

UNIVERSITY OF TOLEDO INTERNAL AUDIT DEPARTMENT

MOVE MATERIALS AND RESOURCES

Control practices

The following control objectives provide a basis for strengthening your control environment for the process of moving materials and resources. 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 usage is properly authorized.
- B. Materials movement is conducted efficiently and occurs on a timely basis to support production.
- C. Employees and management are provided with the information needed to control the materials movement process.
- D. Relevant management information is provided to managers and empowered employees on a timely basis.
- E. All materials movements are authorized.
- F. Materials movements are recorded accurately and completely on a timely basis.
- G. All materials movement transactions are reliably processed and reported.
- H. Performance measures used to control and improve the process are reliable.

Compliance with applicable laws and regulations

- A. The materials movement process complies with applicable laws and regulations.

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Effectiveness and efficiency of operations

A. Materials usage is properly authorized.

Business risks

- Materials will be issued for unauthorized purposes.
- Unauthorized products or quantities of products will be produced.
- Personnel will spend time working on unauthorized projects.

Control practices

1. Require approval for production plans, inventory levels, product lines, and ad hoc projects, and communicate the information to resource managers.
2. Require approved requisition forms for materials issued to production.
3. Review and approve resource requests over specified levels.
4. Train employees in the resource acquisitioning process.
5. Document and update procedures on a regular basis, and provide the information in writing to applicable employees.

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B. Materials movement is conducted efficiently and occurs on a timely basis to support production.

Business risks

- Cost of moving materials will be excessive and contribute to higher product costs.
- Materials will be moved excessively long distances with double handling.
- The company will incur production delays due to slow movement of materials.

Control practices

1. Evaluate the costs and benefits of establishing a just-in-time system, or similar production and inventory management philosophy.
2. Maintain perpetual product inventory records, and notify operations or other appropriate personnel when inventory drops below a predetermined level.
3. Develop a system of inventory storage and handling to reduce double handling of materials and minimize distances materials need to be moved.
4. Store high-volume materials near the relevant production area.
5. Identify and store high-volume materials in convenient warehouse locations.
6. Use standardized storage locations for all materials.
7. Eliminate intermediate inventory holding stages.
8. Determine efficient quantities for movement of each major material.
9. Use mechanical movement techniques such as conveyor belts to automate the materials movement process.
10. Use relevant performance measures to monitor the efficiency of the process of moving materials. Include such measures as: number of full-time equivalent personnel engaged in materials handling, number of materials moved per day, average cost of completing each materials requisition, and average time taken to complete each movement.
11. Store products in containers or in lot sizes that typically are requested and can be moved straight from storage to production without counting or unpacking.
12. Recognize peak materials requisitioning times.
13. Establish procedures to even out the workflow to avoid bottlenecks in materials movements.

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C. Employees and management are provided with the information needed to control the materials movement process.

Business risks

- Information provided to employees and management about the process will conflict with company objectives.
- Employees will not improve process performance on a timely basis.
- Plans to improve the process will be based on incorrect perceptions of process performance.

Control practices

1. Identify and understand customer expectations.
2. Identify and understand the company's goals in relation to improving product quality, reducing costs, and compressing cycle time.
3. Select quantifiable and controllable measures that link the process to the company's goals and to customer expectations, as well as stimulate continuous improvement.
4. Determine what data needs to be collected and how it is to be measured to produce the selected measures.
5. Understand how the process contributes to customer satisfaction and how the company's overall objectives drive all performance measures.

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D. Relevant management information is provided to managers and empowered employees on a timely basis.

Business risks

- Information used to support business decisions will not be relevant.
- Users and managers will make poor decisions because the information they use is incomplete, out-of-date, or irrelevant to the decision.
- Performance measures will not align with management strategy and will focus on the wrong issues, providing incentives for actions that are inconsistent with the strategy.
- Results of the information process will be data rich and information poor unless the available data is synthesized, summarized, and reported at the proper level and in a useful form that supports management decisions.

Control practices

1. Develop relevant performance measures that align process performance with the company's objectives.
2. Determine when and how often performance measurements will be reported and to whom.
3. Educate the recipients of performance measurements on their relevance and use in monitoring the process.
4. Ensure the performance measures used stimulate learning and process improvement.
5. Identify the nature, frequency, and depth of the information that must be communicated to various personnel.
6. Ensure employees empowered with the responsibility to control and improve the process understand the relevance of the performance measures to customer satisfaction.
7. Ensure management understands and communicates the relationship of the performance measures to the company's objectives.
8. Determine what information is needed to support decision making, when it is needed, where it should be distributed, at what level, and in what form.
9. Design and implement procedures that calculate and report the performance measurements on a consistent basis in accordance with management plans.
10. Use integrated systems for effectively and efficiently processing and disseminating relevant information.
11. Design control procedures that provide reliable measurements into these systems.
12. Monitor performance measures over time against desired performance levels.
13. Analyze reasons for variations between performance measures and desired performance levels.
14. Take necessary corrective actions to improve the process.
15. Assess the effectiveness of the performance measures as catalysts for continuous improvement in the process.
16. Update performance measures as appropriate.

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E. All materials movements are authorized.

Business risks

- Resources used in production will not be reported until the physical inventory is taken, resulting in misstated inventory records, reduced relevance of the records for inventory management purposes, and unreliable interim reports.
- Materials or work in progress will be moved without authorization, creating potential production scheduling problems and eventual delays in delivering customer orders.

Control practices

1. Require management authorization before product manufacturing begins.
2. Check to see that authorizations coincide with the approved production plan.
3. Use the computer system to authorize all movements of inventory.
4. Ban the movement of those materials without proper computer authorization.
5. Use the computer system to compare production order numbers of inventory move requests with production order records to ensure that they are legitimate.
6. Update computerized inventory records at the completion of each stage in the production process.
7. Use the system to periodically produce reports of long-outstanding production orders.
8. Investigate orders that have been outstanding for an unreasonable length of time.
9. Implement computer system controls to preclude unauthorized movements of materials.

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F. Materials movements are recorded accurately and completely on a timely basis.

Business risks

- Inventory records will be misstated, reducing the relevance of the records for inventory management purposes.
- Work in progress records will be misstated, creating potential production scheduling problems and eventually causing delays in delivering customer orders.
- Recorded inventory movement is not based on actual counts or weights or on the appropriate unit of measure.

Control practices

1. Use standard forms as input source documentation for updating the computerized inventory records.
2. Ensure controller or warehouse personnel enter movements of inventory from stores into the inventory system online when inventory is released.
3. Update computerized inventory records to reflect all subsequent issuances of materials from stores.
4. Use computer routines to validate the accuracy of quantities and product codes entered for inventory movement transactions.
5. Validate quantity and product code fields against predefined limits and/or master files containing valid codes.
6. Install procedures to highlight invalid values on the computer terminal screens or automatically list invalid values on an exception report.
7. Employ personnel independent of stores to investigate and resolve invalid values.
8. Require management review of the results of independent investigations of invalid values.
9. Count and weigh all inventory moved before updating computer records with this information.
10. Account for all materials charged into and out of production.
11. Coordinate monthly cutoff procedures with the finance function.

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G. All materials movement 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 of program change test results.
3. Install computer system security controls, such as access control software, that preclude unauthorized program changes.
4. Employ tape and/or disk management systems to ensure that appropriate versions of transaction files, master files, and programs are used in processing.

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

Business risks

- Inaccurate measures will result in erroneous perceptions about process performance, resulting in inappropriate decisions.
- Measures calculated with inaccurate data will drive behavior that is inconsistent with management objectives.

Control practices

1. Use a computer application to automatically calculate and process measurements based on data captured at the transaction source, such as production time, inventory levels, and production delays.
2. Assign production personnel to review the measures periodically to ensure that they reflect process performance.
3. Use customer surveys, production personnel complaints, percentage of on-time deliveries, and other such sources to gather information about process performance.
4. Communicate the information obtained from customer surveys and other measures to all responsible employees on a timely basis.
5. Use cross-functional teams to identify potential process improvements.
6. Educate management and employees on the linkage of the measures to customer satisfaction.
7. Ensure management and employees accept these measures as tools to improve process performance.
8. Link performance measures to employee performance evaluations.

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Compliance with applicable laws and regulations

A. The materials movement process complies with applicable laws and regulations.

Business risks

- The company will incur fines or other penalties; bad publicity and loss of reputation; industrial relations problems or union disputes.

Control practices

1. Require legal review of all relevant laws and regulations.
2. Consult with union and/or employee representatives and develop procedures that are in compliance with these regulations.
3. Consult with industry organizations and regulatory bodies about compliance with laws and regulations and possible future requirements.
4. Document the company's policies and procedures concerning compliance with laws and regulations.
5. Distribute documentation of the company's policies and procedures on legal and regulatory compliance to employees and management engaged in the process of moving materials and resources.
6. Develop training programs to support the company's compliance with laws and regulations.