

Technical Communications Team at Aardvark Enterprises

A Value Added Analysis by Courtney MacRae

Background

Aardvark Enterprises is an industry leader in the production of quality software and hardware products for POS systems. In the past, employees with limited technical writing knowledge prepared documentation for these systems. Said documentation failed to meet the needs of our clients, prompting a high rate of both hotline calls and product returns. The overall image of the company has suffered as a result.

The new technical communications team at Aardvark Enterprises will improve the current situation with its production of quality documentation. This report will show that the team will add value in the coming year through internal and external cost reduction, cost avoidance and revenue enhancement. In addition, the intangible contributions of the technical communications team will be analyzed and shown to bolster the image of Aardvark Enterprises.

Determining Added Value

Initially, we must determine the level of risk involved by examining ten different variables. In order to accurately portray how each will affect a project, we will use a dependency calculator to determine the extent to which each variable will affect project cost. The numbers presented in **Table 1** below are derived from the fact that the technical communications team is new, and as such they will face a number of challenges during a project.

Table 1: Project Dependencies

Variable	Percentage	Decimal
SME Availability	100%	1.0
Product Stability	90%	0.9
Information Availability	100%	1.0
Prototype Availability	90%	0.9
Project Team Maturity	110%	1.1
Writing Experience	100%	1.0
Tools Experience	110%	1.1
Audience Awareness	100%	1.0
Quality Process	120%	1.2

We multiply all of the decimal values in order to arrive at an overall variable score:

$$1.0 \times 0.9 \times 1.0 \times 0.9 \times 1.1 \times 1.0 \times 1.1 \times 1.0 \times 1.1 \times 1.2 = \sim 1.3$$

The overall variable score of 1.3 indicates that documentation development for a project will cost approximately 30% above average. However, even after factoring in what initially appear to be addition costs, it will be shown that the benefits of the new technical communication team to Aardvark Enterprises outweigh the risks. Value is added through the following: cost reduction, cost avoidance, revenue enhancement and last but not least, intangible contributions.

Cost Reduction (CR)

Costs can be reduced in three ways: (1) Creation of Quality Documentation, (2) Reduced Hotline Calls and, and (3) Fewer Installation Trips

(1) Creation of Quality Documentation

Technical communicators do not write the current documentation; thus, it is inefficient and costly for Aardvark Enterprises. Creating a quality user manual for the Midas System will ensure that documentation costs are reduced and customers are satisfied. See **Table 2: Creating Quality Documentation**.

Table 2: Creating Quality Documentation

CR(1)	Current Situation	Proposed Situation
Documentation Costs	\$350,000	\$68,000
Costs Reduced		\$282,000

The figure in **Table 2** for the current situation was determined using the following data and calculation:

- 50,000 documents/year
- \$7.00/document
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Current cost of documentation: $50,000 \text{ docs} \times \$7.00/\text{doc} = \$350,000$

The figure in **Table 2** for the proposed situation - the Midas User Manual - was determined using the following data and calculation:

- 50 pages
- 5 hours/page
- \$55/hour
- 3 writers
- 1.3 variable score
- 20% mark-up
- \$3,650 in incurred expenses (specialized graphics & usability testing)

Proposed cost of documentation: $[(50 \times 5) \times (\$55 \times 3) \times 1.3] \times 1.2 + \$3,650 = \$68,000$

Costs Reduced: $\$350,000 - \$68,000 = \$282,000$

→ **Value added, in the form of documentation cost reduction: \$282,000**

Creating a user manual that clients can actually use will not only reduce documentation costs, it will reduce hotline calls and installation trips as well. For more details, see sections (2) Reduced Hotline Calls, and (3) Fewer Installation Trips.

(2) Reduced Hotline Calls

Quality documentation will aid users' product understanding, thus reducing the number of calls to the customer support hotline. See **Table 3: Reduced Hotline Calls**.

Table 3: Reduced Hotline Calls

CR(2)	Current Situation	Proposed Situation
Hotline Calls	\$560,000	\$336,00
Costs Reduced		\$224,000

The figures in **Table 3** were determined using the following data and calculations:

- 20,000 calls/year, currently
- 12,000 calls/year, anticipated
- \$28/call

Current cost of hotline calls: 20,000 calls x \$28 = \$560,000

Anticipated cost of hotline calls: 12,000 calls x \$28 = \$336,000

Costs Reduced: \$560,000 - \$336,000 = \$224,000

→ **Value added, in the form of hotline call cost reduction: \$224,000**

(3) Fewer Installation Trips

Quality documentation will also enable many users to install the software themselves, resulting in fewer installation trips. See **Table 4: Fewer Installation Trips**

Table 4: Fewer Installation Trips

CR(3)	Current Situation	Proposed Situation
Installation Trips	\$1,200,000	\$400,000
Costs Reduced		\$800,000

The figures in **Table 4** were determined using the following data and calculations:

- 300 installation trips, currently
- 100 installation trips, anticipated
- \$4,000/call

Current cost of installation trips: 300 trips x \$4,000 = \$1,200,000

Anticipated cost of installation trips: 100 trips x \$4,000 = \$400,000

Costs Reduced: \$1,200,000 - \$400,000 = \$800,000

→ Value added, in the form of installation trip cost reduction: \$800,000

Cost Avoidance (CA)

Lowered product returns will ensure that unnecessary costs are avoided in the future. See **Table 5: Cost Avoidance**

Table 5: Cost Avoidance

CA	Current Situation	Proposed Situation
Product Return Rate	40%	10%
Cost of Returns	\$4,000,000	\$1,000,000
Costs Avoided		\$3,000,000

With the publication and distribution of the new 50-page user manual for the Midas system, it is anticipated that product returns will decrease by 30%, **avoiding \$3,000,000** in return costs for Aardvark Enterprises.

The figures in **Table 5** were determined using the following data and calculations:

- Midas software cost of \$100/unit
- Projected sales of 100,000 units in the upcoming year
- 40% return rate on software, currently
- 10% anticipated return rate on software after user manual is released

Revenue from software sales: $\$100 \times 100,000 \text{ units} = \$10,000,000$

Current cost of returns: $\$10,000,000 \times 0.4 \text{ (40\%)} = \$4,000,000$

Proposed cost of returns: $\$10,000,000 \times 0.1 \text{ (10\%)} = \$1,000,000$

Costs Avoided: $\$4,000,000 - \$1,000,000 = \$3,000,000$

→ Value Added, in the form of cost avoidance: **\$3,000,000**

*Note: Development costs of the Midas User Manual were taken into consideration in the *Cost Reduction* section and are therefor not reflected here.

Revenue Enhancement (RE)

The creation of a vertical marketing document will enhance revenue for Aardvark Enterprises. See **Table 6: Revenue Enhancement**

Table 6: Revenue Enhancement

RE	Current Situation	Proposed Situation
Cost	\$0	\$130,000
Potential Profit	\$0	\$500,000
Revenue	\$0	\$370,000

Sales of the vertical marketing document will result in \$370,000 in revenue for Aardvark Enterprises.

Cost is determined using the following data and calculations:

- 100 pages
- 5 hours/page
- \$55/hour
- 3 writers
- 1.3 variable score
- 20% mark-up
- \$1,300 in incurred expenses (specialized graphics & review)

Cost: $[(100 \times 5) \times (\$55 \times 3) \times 1.3] \times 1.2 + \$1,300 = \$130,000$

Potential Profit is determined using the following data:

- \$100/unit
- 5,000 units in projected sales

Potential Profit: $\$100 \times 5,000 \text{ units} = \$500,000$

Revenue: $\$500,000 - \$130,000 = \$370,000$

→ Value Added, in the form of revenue enhancement: \$370,000

The technical documentation team will create a vertical marketing document that will be sold to owners of small local banks and brokerages. Aardvark Enterprises will gain \$370,00 in revenue if projected sales are met.

Intangible Contributions (IC)

It is difficult to quantify intangible contributions, however, we can assume that the creation and distribution of quality documentation will bolster the image of Aardvark Enterprises. The company's relationship with both business partners and clients is also bound to improve. A positive effect on ethos will increase client loyalty while re-establish trust in Aardvark Enterprises.

The Value Added Calculation

$$VA = [(CR + CA + RE) - DC] + IC$$

$$VA = CR(\$282,000 + \$224,000 + \$800,000) + CA(\$3,000,000) + RE(\$370,000) + IC$$

$$VA = \$4,676,000 + IC$$

*Note: Development Costs (DC) were not calculated as a stand alone figure, and were instead incorporated in another section of the calculation. That is why they do not appear here in the final calculation.

Conclusion

The value of the new technical communications group to Aardvark Enterprises is undeniable, as shown through the analyses and calculations above. Going forward, our value will continue to increase as we maintain and update online content, create new documentation for sale and help to further improve the positive image of our company.