

UNIVERSITY OF TOLEDO INTERNAL AUDIT DEPARTMENT

PURCHASE MATERIALS AND SUPPLIES

Control practices

The following control objectives provide a basis for strengthening your control environment for the process of purchasing materials and supplies. When you select an objective, you will access a list of the associated business risks and control practices. That information can serve as a checklist when you begin reviewing the strength of your current process controls.

This business risk and control information can help you assess your internal control environment and assist with the design and implementation of internal controls. Please note that this information is at the generic business process level and many companies will need to go beyond generic models to address the specific business processes that support the financial and nonfinancial disclosures being made. You can combine the insight of this business risk and control information with your industry-specific knowledge and understanding of your company's environment when conducting internal control assessments and designing and implementing recommendations.

Effectiveness and efficiency of operations

- A. Materials purchased satisfy the company's requirements and needs.
- B. Materials are purchased at an appropriate price.
- C. Orders are placed on a timely basis.
- D. Materials are received on a timely basis.
- E. The receiving process is efficient and cost-effective.
- F. Materials received are processed on a timely basis.
- G. Materials received meet required quality standards.
- H. Physical safeguards are adequate.
- I. The receiving process is safe.
- J. Employees and management are provided the information they need to control the process of obtaining materials and supplies.
- K. Purchase orders are properly authorized.
- L. Purchase orders are accurately and completely prepared and recorded on a timely basis.
- M. All purchase order transactions are reliably processed and reported.
- N. Receipts are properly authorized.
- O. Receipts are recorded accurately and completely on a timely basis.
- P. All receipt transactions are reliably processed and reported.
- Q. Performance measures used to control and improve the process are reliable.
- R. Management develops strategic business alliances with suppliers.

Compliance with applicable laws and regulations

- A. Materials are obtained in compliance with applicable laws and regulations.

UNIVERSITY OF TOLEDO INTERNAL AUDIT DEPARTMENT

PURCHASE MATERIALS AND SUPPLIES

Effectiveness and efficiency of operations

A. Materials purchased satisfy the company's requirements and needs.

Business risks

- Materials ordered will not meet the necessary technical specifications or quality standards.
- Materials will be received too early or too late, resulting in business interruptions and/or excessive levels of inventory.
- Vendors will not be aware of company needs or will be unable to supply the necessary materials.

Control practices

1. Investigate and update vendor capabilities periodically regarding product line and product specifications, product quality, and capacity and order lead times.
2. Specify procedures for notifying vendors of potential performance problems and for appropriate investigation and follow through.
3. Develop data on alternative vendors, and re-evaluate the vendor selection decision periodically.
4. Evaluate purchasing agents, buyers, and cross-functional teams consistently with management's objectives of reduced inventories, improved quality, lower costs, and frequent reliable deliveries.
5. Apply other measures to address issues such as supplier relationships, frequency of returned purchases, production problems related to out of stock materials and quality problems.
6. Monitor the approved suppliers periodically and systematically to ensure that their actual performance meets expectations. Report performance measures such as: percentage of on-time delivery, accuracy of shipments, product quality, and actual cost performance compared with original cost projections.

UNIVERSITY OF TOLEDO INTERNAL AUDIT DEPARTMENT

PURCHASE MATERIALS AND SUPPLIES

B. Materials are purchased at an appropriate price.

Business risks

- Material costs will be higher than anticipated.

Control practices

1. Develop a mechanism for determining the total cost of major purchases from particular vendors. Include considerations such as: percentage of on-time delivery, accuracy of shipments, product quality, and actual cost performance compared with original cost projections.
2. Centralize purchasing within the company.
3. Order materials and supplies from one or a few vendors to maximize the benefits of volume purchases.
4. Use appropriate performance measures to monitor process performance, such as percentage of purchases made under a bid process, amount of volume discounts obtained, and actual cost performance compared to original cost projections.
5. Evaluate the performance of winning vendors periodically and whether their pricing structures remain at competitive market rates.

C. Orders are placed on a timely basis.

Business risks

- Excessive inventory levels will increase costs.
- Orders will not be placed in sufficient time to account for vendor lead times.
- Insufficient quantities of materials and late deliveries will result in business interruptions.

Control practices

1. Establish communication channels between the marketing, production, and purchasing functions.
2. Document material requirements.
3. Reconcile usage needs with purchase orders and inventory levels periodically to ensure they are adequately aligned.
4. Analyze long-term needs and establish forward contracts with standing orders.
5. Integrate the usage scheduling system with the purchasing system.
6. Configure the computer system to generate purchasing requirements based on usage schedules recorded in the purchasing system and on standard bills of material master files.
7. Configure the computer to automatically generate purchase orders based on these material requirements, current stock levels, and previously specified desired minimum stock levels.
8. Ensure that purchase orders include the shipment mode and delivery date.

UNIVERSITY OF TOLEDO INTERNAL AUDIT DEPARTMENT

PURCHASE MATERIALS AND SUPPLIES

D. Materials are received on a timely basis.

Business risks

- The company will receive goods too early or too late.

Control practices

1. Develop, apply, and monitor supplier performance ratings.

E. The receiving process is efficient and cost-effective.

Business risks

- The receiving process will incur higher labor costs than necessary.
- The organization of the receiving area will not allow for optimum storage of goods or for the efficient movement of goods from receiving.

Control practices

1. Review the physical activities of the receiving process.
2. Design the receiving area and procedures to reduce the number of activities and the time required to complete activities.
3. Train employees in the process of materials handling.
4. Encourage employees to share ideas and suggestions on ways to improve the process.
5. Allow only limited storage space for within the receiving area to enforce the efficient distribution of goods away from receiving.

F. Materials received are processed on a timely basis.

Business risks

- Materials will arrive, but end users will remain unaware of the receipt.
- Plans and schedules for goods to be received will not be communicated to the receiving department.

Control practices

1. Notify end users when materials and supplies are received.
2. Establish communication channels between purchasing, end users, and receiving to ensure all parties are aware of material needs and the timing of these needs.

UNIVERSITY OF TOLEDO INTERNAL AUDIT DEPARTMENT

PURCHASE MATERIALS AND SUPPLIES

G. Materials received meet required quality standards.

Business risks

- Materials received will not meet quality standards and specifications.
- Business interruptions will occur if accepted materials are not usable.
- The company will incur additional costs of returning unacceptable goods at a later date.

Control practices

1. Train receiving personnel to inspect the quality of materials received, or send materials to trained personnel to ensure the materials meet the company's minimum standards for production use.
2. Develop strategic alliances or partnerships with suppliers to ensure the supplier builds in quality.
3. Optimize the number of suppliers to achieve total delivered cost targets and meet specific customer needs.

H. Physical safeguards are adequate.

Business risks

- Materials and supplies will be lost, stolen, damaged, destroyed, used for unauthorized purposes, or temporarily diverted.

Control practices

1. Restrict access to receiving and storage areas to authorized personnel.
2. Close receiving gates or loading docks when no delivery is in process.
3. Check the entry to facilities, issue appropriate visiting documents, and perform random checks of persons on the premises.
4. Segregate the receiving function physically from end users and shipping, unless good business practice dictates otherwise.
5. Secure and safeguard incoming goods upon receipt.
6. Communicate appropriate handling and storage practices to employees to prevent damage to materials.

UNIVERSITY OF TOLEDO INTERNAL AUDIT DEPARTMENT

PURCHASE MATERIALS AND SUPPLIES

I. The receiving process is safe.

Business risks

- Accidents will occur in which employees are injured or facilities are damaged.
- The company will not comply with regulatory requirements.

Control practices

1. Train employees fully in the safe handling and storage of non-hazardous materials.
2. Establish procedures for reporting and addressing safety concerns.
3. Maintain procedures and policies that comply with relevant rules and regulations concerning safety.
4. Train employees fully in the safe handling and storage of hazardous materials.
5. Store hazardous materials in appropriate containers.
6. Segregate hazardous materials from the main facilities used by employees.
7. Inspect handling and storage procedures and facilities regularly.

UNIVERSITY OF TOLEDO INTERNAL AUDIT DEPARTMENT PURCHASE MATERIALS AND SUPPLIES

J. Employees and management are provided the information they need to control the process of obtaining materials and supplies.

Business risks

- Employees and management will not be able to accurately determine whether the process is in control and operating as planned.
- Employees will not be able to improve the process on a timely basis.
- Information provided to employees and management about the process will conflict with company objectives.
- Plans to improve the process will be based on incorrect perceptions of process performance.

Control practices

1. Monitor approved suppliers periodically and systematically to ensure that their actual performance meets expectations. Include performance measures such as: percentage of on-time delivery, accuracy of shipments, product quality, and actual cost performance compared with original cost projections.
2. Evaluate purchasing agents, buyers, and cross-functional teams in a manner consistent with management's objectives of reduced inventories, improved quality, lower costs, and frequent reliable deliveries.
3. Select appropriate performance measures to ensure that the procurement and receiving processes are properly controlled.
4. Select quantifiable and controllable measures that (a) link the process to the company's goals and to customer expectations and (b) stimulate continuous improvement.
5. Define the process used to collect required data and calculate measures. (For example, define whether data collection is an integral part of the operating process or a separate process, and whether it is cost-effective).
6. Ensure that management understands how the procurement and receiving processes contribute to customer satisfaction and overall company objectives.
7. Select performance measures that support the creation of value and customer service by reflecting quality and time as well as costs.

K. Purchase orders are properly authorized.

Business risks

- The company will make unauthorized orders for supplies and services.
- The company will order supplies and services from unauthorized vendors, or at the wrong prices or terms.
- Goods or services purchased will not meet quality standards.
- Unauthorized individuals will order and receive supplies and services.

UNIVERSITY OF TOLEDO INTERNAL AUDIT DEPARTMENT PURCHASE MATERIALS AND SUPPLIES

Control practices

1. Require that the requesting department prepares the purchase requisition for all materials and supplies purchased.
2. Approve requisitions before purchase commitments are made. Ensure that vendors, prices, quality, quantities, and terms are approved.
3. Use computer system input screens and routines to generate purchase order documents and transactions.
4. Design computer system routines to automatically verify that purchase orders are created only for authorized vendors. (For example, configure the system to automatically verify the vendor against the vendor master file during purchase order entry.)
5. Provide purchasing personnel with current prices, vendors, specifications, and terms to ensure that only authorized terms are used to create purchase orders. (For example, this information can be provided on a supplier extranet site or through computer inquiry terminals that have direct access to vendor product and inventory record files.)
6. Ensure that established policies and procedures define spending limits and approval procedures for purchase orders.
7. Configure approval limits in the purchasing system and allow authorized users to approve orders or requisitions within the approved limits.
8. Segregate all purchasing responsibilities, including supplier selection, from disbursement and accounting activities.
9. Rotate purchasing agents or buyers among purchasing responsibilities periodically to ensure independence. If business conditions make it impractical to rotate agents or buyers, implement other compensating controls.
10. Notify vendors of company personnel authorized to approve purchase orders.
11. Ensure that the system uses an approved vendor master file to verify appropriate vendors during purchase order creation.
12. Require management to define and communicate criteria for supplier selection to ensure that goods and services are obtained only from properly approved suppliers.
13. Add new suppliers to the established vendor approval master file only if they meet the criteria established by management.
14. Investigate suppliers prior to approval. Consider such factors as price competitiveness, reputation, product quality, delivery abilities, and financial solvency.
15. Obtain competitive bids for all purchases over amounts specified by management.
16. Require justification and management approval for the absence of competitive bids or for the acceptance of a price other than a lowest bid.
17. Install computer system controls, such as access control software, to preclude unauthorized purchase transactions.

UNIVERSITY OF TOLEDO INTERNAL AUDIT DEPARTMENT PURCHASE MATERIALS AND SUPPLIES

L. Purchase orders are accurately and completely prepared and recorded on a timely basis.

Business risks

- Receiving will reject deliveries because no valid purchase order will exist.
- The company will receive incorrect supplies and merchandise, or quantities of supplies and merchandise, and incur additional costs to return or store these goods.
- The company will obtain an inadequate supply of supplies and merchandise.
- The company will lose purchase orders, resulting in incomplete records of supplies and merchandise to be received.
- Management will be unable to determine unfulfilled purchase commitments.

Control practices

1. Use computer system routines or pre-numbered purchase order forms to assign purchase order numbers to order requests.
2. Safeguard pre-numbered forms from unauthorized use.
3. Require that appropriate personnel, such as the original requestor, review generated purchase orders to ensure that items ordered are correct.
4. Ensure that purchase orders are time sensitive and voided by the system if not fulfilled after a given period.
5. Use computer system routines to generate exception reports for identifying purchase orders that have been outstanding for excessive lengths of time.

UNIVERSITY OF TOLEDO INTERNAL AUDIT DEPARTMENT

PURCHASE MATERIALS AND SUPPLIES

M. All purchase order transactions are reliably processed and reported.

Business risks

- Mistakes and discrepancies on purchase orders will remain undetected.
- Individuals will make unauthorized changes to programs, causing unauthorized processing results.
- Individuals will use unauthorized versions of files and/or programs to process transactions, resulting in unauthorized or incorrect business transactions.
- Files (transaction, reference, or master) will be lost, altered, or damaged, resulting in inefficiencies, lost assets, or incorrect processing of transactions.

Control practices

1. Perform a one-to-one check between the entered information and the source documents to verify the accuracy of key data fields, including the date.
2. Require authorization for all changes to program routines.
3. Require user approval for program change test results.
4. Use tape and/or disk management systems to ensure that appropriate versions of transaction files, master files, and programs are used for processing.
5. Install computer system controls, such as access control software, to preclude unauthorized changes in the versions of files and programs used to process transactions.
6. Install computer system controls, such as access control software, to protect files and programs from unauthorized use, modification, or deletion.

UNIVERSITY OF TOLEDO INTERNAL AUDIT DEPARTMENT

PURCHASE MATERIALS AND SUPPLIES

N. Receipts are properly authorized.

Business risks

- The company will accept supplies, merchandise and services for which no authorized order has been placed.
- The company will accept incorrect quantities of supplies and merchandise, or supplies and merchandise that do not meet company specifications.
- Unauthorized individuals will order and receive supplies, merchandise, and services.
- The company will receive and pay for, rather than return or refuse the following: unordered supplies, merchandise, or services; excessive quantities or incorrect items; and cancelled or duplicated orders.

Control practices

1. Accept only supplies, merchandise, and services that are supported with an authorized purchase order.
2. Return receipts without an authorized purchase order or its equivalent to the supplier, or investigate for propriety in a timely manner.
3. Use computer system routines to verify that the supplies and merchandise orders received are for legitimate outstanding purchase orders. (For example, ensure that orders match the purchase order number entered as part of the receiving transaction with records contained on the purchase order master file.)
4. Configure the computer application to generate exception reports for any receipts that do not have an outstanding purchase order on file.
5. Install computer system controls, such as access control software, to preclude unauthorized entry of receiving transactions into the system.
6. Safeguard receiving reports from theft, destruction, and unauthorized use.
7. Designate authorized personnel to correct errors in original receiving reports and re-enter them into the system.

UNIVERSITY OF TOLEDO INTERNAL AUDIT DEPARTMENT PURCHASE MATERIALS AND SUPPLIES

O. Receipts are recorded accurately and completely on a timely basis.

Business risks

- The company will not record, or will inaccurately record, receipts of supplies, merchandise, or services. Liabilities will not be recorded and inventory will be misstated.
- The company will lose the records of supplies and merchandise received.

Control practices

1. Test count, weigh, or measure incoming goods on a sample basis to determine the accuracy of supplier shipments.
2. Note all discrepancies on the receiving reports and resolve them with the supplier.
3. Inspect incoming goods for effects such as damage, quality characteristics, and product specifications.
4. Use receiving documents or online computer input routines to record the actual receipt of supplies and merchandise.
5. Implement reconciliation controls to ensure that all receiving transactions are entered into the system if receiving documents are initially used to record receipts of materials and supplies.
6. Use computer system routines to match each line item of the receiving transaction with the line items of the corresponding purchase order record.
7. Install computer controls to highlight discrepancies on exception reports and denote purchase orders on file with partial receipt indicators.
8. Design computer procedures to close purchase order records when all line items match and have been received.

UNIVERSITY OF TOLEDO INTERNAL AUDIT DEPARTMENT PURCHASE MATERIALS AND SUPPLIES

P. All receipt transactions are reliably processed and reported.

Business risks

- Individuals will make unauthorized changes to programs, causing unauthorized processing results.
- Individuals will use unauthorized versions of files and/or programs to process transactions, resulting in unauthorized or incorrect business transactions.
- Files (transaction, reference, or master) will be lost, altered, or damaged, resulting in inefficiencies, lost assets, or incorrect processing of transactions.

Control practices

1. Require authorization of all changes to program routines.
2. Require user approval for program change test results.
3. Use tape and/or disk management systems to ensure that appropriate versions of transaction files, master files, and programs are used for processing.
4. Use computer system controls, such as access control software, to preclude unauthorized changes in the versions of files and programs used to process transactions.
5. Implement computer system controls, such as access control software, to protect files and programs from unauthorized use, modification, or deletion.

Q. Performance measures used to control and improve the process are reliable.

Business risks

- Inaccurate measurements will result in erroneous perceptions about process performance, leading to inappropriate decisions.

Control practices

1. Implement controls that automatically calculate and process the performance measures based on data captured at the transaction source. (For example, processing time, number of defects, and on-time delivery).
2. Review performance measures periodically to ensure they reflect actual process performance.
3. Use quality reports and customer surveys to capture relevant information about process performance.
4. Communicate information captured about process performance to employees responsible for vendor relations and improving the procurement and receiving processes.
5. Ensure that management and employees understand the linkage between the measures and customer satisfaction.
6. Ensure that management and employees buy in to the use of these measures as tools to improve process performance.
7. Link the performance measures with employees' performance evaluations.

UNIVERSITY OF TOLEDO INTERNAL AUDIT DEPARTMENT

PURCHASE MATERIALS AND SUPPLIES

R. Management develops strategic business alliances with suppliers.

Business risks

- The process will not achieve optimal results.
- The company will lose competitive advantage to companies that develop cooperative relationships with suppliers and use technology to increase supplier efficiency.
- Adversarial approaches to suppliers will result in unsatisfactory business relationships.

Control practices

1. Develop strategic business alliances with suppliers, and involve these suppliers in developing better ways to process accounts payable.
2. Strive to improve vendor relations continually.
3. Develop objectives for identifying potential candidates for strategic alliances.
4. Perform due diligence reviews of potential vendors.
5. Formalize and document partnership relationships.
6. Reengineer the purchasing and accounts payable processes in cooperation with strategic partners to eliminate redundancies.
7. Ensure that documented and enforced procedures exist to evaluate and approve long-term supply contracts and to ensure that they are in accordance with the business strategy for the company.
8. Employ integrated system technologies, such as EDI, to streamline the accounts payable process and link with strategic partners.

UNIVERSITY OF TOLEDO INTERNAL AUDIT DEPARTMENT

PURCHASE MATERIALS AND SUPPLIES

Compliance with applicable laws and regulations

A. Materials are obtained in compliance with applicable laws and regulations.

Business risks

- The company will incur fines or other penalties.
- The company will make sensitive payments, violate export controls, and/or incur conflict of interest situations.
- The company will incur bad publicity and loss of reputation.

Control practices

1. Require legal review of all relevant laws and regulations.
2. Develop procedures to comply with all relevant laws and regulations.
3. Consult industry organizations or regulatory bodies about compliance with laws and regulations and possible future requirements.
4. Monitor the political, lawmaking, and regulatory environments to ensure company procedures remain in compliance with industry standards and applicable laws and regulations.
5. Document company policies and procedures concerning compliance with laws and regulations.
6. Distribute company policies and procedures concerning compliance with laws and regulations to appropriate personnel.
7. Designate a legal officer that is generally responsible for compliance with laws and regulations and is available to advise management.
8. Assign appropriate personnel to review standard purchase order terms and conditions to ensure that they comply with legal and regulatory requirements.
9. Follow proper competitive bidding procedures as required by company policy or government regulations.
10. Comply with purchasing policy provision for meeting ethical and procedural requirements when evaluating vendors.