

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 of materials and supplies are properly authorized.
- O. Receipts of materials and supplies are recorded accurately and completely on a timely basis.
- P. All material and supply receipt transactions are reliably processed and reported.
- Q. All materials requisitioned are properly transferred.
- R. Performance measures used to control and improve the process are reliable.
- S. Management develops strategic business alliances with suppliers.

Compliance with applicable laws and regulations

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

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Effectiveness and efficiency of operations

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

Business risks

- Products 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 are not aware of the company's needs or are not able to supply the necessary materials.

Control practices

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

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B. Materials are purchased at an appropriate price.

Business risks

- Product costs will be higher than anticipated.
- Products will not be profitable or able to compete in the market at a reasonable price.

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 periodically the performance of winning vendors and whether their pricing structures remain at competitive market rates.

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C. Orders are placed on a timely basis.

Business risks

- Excessive inventory levels will increase costs.
- Insufficient quantities of materials will cause production delays.
- Orders will not be placed soon enough to allow for vendor lead times.
- Late deliveries will result in business interruptions.

Control practices

1. Establish communication channels between the marketing, production, and purchasing functions.
2. Document production schedules and material requirements.
3. Reconcile production 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 production scheduling system with the purchasing system.
6. Use the computer system to generate purchasing requirements based on production schedules recorded in the purchasing system and on standard bills of material master files.
7. Configure the computer system to automatically generate purchase orders based on material requirements, current stock levels, and previously specified desired minimum stock levels.
8. Evaluate the use of electronic data interchange (EDI) for placing orders directly into the supplier's order entry system.

D. Materials are received on a timely basis.

Business risks

- The company will not receive goods in time for production needs.
- The company will receive goods prior to production needs and storage space will not be available.

Control practices

1. Implement just-in-time inventory techniques.
2. Develop, apply, and monitor supplier performance ratings.

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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 does not allow for optimum storage of goods or for the efficient movement of goods from receiving into warehousing or production.

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. Limit storage space in the receiving area to enforce the efficient distribution of goods away from receiving.
6. Maintain material routing procedures for received items.
7. Provide inbound functions with instructions for routing non-routine material.

F. Materials received are processed on a timely basis.

Business risks

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

Control practices

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

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G. Materials received meet required quality standards.

Business risks

- The company will encounter production problems because materials received do not meet quality standards and specifications.
- Production will be delayed if accepted materials are later found to be unusable.
- The company will incur additional costs of returning unacceptable goods at a later date.

Control practices

1. Maintain current lists of specifications to be used in inspecting and testing goods.
2. Ensure that receiving verifies specifications with purchasing or other appropriate personnel.
3. Train receiving personnel to inspect the quality of materials received. Alternately, send the materials to other trained personnel to ensure they meet the company's minimum standards for production use.
4. Develop strategic alliances or partnerships with suppliers to ensure the supplier builds in quality.
5. Optimize the number of suppliers to achieve total delivered cost targets and meet specific customer needs.
6. Involve suppliers in the new product development and value analysis process.

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 entry to facilities, issue appropriate visiting documents, and perform random checks of people on the premises.
4. Segregate the receiving function physically from production facilities and shipping, unless good business practices dictate otherwise.
5. Secure and safeguard incoming goods upon receipt.
6. Communicate appropriate handling and storage practices to employees to prevent damage to materials.

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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.

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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 determine accurately whether the process is in control (that it is 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 the company's 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: percent 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 1. Link the process to the company's goals and to customer expectations, and 2. Stimulate continuous improvement.
5. Define the process used to collect the required data and calculate the 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 materials and supplies.
- The company will order materials and supplies from unauthorized vendors, or at the wrong prices or terms.
- Goods purchased will not meet quality standards.
- Unauthorized individuals will order and receive materials and supplies.

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Control practices

1. Require the requesting department to prepare the purchase requisition for all materials and supplies purchased.
2. Notify vendors of company personnel authorized to approve purchase orders.
3. Approve requisitions before making purchase commitments. Approve vendors, prices, quality, quantities, and terms.
4. Use computer system input screens and routines to generate purchase order documents and transactions.
5. 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.)
6. Provide purchasing personnel with current prices, vendors, specifications, and terms, such as supplier extranet sites or computer inquiry terminals that have direct access to vendor product and inventory record files, to ensure that only authorized terms are used to create purchase orders.
7. Require formal approval from management for all changes to purchase orders.
8. Apply established policies and procedures to define spending limits and approval procedures for purchase orders.
9. Configure approval limits in the purchasing system and allow authorized users to approve orders or requisitions within the approved limits.
10. Monitor and control systematic inventory reorder points.
11. Limit access for changing the inventory reorder points to management.
12. Segregate all purchasing responsibilities, from supplier selection to disbursement and accounting activities.
13. Restrict initiation and editing of purchase requisitions or orders to authorized users independent from vendor maintenance, goods receipts, accounts payable, and processing disbursements.
14. 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.
15. Ensure that an approved-vendor master file is used by the system for verifying acceptable vendors during purchase order creation.
16. Add new suppliers to the established master file only if they meet the criteria established by management.
17. Require management to define and communicate criteria for supplier selection to ensure that goods and services are obtained only from properly approved suppliers.
18. Investigate suppliers prior to approval. Consider such factors as price competitiveness, reputation, product quality, delivery abilities, and financial solvency.
19. Obtain competitive bids for all purchases over amounts specified by management.
20. Require justification and management approval for the absence of competitive bids or for the acceptance of a price other than a lowest bid.
21. Install computer system controls, such as access control software, to preclude unauthorized purchase transactions.

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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 exists.
- The company will receive incorrect materials and supplies, or incorrect quantities of materials and supplies, and will incur additional costs to return or store these goods.
- The company will obtain an inadequate supply of materials and supplies.
- The company will lose purchase orders, resulting in incomplete records of materials and supplies 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. Use batch totals before processing is complete for systems that input purchase orders into a temporary file.
4. Ensure that purchase orders have fields of pertinent commitment information, including item descriptions, quantities, price, price adjustment mechanisms, delivery requirements, freight terms, taxes, payment terms, and account distribution.
5. Ensure that key data fields, including ship-to address, vendor, buyer, item catalog, and unit of measure, are populated to process a purchase order.
6. Require appropriate personnel, such as the original requestor, to review generated purchase orders to ensure that items ordered are correct.
7. Ensure that purchase orders are time sensitive and voided by the system if not fulfilled after a given period.
8. Review open purchase orders regularly (such as weekly or monthly) and remove invalid orders after 30 days.
9. Configure computer system routines to generate exception reports for identifying purchase orders that have been outstanding for excessive lengths of time.
10. Specify the shipment mode and delivery date on purchase orders.

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

Business risks

- Mistakes and discrepancies on purchase orders will remain undetected.
- Unauthorized changes will be made to programs, creating unauthorized processing results.
- Unauthorized versions of files and/or programs will be used 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 field, including the date.
2. Require authorization for all changes to program routines.
3. Require user approval for program change test results.
4. Implement 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.

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N. Receipts of materials and supplies are properly authorized.

Business risks

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

Control practices

1. Accept only materials supported with an authorized purchase order or its equivalent.
2. Return all other receipts to the supplier, or investigate them for propriety in a timely manner.
3. Ensure that receipts that bypass central receiving are subject to validation (of receipt or performed service) and properly approved prior to vouching.
4. Apply computer system routines to verify that any material orders received are for legitimate, outstanding purchase orders. (For example, match the purchase order number entered as part of the receiving transaction with records contained on the purchase order master file.)
5. Establish appropriate tolerance limits for key receiving system inputs and block over deliveries automatically for investigation if they are not within the delivery tolerance.
6. Configure the computer application to generate exception reports for any material receipts for which there is no outstanding purchase order on file.
7. Install computer system controls, such as access control software, to preclude unauthorized entry of receiving transactions into the system.
8. Safeguard receiving reports from theft, destruction, and unauthorized use.
9. Designate authorized personnel to correct errors in original receiving reports and reenter them into the system.

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

Business risks

- The company will not record, or will inaccurately record, receipts of materials and supplies. Liabilities will not be recorded, and inventory and cost of goods sold will be misstated.
- Goods received will not be recorded in the proper period.
- The company will lose the records of materials and supplies received.

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Control practices

1. Verify the accuracy of and update vendor, inventory, and open purchase order information periodically to reflect receipts.
2. Configure the computer system to require a valid purchase order in order to receive goods.
3. Match incoming goods to purchase orders upon receipt and enter them into the system for processing.
4. Use batch totals before processing is complete for goods received that input into a temporary file before sub-ledger updates.
5. Test count, weigh, or measure incoming goods on a sample basis to determine the accuracy of the suppliers' shipments.
6. Complete one-to-one checks of goods received and enter it into the system to verify the correct receiving date and receiving information (quantity, amounts, and vendor).
7. Ensure that goods received are date-stamped by the computer system when entered for proper period (such as month or year-end) recording.
8. Review open receipts daily and follow up for clearance after one day.
9. Review receipts daily for completeness and investigate and resolve all unmatched goods.
10. Note all discrepancies on the standard receiving reports, and review these discrepancies with the manager and resolve them with the supplier.
11. Inspect incoming goods for issues such as damage, quality characteristics, and product specifications.
12. Count materials on hand periodically, reconcile with perpetual records, and investigate any differences.
13. Use receiving documents or online computer input routines to record the actual receipt of materials and supplies.
14. Use computer routines to match quantity of receipts with the purchase order.
15. 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 suppliers.
16. Configure computer system routines to match each line item of the receiving transaction with the line items of the corresponding purchase order record.
17. Install computer controls that are designed to highlight discrepancies on exception reports and denote purchase orders on file with partial receipt indicators.
18. Design computer procedures to close purchase order records when all line items match and have been received.
19. Maintain procedures for promptly updating inventory records.
20. Match dates on receiving information and inventory information and follow up with any discrepancies.
21. Monitor instances of invoices presented for payment when materials were accepted without a valid purchase order.

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P. All material and supply receipt transactions are reliably processed and reported.

Business risks

- Unauthorized changes will be made to programs, causing unauthorized processing results.
- Unauthorized versions of files and/or programs will be used 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. Implement tape and/or disk management systems to ensure that appropriate versions of transaction files, master files, and programs are used for processing.
4. Apply 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. All materials requisitioned are properly transferred.

Business risks

- Some materials requisitioned will not be properly transferred.
- Inadequate transfer or requisition procedures will be employed.
- Transfer documents will be lost.
- Information regarding materials transferred to/from storage will be incomplete or inaccurate.

Control practices

1. Transfer materials only on the basis of a properly approved requisition.
2. Require appropriate documentation for materials transferred from receiving to other business activities.
3. Ensure transfer documentation accompanies all transfers, and stores or other activities personnel verify materials and quantities received.
4. Pre-number transfer documents, and investigate missing documents.

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

Business risks

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

Control practices

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

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S. Management develops strategic business alliances with suppliers.

Business risks

- The process will not achieve optimal results.
- The company will lose competitive advantage to those competitors who are able to increase efficiencies with their suppliers through technology links and joint cooperation.
- Adversarial approaches will lead to suboptimal results for both parties.

Control practices

1. Develop strategic business alliances with suppliers. Involve these suppliers in developing better ways to process accounts payable.
2. Make efforts to improve vendor relations continuously.
3. Develop objectives to identify 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 verify they are in accordance with the company's business strategy.
8. Implement integrated system technologies, such as EDI, to streamline the accounts payable process and build linkages with strategic partners.

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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 that comply with laws and regulations.
3. Consult industry organizations or regulatory bodies about compliance with laws and regulations and possible future requirements.
4. Monitor political, lawmaking, and regulatory environments to ensure that company procedures continually comply with any industry standards and applicable laws and regulations.
5. Document policies and procedures concerning compliance with laws and regulations.
6. Distribute information about compliance policies and procedures 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 compliance with legal and regulatory requirements.
9. Follow proper competitive bidding procedures as required by company policy and government regulations.
10. Comply with purchasing policy guidelines that address how ethical and procedural requirements must be met when evaluating vendors.