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

The Total Economic Impact™ Of Appway Onboarding For Wealth Management

Increased Revenues And Improved Efficiency For Internationally Operating Wealth Management Firms And Private Banks

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Executive Summary

Key Benefits

Reduced onboarding time
90%

Increased margin per customer:
10%

Incremental customer acquisition:
5%

Compliance and back-office efficiencies:
2 FTEs per booking center

Appway provides an onboarding solution for wealth management/private banking that increases margins and delivers incremental customer acquisition. Appway commissioned Forrester Consulting to conduct a Total Economic Impact™ (TEI) study and examine the potential return on investment (ROI) financial organizations may realize by deploying the solution and the underlying platform at international wealth management firms and private banks and for onboarding natural persons, legal entities, and complex structures. The purpose of this study is to provide readers with a framework to evaluate the potential financial impact of Appway's Onboarding for Wealth Management solution on their organizations.

To better understand the benefits, costs, and risks associated with this investment, Forrester interviewed two customers with years of experience using Appway's Onboarding for Wealth Management solution and the underlying platform. By automating processes and streamlining workflows, the interviewed organizations have drastically reduced the onboarding time by up to 90%. Forrester quantified the value of the improved customer experience (CX): The margin per customer increased as did the rate of acquiring new accounts. The improved user experience and higher efficiency of the relationship managers (RMs) enabled them to deliver an improved CX, which underlies these improvements. Furthermore, compliance and back-office processes became more efficient, reducing staffing needs by two FTEs per booking center.

Prior to using Appway's Onboarding for Wealth Management solution and underlying platform, customer onboarding for both banks was complex, inefficient, and lengthy. Processes and technologies were different in the various booking centers, resulting in inefficiencies and a lack of flexibility.

Key Findings

Quantified benefits. The following risk-adjusted present value (PV) quantified benefits are representative of those experienced by the companies interviewed:

- **Margin per customer increases by 10%.**[1] With onboarding times drastically decreasing by 90%, firms have improved their CX, resulting in higher value of new accounts and in turn higher margins on these accounts. A streamlined process gives customers more confidence and avoids loss of momentum, enabling the RMs to better upsell. Furthermore, the RMs are more efficient, can better position the product and service portfolio, and can better target higher-value customers.
- **Customer acquisition grows incrementally by 5%.**[2] With faster onboarding, organizations lose fewer accounts during the prospect-to-customer period. Furthermore, relationship managers' time is freed up to pursue more prospects. Finally, the improved employee experience (EX) leads to better retention of RMs, and, in turn, the lower frequency of RM changes reduces the risk of losing customers or prospects.
- **Improved compliance and back-office efficiency results in two fewer FTEs per booking center.**[3] After streamlining the onboarding process, the compliance and back-office functions at interviewed organizations have become more efficient. Different functions can work on the same account in parallel, and collaboration capabilities have also improved efficiency. Updating compliance requirements is also much faster because all the booking centers are aligned.

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ROI (risk-adjusted)
225%

Payback (risk-adjusted)
19 months

- **Time-to-margin is reduced because of faster onboarding.**[4] With onboarding times reduced by 90%, margin comes in that much sooner.

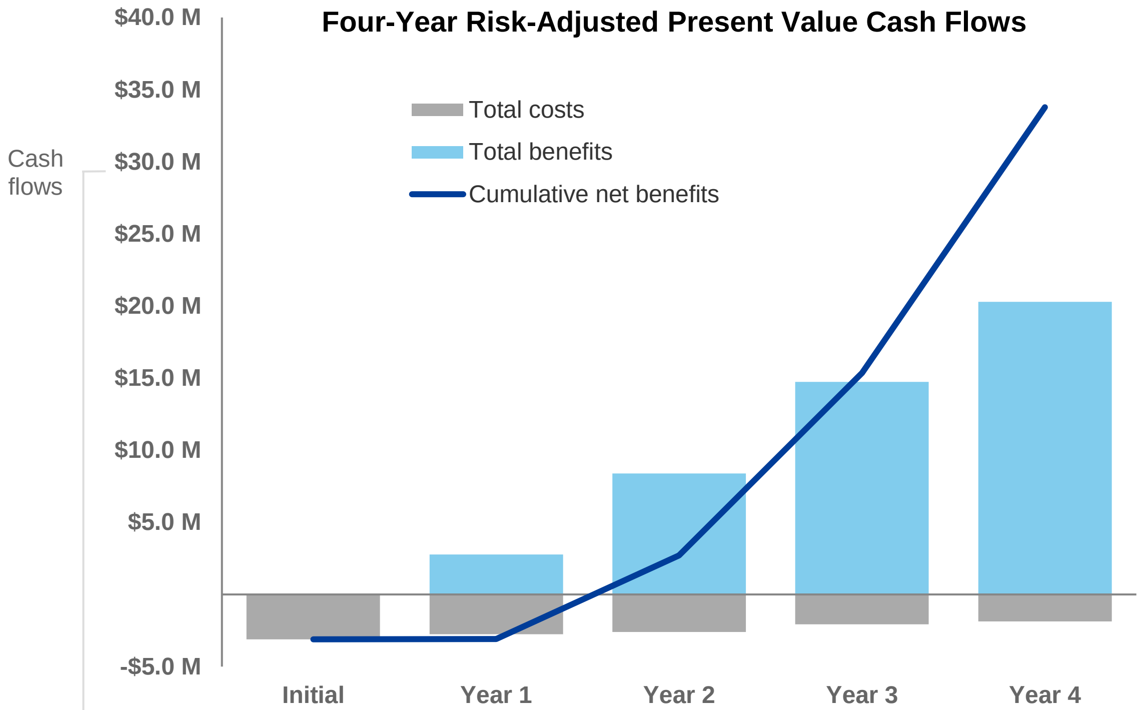
Unquantified benefits. The interviewed organizations experienced the following benefits on top of those quantified, which are not quantified for this study:

- **Faster compliance with new regulations.** With all booking centers using the same platform, the banks can update their compliance to meet changing banking regulations faster, reducing risks.
- **Improved employee engagement.** Better tools and processes enable the RMs and others to better do their jobs and collaborate more easily, improving their experience and, in turn, improving retention rates, reducing absenteeism, and improving productivity.
- **Increased business flexibility.** Organizations' flexibility improves in several ways: Firms can more easily implement additional elements of the Appway platform; RMs and customers can more easily move between booking centers; and integrating additional booking centers through mergers and acquisition (M&A) is easier and faster.

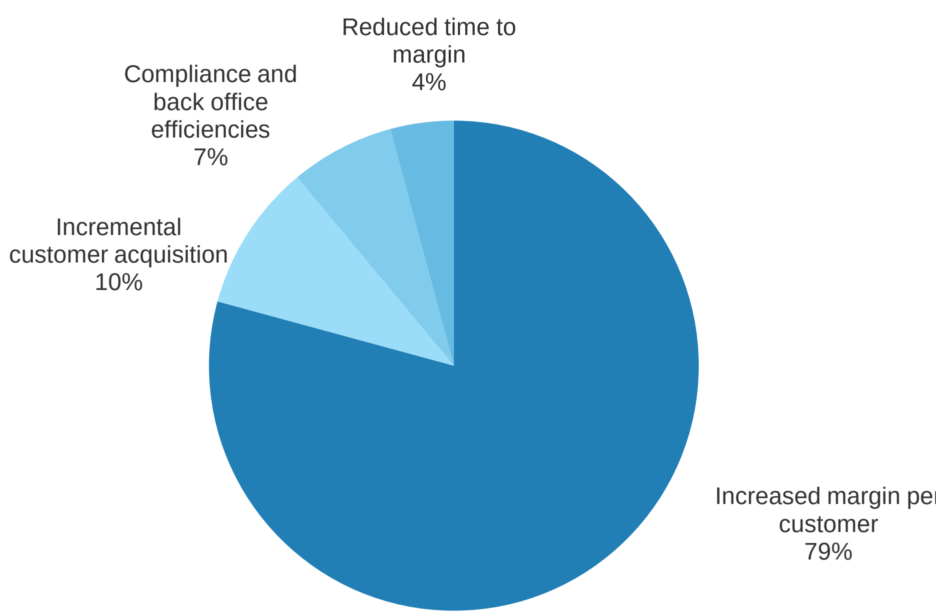
Costs. The interviewed organizations experienced three categories of costs:

- **Licensing fees** include both the annual platform fees as well as the solution costs.
- **Implementation costs** include software customization, integration, and process optimization.
- **Internal costs** include the internal effort required from the banks as well as any third-party services.

Forrester's interviews with two existing customers and subsequent financial analysis found that banks can typically expect business benefits broken down as shown in the charts on the following page:



Benefits By Category



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TEI Framework And Methodology

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

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 Appway Onboarding for Wealth Management can have on an organization:

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

DUE DILIGENCE
Interviewed Appway stakeholders and Forrester analysts to gather data relative to Onboarding for Wealth Management.

CUSTOMER INTERVIEWS
Interviewed two organizations using Onboarding for Wealth Management 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 Appway Onboarding for Wealth Management's impact: benefits, costs, flexibility, and risks. Given the increasing sophistication that enterprises have regarding ROI analyses related to IT investments, Forrester's TEI methodology serves to provide a complete picture of the total economic impact of purchase decisions. Please see Appendix A for additional information on the TEI methodology.

The Onboarding for Wealth Management Customer Journey

BEFORE AND AFTER THE ONBOARDING FOR WEALTH MANAGEMENT INVESTMENT

Interviewed Organizations

For this study, Forrester conducted two interviews with Appway Onboarding for Wealth Management customers. Interviewed customers include the following:

TYPE OF FINANCIAL INSTITUTION	REVENUES	EMPLOYEES	INTERVIEWEE	NUMBER OF BOOKING CENTERS
Global bank with private banking division	~$25 billion	~90,000	Chief operating officer, wealth management	11
Specialized wealth management institution	~$2 billion	~4,000	Group project manager	5

Key Challenges

The main challenges and pain points that the interviewed banks wanted to address were:

- **Long customer onboarding times.** The key challenge was to reduce the customer onboarding time, which averaged 45 days but ranged from 20 days up to several months in certain regions.
- **Regional misalignments.** The processes and technology platforms in use varied by region and even by different booking centers in the same region. The customer experience was, therefore, very different from one center to another. Furthermore, significant inefficiencies existed with this heterogenous setup, resulting in the need for separate individual compliance updates whenever regulations changed for the different booking centers.
- **Uncertain client regulatory data quality.** The misalignment of the compliance processes between booking centers, as well as the lack of automation, resulted in uncertainties over the quality of client regulatory data. As a result, the banks faced compliance risks and potentially costly data auditing requirements.
- **Complex and inefficient onboarding processes and workflows.** The process of onboarding new customers was complex and inefficient. This not only resulted in slow and lengthy processes and workflows but also meant a lot of back-and-forth between departments and customers.

> "Onboarding was a big challenge at a global level, even though the business was operated very regionally at this time."
>
> *COO, global bank*

Implementation

The implementation of the Onboarding for Wealth Management solution is multifaceted and includes a set of workshops, frameworks, and best practices to understand requirements, agree on workflows, and ensure stakeholder buy-in to support the change management efforts. The implementation also includes software customization and testing; furthermore, the back-end integration with banking platforms and other software applications involves implementation costs.

The onboarding solution reflects the updated processes established throughout the bank; these processes are then implemented across the booking centers. The specialized wealth management institution was able to implement onboarding to natural persons in a year and added onboarding for legal entities nine months later; the large global bank, however, took longer as it took a phased approach covering natural persons and legal entities as well as more complex structures such as private investment companies, trusts, foundations, funds, and holdings.

> "We needed to align processes across our different booking centers. Onboarding was very complex, with lots of back-and-forth between departments. This was a big pain point and it took a lot of time from the relationship managers."
>
> *Project manager, specialized wealth management firm*

Key Results

The interviews revealed that key results from the Onboarding for Wealth Management investment include:

- **Significant reduction in onboarding time.** The onboarding process is streamlined, with fewer meetings, less documentation back-and-forth, fewer follow-ups, and fewer mistakes, improving CX. Onboarding times have decreased by nearly 90%; as a result, customers are more confident in using more of the banks' services.
- **Increased revenue growth driven by better CX**. The improved CX has resulted in higher revenue and margin per customer as well as incremental customer acquisition, delivering higher revenue growth and increased margins. The banks are better equipped to attract higher-net-worth customers and avoid losing prospects during the onboarding process.
- **Streamlined workflows and processes.** Improved workflows, automated document generation, and improved collaboration capabilities have reduced task time and eliminated errors and additional back-and-forth. These are now aligned across the regions and booking centers, freeing up resources. One customer told Forrester that it managed to maintain the same level of headcount with the Appway implementation despite significant regulatory changes and an increased burden of compliance requirements. The other told us that for some booking centers, it may be just one FTE saving, but for others, it could be up to four; it depends on the legacy setup.
- **Better CX due to improved EX.** The faster onboarding time, better collaboration capability, and reduced task times have improved employee experience, freeing up RMs' time and enabling them to better serve customers. One of the interviewed bank representatives also told us that because the user experience is better, the bank can better attract and retain high-quality relationship managers, further contributing to an improved CX. Onboarding of new RMS is also faster.

> "Average onboarding times fell from 45 days to five to six days, freeing up resources so we are able to grow faster."
>
> *COO, global bank*

Roadmap

As the new processes have matured and the different elements of the implementations have been completed across all the booking centers, banks have fully realized the benefits. Appway's underlying platform supports not only the onboarding process; organizations can implement additional solutions to support the whole customer lifecycle. Both of the organizations interviewed have implemented or are starting to implement capabilities including file review, know-your-customer (KYC) review, and client update.

Furthermore, one of the bank interviewees told us that its systems are now more agile, making it easier and faster to integrate additional booking centers should they choose to make acquisitions in the future.

Analysis Of The Composite Bank

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

Description of composite. The composite bank is a cross-regional, financial institution with revenues of $2B and 4,000 employees. It operates five booking centers, covering Europe and Asia Pacific. Before the deployment of the Onboarding for Wealth solution and underlying Appway platform, the wealth management division had 15,000 accounts and an average revenue of $100,000 per account; with an operating profit margin of 10%; this equated to an average margin per customer of $10,000.

Deployment characteristics. The bank implements the solution, covering onboarding both for natural persons and legal entities, across four booking centers initially, with the fifth becoming live from the end of Year 1. The implementation of the solution includes streamlining and aligning the onboarding process across the regions and introduces a new operating model. Internal costs include the resources required for planning and implementing the solution, improving processes and workflows, and third-party services. In some cases, the internal skills may not be available or sufficient, and it makes more sense to work with external consultants and/or technicians.

Key assumptions
5 booking centers
15,000 customers
$100,000 average revenue per customer
10% operating margin

The number of accounts and the incremental number of accounts driven by the Appway implemented onboarding solution, as well as the cumulative numbers (which assume a 10% annual churn rate), are shown in the table below:

	INITIAL	YEAR 1	YEAR 2	YEAR 3	YEAR 4
Total new accounts opened on the Appway platform	0	1,500	2,000	2,500	2,500
Cumulative accounts opened on the Appway platform		1,500	3,350	5,515	7,464
Incremental number of accounts opened on the Appway platform (5%)	0	75	100	125	125
Cumulative number of incremental accounts		75	168	276	373

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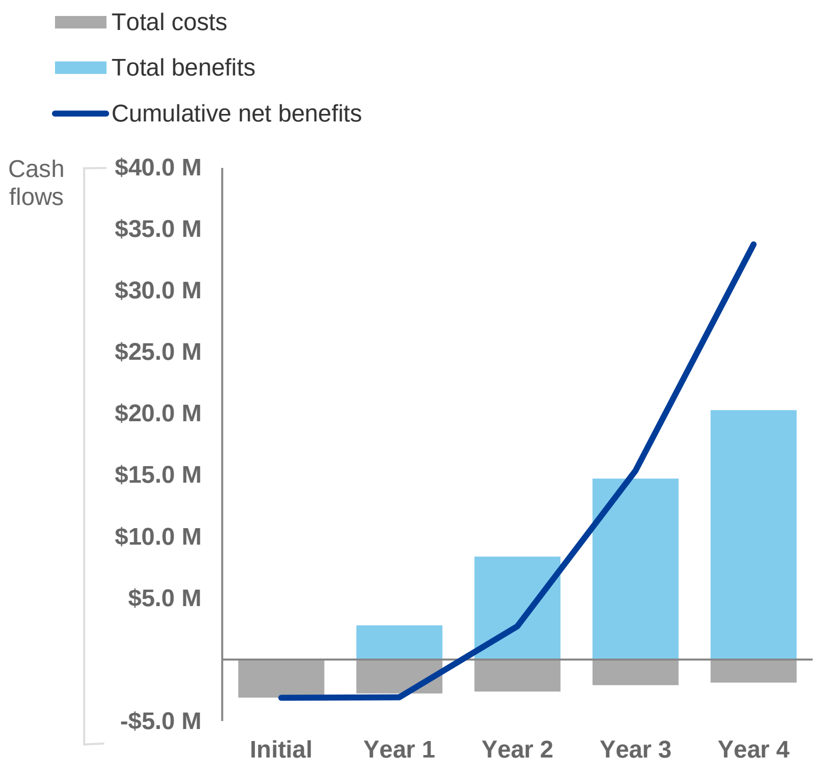
Composite Bank Financial Summary

CONSOLIDATED FOUR-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	Year 4	Total	Present Value
Total costs	($3,109,350)	($2,749,350)	($2,599,350)	($2,074,350)	($1,864,350)	($12,396,750)	($10,588,849)
Total benefits	$0	$2,776,250	$8,381,000	$14,730,833	$20,286,083	$46,174,167	$34,373,471
Net benefits	($3,109,350)	$26,900	$5,781,650	$12,656,483	$18,421,733	$33,777,417	$23,784,622
ROI							225%
Payback period (months)							19.0

Analysis Of Benefits

Total Benefits

REF.	BENEFIT	YEAR 1	YEAR 2	YEAR 3	YEAR 4	TOTAL	PRESENT VALUE
Atr	Increased margin per customer	$1,875,000	$6,187,500	$11,818,750	$16,886,875	$36,768,125	$27,231,746
Btr	Incremental customer acquisition	$375,000	$837,500	$1,378,750	$1,865,875	$4,457,125	$3,343,351
Ctr	Compliance and back-office efficiencies	$360,000	$900,000	$900,000	$900,000	$3,060,000	$2,361,970
Dtr	Reduced time-to-margin	$166,250	$456,000	$633,333	$633,333	$1,888,917	$1,436,404
	Total benefits (risk-adjusted)	$2,776,250	$8,381,000	$14,730,833	$20,286,083	$46,174,167	$34,373,471

Increased Margin Per Customer

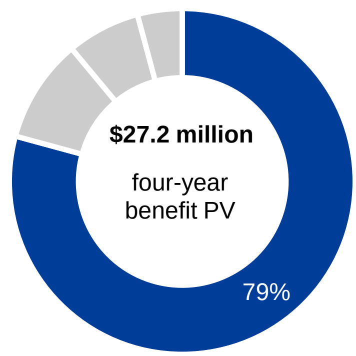
The largest benefit, accounting for nearly 80% of the total, is the increased margin per customer. Appway's onboarding solution reduces the onboarding time for new customers at the composite bank from 45 days down to five. This has a number of implications that together deliver a better CX so that the value per customer increases by 10%.

To model this benefit, Forrester assumes:

- The revenue per customer is initially $100K; with a 10% profit margin, the profit per customer is $10,000.
- The value per customer increases by 5% initially, growing to 10%, adding $5K to $10K in incremental revenue. Forrester applies a 50% margin ratio to account for the increased variable costs, including the additional bonus due to the RMs and additional money management costs.
- The number of Appway accounts grows over time, as outlined in the Analysis Of The Composite Bank section. Forrester uses this to calculate the cumulative number of Appway accounts (assuming a 10% churn rate).
- Thus, the total margin increases driven by the higher value of Appway onboarded customers provides a basis for the calculation.

Forrester applies a relatively high risk adjustment of 50% because neither interviewed organization could share the numbers across regions. The assumptions are based on the reported revenue growth from one region of one of the organizations that has been using the implemented solution for the longest time. This yielded a four-year, risk-adjusted total PV of more than $27.2M.

The table above shows the total of all benefits across the areas listed below, as well as present values (PVs) discounted at 10%. Over three years, the composite organization expects risk-adjusted total benefits to be a PV of nearly $34.4 million.



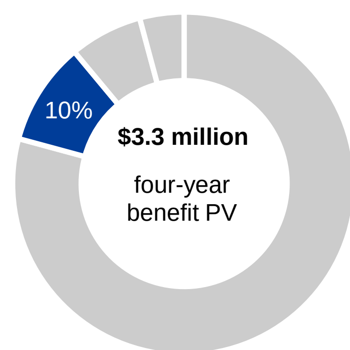
Incremental margin per customer: 79% of total benefits

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

Increased Margin Per Customer: Calculation Table						
REF.	METRIC	CALCULATION	YEAR 1	YEAR 2	YEAR 3	YEAR 4
A1	Revenue per account		$100,000	$100,000	$100,000	$100,000
A2	Incremental revenue per account		5%	9%	10%	10%
A3	Incremental revenue per account	A1*A2	$5,000	$9,000	$10,000	$10,000
A4	Margin ratio		50%	50%	50%	50%
A5	Incremental margin per Appway account	A3*A4	$2,500	$4,500	$5,000	$5,000
A6	Number of new Appway accounts		1,500	2,000	2,500	2,500
A7	Cumulative number of Appway accounts	10% churn	1,500	3,350	5,515	7,464
At	Increased margin per customer	Y1: A5*A7 Y2-Y4: At_{PY}*90%+A5*A6	$3,750,000	$12,375,000	$23,637,500	$33,773,750
	Risk adjustment	↓50%				
Atr	Increased margin per customer (risk-adjusted)		$1,875,000	$6,187,500	$11,818,750	$16,886,875

Incremental Customer Acquisition

Forrester assumes that 5% of the accounts opened through Appway are over and above the amount prior to the implementation. The estimations of incremental accounts are provided in the Analysis Of The Composite Bank section.



Forrester used the number of incremental accounts to calculate the cumulative number of incremental accounts (assuming 10% churn rate). Because Forrester includes the increased customer value benefits in the first benefit category, this calculation only uses the margin per customer prior to Appway implementation to avoid double-counting.

Forrester applies a high risk adjustment of 50% mainly because neither organization could share the numbers across regions. The assumptions are based on the reported revenue growth from one region of one of the organizations that has been using the implemented solution for the longest time; furthermore, the adjustment accounts for differences in legacy setups and potential delays in implementations. The total four-year, present-value, risk-adjusted amount comes to just over $3.3M, equivalent to 10% of the total quantified benefits.

Incremental customer acquisition: 10% of total benefits

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Incremental Customer Acquisition: Calculation Table						
REF.	METRIC	CALCULATION	YEAR 1	YEAR 2	YEAR 3	YEAR 4
B1	Number of new account openings		1,500	2,000	2,500	2,500
B2	Number of incremental accounts		75	100	125	125
B3	Cumulative number of incremental accounts	10% churn	75.000	167.500	275.750	373.175
B4	Margin per account (excluding Appway increase)		$10,000	$10,000	$10,000	$10,000
Bt	Incremental customer acquisition	B3*B4	$750,000	$1,675,000	$2,757,500	$3,731,750
	Risk adjustment	↓50%				
Btr	Incremental customer acquisition (risk-adjusted)		$375,000	$837,500	$1,378,750	$1,865,875

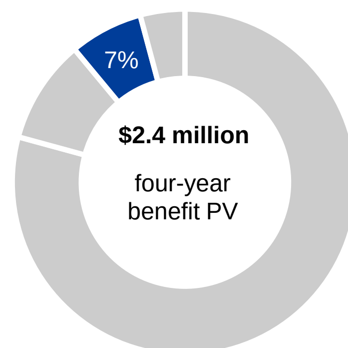
Compliance And Back-Office Efficiencies

For the financial model, Forrester assumes:

- The number of impacted booking centers is four in Year 1 with the fifth coming online at the end of Year 1; thus, from Year 2 onward, these efficiencies impact all five booking centers.
- The composite bank initially avoids one FTE per booking center in Year 1, growing to two from Year 2 onward.
- The average fully loaded annual salary of a back-office employee is $100,000.

Forrester has risk-adjusted the back-office efficiency benefit downward by 10% to account for differences in legacy setups, potential for implementation delays, and differences in regulatory requirements.

The total four-year, risk-adjusted present value of the back-office efficiencies comes to nearly $2.4 million, equivalent to 7% of the total present value benefits.



Compliance and back-office efficiencies: 7% of total benefits

Compliance And Back-Office Efficiencies: Calculation Table						
REF.	METRIC	CALCULATION	YEAR 1	YEAR 2	YEAR 3	YEAR 4
C1	Number of booking centers impacted		4	5	5	5
C2	Number of back-office FTEs saved per booking center		1.0	2.0	2.0	2.0
C3	Number of FTEs avoided	C1*C2	4	10	10	10
C4	Average annual back-office FTE fully loaded salary		$100,000	$100,000	$100,000	$100,000
Ct	Compliance and back-office efficiencies	C3*C4	$400,000	$1,000,000	$1,000,000	$1,000,000
	Risk adjustment	↓10%				
Ctr	Compliance and back-office efficiencies (risk-adjusted)		$360,000	$900,000	$900,000	$900,000

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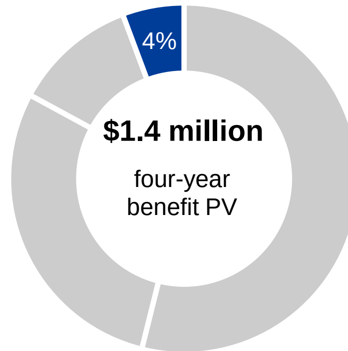
Reduced Time-To-Margin



Reduced time-to-margin: 4% of total benefits

The fourth benefit this analysis quantifies is the reduced time-to-margin. The onboarding time decreases from 45 days to five; therefore, the client revenues come into the bank eight weeks sooner — and these revenues can be used to drive margins sooner.

In this calculation, Forrester multiplies the portion of the year, out of a total of 225 working days per year, and the total margin from Appway onboarded accounts. Forrester then multiples this by 10%, which is the average discount rate or return on capital, to calculate the reduced time-to-margin benefit.

Forrester has risk-adjusted this benefit downward by 5% to account for more complex legacy setups or the possibility that the implementation is delayed, yielding a four-year, risk-adjusted total PV of more than $1.4M, equivalent to 4% of total present value benefits.

Reduced Time-To-Margin: Calculation Table

REF.	METRIC	CALCULATION	YEAR 1	YEAR 2	YEAR 3	YEAR 4
D1	Average onboarding time before Appway (days)		45	45	45	45
D2	Average onboarding time after Appway (days)		10	5	5	5
D3	Reduction in onboarding time (days)	D1-D2	35	40	40	40
D4	Margin from new accounts		$11,250,000	$27,000,000	$37,500,000	$37,500,000
Dt	Reduced time-to-margin	(D3/225)*D4*10%	$175,000	$480,000	$666,667	$666,667
	Risk adjustment	↓5%				
Dtr	Reduced time to margin (risk-adjusted)		$166,250	$456,000	$633,333	$633,333

Unquantified Benefits

The interviewed customers highlighted other benefits that Forrester could not quantify for the analysis:

- Following the 2008 financial crisis, regulators are increasing compliance requirements on financial institutions. Regulatory changes have also become more frequent, so the burden on compliance departments has increased. Appway's solution enables quick implementation of changes of the onboarding process due to new regulatory requirements. This helps banks to reduce risks.
- Updated workflows and processes and the collaboration capabilities of the platform yielded faster RM onboarding.
- Having access to tools that enable better collaboration and faster customer onboarding yields employee experience benefits for relationship managers. A better employee experience delivers multiple benefits, including higher productivity, lower staff turnover, reduced absenteeism, and lower recruitment costs.

The solution enables banks to more quickly comply to changing regulations.

Flexibility

Deploying the Onboarding for Wealth Management solution and the underlying Appway platform also created the foundation to implement

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additional processes to cover the full client lifecycle. Both interviewed banks started implementing such processes, such as file review, KYC review, and client update. Reusing the implemented capabilities will mean reduced cost per implemented additional process.

The banks are now also more flexible, in the sense that their processes and workflows are very similar across their different booking centers. This means that it is much easier for any relationship manager to serve customers from any booking center; both customers and relationship managers can to move location more easily.

Finally, organizations are better prepared for future M&A activities; additional units can be integrated faster into the organization.

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

Analysis Of Costs

Total Costs								
REF.	**COST**	**INITIAL**	**YEAR 1**	**YEAR 2**	**YEAR 3**	**YEAR 4**	**TOTAL**	**PRESENT VALUE**
Etr	Licensing fees	$556,350	$556,350	$556,350	$556,350	$556,350	$2,781,750	$2,319,905
Ftr	Implementation costs	$1,050,000	$1,050,000	$1,260,000	$735,000	$525,000	$4,620,000	$3,956,666
Gtr	Internal costs	$1,440,000	$1,080,000	$720,000	$720,000	$720,000	$4,680,000	$4,049,576
Htr	Infrastructure costs	$63,000	$63,000	$63,000	$63,000	$63,000	$315,000	$262,702
	Total costs (risk-adjusted)	$3,109,350	$2,749,350	$2,599,350	$2,074,350	$1,864,350	$12,396,750	$10,588,849

Licensing Fees

The licensing fees consist of the platform and solution fees. The platform cost is the license for the Appway platform and is typically priced on a per-user basis. The annual platform fees come to just over $350K per year.

The solution fees are also subscription based and reflect the services, support, and maintenance costs. Annually, these fees come to just over $200K.

The total licensing fees therefore amount to just over $556K per year. There are no risk adjustments required; the four-year present value totals to just over $2.3M.

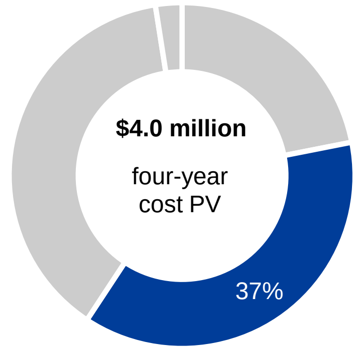
The table above shows the total of all costs across the areas listed below, as well as present values (PVs) discounted at 10%. Over four years, the composite organization expects risk-adjusted total costs to be a PV of nearly $10.6 million.

Licensing Fees: Calculation Table							
REF.	**METRIC**	**CALCULATION**	**INITIAL**	**YEAR 1**	**YEAR 2**	**YEAR 3**	**YEAR 4**
E1	Solution		$202,500	$202,500	$202,500	$202,500	$202,500
E2	Platform		$353,850	$353,850	$353,850	$353,850	$353,850
Et	Licensing fees	E1+E2	$556,350	$556,350	$556,350	$556,350	$556,350
	Risk adjustment	0%					
Etr	Licensing fees (risk-adjusted)		$556,350	$556,350	$556,350	$556,350	$556,350

Implementation Costs

The implementation costs account for nearly two-fifths of the total costs. The implementation costs are ongoing as the solution is rolled out across the different booking centers. In Year 1, implementation costs amount to $1.0M; they increase to $1.2M in Year 2. In Year 3, they fall to $700K, and in Year 4, they decline to $500K.

Forrester applies a small 5% adjustment to these costs to account for the risk of additional implementation costs for banks that have different legacy systems and technologies that could complicate the implementation. The resulting four-year, risk-adjusted present value of these costs comes to just under $4.0M.



Implementation costs: 37% of total costs

Implementation Costs: Calculation Table

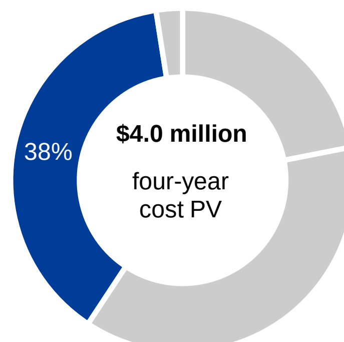
REF.	METRIC	CALCULATION	INITIAL	YEAR 1	YEAR 2	YEAR 3	YEAR 4
F1	Implementation costs		$1,000,000	$1,000,000	$1,200,000	$700,000	$500,000
Ft	Implementation costs	F1	$1,000,000	$1,000,000	$1,200,000	$700,000	$500,000
	Risk adjustment	↑5%					
Ftr	Implementation costs (risk-adjusted)		$1,050,000	$1,050,000	$1,260,000	$735,000	$525,000

Internal Costs

On an annual basis, the composite bank requires between six and 12 full-time equivalents, including time for planning, stakeholder workshops, IT integration, and other resources required to change and implement new workflows and processes.

Forrester assumes a fully loaded salary rate of $100,000; this is an average estimation because, for most companies, this is likely to include a range of different types of employees. Forrester applies a moderate to high 20% risk adjustment to account for different legacy setups and the potential for higher internal costs in different environments, skills capabilities, and structures.

The four-year, risk-adjusted present value of the internal costs amounts to $4.0M; this is equivalent to 38% of the total present value costs.



Internal costs: 38% of total costs

Internal Costs: Calculation Table

REF.	METRIC	CALCULATION	INITIAL	YEAR 1	YEAR 2	YEAR 3	YEAR 4
G1	Number of FTEs		12	9	6	6	6
G2	Average fully loaded FTE salary		$100,000	$100,000	$100,000	$100,000	$100,000
Gt	Internal costs	G1*G2	$1,200,000	$900,000	$600,000	$600,000	$600,000
	Risk adjustment	↑20%					
Gtr	Internal costs (risk-adjusted)		$1,440,000	$1,080,000	$720,000	$720,000	$720,000

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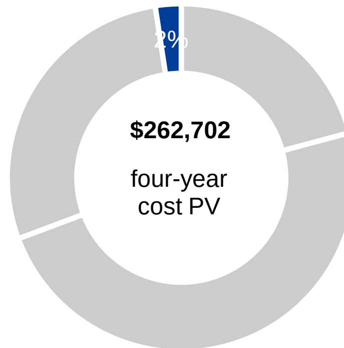
Infrastructure Costs

To support the new platform, the composite bank also needs to invest in infrastructure (either on-premises or in the cloud). In the case of the composite bank, it partners with a private cloud service provider, with costs of $60K per year. In the case of on-premises implementations, the costs would be higher upfront because of the need to acquire and configure new hardware.

Forrester applies a 5% risk adjustment to account for potential differences in infrastructure costs in case of different legacy setups and/or internal technical capabilities. The four-year, risk-adjusted present value of the infrastructure costs amounts to nearly $263K. This is equivalent to 2% of the total present value costs.



Infrastructure costs: 2% of total costs

Infrastructure Costs: Calculation Table

REF.	METRIC	CALCULATION	INITIAL	YEAR 1	YEAR 2	YEAR 3	YEAR 4
H1	Infrastructure costs		$60,000	$60,000	$60,000	$60,000	$60,000
Ht	Infrastructure costs	H1	$60,000	$60,000	$60,000	$60,000	$60,000
	Risk adjustment	↑5%					
Htr	Infrastructure costs (risk-adjusted)		$63,000	$63,000	$63,000	$63,000	$63,000

Implementation risk is the risk that a proposed investment may deviate from the original or expected requirements, resulting in higher costs than anticipated. The greater the uncertainty, the wider the potential range of outcomes for cost estimates.

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About Appway

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

By automating workflows across people, systems, and data, Appway gives financial services businesses everything they need to get the job done and provide exceptional experiences at every touchpoint.

Its award-winning software is trusted by 10 of the top 25 wealth managers to digitize, automate, and accelerate core business processes, such as the onboarding of new clients, managing changing client circumstances, and regulatory reviews. With its reusable components, Appway allows firms to create business applications in a scalable and flexible way.

Industry-leading institutions — including Credit Suisse, HSBC, BNY Mellon, Manulife, LGT, and LPL Financial — rely on Appway to improve customer experience and boost internal efficiencies, in full compliance with complex industry regulations. Headquartered in Switzerland with offices around the globe, Appway serves customers while collaborating with an extensive ecosystem of consulting, implementation, and technology partners.

Its solutions for wealth managers, private banks, broker-dealers, asset managers, multifamily offices, and universal banks cover every aspect of modern client lifecycle management (CLM).

Client Onboarding In Wealth Management And Private Banking

Supports private banks, wealth managers, broker-dealers, multifamily offices, and universal banks to cover all the complexities involved in opening client relationships with (U)HNWIs, corporate customers, and complex structures — like trusts, foundations, and funds — while guaranteeing compliance with all applicable industry regulations.

Onboarding In Retail Banking

Helps universal and retail banks attract new customers — both private and corporate clients (legal entities) — by offering seamless self- and in-branch onboarding with optimal convenience, cross-channel reliability through different interaction modes, and zero wait time after signup so they can move on to assess other products and services.

KYC And Regulatory Reviews

Facilitates ongoing compliance checks and client dossier scrutiny beyond the initial onboarding stage by automating processes like KYC, AML, Periodic Reviews, CRS, and FATCA profiling. Empowers compliance experts to take comprehensive control over reviews, in line with the latest applicable regulations, while transparently managing risks across multiple jurisdictions.

Smart Client Update And Account Maintenance

Provides financial advisors with a set of tools and templates to offer clients hyperpersonalized, holistic management of their changing circumstances and ongoing account maintenance. Enables cross-departmental collaboration with subject matter experts, allowing them to solve multifaceted tasks resulting from material changes in the most efficient and cost-effective way.

Digital Mortgage

Allows institutions to streamline the loan origination process by coordinating client interactions across channels, thereby delivering a transparent, personalized, and frictionless customer experience. Helps deliver a relevant and personalized experience whether online or through physical channels.

CRM+CLM with Salesforce

Turns the client prospect-to-client phase into a competitive advantage for financial services institutions. The CLM for Wealth app, available on the Salesforce AppExchange, offers relationship managers a “one-stop shop” experience for all aspects related to the onboarding of new customers, to create outstanding client experiences and significantly faster account opening time cycles.

For more information, please see www.appway.com or follow Appway on LinkedIn.

Appendix A: Total Economic Impact

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

Total Economic Impact Approach

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

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

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

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

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

Present value (PV)

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

Net present value (NPV)

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

Return on investment (ROI)

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

Discount rate

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

Payback period

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

Appendix B: Supplemental Material

Related Forrester Research

"Now Tech: Digital Banking Engagement Platforms, Q4 2018," Forrester Research, Inc., December 28, 2018

"The Evolution Of Digital Banking Platform Architecture," Forrester Research Inc., April 6, 2020

Appendix C: Endnotes

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[1] Margin per customer is defined as the total operating profit of the wealth management business divided by the number of customer accounts.
[2] Incremental customer acquisition is defined as the additional customer accounts acquired annually following the implementation of the solution.
[3] Compliance and back-office efficiencies refer to full-time equivalent functions that support relationship managers, including compliance, auditing, and administration.
[4] Reduced time-to-margin is a measure that quantifies the financial benefit of bringing in revenue — and hence margin — sooner, using a 10% discount rate.