Case Study 16: It's a Matter of Form

Background

Baker Brothers Construction, the medium-sized building contractor from Case Study 10, needs to replace the forms they use for concrete work. Forms create the external shape of the concrete structure; the concrete is poured into them and hardens into its final shape. Baker Brothers have asked one of their employees to review the various forms available and write a recommendation report for them.

Isaac Cohen doesn't write reports, even informal ones, as a regular part of his job, so he wants to experiment with different structures in his memo to find what works best.

Exhibit A

Interoffice Memo

Date: May 5, 2021 To: Senior Management From: Isaac Cohen

Subject: New Concrete Forms

Introduction

This memo describes my findings about, and recommendations for, the purchase of new concrete forms. There are three forms available: Simeon, E-Z Strip, and the old type we now use. I have evaluated the available forms using these criteria: cost, ease of use, adaptability, longevity, storage space required, and transportation requirements. Overall, I found the Simeon forms to be the best in most categories; however, their storage and transportation requirements might cause some problems.

Simeon Forms

Simeon forms cost \$200 each. They take up approximately three times the storage space of the ones we are now using and weigh about three times as much. We do not have a truck capable of carrying that weight and bulk and would therefore have to invest in a large truck or rent one each time we use them. However, they are much easier and faster to use than the others, saving us employee hours. Stripping these forms takes very little time. As well, they have a longer life; in constant use, they could last up to five years and can be modified and repaired after that. Simeon forms are also very adaptable; they can be stacked to create any height of wall and can be used for any angle, not just 90° angles. In effect, they are an entire system.

E-Z Strip

E-Z Strip forms cost \$60 each. They take up the same amount of storage space as the ones we now

use and weigh about the same. Therefore, we can make do with our current storage facilities and trucks. They are easier to use than our current ones, but not as easy as Simeon's. They are almost as fast to set up as Simeon's for standard use, but they are not at all adaptable. They are limited to residential style walls and cannot be modified once they break down and have to be discarded.

Old Style Forms

The old-style forms cost \$50 each. They are comparable to the E-Z Strip forms in weight and bulk; our current storage facilities and trucks will easily accommodate them. Their use is very labour-intensive, using approximately five times the employee hours as the Simeon's. In effect, we have to build two framed walls to create one concrete wall, and then have to reverse the process for stripping. However, they are more adaptable than the E-Z Strip forms. They cannot be modified and must be discarded when they begin to break down.

Exhibit B

Interoffice Memo

Date: May 5, 2021 To: Senior Management From: Isaac Cohen

Subject: New Concrete Forms

Introduction

This memo describes my findings about, and recommendations for, new concrete forms. There are three forms available: Simeon, E-Z Strip, and the old type we now use. I have evaluated the available forms using these criteria: cost; ease of use; adaptability; longevity; storage space required; and transportation requirements. Overall, I found the Simeon forms to be the best in most categories; however, their storage and transportation requirements might cause some problems.

Cost and Longevity

At \$200 per form, Simeon forms are by far the costliest initially; E-Z Strip and the old-style forms are \$60 and \$50 respectively per form. However, because Simeon's last at least five years and can be modified after that, the cost can be amortized over at least a five-year period, and perhaps as much as ten years. In constant use, E-Z Strip forms will last only one year, and the old-style forms that we now use last only marginally longer.

Ease and Speed of Use

Simeon forms are the easiest form to use; they set up quickly and are easily stripped. We would save about five times the employee hours per average-sized job with their use. Next best, as their name implies, are E-Z Strip forms. The old-style forms are very inconvenient; they require the creation of two framed walls to set up one concrete wall and then these walls have to be torn down.

Adaptability

Simeon forms can be used in many different situations, from walls, to curbs, to bridges. They are not limited to 90° angles. E-Z Strip forms are not at all adaptable; they can only be used for residential type walls. The old-style forms have some adaptability because they have to be constructed, but they are not a system.

Storage Space Requirements

Because the Simeon forms are bulky, they require approximately three times the storage space that we now devote to our forms. If we choose them, we will have to find another storage area or rearrange the contents of the two sheds. E-Z Strip and the old-style forms are comparable in size and therefore can easily be accommodated in Shed 1.

Transportation Requirements

The Simeon forms are bulky and also weigh approximately three times what the E-Z Strip and the old-style forms do. Their bulk and weight mean that we cannot carry enough forms for an average job on the trucks we now have. We would have to invest in a larger truck. Because E-Z Strip forms are comparable in weight and size to the forms we now use, our current fleet could carry them.

Recommendations

Overall, Simeon's are by far the superior forms. They cost more but will be in use much longer than either of the others; their ease of use means that we will save hours in the set-up and stripping. However, because they require the use of a larger truck, I recommend a cost-benefit analysis be done to determine whether the hours saved and the amortization of the initial cost over five to ten years would justify the cost of a new truck.

Activities and Discussion

- 1. How does the presentation of each memo impact its effectiveness? Give examples of positive and negative impacts.
- 2. With reference to the factors in successful reports discussed in the text, which memo do you think is more successful? Why?
- **3.** Which memo is more user-friendly? Why?
- 4. Why is there such an emphasis on form in an informal report?
- **5.** Could Isaac Cohen have added anything to provide a quick overview of the information?