



## **Vision Technologies Incorporated: Issues in Revenue Recognition**

**By Larry M. Prober, PhD, CPA**

After years of impressive growth, Vision Technologies can attract employees via its stock option plan. CEO Denton fears a disruption to present policy. Should Archer insist on a prior period restatement?

### ***Abstract***

*Vision Technologies Incorporated illustrates the significance of revenue recognition in the reported income of a growing business. It shows how the development of a new product platform can affect which revenue realization criteria management uses in recognizing sales. It also addresses the considerations that management faces in employing generally accepted accounting principles and the external pressures inherent in these decisions. Study the problems encountered by Tim Archer, chief financial officer, as he collides with chairman Gene Denton over the recognition of product and support revenue of the company's product lines. Decide for yourself whether a change in revenue realization policy is needed for the company's new product line. Determine if Tim Archer's concerns about auditor independence are justified.*

### **Background**

Vision Technologies Incorporated was founded 10 years ago by its chief executive officer and president, Gene Denton. The company employs over 500 people in the development, marketing and support of client/server database management systems. It also provides software and services for data warehouse applications and during the last year has begun to promote its new integrated intelligent vision e-commerce platform. This new platform includes electronic customer management, interactive broadcasting, supply-chain management, streaming analysis, e-commerce, enterprise portals and reporting, data mining and a host of decision support activities. These applications and Vision's total support system represent the company's continuing efforts to build on customer loyalty from a variety of the most prestigious names in business. As the company ends 20X2 with new offices in Europe, and expectations for a new one in Asia in 20X3, management looks for growth throughout the world to continue its recent trend in revenues and profitability.

Historically, revenues have come from product licenses and fees for technical support, consulting and educational services. Revenue has been recognized in accordance with company policy, which relies on Statement of Position (SOP) No. 97-2, *Software Revenue Recognition*, and SOP No. 81-1, *Accounting for Performance of Construction-*



*Type and Certain Production-Type Contracts.* Tim Archer, Vision's chief financial officer and vice-president of finance, has recently become concerned about issues involving the accounting for revenues. Last year, shortly after being promoted to his current position, Mr. Archer became more aware of the company's aggressive revenue recognition policies. He remembers discussions with the auditors about recently signed contracts and the specific application of previously used criteria. Although there was some disagreement over the timing of revenues, the issue of consistency won out in the specific accounting for new agreements. Thus, some new contracts signed during the last few weeks of last year's fourth quarter were taken into the revenue stream despite amounts of work needed to meet the company's support obligations. With five contracts signed during the last few weeks of 20X2, Mr. Archer sees a similar pattern emerging during that year's final quarter.

### **The Problem**

Mr. Denton believes that two of these contracts should be fully booked into the current quarter, citing arguments similar to those made last year. He believes that the most significant constraint to sales is the signed contract and that, once signed, a contract all but assures the company of these revenues. He acknowledges how important these revenues are in maintaining the company's sales momentum, but assures Mr. Archer that Vision faces little risk of not being paid since these customers are among the elite of Wall Street. He further reasons that not acknowledging these contracts may give the false impression that Vision is unable to market its current offerings, when in fact the sales force has done an outstanding job of selling company products and services. Finally, Mr. Denton talks about the importance of the company's growth to investors/analysts and the role of expectations in the company's stock price. After several years of impressive growth, the company is now able to attract better employees via its stock option plan. He fears that a disruption of present policy may have negative consequences for all levels of management and create undue speculation both in and outside the company. He appeals to Mr. Archer to continue the company's revenue recognition policies in accordance with historical criteria that have been approved by the company's international accounting firm. "If anything was wrong, would they have provided their stamp of approval?" he asks.

Tim Archer knows the Securities and Exchange Commission has embarked on a campaign to tighten the revenue recognition rules. He is expecting a new document on this subject from the commission at any moment, and believes they will call for more detailed accounting in the allocation of revenues from multi-source transactions. Thus, he wants his staff to provide a more detailed breakdown of each contract, and the relative portions of revenue type resulting from each agreement. In that way he can more appropriately determine not only the type of revenue but also the remaining activity necessary to fully meet the company's commitment. This information will allow for revenue recognition on a subscription or percentage-of-completed-contract basis, which Mr. Archer believes is more appropriate. Mr. Denton argues that this additional information is provided during the course of the contract but is not necessary at the time of revenue recognition. Nevertheless, he understands this information is implicit in the



contract negotiations and would help in evaluating the ultimate acceptance or rejection of the contract. Thus, it represents a good management control for company operations.

Mr. Archer's background in public and corporate accounting make him quite sensitive to the legal requirements of company management. While he would like to assure Mr. Denton he is a team player and continue the status quo, he realizes that if either the SEC or the Financial Accounting Standards Board issue new regulations for revenue recognition that are different from those now in use there is the potential for both legal action against the company, and an accounting restatement. Therefore, he reasons that it may be better to implement a more conservative deferral of revenue policy now rather than risk a more comprehensive full blown restatement later. He recalls the problems of Lionnel Industries after analysts questioned that company's accounting methods, perhaps unfairly, and stopped recommending the stock. He believes they will be even less forgiving if Vision is forced into any type of restatement. He fervently believes that with the company's strong product line, analysts can be convinced that timing is not a major issue in regard to the company's overall prospects.

On the other hand, he considers a loss in confidence in the company to be potentially more serious. Mr. Archer knows that Vision competes in extremely competitive markets and that as long as the business has a competitive advantage and provides customers with enhanced value the revenue stream will follow. He does not want to give anyone a reason to switch their alliance, especially after all the investment in the company's new platform. Thus, revenue recognition may have a greater bearing on the company's prospects than management members anticipate. Likewise, Mr. Archer understands that everyone--from the janitors up to CEO--is excited about the company's recent stock price run up and he doesn't want to jeopardize his colleagues' future fortunes. He knows, too, that future funding for international expansion is likely to be financed by a stock offering expected sometime during the next year. Thus, Mr. Archer is doubly concerned about the negative impact that lower stock prices would have on future growth.

Finally, Mr. Archer has some reservations regarding the auditor-client relationship that existed before his hiring. He has learned that two years ago--before the merger of the current auditors--one of the merged firms performed only consulting services for Vision and helped sell Vision's software to other clients. The sales amounts were not significant, and shortly after the merger this sales relationship ended, but some may see it as less than desirable from an independence standpoint. Thus, he worries that the SEC may take a harsher stance with Vision in the event any revenue concerns are raised. He wonders if the auditors' support of previous accounting choices will be dismissed because of this prior relationship--even though it has little to do with the current issue at hand.

### **Key Information**

The following information prior to the audit of 20X2 has been prepared by Tim Archer's staff.

1. Product license fees have generally been recognized upon execution of a contract and shipment of software if no significant obligation remains and collectibles are deemed likely.
2. Technical support revenues result from customer support agreements in connection with initial product license sales and subsequent renewals.
3. Revenues recognized from multiple-element software arrangements are allocated to each element--based on relative fair values of such elements--and include items such as software, upgrades, enhancements, support, installation and education.
4. Consulting and implementation services necessary for custom functionality of software are recognized in accordance with SOP No. 81-1 using the percentage-of-completion method. If the software license arrangement obligates the company to deliver unspecified future products, then revenue is recognized on the subscription basis, ratably over the term of the contract.
5. Beginning in the fourth quarter of 20X1, the company began selling products and services for large scale e-commerce applications. Unlike previous periods in which transactions were of a stand-alone nature, these transactions typically involve multiple software products and services by large numbers of users across a broad spectrum of channels. These large multiple element transactions involve more complex licensing and product support arrangements than were used in previous periods.

### **The Options**

Mr. Archer believes that accounting for the new integrated platform referred to above in compliance with SOP Nos. 97-2 and 81-1, and No. 98-4, *Deferral of the Effective Date of a Provision of SOP-97-2, Software Revenue Recognition*, will require changes from the past since revenue from many of these large multiple contracts is not recognizable upon full execution and delivery of the software product. He recommends that deferred revenue be recorded and product revenue recognized using the percentage-of-completion method based on cost inputs over the entire term of the contract. While product sales cycles may span nine months or more, the company has historically recognized a substantial portion of these revenues in the last month of a quarter, with revenues frequently concentrated in the last two weeks. Since booking orders can have a significant impact for a particular quarter, even a small delay of a large order can dramatically affect quarterly results as will the mix of product licenses, support agreements, implementation work and other specifics of the agreement.

A close examination of these and other orders during the last three years reveals that net revenues of \$24 million, \$5.2 million and \$1 million were prematurely recognized during the 20X2, 20X1 and 20X0 periods, respectively, if the deferral of these revenue types was warranted. Mr. Archer is concerned about this issue and must decide how to respond.

The following partial financial statement reflects the current and adjusted balances of income statement items based upon the above information.



	20X2		20X1		20X0	
	Reported	Adjusted	Reported	Adjusted	Reported	Adjusted
<b>Revenues</b>						
Product licenses	\$71,150	\$42,867	\$36,443	\$30,225	\$18,312	\$17,551
Product support	31,553	32,885	16,843	16,916	8,555	8,787
<b>Income from Operations</b>	<u>9450</u>	<u>(17665)</u>	<u>4623</u>	<u>(1250)</u>	<u>156</u>	<u>(308)</u>
<b>Income taxes</b>	<u>3780</u>	<u>611</u>	<u>1850</u>	==	==	==
<b>Net Income</b>	5670	(16854)	2773	(1250)	63	(426)
<b>Per share data</b>						
Basic	0.08	(0.21)	0.04	(0.02)	0.00	(0.01)
Diluted	0.07	(0.21)	0.03	(0.02)	0.00	(0.01)

#### Stock Price Data

	High	Low
20X1	11.25	5.25
20X2	45.25	14.25

Based on the above information, how would you recommend Tim Archer proceed? Consider the criteria for revenue recognition as it applies in this case and its role in investor expectations.

#### *Comments on "Vision Technologies Incorporated"*

##### **Dan Hugo, CPA, is Director of External Reporting for EBay Inc.**

*Ebay pioneered a Web-based community in which buyers and sellers are brought together. EBay also engages in the traditional auction business and in online payment processing.*

*"Once a company starts down the slippery slope of recognizing revenue early it is almost impossible to turn back."*

This case study highlights one of the age-old struggles in most companies. Marketing and sales departments generally want to recognize as soon as possible, while finance/accounting departments tend to follow a more conservative approach. A common area of misunderstanding is the difference between signing the contract and providing the service. Sales personnel generally believe that the moment a contract is signed, revenue can be recognized, particularly when they are able to collect the cash in advance.



However, generally accepted accounting principles require that revenue has to be recognized in the period in which the service is provided. The mere fact that a contract has been signed or that cash has been received is inconsequential in determining whether revenue can be recognized.

A further complication occurs when a single contract is used to cover to a bundle of services for one set payment. For these types of multiple revenue arrangements, a fair value must be assigned to each of the components and normal revenue recognition principles have to be applied to each one. For some components the company may be able to recognize revenue, while for others revenue recognition may occur over the life of the contract. I agree with Mr. Archer's approach that the best and only time to assign values to the different components will be at the date that the contract commences. Again, tracking the revenue recognition on each of these components may be fairly difficult.

It is important that sound principles rule in the area of revenue recognition. Once a company starts down the slippery slope of recognizing revenue early it is almost impossible to turn back. For example, in the next year, the company does not only have to reach the current year's targets, but it also has to make up for the revenue that was recognized early in the previous year. This has a snowball effect and before long reaches such proportions that it is impossible to hide. Management starts to rely on accounting to make up the shortfall and before long loses track of the company's overall goal--to be successful. As can be seen in the example, the revenue in question grew from \$1 million to \$24 million in only two years.

The main reason for continued success on Wall Street is investor confidence. Investor confidence reflects the company's success, but most of all, it reflects the integrity of this success. Nothing hurts a company more than having to restate its financial results. A restatement will lead to numerous class action lawsuits and will distract management. Most damaging of all, if the company is genuinely successful, the market will always ask if it is for real.

Mr. Archer finds himself faced with a difficult decision, which is not uncommon in today's business world. As more companies structure incentive compensation systems around their stock prices (as well as expansion and acquisition plans), chief executive officers become more and more sensitive to stock performance. This means that the CEOs have a tendency to look to chief financial officers and controllers to maintain revenue and profit trends. The CEO sees any interruption of the trend or possible change in reporting practices as a breach of corporate duty.



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*"Mr. Archer should argue for deferral of revenue and restatement of the prior periods. Obviously, the CEO will not be happy with this recommendation."*

While this is a difficult situation for Mr. Archer, he must remember that he has a responsibility--not only to his bosses but also to the board (and audit committee) and to the shareholders and other external stakeholders--to properly report the entity's financial performance. Mr. Archer also would do well to note that the Securities and Exchange Commission has become increasingly likely to take action against company personnel (such as CFOs and controllers) when they discover that there were financial reporting problems under their watch. The SEC actions are even more severe when the facts show that the CFO knew about the problems and did not take appropriate steps to correct them.

As Mr. Archer knows, the SEC strengthened the revenue recognition rules when it issued Staff Accounting Bulletin No. 101, *Revenue Recognition in Financial Statements*. Of key concern for Mr. Archer, SAB No. 101 closely parallels the existing guidance in Statement of Position No. 97-2, *Software Revenue Recognition*, which Vision Technologies asserts that it uses as the basis for recognizing revenue. SOP No. 97-2 requires that four conditions be met before revenue from sales of software and related services can be recognized:

- There is persuasive evidence of an arrangement.
- Delivery has occurred.
- The vendor's fee is fixed or determinable.
- It is probable that revenue can be collected.

Additionally, since many of the contracts in question appear to involve multiple elements, Mr. Archer would be wise to consider the provisions of SOP No. 98-9, *Modification of SOP 97-2, "Software Revenue Recognition," With Respect to Certain Transactions*. SOP No. 98-9 requires that entities be able to separate multiple element arrangements using vendor-specific objective evidence (VSOE) of fair value of the individual elements. If there is no VSOE for any of the undelivered elements, then the revenue must be deferred until all elements have been delivered. If the elements can be separated, then each one should be recognized when the four criteria above are met. A further complication is the fact that some of the contracts involve significant customization, which leads to contract accounting in accordance with SOP No. 81-1, *Accounting for Performance of Construction-Type and Certain Production-Type Contracts*. An important point to note here is that if SOP No. 81-1 applies, the entire contract is subject to contract accounting (which will result in some deferral of the revenue under the contract).



Mr. Archer's analysis appears to show that certain revenue should be deferred for the current year and that some should have been deferred for the prior two years, as well. The question is how this situation should be handled. Given Mr. Archer's analysis, it appears clear that deferral for the current year is a must. Should he insist on restatement of the prior-period results as well?

The answer to that question depends upon the materiality of the impact on the prior period. This analysis is further complicated by the fact that a restatement often brings about a significant market reaction because of investor questions about the quality of the company's earnings. However, in making the materiality judgment relative to the prior-period results, Mr. Archer should carefully consider the guidance of SAB No. 99, *Materiality*, which notes that management (and auditors) should consider both quantitative and **qualitative** factors in judging materiality. One of the qualitative considerations is whether the amount changes the reported profit into a loss, which, in Vision's case, it does.

All of these considerations lead to the conclusion that Mr. Archer should argue for deferral of revenue and restatement of the prior periods. Obviously, the CEO will not be happy with this recommendation. And this is where the issue of the auditor's independence (or lack of it) comes in. The SEC revised its independence rules in 2000 and clearly indicated that it intends to more closely scrutinize auditor independence in the future. Mr. Archer may be able to use the independence issue as a justification for changing auditors, given the concerns about the existing auditor's independence. That could be important, since it would be much easier for a new auditor to approve a restatement than it would be for the existing auditor, which has previously expressed an unqualified opinion on those prior-period financial statements.

**Stephen L. Key is the retired Executive Vice President and Chief Financial Officer of Textron Inc.**

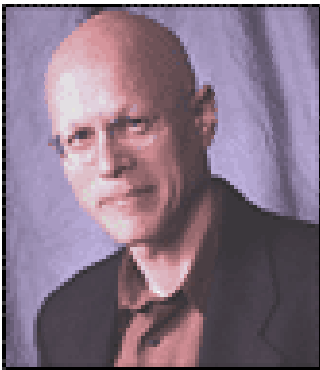
*He is a former Executive Vice President and Chief Financial Officer of ConAgra and a former managing partner of the Ernst and Young New York office.*

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Mr. Archer has valid concerns. Based on the facts presented, it would appear the Vision might have erred in not amending its accounting policies for the change in business that occurred in the fourth quarter of 20X1. (It is unclear, however, why the results for 20X0 would need to be adjusted). The facts presented would seem to support a boarder usage of the percentage-of-completion method beginning with the change in business practice that occurred in 20X1. The company must carefully review its communications with analysts and investors with respect to this change in business practice, and make necessary amendments.

**Steven Wallman, J.D., is founder and CEO of FOLIOfn founded in 1998.**

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*“Consistency, which Denton and the auditors rely on as their argument for continuing the old realization policies, is an alluring concept to many, however...”*

Tim Archer is in a tough place, but he is on the right track. When the development of new products begins to challenge the soundness of a company’s existing revenue realization policies, the sooner the change is implemented the better.

Complex bundles of products and services require companies to make tough decisions about when to book revenues, no matter how sophisticated and detailed the rules are. The more complex the bundle, the more difficult to make the call. Archer has a mountain of complexity before him with the company’s new “intelligent vision e-commerce platform.”

Archer must use his skill and judgment to help the company make the transition to the cleaner and more transparent realization criteria. Unfortunately, existing accounting policies do not help him much. The current requirement of static, snapshot style quarterly accounting encourages rigid thinking about bright lines and artificial distinctions about quarterly recognition instead of a more reality-based approach. Even the practice Archer is now contemplating has plenty of artificial lines to be drawn, but it is clearly more reality based than one that puts all revenue in one quarter or another for massive contracts that take months to complete fully. However, his new approach is inconsistent with past practice--although that practice was based on the earlier platform’s different characteristics--and one thing accounting and the markets favor is consistency. The reality of complex product-service bundles is that revenue is earned and therefore realized more in line with the percentage-of-completion approach that Archer is



advocating. Not only does accounting for the progress of work and revenue recognition on a percentage-of-completion basis better inform company planning--as Denton, the company founder, acknowledges--but it also gives a better and more accurate picture of the company's metrics for investors.

(One objection to reporting information at this more granular level is that it will also inform competitors and, perhaps, the other party to the contract of sensitive company information. In this case it seems that there is little concern about sensitive information given that there is no suggestion that any one contract is so large that reporting this information at an aggregate level would provide sensitive data.)

Consistency, which Denton and the auditors rely on as their argument for continuing the old realization policies, is an alluring concept to many, but seldom, in my experience, to regulators once they are convinced that they have identified a problem. Archer is properly concerned that postponing a change will simply exacerbate any problem that the Securities and Exchange Commission might identify. The impact on shareholders and employees that Denton claims would occur because of a change in approach would only be worse if the change were postponed. Moreover, the rollout of the new platform, with its new level of complexity, gives the company a reasonable, appropriate and explainable opportunity to make the change. There is no doubt that applying the old recognition practices to the new platform will eventually lead, when discovered, to long and significantly adverse fallout from the market's perception that Vision is playing with its revenue recognition. This fallout will be much worse than any consequences from having to explain now that a new platform--with all its attendant opportunities for the company--also requires a new accounting treatment. The real concern for Archer should be the prior-year's reporting. However, based on the auditor's independent review, management's view of the contract revenue realization and the simpler version of the earlier platform supporting that view--and the accounting standards of the time--Archer will likely be justified in leaving the prior statements as they are, if the auditors concur, provided he adopts the new treatment going forward. Disclosure of the reason for the change will have to be carefully crafted to explain accurately what is occurring. But the significant differences between what was sold before and what is being sold now seem to support the auditor's view that the prior years' accounting was accurate, even if different from what Archer knows he has to do going forward.

Archer is also correct to be concerned that the consulting relationship with one of the pre-merger audit firms could be an adverse background factor should the SEC decide to act. On its own, however, the relationship should not be difficult to explain and defend, given that the sales channel relationship was terminated promptly after the merger and contributed de minimis revenues to the pre-merger firm. Even if there is an SEC action, Vision should be able to argue persuasively that the pre-merger firm's consulting had nothing to do with the accounting judgment behind the recognition of revenues policy and created no independence issue.