Appendix 6C

Illustrative Audit Case: Keystone Computers & Networks, Inc.

Part I: Audit Planning

The Keystone Computers & Networks, Inc. (KCN) case is used throughout the text to illustrate audit procedures and methodology. KCN is a company that sells and installs computer workstations and networking software to business customers. The CPA firm of Adams, Barnes & Co. has audited the financial statements of KCN for the past three years. This part of the case illustrates selective audit planning working papers prepared by the staff of Adams, Barnes & Co. for this year's audit. You should read through the information to obtain an understanding of the nature of the information that is important to planning an audit engagement. The working papers include:

- The balance sheet and income statement for the company for the prior year, 20X4.
- A trial balance for 12/31/X5, with comparative amounts for 12/31/X4.

KEYSTONE COMPUTERS & NETWORKS, INC.
Balance Sheet
December 31, 20X4

Assets	
Current Assets	
Cash	$ 53,964
Trade receivables, less allowance for doubtful accounts of $96,000	8,438,524
Accounts receivable—officers	57,643
Inventory	1,234,589
Prepaid expenses	156,900
Total current assets	$ 9,941,620
Equipment and leasehold improvements, at cost	
Equipment and furniture	$ 1,090,634
Leasehold improvements	98,900
	$ 1,189,534
Less accumulated depreciation	(250,987)
	$ 938,547
Intangible assets net of amortization	$ 1,000,000
	$11,880,167
Liabilities and Stockholders' Equity	
Current Liabilities	
Line of credit	$ 6,612,550
Accounts payable	1,349,839
Current maturities of capital lease obligations	43,200
Accrued expenses	178,900
Total current liabilities	$ 8,184,489
Capital lease obligations, less current maturities	$ 456,700
Total liabilities	$ 8,641,189
Stockholders' equity	
Common stock, $1 par value; 1,000,000 shares authorized; 200,000 shares issued and outstanding	$ 200,000
Additional paid-in capital	423,500
Retained earnings	2,615,478
	$11,880,167

KEYSTONE COMPUTERS & NETWORKS, INC.
Working Trial Balance
For the Period Ended December 31, 20X5

Prepared by WL
Reviewed by
Page 1

Account #	Account Name	Prior Period Balance 12/31/X4	Unadjusted Trial Balance Dr (Cr)	Ref #	Adjustments Dr (Cr)	Adjusted Balance Dr (Cr)
1000.10	Cash—First Natl. Bank	52,764	76,234			
1000.30	Cash in register	1,200	1,200			
1050.10	Accounts receivable—trade	8,534,524	10,235,457			
1050.40	Accounts receivable—officers	57,643	84,670			
1050.90	Allowance for bad debts	(96,000)	(104,000)			
1100.10	Inventories	1,234,589	1,375,835			
1300.10	Prepaid expenses	156,900	176,456			
2050.10	Furniture & fixtures	300,980	344,900			
2050.30	Office equipment	789,654	974,676			
2050.80	Leasehold improvements	98,900	91,230			
2050.90	Accumulated depreciation	(250,987)	(404,560)			
2100.00	Software development cost		178,000			
2200.00	Intangible assets	1,000,000	800,000			
3050.10	Accounts payable—trade	(1,349,839)	(1,429,033)			
3100.00	Capital lease obligations—current	(43,200)	(45,675)			
3200.10	Accrued liabilities	(178,900)	(203,450)			
3300.30	Unearned service revenue		(42,300)			
3400.50	Line of credit	(6,612,550)	(8,632,105)			
4400.10	Capital lease obligations—noncurrent	(456,700)	(423,680)			
5050.10	Capital stock	(200,000)	(200,000)			
5100.10	Paid-in capital	(423,500)	(423,500)			
5700.10	Retained earnings	(1,626,203)	(2,615,478)			
5900.00	Dividends		415,000			
		989,275	229,877			
		(989,275)	(229,877)			
		0	0			

KEYSTONE COMPUTERS & NETWORKS, INC.
Working Trial Balance
For the Period Ended December 31, 20X5

Prepared by WL
Reviewed by
Page 2

Account #	Account Name	Prior Period Balance 12/31/X4	Unadjusted Trial Balance Dr (Cr)	Ref #	Adjustments Dr (Cr)	Adjusted Balance Dr (Cr)
6000.10	Sales of computers	(44,890,788)	(42,345,675)			
6010.10	Software licenses	(248,900)	(236,700)			
6020.10	Service revenue	(4,567,888)	(4,325,777)			
6030.10	Consulting revenue	(46,751,990)	(45,677,899)			
7020.10	Cost of sales	74,122,435	72,134,566			
7070.10	Salaries—sales	3,167,889	2,765,677			
7070.50	Payroll benefits—sales	913,456	857,368			
7075.10	Advertising & promotion	1,200,786	1,567,889			
7080.10	Travel & entertainment	609,788	445,600			
7080.30	Miscellaneous exp.—sales	334,890	278,656			
7090.10	Salaries—operations	4,878,900	4,544,860			
7090.30	Salaries—administrative	4,234,234	3,945,670			
7090.50	Payroll benefits—admin.	1,812,344	1,734,565			
7100.10	Rent	797,800	721,345			
7140.10	Utilities	210,495	234,839			
7200.10	Insurance	356,890	378,677			
7260.30	Legal & accounting	457,577	485,767			
7320.10	Bad debt expense	234,500	256,678			
7410.10	Supplies	556,345	478,900			
7600.10	Depreciation and amort.	334,565	367,867			
7650.10	Software development	289,100	345,645			
7700.10	Miscellaneous exp.—administrative	234,556	245,456			
7800.10	Interest expense	421,344	476,899			
7900.10	Current income taxes	256,765	80,100			
7900.70	Deferred income taxes	45,632	9,150			
9000.00	P & L Summary	989,275				
		0	(229,877)			
		0	229,877			
		0	0			

KEYSTONE COMPUTERS & NETWORKS, INC.
Analytical Review Ratios
For the Period Ended December 31, 20X5

Prepared by *WL*
Reviewed by ________

Ratio	Ending 12/31/X5	Ending 12/31/X4	Industry
Current ratio		1.2	1.3
Days' sales in accounts receivable, computed with average accounts receivable		33.2	37.0
Allowance for doubtful accounts/accounts receivable		1.1%	—
Bad debt expense/net sales		0.2%	—
Total liabilities/net worth		2.7	2.9
Return on total assets		8.3%	9.0%
Return on net worth		30.5%	29.0%
Return on net sales		1.0%	2.3%
Gross profit/net sales		23.2%	24.0%
Selling, operating, and administrative expense/net sales		21.4%	23.9%
Times interest earned		4.1	5.5

KEYSTONE COMPUTERS & NETWORKS, INC.
Audit Strategy
December 31, 20X5

		Date
Prepared by:	Warren Love (Senior)	August 14, 20X5
Reviewed by:	Karen West (Manager)	August 28, 20X5
Reviewed by:	Charles Adams (Partner)	September 5, 20X5

OBJECTIVES OF THE ENGAGEMENT

Audit of the financial statements of Keystone Computers & Networks, Inc. (KCN), for the year ended December 31, 20X5. Also, the company's debt agreement with Western Financial Services requires the company to furnish the lender a report by our firm on KCN's compliance with various restrictive debt covenants.

BUSINESS AND INDUSTRY CONDITIONS

KCN sells and installs computers and networking hardware and software to business customers and provides other information technology consulting services. KCN also has begun developing its own computer networking software to be sold as a product to its customers. The company's primary competitive strategy is to maintain a high level of technical expertise and a broad range of services.

KCN's long-term success is contingent on its ability to attract and retain qualified information technology personnel. The market for such individuals is very competitive. However, the company has a competitive advantage because of its desirable geographic location (Phoenix), which has a large number of colleges with technology programs.

The market for computers and related products is extremely competitive. KCN competes with large retailers of computers, such as Dell, Hewlett Packard, and Apple. The company also competes with other value-added resellers who provide computers and software products and consulting services directly to customers. To effectively compete, the company must be able to obtain inventories of state-of-the-art equipment on a timely basis. Because the company does not have the buying power of some of its other competitors, it generally must charge a higher price for its products. Its customers are willing to pay the higher price because of the high level of expertise and service that the company provides.

The market for computer products and technology services is also very sensitive to economic conditions. Recent reports indicate that the U.S. economy will be challenged for the next few years. The annual growth in spending for information technology products and services is expected to be 3 percent per year for the next three years. In the past year, the company has decided to increase sales by extending credit to clients with slightly higher credit risk.

PLANNING MEETINGS

On July 20, Karen West and I met with Loren Steele, controller, and Sam Best, president, of KCN to discuss the planning of the audit for the current year. On August 2, a planning meeting was held in our office with all members of the engagement team assigned to the audit.

OWNERSHIP AND MANAGEMENT

KCN is a closely held company owned by five stockholders: Terry Keystone, Mark Keystone, John Keystone, Keith Young, and Rita Young. Terry and Mark Keystone are active members of the company's board of directors. None of the other owners take an active part in the management of the business.

OBJECTIVES, STRATEGIES, AND BUSINESS RISKS

KCN's primary business objectives are to increase revenues by 6 percent and increase net income by 8 percent each year for the next three years. Major strategies to achieve those objectives include:

- Aggressive marketing of products and services through increased advertising.
- Sales to customers with a higher credit risk profile.
- New software development.

The primary business risks associated with the company's strategies include:

- The U.S. economy may suffer on additional significant downturn.
- Competitors may engage in predatory pricing to gain market share.
- Increased advertising expenditures may not produce desired results.
- Credit losses may exceed the benefits of increased sales.
- Software development activities may not generate viable products.

The company has developed the following responses to these risks:

- Careful monitoring of economy and industry conditions.
- Careful monitoring of competitor actions.
- Hiring of marketing consulting firm to evaluate the performance of advertising methods.
- Daily review of aging of accounts receivable by Loren Steele, controller.
- Use of carefully controlled software development budget.

MEASUREMENT AND REVIEW OF FINANCIAL PERFORMANCE

Management uses the following measures to monitor the company's performance:

- Inventory and receivables turnover.
- Aging of accounts receivable.
- Sales and gross margins by type of revenue.
- Net income.
- Total inventory balance.

PROCEDURES TO OBTAIN AN UNDERSTANDING OF THE CLIENT AND ITS ENVIRONMENT

The following procedures were performed to update our understanding of the client and its environment:

- Roll forward of information from the prior year's audit.
- Inquiries of management:

Loren Steele	7/20, 8/15
Sam Best	7/20, 8/16

- Reading of quarterly board of directors' meetings held on 4/05 and 7/12.
- Review of monthly performance reports for January through July.
- Industry reports—IT and consulting services.
- Review of KCN's Web site.
- Review of selected articles in *The Wall Street Journal*.

SIGNIFICANT RISKS

Several significant risks were noted as a result of obtaining information about KCN and its environment, including:

Risk	Implications and Response
1. KCN has engaged in a strategy to sell to customers with higher credit risk.	
2. The officers of the company receive significant bonuses based on quarterly results.	

SIGNIFICANT ACCOUNTING AND AUDITING MATTERS

The company began offering for sale extended warranties on computers during the current year. We need to review the method of revenue recognition to determine whether it complies with the requirements of *FASB ASC* 605-20-25.

In the prior year, KCN began developing networking software products for sale. This year the company has started capitalizing certain costs of development. We need to review the method of accounting for the cost of software development to determine whether it complies with the requirements of *FASB ASC* 985-20-25.

In 20X3, KCN acquired for $1,200,000 a small business accounting system (Plumbtree Systems) that it licenses to its customers. Recently, sales of the licenses for the software have begun to decline. In addition, a recent article in a trade journal ranked the system poor in relation to its competitors. This may indicate that an impairment in the value of the software may have occurred.

PLANNING MATERIALITY

Because the firm has experienced steady growth in sales and earnings over the last three years, we believe that operating results are the most appropriate basis for estimating planning materiality as described below:

Comparison of Bases

Financial Statement Base	Annualized for 12/31/X5
Sales	$92,000,000
Total assets	13,000,000
Pretax net income	320,000

Computation of Planning Materiality

Base	Amount	Percentage	Materiality Estimate
Sales	$92,000,000	1%	$920,000
Total assets	13,000,000	1	130,000
Pretax net income	320,000	10	32,000

The range for planning materiality is from $32,000 to $920,000. Based on the company's steady growth in sales and earnings and the fact that the company is not a public company, we have selected $300,000 as a reasonable materiality amount for planning purposes.

SCHEDULING AND STAFFING PLAN

Based on discussions with Ms. Steele, the following are tentative dates of importance for the audit:

Begin interim audit work	October 15, 20X5
Complete interim audit work	by November 15, 20X5
Issue management letter on interim work	by November 30, 20X5
Observe physical inventory	December 31, 20X5
Begin year-end audit work	February 1, 20X6
Complete fieldwork	by February 20, 20X6
Closing conference	February 25, 20X6
Issue audit report	by March 5, 20X6
Issue letter required by financing agreement	by March 5, 20X6
Issue updated management letter	by March 10, 20X6

Staffing time requirements for the engagement are described below:

	Assistant	Senior	Manager	Partner	Total
Interim	40	40	10	8	98
Final	40	30	15	12	97
	80	70	25	20	195

Fraud Risk Assessment

G-10
CA
CA 8/14/X5

Client: *Keystone Computers & Networks, Inc.*

Financial Statement Date: *12/31/X5*

Procedure	Performed by	Comments
1. Consider the results of the discussion among engagement personnel about the risk of material misstatement due to fraud.	CA	*See G-21 for a description of the discussion.*
2. Consider results of inquiries of management about the risks of fraud and how they are addressed.	CA	
3. Consider the results of risk assessment analytical procedures.	CA	
4. Consider the existence of fraud risk factors listed on G-30 through G-35.	CA	
5. Consider any other information that might be relevant to the risk of material misstatement due to fraud.	CA	

Risks of Material Misstatement Due to Fraud

Management may be motivated to misstate financial results due to impending sale of the company.

Responses

Overall Responses

Risks were considered in staffing the engagement and determining the appropriate level of supervision.

Alterations of the Nature, Timing, and Extent of Further Audit Procedures

Risks were considered in designing audit procedures for sales and accounts receivable and inventories. (See R-6 and R-9.)

Procedures were performed to address the risk of management override of internal controls. (See G-23–G-24.)

Appendix 6C Problems

LO 6-3

6C–1. The audit plan for the audit of Keystone Computers & Networks, Inc., appears on pages 235–242. Review each major section of the audit plan and briefly describe the purpose and content of the section. Organize your solution in the following manner:

Section	Purpose	Content
Objectives of the engagement	To describe the services that are to be rendered to the client.	The objectives are (1) audit of KCN's financial statements for the year ended 12/31/X5, and (2) issuance of a letter on compliance with covenants of the client's letter of credit agreement.

LO 6-3, 4

6C–2. In the audit plan for the audit of Keystone Computers & Networks, Inc., on page 241 there is a section on significant risks. For each of the risks, identify the implications and potential responses.

LO 6-7

6C–3. In the audit plan for the audit of Keystone Computers & Networks, Inc., on page 241 there is a section on significant accounting and auditing matters. The second matter described involves capitalizing the costs of developing a software program for sale.

Required:

a. Research this issue and write a brief memorandum for the working papers describing the issue and summarizing the appropriate method of accounting for the development costs.

b. Based on your research, describe the major audit issue that you believe will be involved in auditing the software development costs.

LO 6-3, 4

6C–4. A partially completed analytical ratios working paper for Keystone Computers & Networks, Inc., is presented on page 239.

Required:

excel

a. Complete the working paper by computing the financial ratios for 20X5.

b. After completing part (*a*), review the ratios and identify financial statement accounts that should be investigated because the related ratios are not comparable to prior-year ratios, industry averages, or your knowledge of the company.

c. For each account identified in part (*b*), list potential reasons for the unexpected account balances and related ratios.