## Forrester<sup>®</sup>



The Total Economic Impact™
Of Arc XP

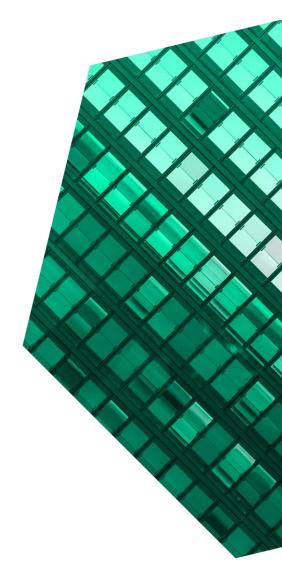
Cost Savings And Business Benefits Enabled By Arc XP

**FEBRUARY 2022** 

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#### ABOUT FORRESTER CONSULTING

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## **Executive Summary**

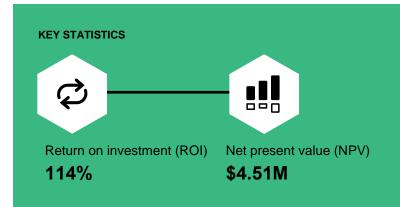
Arc XP provides an end-to-end digital experience platform that includes a content management system, commerce engine, and front-end website platform. Arc XP helps its customers to operate more effectively, publish more content, deliver omnichannel experiences, lower costs, and grow digital revenue. For media companies, Arc XP enhances the end user experience, which leads to greater site traffic, increased time on site, and higher digital advertising and subscription revenue.

Arc XP is a cloud-native digital experience platform (DXP) built on AWS that allows its customers to easily create and distribute content, facilitate digital subscriptions and commerce, and deliver attractive omnichannel customer experiences. Arc XP includes a fully hosted website platform with a built-in content delivery network (CDN) and guaranteed uptime to keep its customers' properties running fast and reliably.

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

To better understand the benefits, costs, and risks associated with this investment, Forrester interviewed four decision-makers with experience using Arc XP. For the purposes of this study, Forrester aggregated the interviewees' experiences and combined the results into a single composite organization.

Prior to using Arc XP, these interviewees noted that their legacy content management system (CMS) and underlying website infrastructure did not support their digital needs, were expensive to maintain, and lacked the reliability and stability that their digital properties required. These limitations negatively impacted the end user experience, making it difficult for the interviewees' companies to monetize their digital



properties via advertising and paid digital subscriptions. Digital properties were an increasingly critical component of the interviewees' overall growth strategy, and as a result, they required better underlying infrastructure.

After the investment in Arc XP, the interviewees' companies could focus on the business of news delivery and not worry about the underlying infrastructure. Journalists and editors published more digital content faster. Developers spent less time maintaining infrastructure and could focus on higher value tasks, such as new product development. The companies' digital properties experienced improved performance with higher reliability, traffic growth, and enhanced end user experience. The interviewed companies could more effectively monetize their digital properties, growing both advertising and digital subscription revenue.

# [With Arc XP] it's a whole different experience. The site loads faster. We have more information. We have more traffic. We have more engagement with people.

— Director general of a media company in Mexico

#### **KEY FINDINGS**

**Quantified benefits.** Risk-adjusted present value (PV) quantified benefits for the composite organization include:

- Improvement to the editorial team's productivity 50% productivity improvement. The editorial team at the composite organization works more efficiently and produces more digital content with Arc XP. Arc XP is easy to use, and it simplifies the content editing and production process. The editorial team publishes twice as much digital content with Arc XP.
- Improvement to developers' productivity —
   67% productivity improvement. The
   developers spend less time maintaining
   infrastructure and legacy systems after the
   composite organization deploys Arc XP, which is
   cloud native. The developers use the time they
   save with Arc XP to focus on new, more valuable
   projects to support revenue growth.

- Digital subscription growth \$1.6 million incremental annual revenue by Year 3. With Arc Subscriptions, the composite organization more easily grows and manages its paid digital subscriber base. By Year 3, the composite organization adds 30,000 new digital subscribers, which grows subscription revenue by \$1.6 million.
- Increased digital advertising revenue \$1.2
  million incremental annual revenue by Year 3.
  Arc XP improved search engine optimization
  (SEO) for the composite organization's digital
  properties, drawing more traffic and increasing
  page views and impressions. The growth in
  visitors and impressions led to higher digital
  advertising revenue.
- Decommissioned legacy systems \$500,000 in annual cost savings. The composite organization was able to cut costs by decommissioning legacy systems after deploying Arc XP.



**Unquantified benefits.** Additional benefits that the interviewees experienced but were not quantified for this study include:

- Better digital property performance. The interviewees reported that with Arc XP their websites' performance improved significantly with better reliability and faster page load speeds.
- Enhanced end user experience. With Arc XP, the interviewees' digital publications now offer more content with better reliability. Readers and subscribers had a better overall digital experience and spent more time on the interviewees' websites.
- Arc XP partnership and community. The
  interviewees' shared that Arc XP has been a
  good partner and continues to innovate. They
  appreciated the ability to draw on the expertise of
  other companies around the globe using Arc XP.

"Our philosophy was we are not in the software development business. We are in the news delivery and marketing business. We want our staff focused on the product, the things that make us unique and the front-end user experience, not the plumbing and the foundational work."

Chief product officer, media company US

Costs. Risk-adjusted PV costs include:

 Arc XP subscription cost and professional services — \$1.8 million PV over three years.
 The composite organization uses Arc XP's professional services to deploy Arc XP. The

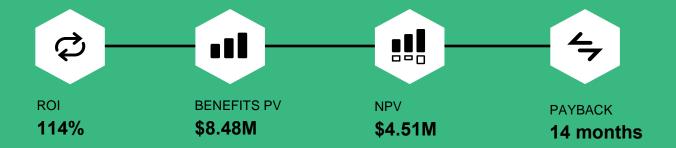
- organization pays a monthly subscription fee to Arc XP for use of its DXP.
- Internal team to install and maintain Arc XP \$2.1 million PV over three years. A crossfunctional internal team is dedicated to the Arc XP implementation and subsequent ongoing Arc XP maintenance.

"With [Arc XP] we don't have to waste a lot of time and effort trying to identify problems that are related to technology. That's not our core. Our core is to write and publish relevant pieces of information to work on more serious journalism. Our people are now fully focused on creating the content."

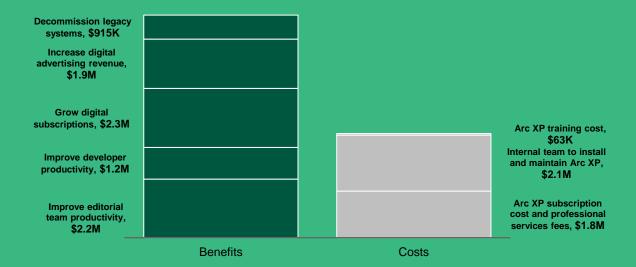
Director general of media company Mexico

Arc XP training — \$63,000 PV over three years. The training time to learn Arc XP is minimal. Arc XP users spend between 2 hours to 2 days training on Arc XP, depending on their role.

The decision-maker interviews and financial analysis found that a composite organization experiences benefits of \$8.48 million over three years versus costs of \$3.97 million, adding up to a net present value (NPV) of \$4.51 million and an ROI of 114%.



#### **Financial Summary (Three-Year)**





#### 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 Arc XP.

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 Arc XP can have on an organization.

#### **DISCLOSURES**

Readers should be aware of the following:

This study is commissioned by Arc XP 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 Arc XP.

Arc XP 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.

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



#### **DUE DILIGENCE**

Interviewed Arc XP stakeholders and Forrester analysts to gather data relative to Arc XP.



#### **DECISION-MAKER INTERVIEWS**

Interviewed four decision-makers at media organizations using Arc XP to obtain data with respect to costs, benefits, and risks.



#### **COMPOSITE ORGANIZATION**

Designed a composite media organization based on characteristics of the interviewees' 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 decision-makers.



#### **CASE STUDY**

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

## The Arc XP Customer Journey

Drivers leading to the Arc XP investment

Interviewed Decision-Makers							
Interviewee	Industry	Region	Arc XP users				
Editor general	Media	Chile	300				
Director general	Media	Mexico	30				
Editor and director general	Media	South Korea	250				
Chief product officer	Media	USA	555				

#### **KEY CHALLENGES**

Prior to Arc XP, the composite organization used a disparate set of tools to support its digital properties including a CMS, a digital asset management (DAM) tool, a subscription management system, and a CDN. Most of the solutions, except for the CDN, were developed in house.

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

- Infrastructure did not support the shift to digital. It was time-consuming and inefficient for editors, journalists, and the website team to upload and update digital content. This limited the amount of digital content that the interviewees' organizations could publish and the resulting timeliness of the content.
- Infrastructure was expensive to maintain. A
  large team of developers supported the legacy
  systems. This approach was cumbersome and
  took a long time for the developers to update and
  make changes to the digital properties.

• Poor, unreliable digital property performance. Before Arc XP, the digital properties would sometimes crash since the underlying infrastructure was not reliable. Page load speeds were slow. The poor performance made it difficult for the interviewees' organizations to monetize their digital properties and grow their digital subscriber base.

"Previously, if we wanted to make a major change for our home page or to create a new page, we had to go to our design and development team and waste a lot of time. In journalism, everything is needed yesterday."

Editor general of a media company Chile



#### **COMPOSITE ORGANIZATION**

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

"[Before Arc XP] we didn't have the stability and performance our site required to grow. We were paying too much for our infrastructure, and it required a lot of third-party services to develop and maintain. It was not efficient."

Director general of a media company Mexico

Description of composite. The composite organization is a regional digital media company that manages multiple print and digital publications. The company has annual revenue of \$100 million and 500 employees. The organization's media properties include a daily print newspaper and three digital news sites. Print circulation for the daily and Sunday newspapers is 500,000. Before deploying Arc XP, the organization's three digital properties had a total of 30 million unique monthly visitors, 100 million monthly page views, and 20,000 paid digital

#### **Key assumptions**

- Regional media company
- \$100 million revenue
- 3 digital properties
- 250 Arc XP users

subscribers. The organization prices digital subscriptions at \$1.00 per subscriber per week.

Deployment characteristics. The organization uses Arc XP to support its three digital publications. The company's Arc XP subscription provides access to Arc XP's Composer, Photo Center, Video Center, WebSked, and PageBuilder tools to create and manage digital content. The organization uses Arc Subscriptions to support its paid digital subscriptions. Two hundred and fifty people use Arc XP, including product developers, editors, journalists, and freelancers.

Multiple inbound feeds from news agencies bring wire service articles and photos into Arc XP. Arc XP content feeds into print, e-mail, and social channels.

An internal team of nine FTEs and Arc XP's professional services team support the Arc XP implementation. Implementation time is six months, and three FTEs maintain Arc XP on an ongoing basis.

## **Analysis Of Benefits**

Quantified benefit data as applied to the composite

Total	Total Benefits									
Ref.	Benefit	Year 1	Year 2	Year 3	Total	Present Value				
Atr	Improvement to editorial team productivity	\$548,100	\$1,096,200	\$1,096,200	\$2,740,500	\$2,227,814				
Btr	Improvement to developer productivity	\$296,916	\$593,831	\$593,831	\$1,484,578	\$1,206,847				
Ctr	Digital subscription growth	\$468,000	\$936,000	\$1,404,000	\$2,808,000	\$2,253,854				
Dtr	Increased digital advertising revenue	\$576,000	\$748,800	\$973,440	\$2,298,240	\$1,873,839				
Etr	Decommissioned legacy systems	\$225,000	\$450,000	\$450,000	\$1,125,000	\$914,538				
	Total benefits (risk-adjusted)	\$2,114,016	\$3,824,831	\$4,517,471	\$10,456,318	\$8,476,892				

# IMPROVEMENT TO EDITORIAL TEAM PRODUCTIVITY

**Evidence and data.** The interviewees' editorial teams worked more efficiently and produced more digital content with Arc XP.

- The number of editorial team members who are using Arc XP varied considerably from 12 employees to over 500 employees. This includes product developers, editors, journalists, and freelancers.
- The interviewees' organizations published between 2,000 and 18,000 digital articles per month with Arc XP.
- The interviewees' reported that Arc XP allowed their editorial teams to operate more effectively, publish faster, and produce more content. They typically published twice as much digital content with Arc XP. Composer helped the editorial teams to create photo and video rich content more quickly. PageBuilder allowed the interviewees' to easily customize the look and feel of their content and brand pages. While WebSked centralized and automated workflow

management, keeping content creation plans on schedule.

 The director general of a media company in Mexico noted: "The editors and journalists can now do at least double the number of articles with the same number of people. [Arc XP] is easy to use and takes complexity out of their jobs. We can react in almost real time to where trends are happening and publish to our home page faster."

"Everything got faster [with Arc XP]. We were able to produce more articles than before, and we are moving very swiftly."

Editor and director general of a media company South Korea

**Modeling and assumptions.** For the analysis, Forrester assumes:

- organization. Two hundred employees, who are primarily journalists, are light users of Arc XP; they spend 20% of their time interacting with Arc XP. While another 50 employees are heavy users of Arc XP, including product developers and editors. These employees spend 80% of their time interacting with Arc XP.
- The editorial team saves 50% of their time with Arc XP.
- There is a learning curve for the editorial team to realize all the productivity benefits that are associated with Arc XP. By Year 2, the editorial team realizes 100% of the productivity benefit.
- The average annual salary, including benefits, for an editorial team member is \$78,300 (or \$58,000 annual salary plus benefits).

# Increased digital content creation by





 The editorial team converts 50% of the hours saved into productive time.

Risks. This benefit will vary based on:

- The number of editorial team members using Arc XP.
- The average editorial team salary.

**Results.** To account for these risks, Forrester adjusted this benefit downward by 20%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of over \$2.2 million.

Impro	ovement To Editorial Team	Productivity			
Ref.	Metric	Source	Year 1	Year 2	Year 3
A1	Arc users light use (FTEs)	Composite	200	200	200
A2	Arc users light use (% of time using Arc)	Composite	15%	15%	15%
А3	Arc users heavy use (FTEs)	Composite	50	50	50
A4	Arc users heavy use (% of time using Arc)	Composite	80%	80%	80%
A5	Time savings with Arc	Interviews	50%	50%	50%
A6	Learning curve ramp	Assumption	50%	100%	100%
A7	Editorial team average annual salary fully burdened	Interviews	\$78,300	\$78,300	\$78,300
A8	Improvement to editorial team productivity	((A1*A2)+(A3*A4))*A5*A6*A7	\$1,370,250	\$2,740,500	\$2,740,500
A9	Productivity recapture	TEI standard	50%	50%	50%
At	Improvement to editorial team productivity	A8*A9	\$685,125	\$1,370,250	\$1,370,250
	Risk adjustment	↓20%			
Atr	Improvement to editorial team productivity (risk-adjusted)		\$548,100	\$1,096,200	\$1,096,200
	Three-year total: \$2,740,5	500	Three-year preser	nt value: \$2,227,81	4

#### IMPROVEMENT TO DEVELOPER PRODUCTIVITY

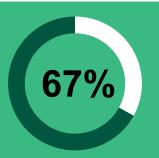
**Evidence and data.** The interviewees' developers spent less time maintaining infrastructure and legacy systems after their companies deployed Arc XP.

- Before Arc XP, the interviewee's companies required large in-house teams of developers to maintain their legacy CMS and related tools.
- One interviewee's company spent \$3 million annually for outsourced professional services to support the legacy system in lieu of an in-house team.
- The director general at the media company in Mexico noted: "One of the sweet things about Arc XP is that you have to do very little on the back end. Before moving to Arc XP, we had a large team for in-house development. Now, we were able to reassign new tasks to those people, and we have to worry less about the back end."
- The developers used the time they save with Arc XP to focus on higher value tasks that support revenue growth.

"[Arc XP] has really freed up time for the developers and the IT teams to not spend time looking at bugs and problems but instead look into new products. This is helpful for the organization because it can bring in new revenue."

Editor general of a media company in Chile





**Modeling and assumptions.** For the analysis, Forrester assumes:

- Nine developers support the legacy systems.
- The developers save 67% of their time with Arc XP.
- There is a learning curve for the developers to realize all the productivity benefits associated with Arc XP. By Year 2, the developers realize 100% of the productivity benefit.
- The average annual salary, including benefits, for a developer is \$155,250 (or \$115,000 annual salary plus benefits).
- The developers convert 75% of the hours saved into productive time.

**Risks.** The developer productivity benefit will vary based on:

- The number of developers maintaining the prior legacy systems.
- The average annual developer salary.

**Results.** To account for these risks, Forrester adjusted this benefit downward by 15%, yielding a three-year, risk-adjusted total PV of slightly more than \$1.2 million.

Impro	Improvement To Developer Productivity									
Ref.	Metric	Source	Year 1	Year 2	Year 3					
B1	Developers maintaining legacy systems	Composite	9	9	9					
B2	Time savings with Arc	Interviews	67%	67%	67%					
В3	Learning curve ramp	Assumption	50%	100%	100%					
B4	Developer average annual salary fully burdened	Interviews	\$155,250	\$155,250	\$155,250					
B5	Productivity recapture	TEI standard	75%	75%	75%					
Bt	Improvement to developer productivity	B1*B2*B3*B4*B5	\$349,313	\$698,625	\$698,625					
	Risk adjustment	↓15%								
Btr	Improvement to developer productivity (risk-adjusted)		\$296,916	\$593,831	\$593,831					
Three-year total: \$1,484,578			Three-year prese	ent value: \$1,206,847	7					

#### **DIGITAL SUBSCRIPTION GROWTH**

**Evidence and data.** Arc Subscriptions helped the interviewees' organizations grow and manage their paid digital subscriber base.

- Two of the interviewees used Arc Subscriptions to manage their paid digital subscriptions.
- One of the interviewees grew their paid digital subscribers from 28,000 to 60,000 over three years after deploying Arc XP and Arc Subscriptions. The company grew digital subscription revenue from \$3.8 million to \$9.5 million over the same period, implying a 36% compound annual growth rate (CAGR).
- The other interviewee's company doubled both their digital subscriber base and digital subscription revenue in one year after deploying Arc XP and Arc Subscriptions.
- While other factors, such as new business initiatives, contributed to the growth in digital subscribers, the interviewees attributed much of the growth in their digital subscriber base to Arc XP.
- The interviewees also reported that Arc XP provided their organizations with improved website performance and stability. The editorial

"Arc XP was absolutely part of growing our subscription revenue. The site speed made a huge difference. It allowed our team to publish more stories versus futzing around in the CMS. Arc has definitely been a piece of the revenue growth."

Chief product officer of a media company USA

teams published more content and new types of content with Arc XP. This created a better overall end user experience and helped drive paid digital subscription growth.

Additional paid digital subscription revenue by Year 3

\$1.6 million

**Modeling and assumptions.** For the analysis, Forrester assumes:

- The composite organization has 20,000 paid digital subscribers before deploying Arc XP and Arc Subscriptions.
- The composite organization adds 10,000 new paid digital subscribers each year after deploying Arc XP.
- A digital subscription costs \$1 per subscriber per week.
- The incremental costs associated with adding additional digital subscribers are minimal, so the additional digital subscription revenue goes directly to the organization's bottom line.

**Risks.** The digital subscription revenue benefit will vary based on:

- Growth in digital subscriptions.
- Digital subscription cost.

**Results.** To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV of slightly over \$2.25 million.

Digita	Subscription Growth				
Ref.	Metric	Source	Year 1	Year 2	Year 3
C1	Print circulation (daily and Sunday)	Composite	500,000	500,000	500,000
C2	New digital subscribers with Arc (annual)	Interviews	10,000	10,000	10,000
C3	New digital subscribers with Arc (cumulative)	C2+C3 prior year	10,000	20,000	30,000
C4	Total paid digital subscribers	C2+C4 prior year	30,000	40,000	50,000
C5	Digital subscribers as % of circulation	C1/C4	6%	8%	10%
C6	Subscription revenue per week per digital subscriber	Interviews	\$1	\$1	\$1
Ct	Digital subscription growth	C3*C6*52 weeks	\$520,000	\$1,040,000	\$1,560,000
	Risk adjustment	↓10%			
Ctr	Digital subscription growth (risk-adjusted)		\$468,000	\$936,000	\$1,404,000
	Three-year total: \$2,808,000		Three-year pres	ent value: \$2,253,85	4

#### **INCREASED DIGITAL ADVERTISING REVENUE**

**Evidence and data.** Arc XP improved search engine optimization (SEO) for the websites of interviewees' companies', drawing more traffic and increasing page views.

- All four of the interviewees' companies saw a significant increase in website traffic and page views after deploying Arc XP.
- Two of the interviewees' companies reported that the increased website traffic led to increased digital advertising revenue.
- One of the interviewees' companies increased digital advertising revenue from \$300,000 to \$1.2 million in one year after deploying Arc XP.
- While other factors, such as new business initiatives, contributed to the growth in digital advertising revenue, the interviewees attributed much of the growth in their digital advertising revenue to Arc XP.

**Modeling and assumptions.** For the analysis, Forrester assumes:

- The composite organization grows its monthly impressions 30% annually with Arc XP.
- The composite organization generates incremental digital advertising revenue as more visitors see the ads. It sells its advertising space at \$2 RPM (revenue per thousand impressions). This is in line with typical pricing for banner and display ads.
- The incremental costs associated with increasing website traffic are minimal, so the additional digital advertising revenue goes directly to the organization's bottom line.

**Risks.** The digital advertising revenue benefit will vary based on:

- Growth in website traffic.
- Types of digital advertising.

"Producing more articles around the clock [with Arc XP] gives our readers more options. It draws more people to our website."

Editor and director general of a media company South Korea

Average RPM.

**Results.** To account for these risks, Forrester adjusted this benefit downward by 20%, yielding a three-year, risk-adjusted total PV of almost \$1.9 million.



Increa	Increased Digital Advertising Revenue									
Ref.	Metric	Source	Year 1	Year 2	Year 3					
D1	Monthly impressions (millions)	Composite	100	130	169					
D2	Incremental monthly impressions Arc XP (millions)	30% annual growth	30	39	51					
D3	Revenue per thousand impressions (RPM)	Assumption	\$2	\$2	\$2					
Dt	Increased digital advertising revenue	D2*1,000*D3*12 months	\$720,000	\$936,000	\$1,216,800					
	Risk adjustment	↓20%								
Dtr	Increased digital advertising revenue (riskadjusted)		\$576,000	\$748,800	\$973,440					
	Three-year total: \$2,298,240		Three-year prese	ent value: \$1,873,83	9					



#### **DECOMMISSIONED LEGACY SYSTEMS**

**Evidence and data.** The interviewees' companies were able to cut costs by decommissioning legacy systems after deploying Arc XP.

- While most of the interviewees' companies developed their legacy CMS in house, one of them used a third-party vendor CMS that was decommissioned after deploying Arc XP.
- Several of the interviewees' companies were able to decommission other tools, such as their DAM and workflow management systems, after deploying Arc XP.
- Several of the interviewees' companies reported CDN cost savings with Arc XP. One of them reported using the same CDN as they did previously, however, they got better pricing with Arc XP.

**Modeling and assumptions.** For the analysis, Forrester assumes:

 The composite organization saves \$500,000 annually by decommissioning third-party legacy systems. "We switched to Arc and were immediately saving a million dollars a year. So, cost-wise, it was a no brainer."

Chief product officer of a media company USA

 The legacy systems are fully decommissioned by Year 2.

**Risks.** The decommissioning of legacy system benefits will vary based on:

- The extent to which the legacy systems are purchased from third-party vendors vs. developed in house.
- How quickly the legacy systems are decommissioned.

**Results.** To account for these risks, Forrester adjusted this benefit downward by 10%, yielding a three-year, risk-adjusted total PV of over \$900,000.

Decor	Decommissioned Legacy Systems									
Ref.	Metric	Source	Year 1	Year 2	Year 3					
E1	Cost of decommissioned legacy systems (including the legacy CDN)	Interviews	\$500,000	\$500,000	\$500,000					
E2	Phased decommissioning	Interviews	50%	100%	100%					
Et	Decommissioned legacy systems	E1*E2	\$250,000	\$500,000	\$500,000					
	Risk adjustment	↓10%								
Etr	Decommissioned legacy systems (riskadjusted)		\$225,000	\$450,000	\$450,000					
	Three-year total: \$1,125,000		Three-year pres	ent value: \$914,538						

#### **UNQUANTIFIED BENEFITS**

Additional benefits that the interviewees experienced but were not quantified for this study include:

- Better digital property performance. The interviewees reported that with Arc XP their websites' performance improved significantly.
  - Enhanced Reliability. The editor general of a media company in Chile noted: "[Before Arc XP] we had two or three major outages with availability compromised. That hasn't happened with Arc XP. It's reliable."
  - Faster page load speeds. With Arc XP, webpages loaded much faster, which improved the digital experience. The chief product officer of a media company in the USA stated, "At the time of our Arc XP launch, our page load speeds improved by more than 300%."

"We were constantly down before, and we're very rarely, if ever, down now [with Arc XP]."

Chief product officer of a media company USA

• Enhanced end user experience. With Arc XP, the digital publications at the interviewees' companies now offered more content with better reliability. Readers and subscribers had a better overall digital experience and spent more time on the websites of the interviewees' organizations.

The editor and director of a media company in South Korea noted: "We used to publish 300 to

400 articles per day. Now [with Arc XP] we are publishing 600 articles. People are turning to more stories. In the past, they would click on two articles, but now they click on the third, fourth, and fifth article. They are spending more time on our website."

"People stay on the site two to three times longer than before Arc."

Director general of a media company Mexico

Arc XP partnership and community. The interviewees' shared that Arc XP has been a good partner and continues to innovate. They appreciated drawing on the expertise of other companies using Arc XP.

The editor general of a media company in Chile shared: "With Arc, you become part of a community. I could share ideas with other newsrooms, IT people, and developers from South America, New Zealand, and the US. Everybody is under the same umbrella, and the umbrella is growing. The team at Arc is working

"Arc has been a very, very good partner for us. We know that if we have a problem, somebody will look after us. They are always trying to come up with the best ideas."

Editor general of a media company in Chile

on improvements for teams all over the world, and that is extremely helpful for us."

#### **FLEXIBILITY**

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

• Expansion to new digital properties. The interviewees' companies typically deployed Arc XP for their flagship properties first and then expanded Arc XP to other smaller digital properties. Their experience with Arc XP and their flagship properties made it significantly easier and faster to implement the solutions on the new properties. For example, the director general of a media company in Mexico reported that it took six months to deploy Arc XP on their flagship media property. However, it only 2.5 months to deploy Arc XP on a second digital property.

Flexibility would also be quantified when evaluated as part of a specific project (described in more detail in Appendix A). "[With Arc XP] we lowered our costs; we grew revenue, and we grew our relevance."

Director general of a media company Mexico

## **Analysis Of Costs**

Quantified cost data as applied to the composite

Total	Total Costs										
Ref.	Cost	Initial	Year 1	Year 2	Year 3	Total	Present Value				
Ftr	Arc XP subscription cost and professional services fees	\$605,000	\$471,042	\$471,042	\$471,042	\$2,018,126	\$1,776,412				
Gtr	Internal team to install and maintain Arc XP	\$853,875	\$512,325	\$512,325	\$512,325	\$2,390,850	\$2,127,951				
Htr	Arc XP training cost	\$50,160	\$5,016	\$5,016	\$5,016	\$65,208	\$62,634				
	Total costs (risk- adjusted)	\$1,509,035	\$988,383	\$988,383	\$988,383	\$4,474,184	\$3,966,997				

# ARC XP SUBSCRIPTION COST AND PROFESSIONAL SERVICES FEES

**Evidence and data.** The interviewees' companies used Arc XP's professional services to help deploy Arc XP. They paid a monthly fee to Arc XP for use of its DXP. The Arc XP implementation included building out the Arc XP front end and migrating content from the prior CMS. The Arc XP implementation typically took the interviewees' organizations between six and seven months to complete.

- All four interviewees' companies used Arc XP's professional services to help implement the Arc XP platform. Spending on Arc XP's professional services varied considerably depending on how heavily the companies relied on their internal developer teams vs. Arc XP's professional services. Spending on Arc XP's professional services ranged from \$50,000 to \$3,000,000.
- One of interviewee's company used a local design firm to help with the Arc XP implementation at a cost of \$50,000.
- The monthly payment to Arc XP for the use of the Arc XP platform could vary based on traffic or storage requirements.

 Two of the four interviewees used Arc Subscriptions to support their paid digital subscriptions.

Arc XP implementation time

## 6 months



**Modeling and assumptions.** For the analysis, Forrester assumes:

- The Arc XP installation takes six months.
- The composite organization uses Arc XP professional services to support the Arc XP installation. The one-time, upfront Arc XP professional services fee is \$500,000.
- The composite organization uses other thirdparty professional services organizations, such as a local creative agency, to support the Arc XP installation. The cost is \$50,000.

 The composite organization pays Arc XP a monthly fee of \$35,685 for use of the platform.
 The cost includes both Arc XP and Arc Subscriptions.

**Risks.** The cost of Arc XP subscription and professional services will vary based on:

- The extent to which Arc XP's professional services support the Arc XP installation.
- Specific Arc XP deployment characteristics, including: the number of Arc XP users, the

- number of digital properties, storage requirements, and website traffic.
- Use of Arc Subscriptions to support digital subscriptions.

**Results.** To account for these risks, Forrester adjusted this cost upward by 10%, yielding a three-year, risk-adjusted total PV (discounted at 10%) of just under \$1.8 million.

Arc X	Arc XP Subscription Cost And Professional Services Fees									
Ref.	Metric	Source	Initial	Year 1	Year 2	Year 3				
F1	Arc XP professional services fees for implementation	Interviews	\$500,000							
F2	Other professional services fees for implementation	Interviews	\$50,000							
F3	Monthly Arc XP subscription cost	Composite		\$35,685	\$35,685	\$35,685				
F4	Annual Arc XP subscription cost	F3*12 months		\$428,220	\$428,220	\$428,220				
Ft	Arc XP subscription cost and professional services fees	F1+F2+F4	\$550,000	\$428,220	\$428,220	\$428,220				
	Risk adjustment	↑10%								
Ftr	Arc XP subscription cost and professional services fees (riskadjusted)		\$605,000	\$471,042	\$471,042	\$471,042				
	Three-year total: \$2,018,126			ree-year present	value: \$1,776,412					

# INTERNAL TEAM TO INSTALL AND MAINTAIN ARC XP

**Evidence and data.** Cross-functional teams at the interviewees' companies were dedicated to the Arc XP implementation and subsequent ongoing Arc XP maintenance.

- The internal implementation team typically included developers, product managers, and senior editorial team members.
- The size of the internal teams supporting the Arc XP implementation varied depending on company size, the complexity of the installation,

- how many digital properties were supported by Arc XP, and how heavily the interviewees' companies leveraged Arc XP's professional services to support the implementation.
- The internal teams at the interviewees' companies that are dedicated to the Arc XP implementation ranged from four to 50 people.
   Typically, 10 to 15 employees were involved in the Arc XP implementation.

 Once Arc XP was installed, a smaller team of developers was dedicated to maintaining and updating Arc XP.

# Internal team supporting Arc XP

# 3 FTEs



**Modeling and assumptions.** For the analysis Forrester assumes:

- Ten FTEs work on the Arc XP installation.
- The Arc XP installation takes six months. The installation effort includes building out the Arc XP

front end and migrating content from the legacy CMS.

- Three FTEs maintain Arc XP once it is installed.
- The average annual fully burdened salary of each team member is \$155,250 (or \$115,00 annual salary plus benefits).

**Risks.** The cost of the internal team to install and maintain Arc XP will vary based on:

- The complexity of the Arc XP installation.
- The skill set and experience of the internal team supporting Arc XP.
- The average annual fully burdened salary of team members. Salary will vary significantly by geography.

**Results.** To account for these risks, Forrester adjusted this cost upward by 10%, yielding a three-year, risk-adjusted total PV of over \$2.1 million.

Intern	Internal Team To Install And Maintain Arc XP									
Ref.	Metric	Source	Initial	Year 1	Year 2	Year 3				
G1	Internal team installation (FTEs)	Composite	10							
G2	Installation time	6 months	50%							
G3	Internal team maintenance (FTEs)	Composite		3	3	3				
G4	Internal team average annual salary fully burdened	Interviews	\$155,250	\$155,250	\$155,250	\$155,250				
Gt	Internal team to install and maintain Arc XP	((G1*G2)+G3)*G 4	\$776,250	\$465,750	\$465,750	\$465,750				
	Risk adjustment	↑10%								
Gtr	Internal team to install and maintain Arc XP (risk-adjusted)		\$853,875	\$512,325	\$512,325	\$512,325				
	Three-year total: \$2,390,850			ree-year present v	/alue: \$2,127,951					

#### **ARC XP TRAINING COST**

**Evidence and data.** The interviewees' reported that the time spent training to learn Arc XP was minimal.

- Arc XP provided training as part of the upfront professional services costs.
- One of the interviewees reported that heavy Arc XP users, including the website team and employees managing PageBuilder, spent two days training on Arc XP. Most of the newsroom trained for 90 minutes to 2 hours on Composer and Photo Center.

**Modeling and assumptions.** For the analysis, Forrester assumes:

 The Arc XP light users spend 2 hours training on Arc XP.

- The Arc XP heavy users spend two days (16 hours) training on Arc XP.
- As new employees join in Years 1 through 3 they spend time training on Arc XP.
- The average fully loaded salary of each Arc XP user is \$38 per hour.

**Risks.** The Arc XP training cost will vary based on:

- The number of Arc XP users.
- The average salary for Arc XP users.
- Prior experience using Arc XP.

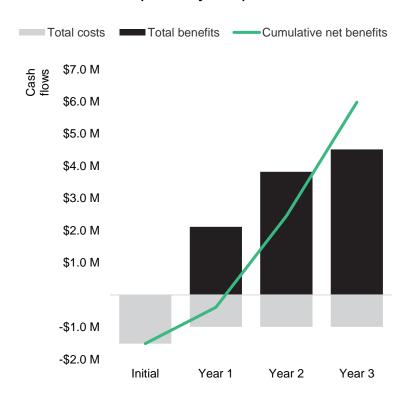
**Results.** To account for these risks, Forrester adjusted this cost upward by 10%, yielding a three-year, risk-adjusted total PV of slightly more than \$62,000.

Arc X	P Training Cost					
Ref.	Metric	Source	Initial	Year 1	Year 2	Year 3
H1	Arc users light use (FTEs)	A1	200	20	20	20
H2	Training time light users (hours)	Interviews	2	2	2	2
НЗ	Arc users heavy use (FTEs)	A3	50	5	5	5
H4	Training time heavy users (hours)	Interviews	16	16	16	16
H5	Total training time (hours)	H1*H2+H3*H4	1,200	120	120	120
H6	Cost per hour	A7/2,080 hours per year	\$38	\$38	\$38	\$38
Ht	Arc XP training cost	H5*H6	\$45,600	\$4,560	\$4,560	\$4,560
	Risk adjustment	↑10%				
Htr	Arc XP training cost (risk-adjusted)		\$50,160	\$5,016	\$5,016	\$5,016
	Three-year total: \$65,208			nree-year present	value: \$62,634	

## **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	(\$1,509,035)	(\$988,383)	(\$988,383)	(\$988,383)	(\$4,474,184)	(\$3,966,997)
Total benefits	\$0	\$2,114,016	\$3,824,831	\$4,517,471	\$10,456,318	\$8,476,892
Net benefits	(\$1,509,035)	\$1,125,633	\$2,836,448	\$3,529,088	\$5,982,134	\$4,509,895
ROI						114%
Payback period						14 months

# 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**

<sup>&</sup>lt;sup>1</sup> 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.

