

Alchemy – An Internal Auditing Case

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INTRODUCTION TO AUDITING ALCHEMY

Auditing Alchemy (AA) is a privately-held manufacturing company established in 1998. AA manufactures spheres that are used in a variety of industrial applications. AA is the top sphere producer in the industry and also sells spheres to the U.S. government and other aerospace contracts. The spheres are sold in two forms: green and gold. A third form of sphere, red, is also a by-product of the manufacturing process.

Although it is not publicly traded, AA has had an internal audit department for more than a decade. The department has a chief audit executive (CAE) who reports to the board of directors and who reports administratively to the CEO. The department has three other internal auditors, in addition to the director. The department has broad responsibilities within AA, but among its duties are deterring and investigating fraud and safeguarding assets.

PROBLEM DEFINITION: A POSSIBLE FRAUD

Sylvia Torrance is Auditing Alchemy's CEO. She had been feeling uneasy about AA's manufacturing output since the beginning of calendar year 2006. Although sales were brisk and profits remained at an acceptable level, there seemed to be less profit from sales and higher expenses for manufacturing. As a result, she scheduled a meeting with AA's CAE Bret Anderson to discuss the situation.

Conversation between Sylvia Torrance (CEO) and Bret Anderson:

ST: Thanks for stopping by today. I'm not sure if we have a problem here, but something doesn't seem right about our finances. Profit level is acceptable, but we should be doing better. Our gross margin percentage has dropped from 27% in 2005 to 25% so far in 2006. Our selling price and operating expenses are pretty consistent between the two years.

BA: What is it exactly that doesn't seem right to you?

ST: That's just the problem. I can't quite put my finger on it, but the financials for the company just don't look right to me. The bottom line is still healthy, but I'm just not comfortable with things. The CFO's staff has done some preliminary analyses, and it appears there might be a problem with missing inventory. Let me lay out for you what we have found so far.

First, there was an extensive examination of our warehouse. The physical protection for inventory is the most secure I've ever seen. We also did a complete review of the internal controls; they're well-designed and, more importantly, they actually work the way their intended. I am confident that if there is a problem with missing inventory, it has to occur in manufacturing, before it reaches the warehouse.

Our raw material cost per unit to produce a gold sphere and a green sphere is up significantly over the last couple of years. We use a standard cost system and consequently develop a standard material cost for each type of sphere produced. Our standard material cost is \$348 for a gold sphere and \$90 for the green sphere. Last year our costs were just about on target (\$349 for gold spheres and \$89

for green spheres) compared to the standard, but not this year. This year the material cost for the gold spheres has increased 2% to \$356.

We further broke the materials cost variance into a price variance and a usage variance. The price variance was near zero as I had expected, since Purchasing had told me there was no increase in the price we were paying for raw materials. In fact, the whole cost variance was made up of the usage variance. We used more raw material in producing this year's usable spheres than we had in previous years.

At the same time, however, our cost of goods manufactured/raw material inventory ratio is pretty consistent over the most recent six quarters, indicating that we are using about the same amount of raw material in our production process as we have previously. We use a perpetual inventory system and have not done a manual inventory count in a couple of years because of the cost of doing this.

Finally, we have also noticed that our raw material purchases are up over last year.

I know that this is a hodge-podge of information, but it all points to us using more materials than we should. I've talked with the production manager about whether she can identify any reason why we would be using more materials, such as labor not being sufficiently trained on the new machinery we bought, raw materials being a poorer quality, or machinery not having the preventive maintenance being done. But she said none of those factors are a problem. I'm at a loss as to what more I can do, so I'm seeing if you might be able to help. Will you look into it?

BA: Of course. Do you suspect fraud?

ST: I don't know. I'm not sure what the problem is, but we don't seem to have the money and profits we ought to and the market is booming. What else could it be?

BA: I'm not sure, but before we start shaking things up with a word like "fraud," I should look into things in more detail. A full-blown fraud examination costs a bundle and it puts everybody on edge, even if they're honest. Tell you what. I'll run some quick diagnostics and see if anything falls out, and then we can decide whether things are as bad as you think they are.

ASSIGNMENT

There are three separate tasks for this case, each of which has a specific set of deliverables, as follows:

TASK 1:

Imagine you are Bret Anderson and have been provided the following employee productivity information.

What evidence can you provide that further investigation is or is not needed? Provide specific calculations to support your decision, as well as a narrative analysis of what the calculations demonstrated to you. Keep in mind that any further investigation will be disruptive, so any recommendation to proceed will require strong evidence. If you decide to proceed, is the evidence you produce indicative that fraud has occurred? Explain why or why not.

EXHIBIT 1:

Year-to-date production by employee

Refer to Excel file: T1_AA_Prod_Data.xls

TASK 2:

This task uses the Auditing Alchemy video, which may be viewed by downloading the file from: <http://134.129.81.111/~alchemy/>

The file is approximately 1.4GB and requires about 4-6 minutes to download on a high-speed connection. The video is an AVI format, which should run on most computer media players. The video runs approximately 7 minutes.

You may view the video more than one time, but no additional information about the workplace is available other than what was used for Task 1.

The video will lead you through a tour and explanation of the Auditing Alchemy sphere production process.

Based on your observations of the Auditing Alchemy workplace in the video, answer the following questions:

1. What are the strengths of the internal control system that protects the sphere inventory from misstatement?
2. Is it possible to steal the valuable spheres without detection, and if so, how is this accomplished?
3. If it is possible to steal spheres, is there enough evidence to support that a crime has been committed? Why or why not?

TASK 3:

1. Based on your analysis from Tasks 1 and 2, you may request additional information to help you decide if and who may have perpetrated fraud at Auditing Alchemy. Any request should be made in writing (hard copy or

email, as your instructor specifies) to your instructor. Whatever information you ask for must be legally obtainable. It may be possible to obtain information that requires a court order, but this will be supplied only if you provide an explanation that would be sufficient to convince a judge.

2. Write your final fraud report based on any information you have collected and the analysis from Tasks 1 and 2. At a minimum, your report should list predication for believing a fraud has occurred, a mechanism by which the fraud could be perpetrated, a likely suspect or suspects, and evidence that supports your choice of a suspect.

What are the strengths and weaknesses in your case? What else could you do (if anything) to make the case stronger? What other courses of action would you advise?

Summary information concerning AA's products and manufacturing process follow.

SUMMARY OF AUDITING ALCHEMY'S MANUFACTURING PROCESS

As noted earlier in the case, AA produces and sells two varieties of spheres: green and gold. Both green and gold spheres have considerable value. A gold sphere requires nearly four times as much raw material as a green sphere and sells for approximately ten times the cost. Both green and gold spheres are portable.

The raw materials that are used to produce spheres have value in and of themselves, and the manufacturing inputs are closely monitored. All of the raw materials that go into the process result in the production of spheres, but not all of the spheres have commercial value. In addition to the green and gold spheres, the manufacturing process also results in the production of red spheres. Some red spheres must be produced in order to manufacture either green or gold spheres; however, they have no commercial value in and of themselves. As a result, the number of spheres—red, green, and gold—is reconciled with the raw material inputs for each production. The green and gold spheres are subsequently sent off to AA's warehouse. The red spheres, having no commercial value, are discarded after the run's reconciliation.

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