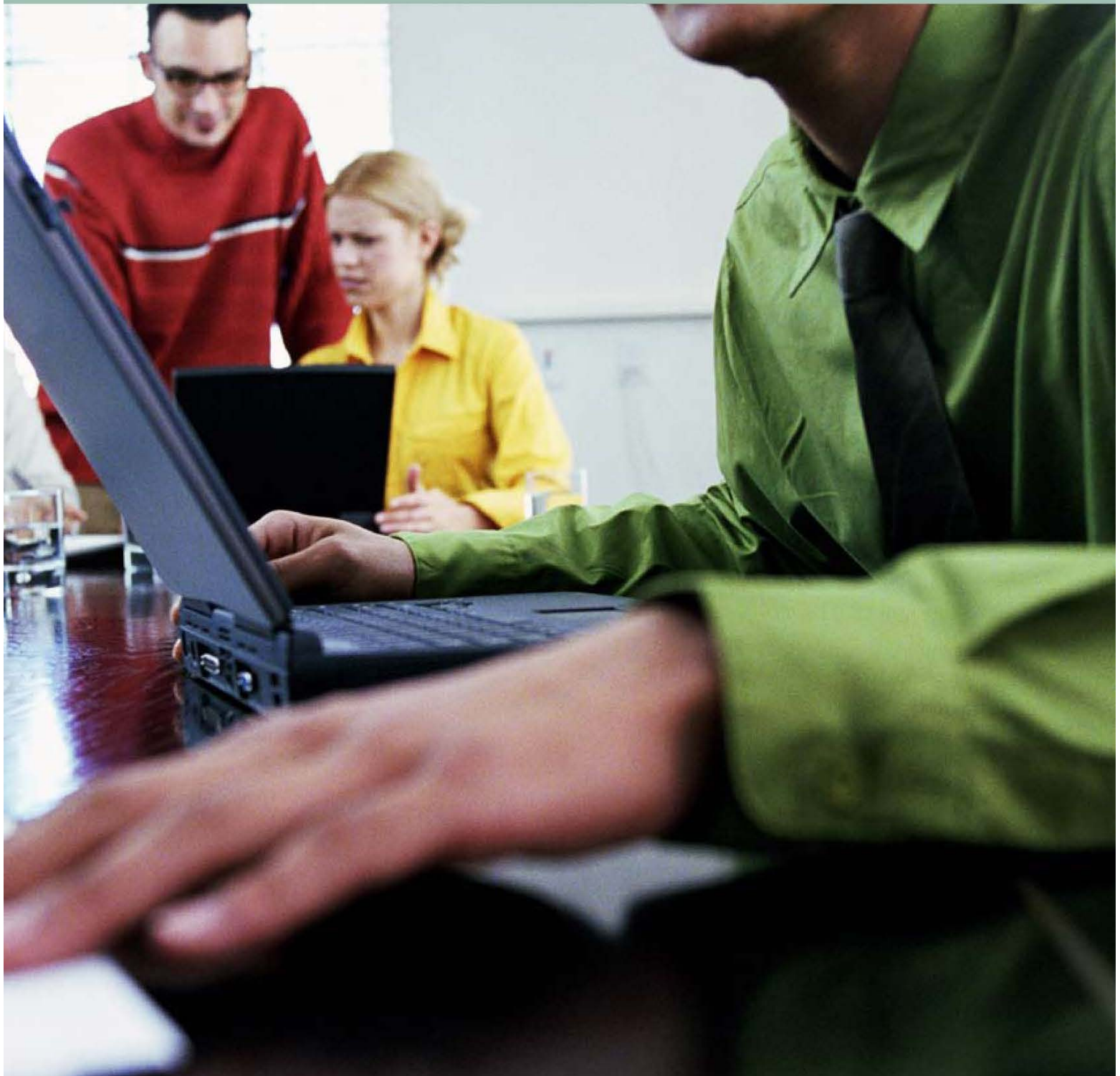




Internal Control over Financial Reporting – Guidance for Smaller Public Companies

Volume IV : Working Tools



I. Introduction

This is a companion document to the third volume of *Internal Control over Financial Reporting – Guidance for Smaller Public Companies*. The purpose and context of the matrices contained in this volume are explained in Volume III. This volume provides electronic versions of those matrices.¹ All templates are provided in blank format.

Users should use these templates only in conjunction with the other three volumes of the guidance. The objective of the three–volume report is to provide guidance to smaller public companies using the Committee of Sponsoring Organizations of the Treadway Commission (COSO) *Internal Control – Integrated Framework* as it relates to the effectiveness of internal control over financial reporting. The report describes ways to accomplish that objective in a cost-effective manner. These templates should not be used without first reading the complete guidance.

- The first volume contains an *Executive Summary*, providing a high level summary for companies' boards of directors and senior management.
- The second volume provides an overview of internal control over financial reporting in smaller businesses, including descriptions of company characteristics and how they affect internal control, challenges smaller businesses face, and how management can use the *Framework*. Presented are twenty fundamental principles drawn from the *Framework*, together with related attributes, approaches and examples of how smaller businesses can apply the principles in a cost-effective manner.
- This third volume contains illustrative tools to assist management in evaluating internal control. Managers may use the tools in determining whether the company has appropriately applied the principles.

These tools are presented for purely illustrative purposes, and their presentation here in no way suggests that all matters addressed in them need to be considered in evaluating an internal control system, or that all such matters must be present in order to conclude that a system is effective. Similarly, these tools are not a preferred method to conduct and document an evaluation, nor do they necessarily represent a complete set of all criteria that a company would consider in its evaluation of internal control over financial reporting.

Evaluation methodologies and documentation techniques vary between companies. Accordingly, companies may adopt different evaluation tools and techniques, and for those companies that do plan to use these tools, it is suggested that the tools be modified to reflect its particular facts, conditions, risks, and other circumstances.

¹ Pagination differs slightly from Volume III and Volume IV.

II. Principles Evaluation

Control Environment Principles	Summary of Controls		Design Effectiveness (Fully met, partially met, not met)	Summary Evidence of Control	Operating Effectiveness (Fully met, partially met, not met)
	Entity Level	Process Level			
1. Integrity and Ethical Values – Sound integrity and ethical values, particularly of top management, are developed and understood and set the standard of conduct for financial reporting.					
1.1 Has top management developed a clearly articulated statement of ethical values that is understood at all levels of the organization?					
1.2 Are processes in place to monitor adherence to principles of sound integrity and ethical values?					
1.3 Are deviations from sound integrity and ethical values identified in a timely manner and addressed and remedied at appropriate levels within the company?					
2. Board of Directors – The board of directors understands and exercises oversight responsibility related to financial reporting and related internal control.					
2.1 Has the board of directors defined and communicated authorities retained at the board level and those delegated to management?					
2.2 Does the board of directors have a critical mass of members who are independent directors?					
2.3 Does the board of directors actively evaluate and monitor risk of management override of internal control and consider risks affecting the reliability of financial reporting?					
2.4 Does the audit committee have one or more members who have financial reporting expertise?					
2.5 Does the audit committee actively monitor the effectiveness of internal control over financial reporting and financial statement preparation?					
2.6 Does the audit committee oversee the work of both internal and external auditors?					

Control Environment Principles	Summary of Controls		Design Effectiveness (Fully met, partially met, not met)	Summary Evidence of Control	Operating Effectiveness (Fully met, partially met, not met)
	Entity Level	Process Level			
2.7 Does the audit committee interact with regulatory auditors, as necessary?					
2.8 Does the audit committee have the exclusive authority to engage, replace, and determine the compensation of the external audit firm?					
2.9 Does the audit committee meet privately with internal and external auditors to discuss relevant matters?					
3. Management's Philosophy and Operating Style – Management's philosophy and operating style support achieving effective internal control over financial reporting.					
3.1 Does management's philosophy and operating style emphasize reliable financial reporting?					
3.2 Does management's attitude support a disciplined, objective process in selecting accounting principles and developing accounting estimates?					
3.3 Has management established and clearly articulated financial reporting objectives, including those related to internal control over financial reporting?					
4. Organizational Structure – The company's organizational structure supports effective internal control over financial reporting.					
4.1 Has management established appropriate lines of financial reporting for each functional area and business unit in the organization?					
4.2 Does management maintain an organizational structure that facilitates effective reporting and other communications about internal control over financial reporting?					
5. Financial Reporting Competencies – The company retains individuals competent in financial reporting and related oversight roles.					
5.1 Does the company identify competencies that support accurate and reliable financial reporting?					

Control Environment Principles	Summary of Controls		Design Effectiveness (Fully met, partially met, not met)	Summary Evidence of Control	Operating Effectiveness (Fully met, partially met, not met)
	Entity Level	Process Level			
5.2 Does the company employ or otherwise retain individuals who possess the required competencies related to financial reporting?					
5.3 Does the company regularly evaluate and maintain needed competencies?					
6. Authority and Responsibility – Management and employees are assigned appropriate levels of authority and responsibility to facilitate effective internal control over financial reporting.					
6.1 Does the board of directors oversee management's process for defining responsibilities for key financial reporting roles?					
6.2 Are the CEO and senior management responsible for sound internal control over financial reporting, including both initiating and maintaining the program?					
6.3 Are senior and functional management responsible for ensuring all employees understand their responsibilities for achieving financial reporting objectives through adherence to internal control policies and procedures?					
6.4 Does the assignment of authority and responsibility include appropriate limitations?					
7. Human Resources – Human resource policies and practices are designed and implemented to facilitate effective internal control over financial reporting.					
7.1 Has management established human resource practices that demonstrate its commitment to integrity, ethical behavior, and competence?					
7.2 Are employee recruitment and retention for key financial positions guided by the principles of integrity and by the necessary competencies associated with the positions?					
7.3 Does management support employees by providing access to the tools and training needed to perform their financial reporting roles?					

Control Environment Principles	Summary of Controls		Design Effectiveness (Fully met, partially met, not met)	Summary Evidence of Control	Operating Effectiveness (Fully met, partially met, not met)
	Entity Level	Process Level			
7.4 Do employee performance evaluations and the company's compensation practices, including those affecting top management, support the achievement of financial reporting objectives?					

Control Environment Summary	Design Effectiveness of Control Activities Component	Operating Effectiveness of Control Activities Component
In summary, are the processes set forth sufficient to accomplish the seven control environment principles identified and support the achievement of the company's objectives related to financial reporting?	Fully Met	Fully Met
	Partially Met	Partially Met
	Not Met	Not Met
Summarize the reasoning for this judgment along with any areas that the company will be addressing to improve the quality of internal control over financial reporting.		

Risk Assessment Principles	Summary of Controls		Design Effectiveness (Fully met, partially met, not met)	Summary Evidence of Control	Operating Effectiveness Regarding Principles
	Entity Level	Process Level			
8. Financial Reporting Objectives – Management specifies financial reporting objectives with sufficient clarity and criteria to enable the identification of risks to reliable financial reporting.					
8.1 Do financial reporting objectives align with the requirements of generally accepted accounting principles?					
8.2 Are the accounting principles selected appropriate in the circumstances?					
8.3 Are financial statements informative of matters that may affect their use, understanding, and interpretation?					
8.4 Is information presented classified and summarized in a reasonable manner, neither too detailed nor too condensed?					
8.5 Do the financial statements reflect the underlying transactions and events in a manner that presents the financial position, results of operations, and cash flows within a range of acceptable limits?					
8.6 For each significant account and disclosure, are financial reporting objectives supported by financial statement assertions that underlie a company's financial statements, with relevance depending on the circumstances?					
8.7 Does the financial statement presentation reflect the idea of materiality?					
9. Financial Reporting Risks – The company identifies and analyzes risks to the achievement of financial reporting objectives as a basis for determining how the risks should be managed.					
9.1 Does the company's risk identification include consideration of the business processes that impact financial statement accounts and disclosures?					

Risk Assessment Principles	Summary of Controls		Design Effectiveness (Fully met, partially met, not met)	Summary Evidence of Control	Operating Effectiveness Regarding Principles
	Entity Level	Process Level			
9.2 Does risk identification and assessment consider the competency of company personnel dedicated to supporting the financial reporting objectives?					
9.3 Are information technology infrastructure and processes supporting the financial reporting objectives included in the financial reporting risk assessment?					
9.4 Has the organization put into place effective risk assessment mechanisms that involve appropriate levels of management?					
9.5 Does risk identification consider both internal and external factors and their impact on the achievement of financial reporting objectives?					
9.6 Are identified risks analyzed through a process that includes estimating the likelihood of the risk occurring and the potential impact of the risk?					
9.7 Has management established triggers for reassessment of risks as changes occur that may impact financial reporting objectives?					
10. Fraud Risk – The potential for material misstatement due to fraud is explicitly considered in assessing risks to the achievement of financial reporting objectives.					
10.1 Does the company's assessment of fraud risks consider incentives and pressures, attitudes, and rationalizations, as well as opportunity to commit fraud?					
10.2 Does the company's assessment consider risk factors that influence the likelihood of someone committing a fraud and the impact of a fraud on financial reporting?					
10.3 Do responsibility and accountability for fraud policies and procedures reside with the management of the business or function in which the risk resides?					

Risk Assessment Summary	Design Effectiveness of Risk Assessment Component	Operating Effectiveness of Risk Assessment Component
In summary, are the processes set forth sufficient to accomplish the three risk assessment principles identified and support the achievement of the company's objectives related to financial reporting?	Fully Met	Fully Met
	Partially Met	Partially Met
	Not Met	Not Met
Summarize the reasoning for this judgment along with any areas that the company will be addressing to improve the quality of internal control over financial reporting.		

Control Activities Principles

To fully consider principles 11 through 14, management will need to review each question in relation to the specific processes identified in the risk assessment process. Common processes, as noted in the risk assessment chapter, for evaluation may include:

Accounting estimates	Payroll and employee benefits
Adjustments	Purchase and payables
Capital assets	Revenue and receivables
Equity	Taxes
Financial statement close and reporting	Treasury
Financing	Unusual transactions

Chapter V contains a sample questionnaire related to account estimates and adjusting entries that, when completed, would form the basis for management to summarize in this matrix key conclusions for each of the following questions.

Chapter VI contains a sample questionnaire related to one process noted above, being revenue and receivables that, when completed, would form the basis for management to summarize in this matrix key conclusions for each of the following questions. These process level controls also will form the primary reliance for management.

Control Activities Principles	Summary of Controls		Design Effectiveness (Fully met, partially met, not met)	Summary Evidence of Control	Operating Effectiveness Regarding Principles
	Entity Level	Process Level			
11. Integration with Risk Assessment – Actions are taken to address risks to the achievement of financial reporting objectives.					
11.1 Are control activities designed to mitigate risks potentially impacting financial reporting objectives?					
11.2 Do control activities consider risks related to all aspects of the recording process, including accounting estimates, and adjusting and closing journal entries?					
11.3 Does the selection of control activities encompass relevant information technology risks?					
12 Selection and Development of Control Activities – Control activities are selected and developed considering their cost and their potential effectiveness in mitigating risks to the achievement of financial reporting objectives.					

Control Activities Principles	Summary of Controls		Design Effectiveness (Fully met, partially met, not met)	Summary Evidence of Control	Operating Effectiveness Regarding Principles
	Entity Level	Process Level			
12.1 Do control activities include a range of activities that vary in terms of cost and effectiveness, depending on the circumstances? (These include approvals, authorizations, verifications, reconciliations, reviews of operating performance, security of assets, and segregation of duties)					
12.2 Does management use an appropriate balance of preventive and detective controls, and an appropriate balance of manual and automated controls, to mitigate risks to the achievement of financial reporting objectives?					
12.3 Are duties logically divided among people or processes to mitigate risks and meet financial reporting objectives?					
12.4 When selecting amongst alternative control options, does management consider the cost of control activities in relation to expected benefits of improved control?					
13 Policies and Procedures – Policies related to reliable financial reporting are established and communicated throughout the company, with corresponding procedures resulting in management directives to be carried out.					
13.1 Are control activities built into business processes and the day-to-day activities of its employees?					
13.2 Do responsibility and accountability for policies and procedures reside with the management of the business or function in which the relevant risk resides?					
13.3 Are procedures performed in a timely manner?					
13.4 Are procedures implemented thoughtfully, conscientiously, and consistently across business units?					
13.5 Do procedures reflect policies developed at the senior management level and are procedures developed with increasing specificity within each layer of the company – e.g., functions, departments, and processes?					

Control Activities Principles	Summary of Controls		Design Effectiveness (Fully met, partially met, not met)	Summary Evidence of Control	Operating Effectiveness Regarding Principles
	Entity Level	Process Level			
13.6 Are conditions identified as a result of executing the procedures investigated and are appropriate actions taken?					
13.7 Are policies and procedures reviewed periodically to determine their continued relevance?					
14. Information Technology – Information technology controls, where applicable, are designed and implemented to support the achievement of financial reporting objectives.					
14.1 Are application controls built into computer programs and supporting manual procedures?					
14.2 Are application controls designed to provide completeness and accuracy of information processing critical to the integrity of the financial reporting process, authorization, and validity?					
14.3 Do general computer controls include controls critical to the integrity of the financial reporting process, such as? <ul style="list-style-type: none"> • Access controls? • Change and incident management? • Systems development and deployment? • Computer operations? • Data backup and recovery? • Third party vendor management? • Physical security? 					
14.4 Are end-user computing processes, including spreadsheets and other user-developed programs documented, secured, backed-up, and regularly reviewed for processing integrity?					

Control Activities Summary	Design Effectiveness of Control Activities Component	Operating Effectiveness of Control Activities Component
<p>In summary, are control procedures implemented over major transaction cycles, accounting estimates, and the closing process sufficient to support the achievement of the company's objectives related to effective financial reporting? Consider summary conclusions in the context of each of the processes identified above.</p>	Fully Met	Fully Met
	Partially Met	Partially Met
	Not Met	Not Met
<p>Summarize the reasoning for this judgment along with any areas that the company will be addressing to improve the quality of internal control over financial reporting.</p>		

Information and Communication Principles	Summary of Controls		Design Effectiveness (Fully met, partially met, not met)	Summary Evidence of Control	Operating Effectiveness Regarding Principles
	Entity Level	Process Level			
15. Financial Reporting Information – Pertinent information is identified, captured, used at all levels of the company, and distributed in a form and timeframe that supports the achievement of financial reporting objectives.					
15.1 Is data underlying financial statements captured (optimally, at the source) completely, accurately, timely?					
15.2 Is information identified and captured for all financial transactions and events?					
15.3 Is information used, among other purposes, for adjusting entries and accounting estimates, as well as to monitor the reasonableness of recorded transactions?					
15.4 Is information developed using internal and external sources?					
15.5 Does operating information used to develop accounting and financial information often serve as a basis for reliable financial reporting?					
15.6 Do information systems produce information that is timely, current, accurate, and accessible?					
16. Internal Control Information – Information needed to facilitate the functioning of other control components is identified, captured, used, and distributed in a form and timeframe that enables personnel to carry out their internal control responsibilities.					
16.1 Are data required to execute each control component captured completely, accurately, and timely and in compliance with laws and regulations?					
16.2 Do reporting triggers prompt exception resolution, root-cause analysis, and control update, as needed?					
16.3 Do information systems produce information that is timely, current, accurate and accessible?					

Information and Communication Principles	Summary of Controls		Design Effectiveness (Fully met, partially met, not met)	Summary Evidence of Control	Operating Effectiveness Regarding Principles
	Entity Level	Process Level			
16.4 Is the quality of system information reviewed periodically to assess its reliability and timeliness in meeting the company's internal control objectives?					
17. Internal Communication – Communications enable and support understanding and execution of internal control objectives, processes, and individual responsibilities at all levels of the organization.					
17.1 Does management communicate to all personnel, particularly those in roles affecting financial reporting, that internal control over financial reporting must be taken seriously?					
17.2 Does an open communications channel exist between management and the board of directors so that both have information needed to fulfill their roles with respect to financial reporting objectives?					
17.3 Are separate lines of communication in place and do they serve as a “fail-safe” mechanism in case normal channels are inoperative or ineffective?					
17.4 Does the board have access to information sources outside of management, on a regular basis and as needed, including access to the external auditors, the internal auditors, and other relevant parties (such as regulatory authorities)?					
18. External Communication – Matters affecting the achievement of financial reporting are communicated with outside parties.					
18.1 Do open external communications channels allow input from customers, consumers, end users, suppliers, external auditors, regulators, financial analysts, and others, provide management and the board with important information on the effectiveness of internal control over financial reporting?					

Information and Communication Principles	Summary of Controls		Design Effectiveness (Fully met, partially met, not met)	Summary Evidence of Control	Operating Effectiveness Regarding Principles
	Entity Level	Process Level			
18.2 Is achievement of internal control over financial reporting assessed, where required by external auditors, and is this assessment communicated to management and the board?					

Information and Communications Summary	Design Effectiveness of Information and Communications Component	Operating Effectiveness of Information and Communications Component
In summary, are the processes set forth sufficient to accomplish the four information and communication principles identified and support the achievement of the company's objectives related to financial reporting?	Fully Met	Fully Met
	Partially Met	Partially Met
	Not Met	Not Met
Summarize the reasoning for this judgment along with any areas that the company will be addressing to improve the quality of internal control over financial reporting.		

Monitoring Principles	Summary of Controls		Design Effectiveness (Fully met, partially met, not met)	Summary Evidence of Control	Operating Effectiveness Regarding Principles
	Entity Level	Process Level			
19. Ongoing and Separate Evaluations – Ongoing and/or separate evaluations enable management to determine whether the other components of internal control over financial reporting continue to function over time.					
19.1 Is ongoing monitoring built into operations throughout the company?					
19.2 Do evaluations provide an objective consideration of the overall internal control over financial reporting?					
19.3 Does the evaluator understand the components being evaluated and how they relate to the activities supporting the reliability of financial reporting?					
19.4 Does management receive feedback on the effectiveness of internal control over financial reporting?					
19.5 Does management vary the scope and frequency of separate evaluations depending on the significance of risks being controlled, the importance of the controls in mitigating those risks, and the overall effectiveness of ongoing monitoring?					
20. Reporting Deficiencies – Internal control deficiencies are identified and communicated in a timely manner to those parties responsible for taking corrective action, and to management and the board as appropriate.					
20.1 Are findings of internal control deficiencies reported to the individual who owns the process and related controls, and who is in position to take corrective actions? Are the findings also reported to at least one level of management above the process owner?					
20.2 Are deficiencies that affect internal control over financial reporting communicated to top management and the board or audit committee, regularly and as necessary?					

Monitoring Principles	Summary of Controls		Design Effectiveness (Fully met, partially met, not met)	Summary Evidence of Control	Operating Effectiveness Regarding Principles
	Entity Level	Process Level			
20.3 Are deficiencies reported from both internal and external sources considered for internal control implications, and timely corrective actions are identified and taken?					

Monitoring Summary	Design Effectiveness of Monitoring Component	Operating Effectiveness of Monitoring Component
In summary, are the processes set forth sufficient to accomplish the two monitoring principles identified and support the achievement of the company's objectives related to financial reporting?	Fully Met	Fully Met
	Partially Met	Partially Met
	Not Met	Not Met
Summarize the reasoning for this judgment along with any areas that the company will be addressing to improve the quality of internal control over financial reporting.		

Deficiencies	
Identify which deficiencies, if any, are (or might be) categorized as significant deficiencies or material weaknesses.	
Potential Significant Deficiencies	Potential Material Weaknesses

III. Entity-Wide Controls

Control Environment ² Principle and Attribute	Summary of Entity-Wide Control and Management's Documentation
<p>1. Integrity and Ethical Values – Sound integrity and ethical values, particularly of top management, are developed and understood and set the standard of conduct for financial reporting.</p>	
<p>1.1 Has top management developed a clearly articulated statement of ethical values that is understood at all levels of the organization?</p> <ul style="list-style-type: none"> • Is there an established “tone at the top” that reinforces acceptable moral guidance about what is right and wrong? How is this tone communicated and practiced by executives and managers throughout the organization? • Does a code of conduct exist and does it include guidance on acceptable business practice, conflicts of interest, and expected standards of ethical and moral behavior? • Are the standards and guidance effectively implemented within the organization? • How does the company attain confidence that dealings with employees, suppliers, customers, investors, creditors, insurers, competitors, and auditors, etc., are ethical? 	
<p>1.2 Are processes in place to monitor adherence to principles of sound integrity and ethical values?</p> <ul style="list-style-type: none"> • Is there a process of periodically assessing compliance with the company's code of conduct? 	
<p>1.3 Are deviations from sound integrity and ethical values identified in a timely manner and addressed and remedied at appropriate levels within the company?</p> <ul style="list-style-type: none"> • Are appropriate remedial actions taken in response to departures from approved policies and procedures or violations of the code of conduct, and if so what are these actions? • What processes are in place to ensure that remedial action policies and steps are communicated to and understood by all associates? • Does management avoid intervening or overriding established controls? 	

² Numbering in this matrix corresponds to the number in the Principles Evaluation Matrix.

Control Environment ² Principle and Attribute	Summary of Entity-Wide Control and Management's Documentation
2. Board of Directors – The board of directors understands and exercises oversight responsibility related to financial reporting and related internal control.	
2.1 Has the board of directors defined and communicated authorities retained at the board level and those delegated to management?	
2.2 Does the board of directors have a critical mass of members who are independent of management? <ul style="list-style-type: none"> • Does the board have at least two independent directors? • Does the company have a process to periodically evaluate the independence of outside board, including their affiliations, relationships, and transactions with the company? • Is the audit committee constituted solely of independent members of the board? 	
2.3 Does the board of directors actively evaluate and monitor risk of management override of internal control and consider risks affecting the reliability of financial reporting? <ul style="list-style-type: none"> • Does the board (and audit committee) represent an informed and vigilant overseer of the financial reporting process and internal controls, including the information systems processing and related controls? 	
2.4 Does the audit committee have one or more members who have financial reporting expertise?	
2.5 Does the audit committee actively monitor the effectiveness of internal control over financial reporting and financial statement preparation? <ul style="list-style-type: none"> • Does a process exist for informing the audit committee of significant issues? Is information communicated on a timely basis? • Does the board of directors and/or audit committee give adequate consideration to understanding how management identifies, monitors, and controls financial reporting risks affecting the organization? 	
2.6 Does the audit committee oversee the work of both internal and external auditors? <ul style="list-style-type: none"> • Does the audit committee meet privately with the external auditors to discuss the reasonableness of the financial reporting process, system of internal control, significant comments, and recommendations? • Does the audit committee review the scope of activities of the external auditors? 	

Control Environment ² Principle and Attribute	Summary of Entity-Wide Control and Management's Documentation
2.7 Does the audit committee interact with regulatory auditors, as necessary?	
2.8 Does the audit committee have the exclusive authority to engage, replace, and determine the compensation of the external audit firm? <ul style="list-style-type: none"> • Does the audit committee have a charter outlining its duties and responsibilities? • Does the audit committee have adequate resources and authority to discharge its responsibilities? 	
2.9 Does the audit committee meet privately with internal and external auditors to discuss relevant matters?	
3. Management's Philosophy and Operating Style – Management's philosophy and operating style support achieving effective internal control over financial reporting.	
3.1 Does management's philosophy and operating style emphasize reliable financial reporting?	
3.2 Does management's attitude support a disciplined, objective process in selecting accounting principles and developing accounting estimates?	
3.3 Has management established and clearly articulated financial reporting objectives, including those related to internal control over financial reporting?	
4. Organizational Structure – The company's organizational structure supports effective internal control over financial reporting.	
4.1 Has management established internal reporting responsibilities for each functional area and business unit in the organization? <ul style="list-style-type: none"> • How are organizational responsibilities assigned relative to financial reporting? • How are modifications to the organizational structure made on a timely basis in light of changed conditions? 	
4.2 Does management maintain an organizational structure that facilitates effective reporting and other communications about internal control over financial reporting? <ul style="list-style-type: none"> • Are there an appropriate number of people, particularly with respect to data processing and accounting functions, with the requisite skill levels relative to the size of the entity and nature and complexity of activities and systems? • Are mechanisms in place for reporting identified internal control deficiencies? How are gaps reported to management? 	

Control Environment ² Principle and Attribute	Summary of Entity-Wide Control and Management's Documentation
5. Financial Reporting Competencies – The company retains individuals competent in financial reporting and related oversight roles.	
5.1 Does the company identify competencies that support accurate and reliable financial Management reporting?	
5.2 Does the company employ or otherwise retain individuals who possess the required competencies related to financial reporting?	
5.3 Does the company regularly evaluate and maintain needed competencies?	
6. Authority and Responsibility – Management and employees are assigned appropriate levels of authority and responsibility to facilitate effective internal control over financial reporting.	
6.1 Does the board of directors oversee management's process for defining responsibilities for key financial reporting roles?	
6.2 Are the CEO and senior management responsible for sound internal control over financial reporting, including both initiating and maintaining the program?	
6.3 Are senior and functional management responsible for ensuring all employees understand their responsibilities for achieving financial reporting objectives through adherence to internal control policies and procedures?	
6.4 Does the assignment of authority and responsibility include appropriate limitations?	
7. Human Resources – Human resource practices are designed and implemented to facilitate effective internal control over financial reporting.	
7.1 Has management established human resource practices that demonstrate its commitment to integrity, ethical behavior, and competence? <ul style="list-style-type: none"> • Are key managers' responsibilities clearly defined, and is their understanding of these responsibilities considered adequate? • Are policies and procedures for hiring, training, promoting, and compensating employees in place? 	
7.2 Are employee recruitment and retention for key financial positions guided by the principles of integrity and by the necessary competencies associated with the positions? <ul style="list-style-type: none"> • Do executives have the required knowledge, experience, and training to perform their duties? 	

Control Environment ²	Summary of Entity-Wide Control and Management's Documentation
Principle and Attribute	
<ul style="list-style-type: none"> • Is there appropriate oversight of compensation, retention, and termination of key executives by the board? • Are employee candidate background checks performed, particularly with regard to prior actions or activities considered to be unacceptable by the entity? 	
<p>7.3 Does management support employees by providing access to the tools and training needed to perform their financial reporting roles?</p> <ul style="list-style-type: none"> • Are all employees affecting financial reporting, including information technology personnel, adequately trained in their internal control roles and responsibilities? 	
<p>7.4 Do employee performance evaluations and the company's compensation practices, including those affecting top management, support the achievement of financial reporting objectives?</p>	

Information and Communication Principle and Attribute	Summary of Entity-Wide Control and Management's Documentation
17. Internal Communication – Communications enable and support understanding and execution of internal control objectives, and individual responsibilities at all levels of the organization.	
17.1 Does management communicate to all personnel, particularly those in roles affecting financial reporting, that internal control over financial reporting must be taken seriously?	
17.2 Does an open communications channel exist between management and the board of directors so that both have information needed to fulfill their roles with respect to financial reporting objectives?	
17.3 Are separate lines of communication in place and do they serve as a “fail-safe” mechanism in case normal channels are inoperative or ineffective?	
17.4 Does the board have access to information sources outside of management, on a regular basis and as needed, including access to the external auditors, the internal auditors, and other relevant parties (such as regulatory authorities)?	
18. External Communication – Matters affecting the achievement of financial reporting are communicated with outside parties.	
18.1 Do open external communications channels allow input from customers, consumers, end users, suppliers, external auditors, regulators, financial analysts, and others, provide management and the board with important information on the effectiveness of internal control over financial reporting?	
18.2 Is achievement of internal control over financial reporting assessed, where required by external auditors, and is this assessment communicated to management and the board?	

Monitoring Principle and Attribute	Summary of Entity-Wide Control and Management's Documentation
19. Ongoing and Separate Evaluations – Ongoing and/or separate evaluations enable management to determine whether the other components of internal control over financial reporting continue to function over time.	
19.1 Is ongoing monitoring built into operations throughout the company?	
19.2 Do evaluations provide an objective consideration of the overall internal control over financial reporting?	
19.3 Does the evaluator understand the components being evaluated and how they relate to the activities supporting the reliability of financial reporting?	
19.4 Does management receive feedback on the effectiveness of internal control over financial reporting?	
19.5 Does management vary the scope and frequency of separate evaluations depending on the significance of risks being controlled, the importance of the controls in mitigating those risks, and the overall effectiveness of ongoing monitoring?	
20. Reporting Deficiencies – Internal control deficiencies are identified and communicated in a timely manner to those parties responsible for taking corrective action, and to management and the board as appropriate.	
20.1 Are findings of internal control deficiencies reported to the individual who owns the process and related controls, and who is in position to take corrective actions? Are the findings also reported to at least one level of management above the process owner?	
20.2 Are deficiencies in internal control over financial reporting communicated to top management and the board or audit committee, regularly and as necessary?	
20.3 Are deficiencies reported from both internal and external sources considered for internal control implications, and timely corrective actions identified and taken?	

IV. Risk Assessment

Risk Assessment Matrix 1. Risk Identification and Analysis by Account and Disclosure

Financial Statement Account Disclosure	As % of Total	Impact on F/S	Account Characteristics	Business Process Characteristics	Fraud Risk	Entity-wide Factors	Overall Rating	Significant Assertions ³				
								E	C	V/A	R&O	P&D
BALANCE SHEET												
Assets												
Cash & Cash Equivalents												
Accounts Receivable												
Prepaid Expenses												
Inventory												
Property & Equipment												
Intangible Assets												
Total Assets												
Liabilities												
Accounts Payable												
Accrued Expenses												
Warranty												
Long-Term Debt												
Total Liabilities												
Shareholders' Equity												
Common Stock												
Retained Earnings												
Total Liabilities and Equity												

³ Significant Assertions: E • Existence C • Completeness V&A • Valuation or Allocation R&O • Rights and Obligations P&D • Presentation and Disclosure

Risk Assessment Matrix 1. Risk Identification and Analysis by Account and Disclosure

Financial Statement Account Disclosure	As % of Total	Impact on F/S	Account Characteristics	Business Process Characteristics	Fraud Risk	Entity-wide Factors	Overall Rating	Significant Assertions ³				
								E	C	V/A	R&O	P&D
INCOME STATEMENT												
Revenues												
Product Sales												
Repair Services												
Total Revenue												
Cost of Goods												
Operating Expenses												
Compensation & Related Benefits												
Marketing & Selling Expenses												
G&A Expense												
Depreciation & Amortization												
Total Operating Expenses												
Other Income/ Expense												
Interest Income/ (Expense)												
Income Taxes Expense												
Net income												
Total, as percent of Revenue												

Risk Assessment Matrix 2. Risk Analysis Mapping Accounts to Business Processes ⁴

Financial Statement Account		Cash & Cash Equivalents	Accounts Payable	Retained Earnings	Product Sales	Compensation & Related Benefits
Business Process	Business Sub-Process					
GL Closing and Reporting	General Ledger Maintenance					
	Non-Recurring Transactions					
	Period Close					
	Foreign Currency Translation					
	Consolidations					
	Financial Statement Preparation					
	Accruals, Management Estimates, and Reserves					
	SEC Filings and Other Regulatory Disclosures					
Treasury	Cash Management					
	Investment Securities					
Revenue & Receivables	Order Processing					
	Shipments					
	Cash Receipts					
	Invoicing					
	Credit Notes and Adjustments					
Purchasing & Payable	Purchasing to Payables					
	A/P and Cash Disbursements					
Payroll & Employee Benefits	Employee Master File Maintenance					
	Payroll Management & Benefits					
	Incentive Compensation					
Equity	Stock Administration & Equity Transaction					
Taxes	Income Tax Provision & Compliance					
Overall Rating						

⁴ This matrix is an excerpt of the complete matrix developed by the example company, addressing only certain of its accounts.

Risk Assessment Matrix 3. **Mapping Business Sub-Processes to Supporting IT Infrastructure**

Business Process and Sub-Process	Overall Rating	Application Name	Database	Operating System	Critical Spreadsheet Name	Supported by a Third Party	Hosted by a Third Party Provider
Cash Management							
Investment Securities							
Order Processing							
Credit and Collections							
Revenue Recognition							
Purchasing to Payables							
A/P and Cash Disbursements							
Employee Master File Maintenance							
Process Payroll							
Incentive Compensation							
Stock Administration & Equity							
Income Tax Provision and Compliance							
Manage GL and Closing							
Consolidation							
External Reporting & F/S Disclosure							

V. Account Estimates, Adjusting Entries, and Closing Entries

Financial Statement Assertion	Risk	Entity-Wide Control	Preventive / Detective	Manual / Automated
General Ledger Maintenance				
Existence and Completeness ⁵ – Changes to the chart of accounts are processed completely and accurately.	Personnel do not appropriately process changes to the chart of accounts, which may lead to inappropriately grouped or incomplete financial statements.			
Existence and Valuation – Routine transactions are accurately processed (manually or automatically) in the appropriate accounting period.	Manual or automated journal entries are not processed accurately in the proper accounting period, which may lead to incomplete or inaccurate financial statements.			
Existence and Completeness – Period-end closing adjustments are recorded completely and accurately.	When preparing period ending closing adjustments personnel do not record all of the appropriate transactions into the general ledger, or otherwise capture all relevant information, which may result in incomplete financial statements.			
Rights and Obligations – The chart of accounts reflects management’s decisions on roll-up for appropriate financial statement presentation.	Personnel without proper authority add or delete accounts or modify account groupings, which may lead to incorrect financial statement presentation.			
Rights and Obligations – Only transactions and activities that have occurred are reflected in the general ledger.	Personnel without the proper authority have access to the general ledger, which may result in processing of fictitious transactions and ultimately financial statement misstatements.			
Non-recurring transactions				
Existence and Completeness – All nonrecurring events and transactions are valid and properly recorded in the appropriate accounting period.	Personnel record invalid transactions in the general ledger, which may lead to financial statements coating, misleading, or misstated account balances. Personnel do not record nonrecurring events into the general ledger, leading to incomplete financial statements.			

⁵ Italicized text refers to financial assertions described in section *Importance of Financial Reporting Objectives* Chapter in Volume II

Financial Statement Assertion	Risk	Entity-Wide Control	Preventive / Detective	Manual / Automated
Valuation – All journal entries must balance.	Personnel prepare and enter journal entries into the general ledger which do not balance, leading to inaccurate financial statements.			
Valuation and Completeness – Related party events and transactions are identified, appropriately accounted for, and disclosed as necessary in the correct accounting period.	Personnel do not adequately identify transactions with related parties, which may lead to inadequate or incomplete recording or disclosure of related party transactions.			
Period Close				
Existence – Postings to prior periods are restricted.	Personnel make adjustments to closed accounting periods. Unauthorized closing entries in prior periods may result in misstated account balances.			
Existence, Completeness and Valuation – Reconciliations are properly performed and reviewed for all significant accounts on a timely basis and in the appropriate accounting period; issues identified are resolved.	Personnel do not perform reconciliations in the appropriate accounting period. This may result in inaccurate or incomplete financial statements.			
Existence, Completeness and Valuation – Postings from subledger to GL are made completely, accurately, and in the proper period.	Subledger to GL postings are inaccurate or incomplete, leading to misstated financial statements.			
Existence, Completeness and Valuation – Suspense, invalid, or other rejected or improper automated postings are analyzed and resolved on a timely basis.	Existence of unresolved suspense, invalid or other rejected or improper automated postings at period end, leading to inaccurate financial information in the general ledger.			
Foreign Currency Translations				
Valuation – Exchange rates used to translate foreign currency trial balances or amounts are valid.	Personnel use inaccurate month-end foreign currency rates, resulting in misstated foreign denominated account balances.			
Valuation – Foreign exchange gains and losses are correctly accounted for.	Personnel may record inappropriate gains or losses in the income statement.			
Consolidations				
Completeness – All subsidiaries or other applicable organizations are identified and considered in the consolidation process.	Personnel fail to identify all entities which should be included in the company's consolidation or include inappropriate entities.			

Financial Statement Assertion	Risk	Entity-Wide Control	Preventive / Detective	Manual / Automated
Existence, Rights and Obligations and Valuation – Consolidation packages received from subsidiaries accurately reflect the underlying operations.	Consolidation packages received from subsidiaries are inaccurate, incomplete or otherwise do not accurately reflect operations			
Completeness and Rights and Obligations – All inter-company transactions and balances are identified, reconciled, and appropriately eliminated in consolidation in the appropriate accounting period.	Personnel do not adequately identify inter-company transactions and balances, which are not eliminated in consolidation.			
Rights and Obligations – Consolidation entries are appropriate.	Personnel book unauthorized consolidation entries, which may result in misstated financial statements.			
Completeness and Presentation and Disclosure – Inclusion/exclusion of subsidiaries in the consolidation is appropriate.	Personnel do not adequately identify subsidiaries for inclusion in the consolidation, or entities that should be included are not.			
Existence – Inclusion/exclusion of subsidiaries in the consolidation is appropriate.	Personnel do not adequately identify subsidiaries and as such the subsidiaries financial information is not included in the consolidation.			
Completeness and Valuation – Consolidation entries are recorded completely and accurately.	Personnel book inaccurate or incomplete consolidating entries, leading to incomplete or inaccurate financial statements.			
Financial Statement Preparation				
All Assertions – Accounting policies are relevant to and kept current in response to changes in the company's business and operations	Management does not evaluate the impact of changes to the company's business or the overall economic environment in the context of the company's accounting policies.			
All Assertions – All entries are consistent with established accounting policies	Personnel do not understand or are unaware of the company's accounting policies resulting in deviations from company policy, which may lead to misapplication of policies.			
All Assertions – Interpretation of GAAP requirements is correct	Unqualified personnel are making judgments on interpretations of complex accounting rules without proper guidance from management.			

Financial Statement Assertion	Risk	Entity-Wide Control	Preventive / Detective	Manual / Automated
All Assertions – Accounting policies are appropriate to the company’s circumstances, and conform with GAAP.	Accounting policies are developed by personnel who lack sufficient understanding of the company’s circumstances or expertise to interpret complex GAAP.			
Presentation and Disclosure – Balances and disclosures are included in the financial statements completely and accurately	Personnel and/or accounting systems do not capture all relevant information from the GL and other sources, resulting in incomplete financial statement information.			
Presentation and Disclosure – Financial statement information is footed.	Financial statements not footed contain computation errors which would lead to inaccurate financial reporting.			
Presentation and Disclosure – Financial statements conform with GAAP.	Financial statements might be inaccurate, incomplete, or lack proper disclosure.			
Presentation and Disclosure – information presented in the financial statement footnotes is complete and accurate.	Disclosure information is not captured fully or accurately, or fails to properly reflect events or conditions.			
In addition to the above processes managed at the entity level, the following accounts are primarily managed at the entity level and have therefore been included in this matrix.				
Accruals, Management Estimates, and Reserves				
Completeness – All accruals and adjustments to allowance accounts are recorded.	Personnel do not properly record an accrual for existing obligations or other circumstances, or book inappropriate amounts, which may result in financial statement misstatements.			
Valuation and Completeness – All nonrecurring events, transactions, classes of transactions, and account balances requiring use of accounting estimates and application of judgment are identified and the appropriate accounting treatment is specified.	Personnel make misinformed or otherwise inappropriate judgments on accounting estimates or other matters, which may result in misstated obligations or other items in the financial statements.			
Goodwill and Other Intangible Assets				
Existence, Completeness and Valuation – All acquired goodwill and intangible assets are recorded at fair value at	Personnel record inappropriate purchase accounting entries which are not detected by management, or fair value of goodwill			

Financial Statement Assertion	Risk	Entity-Wide Control	Preventive / Detective	Manual / Automated
acquisition.	and intangibles is not supported by appropriate analysis and documentation. This may result in inaccurate values of goodwill and intangible assets in the financial statements.			
Existence, Completeness and Valuation – Historical data used for evaluating future trends are relevant, complete, and accurate.	Financial data for an acquired company lacks basis or is misleading or otherwise flawed. This may result in management using inaccurate data to perform financial analysis of acquisition target.			
Valuation – Acquired debts and obligations are properly valued.	Management does not properly identify valuation risk related to acquired debt obligations. This may result in a lack of risk management strategies to deal with any risks related to debt acquired.			
Presentation and Disclosure – Restructuring expenses are properly valued and classified.	Management does not appropriately identify restructuring expenses, or does not appropriately quantify the amounts.			
Existence, Completeness and Valuation – The amortization period for intangible assets represents the period for which the intangible assets are expected to provide value.	Management uses an inappropriate useful life in computing amortization, or does not properly consider impairment as economic conditions change, which may result in carrying intangible assets at inappropriate amounts.			
Existence, Completeness and Valuation – amounts at which goodwill and other intangible asset balances are carried remain valid.	Impairments of goodwill or other intangibles are not appropriately considered, which may result in their being carried at improper amounts.			
Existence, Completeness and Valuation – Amortization of intangible assets is recorded in the appropriate period.	Amortization amounts are based on flawed data or are otherwise incorrectly calculated.			

VI. Process Level Matrix – Revenue

Financial Statement Assertion	Risk	Process Level Control	Preventive / Detective	Manual / Automated
Order processing				
Valuation – Prices used in recorded sales are accurate.	Inaccurate prices are used.			
	Staff or supporting systems inaccurately calculate discounts, incentives, etc.			
Occurrence – Only valid orders are fulfilled.	Invalid orders are taken and processed.			
	Duplicate sales orders are processed.			
	Orders are accepted at unauthorized prices or terms unacceptable to management.			
	Orders are accepted at unauthorized prices or terms unacceptable to management.			
	Large, unusual or related party orders are inappropriately accepted.			
	Unacceptable customers are added to the customer list.			
	Customer list is inaccurate or incomplete.			
	Order processing circumvents established procedures			
Completeness – All valid orders are processed and recorded.	Back orders are not fulfilled.			
	Orders are not recorded properly.			
Presentation and Disclosure – Relevant information is captured and reported accurately and promptly	Disclosure data is not identified accurately or timely.			
	Disclosure data is not identified by each department.			
Rights and Obligations – Only valid orders are filled.	Lack of segregation of duties, which may result in inappropriate actions by unauthorized personnel			
Shipments				
Valuation – Correct goods are shipped and accurately recorded.	Incorrect items are included or substituted in the order, which may be returned by the customer.			

Financial Statement Assertion	Risk	Process Level Control	Preventive / Detective	Manual / Automated
Existence – Deliveries are recorded in the proper period.	Backlog orders are not properly monitored.			
Completeness – All deliveries are recorded.	Shipment data is not completely or is incorrectly recorded.			
	Inventory is incorrectly recorded.			
Existence, Completeness – Sales are recorded in the proper period.	Deliveries data are not captured or processed timely, due, for example, to incomplete or missing work orders.			
Valuation – Postings to cost of sales and inventory general ledger accounts are correct.	Human error in coding or entry.			
Rights and Obligations – Recorded inventory is owned by the company.	Inappropriate access to inventory or shipment systems.			
Cash Receipts				
Valuation – Cash receipts are accurately recorded.	Cash receipts are inaccurately or incompletely recorded.			
	Cash receipts are recorded in the improper period.			
	Cash receipts do not relate to sales and/or are not recorded against the correct customer or invoice.			
	Cash receipts are not input for processing.			
	Periodic updates for batch processing are inappropriately executed.			
	Bank statements are inconsistent general ledger accounts.			
	Inappropriate access to cash receipts and related records.			
	Inadequate segregation of duties.			
	Cash receipts are not protected before they are deposited.			
Valuation – An allowance for doubtful accounts is properly estimated.	Doubtful accounts have not been appropriately identified and considered.			
Existence – Recorded cash amounts exist	Cash is subject to theft			
	Cash receipts are not recorded in the period in which they are received.			
Presentation and Disclosure – Cash-related information is properly disclosed in the financial statements	Disclosure data is not identified by each department.			
	Personnel receive inadequate instruction on how to promptly and accurately report data required for disclosure.			

Financial Statement Assertion	Risk	Process Level Control	Preventive / Detective	Manual / Automated
Invoicing				
Rights and Obligation – The company has ownership rights to recorded cash and accounts receivable	Transactions affecting cash and accounts receivable balances are not captured and recorded completely and accurately			
Existence – Cash and accounts receivable records accurately reflect those items	Records of accounts receivable are inadequate.			
Existence – Invoices are recorded in the appropriate period.	Invoices are not recorded in the appropriate period.			
Valuation – Prices used in recorded sales are accurate.	Formulas used for calculating accounts receivables entries are inaccurate.			
	Selling price is inaccurate.			
	Inaccurate price lists are used.			
	Discounts, incentives, etc. are calculated incorrectly.			
	Customer complaints regarding inaccurate bills are not investigated or monitored.			
Completeness – A sales invoice is generated for every shipment or completed work order.	Delivery slips or work orders are lost or missing.			
	Deliveries are made but not recorded.			
	Invoices are not sent out properly.			
Rights and Obligations – The company has ownership rights to cash and accounts receivable	Transactions affecting cash and accounts receivable are incorrectly recorded or files improperly modified			
Credit Notes and Adjustments				
Existence – Credit notes issued are properly recorded	Goods returned by customers are not recorded in the appropriate period.			
Valuation – Credits to accounts receivable are accurately calculated and properly recorded.	Credit notes and adjustments to accounts receivable are miscalculated or inaccurately recorded.			
Completeness – All credit notes and proper adjustments to accounts receivable are recorded.	Not all credit notes and adjustments are captured and processed for recording in the accounts.			
Information Technology				
Completeness – A sales invoice is generated for every shipment or work order.	Order data is not transferred completely from the order entry subsystem to the invoicing subsystem.			
Valuation – Invoices are generated for proper amounts	Incorrect shipment or price data or terms are input into the invoicing system.			

Financial Statement Assertion	Risk	Process Level Control	Preventive / Detective	Manual / Automated
Completeness and Valuation – Standing data are complete and accurate.	Human error causes changes to standing data to be incompletely and inaccurately inputted.			
	Periodic updates for batch processing are improperly executed.			
	Inappropriate access to customer and price information leading to unauthorized changes.			

VII. Process Level Matrix – Payroll

Narrative Supporting Payroll Documentation

- *Record employee compensation data* – Upon an employee’s hiring, employee compensation data is entered to payroll database and the outsource payroll processing system. The payroll supervisor receives a Personnel Status Change report from HR from which she enters data into the database using the “New Hire” function. The ‘New Hire’ function requires specified data for entering: employee number, name, address, gender, date of birth, marital status, start date, status, cost center, office location, standard hours, salary, effective date, pay frequency, tax exemption, state of employment, bank information, benefit deductions, permanent or temporary employment status, additional benefits and 401K information.
- *Calculation of gross pay* – Calculation of gross pay is completed by the outsource payroll provider. For calculation of overtime, the controller generates a report from the payroll database. The file is emailed to payroll supervisor, reformatted and sent to the payroll provider for upload and calculation of gross pay. Bi-weekly and annual reconciliations of overtime hours and overtime paid is performed by the controller.
- *Calculate withholdings, other deductions* – All withholdings and other deductions are calculated by the outsource payroll provider.
- *Calculate net pay* – Calculation of net pay is performed by outsource payroll provider.
- *Remit deductions to appropriate agencies* – Payroll taxes are calculated, deducted and remitted by outsource payroll provider. The payroll supervisor is involved only when a new location needs to be added. The payroll supervisor contacts the state to issue a state remittance number, which the payroll supervisor forwards to outsource payroll provider. Any changes in contributions rates for states are handled by the outsource payroll provider, which notifies the payroll supervisor by fax if additional funds are needed to remit. Taxes are withdrawn from the payroll account.
- *Disburse pay* – Disbursement of pay is handled by outsource payroll provider. Prior to the transfer of funds, a wire confirmation is faxed to Payroll for the total amount of pay. Request for approval is sent to Treasury for authorization to transfer funds. After approval the funds are electronically transferred from company’s bank account to outsource payroll provider for disbursal. After the funds are withdrawn, a “Notice of Withdrawal” is sent to the payroll supervisor for comparison with bi-weekly payroll information. The approval of transfer is sent back to the payroll supervisor for filing with bi-weekly payroll information. At this time a journal entry to record the disbursement is prepared, reviewed by the controller, and booked.

Access to the payroll function and data is restricted to authorized personnel and adequate segregated duties exist between incompatible duties. This requires user access privileges that are authorized and granted by the business process owner having administrative rights and established security rights. Systems interacting with the Human Resource system are only those providing input required by the company’s outsourcer.

VIII. Information Technology Controls

information Technology Area	Risk	General Computer Control	Preventive / Detective	Manual / Automated
Less Complex Information Technology Environment				
Change Management	Incorrect changes are made to systems, applications, infrastructure and databases, adversely affecting the reliability of financial reporting.			
Security and Access – Logical	Improper use, disclosure, modification, or loss of critical financial data adversely affecting the reliability of financial reporting.			
Security and Access – Physical This section refers to data centers. In some smaller companies, network servers and communication equipment may comprise the entirety of the data center.	Improper use, disclosure, modification, or loss of critical financial data adversely affecting the reliability of financial reporting.			
Computer Operations – Data Backup	Lost or corrupted critical financial data is not recoverable, adversely affecting the reliability of financial reporting.			
Computer Operations – Third-Party Vendor Management	Inappropriate operations by a third party adversely affect data captured, processes, or reported to the company.			
Application Controls	Procedures in application programs to help ensure completeness and accuracy of transaction processing are ineffectively designed or not operating as intended.			

information Technology Area	Risk	General Computer Control	Preventive / Detective	Manual / Automated
More Complex Information Technology Environment				
Security and Access – Logical	The organization relies heavily on e-commerce as a critical part of their transaction processing or security controls at the application level are weak. Improper use, disclosure, modification, or loss of critical financial data, adversely affecting the reliability of financial reporting.			
Computer Operations – Problem Management	Inappropriate activities or processing errors alter data, impacting on reliability of financial reporting			
End User Computing	Inaccuracies in end user systems (spreadsheets) alter data affecting the reliability of financial reporting.			