



Augmented Reality for Enterprise Alliance

AREA ROI Calculator Overview

April 2020

ROI Calculator Overview & Goals

ROI Calculator Goals

The AREA ROI Calculator aims to help organisations:

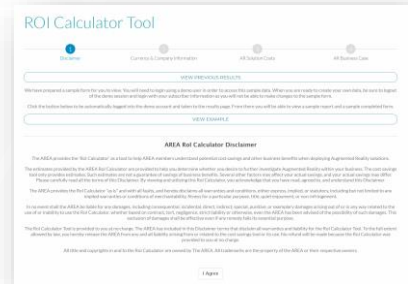
- Understand the value of Enterprise AR use cases within their business
- Provide tools to inform management to support investment decisions
- Benefit from a broader view of aggregated data from across the AR ecosystem

Captured data will help the AREA to communicate data-driven ROI info to the wider AR community

ROI Calculator Overview

The AREA ROI Calculator is a comprehensive web-based tool:

- Available to AREA members and registrants
- Supports input of data that encompasses:
 - Potential costs saved and increased revenues
 - User, Manager, IT and Consultancy costs
 - Initial and ongoing training costs
 - AR software, hardware and supporting IT infrastructure costs
 - Multiple currencies
- Reports results in multiple formats (CSV, PDF, Excel)
 - Multi-year view of costs, ROI and NPV
- Five different datasets per user
 - To support 'what-if' calculations
- Starter template for new users
- Non-editable 'demo template' for non-registrants

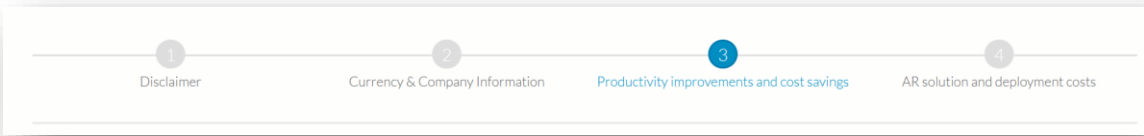


The screenshot shows the 'ROI Calculator Results' page. It features a table with columns for 'Year 0', 'Year 1', 'Year 2', 'Year 3', and 'Totals'. The table is divided into several sections: 'Summary Annual Allocation', 'ROI Analysis', 'Annual ROI', 'Component Cost Year', 'Payback period in years', 'Benefits', and 'Costs - Operational Expenses'. The 'ROI Analysis' section shows net cash flow before taxes, net cash flow after taxes, and annual ROI. The 'Benefits' section lists various cost-saving measures like 'User Productivity Improvements', 'Forecasted Profit', 'Reduced Hardware & Software Costs', 'Reduced Audit Costs', 'Reduced Inventory Carrying Costs', and 'Other Inbound Benefits'. The 'Costs - Operational Expenses' section shows the total costs over the three-year period.

Year	Expected Cost	Expected Benefit	Expected Profit		
ROI Analysis					
Year 0	Year 1	Year 2	Year 3	Totals	
Net cash flow before taxes	\$ 153,236	\$644,263	\$644,263	\$644,263	\$1,546,825
Net cash flow after taxes	\$ 153,236	\$508,244	\$508,244	\$508,244	\$1,528,972
Annual ROI	312.2%	312.2%	312.2%	312.2%	
Net Present Value (NPV)	\$ 102,028	\$17,949	\$17,949	\$17,949	\$156,875
Component Cost Year	\$ 102,028	\$168,248	\$688,248	\$1,266,427	
Payback period in years					
Benefits	Year 1	Year 2	Year 3	Totals	
User Productivity Improvements	\$1	\$682,262	\$682,262	\$682,262	\$1,966,826
Forecasted Profit	\$1	\$168,244	\$168,244	\$168,244	\$504,736
Reduced Hardware & Software Costs	\$1	\$50,000	\$50,000	\$50,000	\$150,000
Reduced Audit Costs	\$1	\$500	\$500	\$500	\$1,500
Reduced Inventory Carrying Costs	\$1	\$480	\$480	\$480	\$1,440
Other Inbound Benefits	\$1	\$5000	\$5000	\$5000	\$15,000
Other Inbound Benefits	\$1	\$5000	\$5000	\$5000	\$15,000
Net Benefits	\$1	\$759,272	\$759,272	\$759,272	\$2,252,816
Costs - Operational Expenses					
Software	\$1	\$	\$	\$	\$

General Principles

- Users must have an account and be logged in to the AREA portal
 - Your individual data will not be shared
 - Anonymised and aggregated data (across many users) may be reported later
- All data entered is saved ‘as you go’
 - Just return to edit and continue...
- Complete as much as you can
 - Each item **must** have an entry –
 - Either find out the real answer or make an educated estimate (if unable, enter a zero)
- You can maintain up to five versions at a time
 - Add meaningful comments when updating/saving the ROI



Navigate between topics by clicking on the headings

Year	Expected	Actual	Year 1	Year 2	Year 3	Totals
ROI Analysis						
Net cost from before taxes	\$ 152,236	\$64,363	\$64,363	\$64,363	\$64,363	\$1,956,879
Net cost from after taxes	\$ 152,236	\$39,344	\$39,344	\$39,344	\$39,344	\$1,429,824
Annual ROI	312.2%	312.2%	312.2%	312.2%	312.2%	
Net Present Value (NPV)	\$ 102,028	\$17,949	\$17,949	\$17,949	\$17,949	
Compound Cash Flow	\$ 102,028	\$466,336	\$466,336	\$466,336	\$466,336	\$1,366,427
Payback period in years						
Benefits						
User Productivity Improvements	\$1	\$662,202	\$662,202	\$662,202	\$662,202	\$1,986,606
Increased Profits	\$1	\$146,600	\$146,600	\$146,600	\$146,600	\$439,800
Reduced Hardware & Software Costs	\$1	\$50,000	\$50,000	\$50,000	\$50,000	\$150,000
Reduced Audit Costs	\$1	\$500	\$500	\$500	\$500	\$1,500
Reduced Inventory Carrying Costs	\$1	\$400	\$400	\$400	\$400	\$1,200
Other Elated Costs Savings	\$1	\$5,000	\$5,000	\$5,000	\$5,000	\$15,000
Other Indirect Benefits	\$1	\$5,000	\$5,000	\$5,000	\$5,000	\$15,000
Total Benefits	\$1	\$1,369,272	\$1,369,272	\$1,369,272	\$1,369,272	\$4,107,878
Costs - Operational Expenses						
Software	\$1	\$	\$	\$	\$	\$

Getting Started

Getting Started – ROI calculator home page

ROI calculator is available here: <https://thearea.org/roi-calculator-tool/>

ROI Calculator Tool

- 1 Disclaimer
- 2 Currency & Company Information
- 3 Productivity improvements and cost savings
- 4 AR solution and deployment costs

[VIEW PREVIOUS RESULTS](#)

We have prepared a sample form for you to view. You will need to login using a demo user in order to access this sample data. When you are ready to create your own data, be sure to logout of the demo session and login with your subscriber information as you will not be able to make changes to the sample form.

Click the button below to be automatically logged into the demo account and taken to the results page. From there you will be able to view a sample report and a sample completed form.

[VIEW EXAMPLE](#)

AREA Rol Calculator Disclaimer

The AREA provides the 'Rol Calculator' as a tool to help AREA members understand potential cost savings and other business benefits when deploying Augmented Reality solutions.

The estimates provided by the AREA Rol Calculator are provided to help you determine whether you desire to further investigate Augmented Reality within your business. The cost savings tool only provides estimates. Such estimates are not a guarantee of savings of business benefits. Several other factors may affect your actual savings, and your actual savings may differ. Please carefully read all the terms of this Disclaimer. By viewing and utilizing this Rol Calculator, you acknowledge that you have read, agreed to, and understand this Disclaimer.

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I Agree

View a pre-filled starter example

Process steps

View previous results (if any) stored against your login credentials

START HERE

First page – some basics

ROI Calculator Tool

1 Disclaimer 2 Currency & Company Information 3 Productivity improvements and cost savings 4 AR solution and deployment costs

Please complete all of the metrics outlined below based on your companies current status. All fields are required in order to calculate ROI and NPV correctly.

Currency

Select your preferred currency *

Tax Rate

Enter your corporate tax rate (Percentage %)

Cost of Capital

Enter your corporate cost of capital below (Percentage %): *

Life of Assets

Select life of assets

Options:
USD, RMB, EUR, GBP

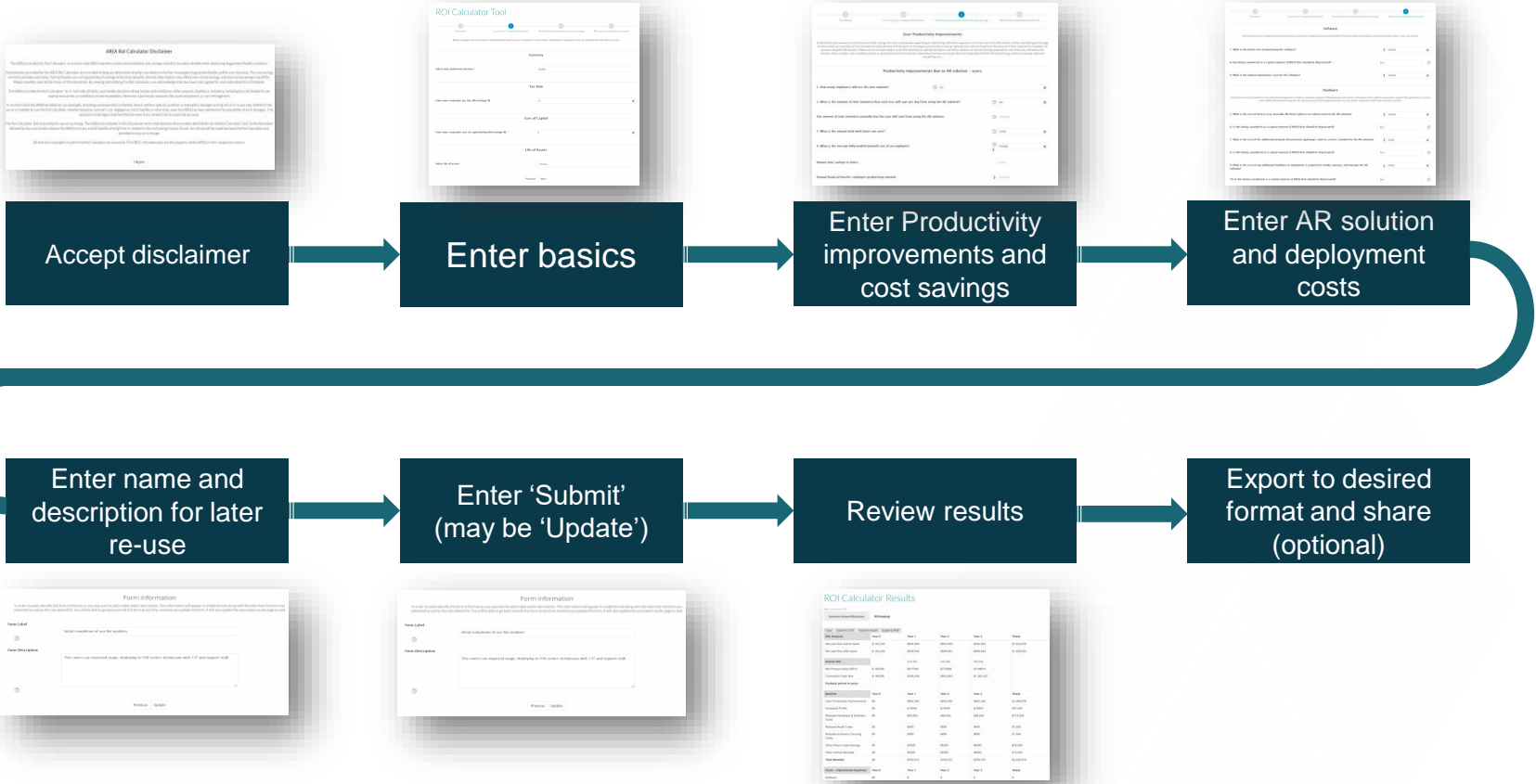
Varies e.g.
US = 21%
UK = 19%

Obtain from
corporate finance.

Click to complete
data entry.

Entering data

Overview of workflow – first usage



Topic: AR solution and deployment costs

Overview of sections:

AR solution costs:

1. Software
2. Hardware

Labor costs:

1. Deployment
2. Initial training
3. Ongoing annual training
4. Ongoing management and integration

Consulting and professional services costs:

1. Deployment and training
2. Content adaptation
3. Integration

The screenshot shows a multi-step form for estimating costs. The top navigation bar includes: Overview, Company & Company Information, Productivity measurements and initial settings, and AR solution and deployment costs (the current step).

Software

The software costs include the initial license fees as well as the ongoing costs associated for the subscription (license) & maintenance fees. Other costs may include:

- 3. What is the initial cost of purchasing the software? \$ 30000
- Is this being considered as a capital expense (CAPEX) that should be depreciated? Yes
- 4. What is the annual maintenance cost for the software? \$ 90000

Hardware

All hardware costs include the cost of the devices (laptops or tablets), network equipment (for wireless and routers), and servers that might be required to support the application in some cases. Additionally, there may also be a need for a part of the deployment for security and/or integration with other business systems.

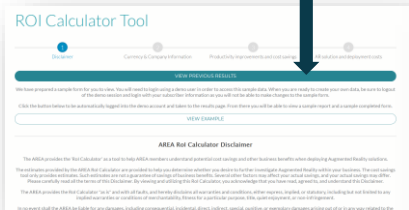
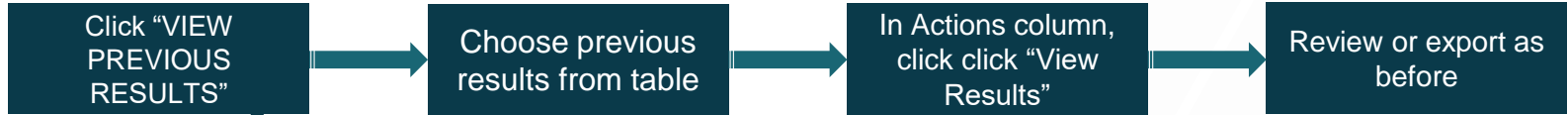
- 5. What is the cost of devices (e.g., wearable AR device/glasses or tablets) used in the AR solution? \$ 30000
- 6. Is this being considered as a capital expense (CAPEX) that should be depreciated? Yes
- 7. What is the cost of the additional network infrastructure (lightways, routers, servers) needed for the AR solution? \$ 2000
- 8. Is this being considered as a capital expense (CAPEX) that should be depreciated? Yes
- 9. What is the cost of any additional hardware or equipment is required to enable, operate, and manage the AR solution? \$ 2000
- 10. Is this being considered as a capital expense (CAPEX) that should be depreciated? Yes

Deployment

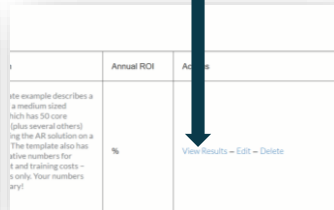
- 12. What is the total number of line of business employees that will take part in the deployment of the AR solution? 6
- 13. What is the total number of hours that line of business staff will spend per person on the deployment of the AR solution? 20
- 14. What is the average fully loaded annual cost of a line of business employee? \$ 90000
- Total deployment costs, line of business employees: \$ 10800
- Is this being considered as a capital expense (CAPEX) that should be depreciated? Yes
- 15. What is the total number of IT employees that will take part in the deployment of the AR solution? 1
- 16. What is the total number of hours that each IT employee will spend on the deployment of the AR solution? 80
- 17. What is the average fully loaded annual cost of an IT employee? \$ 100000
- Total deployment costs, IT employees: \$ 11200
- 18. Is this being considered as a capital expense (CAPEX) that should be depreciated? Yes
- 19. What is the total number of managers that will take part in the deployment of the AR solution? 1
- 20. What is the total number of hours that managers will spend on the deployment of the AR solution? 50
- 21. What is the average fully loaded cost of a manager? \$ 10000
- Total deployment costs, managers: \$ 100

Viewing the results

Viewing previous results



Date	Label	Description	Annual ROI	Actions	
17th March 2020 at 1:02 pm	Example completed form - 01	This template matches the three elements of a medium sized business and the Project description (see example) showing the all capital one million plus training costs. It is a template for a business with a turnover of £100,000 and a profit of £10,000.	%	View Results - Edit - Delete	
19th March 2020 at 9:28 am			+0.00	%	View Results - Edit - Delete
19th March 2020 at 9:28 am			+0.00	%	View Results - Edit - Delete
19th March 2020 at 12:06 pm			-0.00	%	View Results - Edit - Delete
20th February 2020 at 1:17 am			+0.00	99.0%	View Results - Edit - Delete



You can also go directly to: <https://thearea.org/roi-calculator-results/>

Viewing the results

Two sets of results available:

- Summary of annual allocations
 - Year by year costs and saving
- ROI analysis showing year by year:
 - Cash flow before/after taxes
 - NPV
 - Costs/savings
 - Depreciation schedule
- All results can be exported
 - CSV
 - Excel
 - PDF
 - Copy to clipboard

ROI Calculator Results

Summary Annual Allocation ROI Analysis

Year	Year 0	Year 1	Year 2	Year 3	Totals
ROI Analysis					
Net Cash Flow before taxes	\$ 150,000	\$64,969	\$64,000	\$64,000	\$1,962,879
Net Cash Flow after taxes	\$ 150,000	\$308,844	\$168,244	\$168,144	\$674,232
Annual ROI					
Net Present Value (NPV)	\$ 160218	\$17436	\$77884	\$119411	
Comparable Cash Flow	\$ 160218	\$308,838	\$683,969	\$1,391,227	
Payback period in years					
Benefits					
User Productivity Improvements	\$0	\$462,282	\$462,282	\$462,282	\$1,386,846
Increased Profits	\$0	\$19000	\$19000	\$19000	\$57,000
Reduced Hardware & Software Costs	\$0	\$58,000	\$58,000	\$58,000	\$174,000
Reduced Audit Costs	\$0	\$500	\$500	\$500	\$1,500
Reduced Inventory Carrying Costs	\$0	\$480	\$480	\$480	\$1,440
Other Direct Costs Savings	\$0	\$5000	\$5000	\$5000	\$15,000
Other Indirect Benefits	\$0	\$5000	\$5000	\$5000	\$15,000
Year Benefits	\$0	\$790,272	\$790,272	\$790,272	\$2,250,816
Costs - Operational Expenses					
Software	\$0	\$	\$	\$	\$
Benefits					
User Productivity Improvements	\$0	\$462,282	\$462,282	\$462,282	\$1,386,846
Increased Profits	\$0	\$19000	\$19000	\$19000	\$57,000
Reduced Hardware & Software Costs	\$0	\$58,000	\$58,000	\$58,000	\$174,000
Reduced Audit Costs	\$0	\$500	\$500	\$500	\$1,500
Reduced Inventory Carrying Costs	\$0	\$480	\$480	\$480	\$1,440
Other Direct Costs Savings	\$0	\$5000	\$5000	\$5000	\$15,000
Other Indirect Benefits	\$0	\$5000	\$5000	\$5000	\$15,000
Year Benefits	\$0	\$790,272	\$790,272	\$790,272	\$2,250,816
Costs - Operational Expenses					
Software	\$0	\$	\$	\$	\$
Hardware	\$0	\$0,000	\$0,000	\$0,000	\$0,000
Labor	\$0	\$14,877	\$14,877	\$14,877	\$44,631
Consulting	\$0	\$0	\$0	\$0	\$0
Total Operational Expenses	\$0	\$	\$	\$	\$
Costs - Capitalized Assets					
Software	\$30,000	\$10,000	\$10,000	\$10,000	\$30,000
Hardware	\$24,000	\$7,333	\$7,333	\$7,333	\$24,000
Labor	\$2704	\$0,000	\$0,000	\$0,000	\$2704
Computer	\$72,000	\$24,000	\$24,000	\$24,000	\$72,000

Process steps

Export

Thank you

Please provide feedback to:

michael@thearea.org