," Insurance Information Institute, 2022.

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