

Document ID ITAD101	Title INFORMATION TECHNOLOGY MANAGEMENT	Print Date mm/dd/yyyy
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Policy: To support the Company's business strategy through the productive use of information technology.

Purpose: To deploy information technologies that increase overall Company productivity and performance, achieve greater efficiencies, and achieve positive returns on the investment in technology.

To link the Information Technology Department's goals and objectives to the Company's strategic vision, assuring that the Company continues to meet customer requirements.

Scope: This applies to the Company's Information Technology department.

Responsibilities:

The Company's Board of Directors is responsible for approving the Company's Information Technology Plan and ensuring that Top Management effectively carries out the plan.

The Chief Executive Officer, or CEO, is responsible for conducting strategic planning and setting the strategic objectives for the Company.

Top Management is responsible for reviewing the Company's Strategic Plan with Information Technology Managers, developing a budget and other guidelines for Information Technology to follow in developing the Information Technology Plan, and for presenting the final Information Technology Plan to the Board of Directors for approval. Top Management will consist of the Company's chief executive officer and chief financial officer, at a minimum.

Information Technology Managers are responsible for developing the Information Technology Plan, reviewing the Plan with Top Management, overseeing implementation of the Plan, and periodically verifying that the Information Technology Plan continues to meet Company requirements.

Information Technology Staff are responsible for working with Information Technology Managers to carry out the Information Technology Plan.

Definitions: Information Technology asset – Any computer hardware, software, reference or other supporting material (in printed or other form), including rights and licenses, that is owned or controlled by the Company. Within

the scope of this procedure, “asset”, “Information Technology asset”, “resource”, and “Information Technology resource” are synonymous.

Risk – Possibility of loss or injury to the Company.

ROI – Return on Investment, calculated by dividing the expected results of committed resources by the resources committed to achieve the results. (ROI = Results/Resources.)

Procedure:

1.0 BUSINESS PLANNING

- 1.1 On an annual basis, the Company’s CEO shall conduct strategic planning meetings with Top Management before the Information Technology Managers planning process. The CEO is responsible for seeing that strategic objectives for the Company are defined and measurable, as they will form the basis for Information Technology strategic objectives.
- 1.2 Within a month of the Company’s strategic planning meeting, Top Management shall meet with Information Technology Managers to review the Company’s Strategic Plan. Information Technology Managers shall develop an information technology plan, the main objective of which shall be to support the Company Strategic Plan. Information Technology Department objectives shall be specific and measurements shall be clearly defined.
- 1.3 Information Technology Managers shall develop a budget to determine the feasibility of projects included in the Plan. The Information Technology budget shall cover at least the coming fiscal year and should cover the coming FY and two following that (e.g., if this is FY07, the budget must address FY08 at a minimum and should include FY09 and FY10).

2.0 IT DEPARTMENT OBJECTIVE PLANNING

- 2.1 Information Technology Managers shall review relevant information to determine the Company’s performance and productivity needs over the next five years. Sources of relevant information include:
 - The Company’s Strategic Plan and strategic objectives;
 - The current Information Technology Plan and Information Technology department objectives;
 - A SWOT analysis of IT;
 - ITAM110-3 USER SATISFACTION SURVEY;
 - ITAM102-5 IT ASSET INVENTORY DATABASE;
 - ITAM102-6 IT NETWORK MAP;
 - Information Technology industry standards, regulations, and practices changes; and
 - Information Technology market studies, trends, opportunities and benchmarks.

- 2.2 Information Technology Managers shall determine the Information Technology Department Objectives as input to the Information Technology Plan. Information Technology Department Objectives shall incorporate an analysis of relevant information collected in order to achieve the Company's Strategic Objectives.
- 2.3 An Information Technology Steering Committee, consisting of Information Technology and Top Management and led by Information Technology Managers, shall be formed to evaluate the Information Technology Plan's suitability and performance.
- 2.4 Top Management shall review the proposed Information Technology Departmental objectives along with the budget requests. The review process may include adjustments to ensure objectives are relevant, challenging, and achievable. The review process also ensures resources are in the budget to support the objectives.
- 2.5 Information Technology Managers shall ensure that departmental objectives are communicated to employees on a need-to-know basis.

3.0 IT PLAN DEVELOPMENT

- 3.1 Information Technology Managers shall update the Information Technology Plan, which shall be a rolling five-year plan, using ITAD101-1 INFORMATION TECHNOLOGY PLAN as a guide. The Information Technology Plan includes the actual management process and content details.
- 3.2 The Information Technology Plan expands the technical details to include seven required sections:
 - Mission statement. A good mission statement is a guiding principle that: mandates or constrains actions; applies to the entire organization; changes infrequently; sets a course for the foreseeable future; helps ensure compliance; reduces organizational risk; and will answer three key questions:
 - a. Purpose – What are the opportunities/needs the Company will address?
 - b. Business – How will (existing and emerging) information technologies address those opportunities/needs?
 - c. Values – What principles/beliefs will guide the Information Technology Department's efforts?
 - IT Departmental Goals and Objectives. The Information Technology Plan shall explain how information technologies are expected to help the Company achieve its strategic objectives in each area of the company, such as manufacturing, shipping, marketing, sales, accounting, and software support, among others. The Plan shall contain short- and long-range goals and objectives for the Information Technology Department and indicate how achievement will be measured.
 - Risk. The risk each Information Technology goal and objective carries shall be identified and quantified (risk assessment); a qualitative or quantitative relationship between risks and benefits shall be established (risk evaluation);

and social, economic, and technological factors shall be considered with relevant risk assessments relating to potential hazards so as to analyze and compare regulatory and nonregulatory options and select the optimal response (risk management).

- Timelines. The Information Technology Plan shall project activities and deployment plans over a series of quarterly periods. Short, intermediate, and long-range (i.e., one-year, three-year, and five-year) milestones shall be prepared.
- Resource and Budget Estimates. The Information Technology Plan shall indicate resource (hardware, software, personnel, etc.) and fiscal budget estimates for every year of the Plan.
- Roles and Responsibilities. The Information Technology Plan shall identify who is responsible for implementing each aspect of the Plan.
- Information Technology Plan Distribution List. A list of personnel either named in the plan or that are required to support the plan's outcomes.

3.3 Information Technology Managers shall establish checkpoints for meeting with members of the Information Technology staff to review the Plan.

3.4 The Information Technology Steering Committee shall review the Information Technology Plan according to the following criteria:

- Improvement in overall productivity and performance of the Company;
- Achievement of greater efficiencies; and
- Realization of positive Returns On Investments (ROI) in technology.

3.5 The Information Technology Steering Committee shall present the final plan to the Board of Directors for approval prior to implementation.

4.0 IT PLAN IMPLEMENTATION

4.1 Information Technology Managers shall be responsible for distributing (communicating) the new Information Technology Plan to the appropriate personnel listed on the Information Technology Plan Distribution list and collecting the preceding Information Technology Plan.

4.2 Information Technology Managers shall ensure that resources are allocated and used in accordance with ITAM102 IT ASSET MANAGEMENT and that training is conducted according to ITTS101 IT USER-STAFF TRAINING PLAN and ITSW112 SOFTWARE TRAINING.

5.0 IT PLAN REVIEW

5.1 At established checkpoints in the Information Technology Plan, Information Technology Managers shall meet with members of the Information Technology staff to measure the Information Technology Plan's performance against expectations. ITAD101-2 IT PLAN REVIEW CHECKLIST shall be used as a guide.

- 5.2 At least twice per year (more often if deemed necessary), Information Technology Managers shall coordinate a meeting, to be attended by Top Management. The purpose of the meeting is to review the Information Technology Plan to ensure its continuing suitability, adequacy, and effectiveness. This review shall include assessing opportunities for improvement and the need for changes to the Information Technology Plan, including the Information Technology objectives.
- Information Technology Managers is responsible for ensuring minutes of the meeting are taken and for maintaining the minutes as an Information Technology Record, in accordance with ITAD102 – IT RECORDS MANAGEMENT. The meeting agenda will include the following reports from Information Technology Managers and appropriate Information Technology staff:
 - a. Results of audits;
 - b. User or customer feedback;
 - c. Process performance and results of Information Technology Plan checkpoint reviews;
 - d. Status of preventive and corrective actions;
 - e. Follow-up actions from previous management reviews;
 - f. Changes that could affect the Information Technology Plan; and
 - g. Recommendations for improvement.
 - The meeting minutes shall also include any decisions and actions related to:
 - a. Improvement of the effectiveness of the Information Technology Plan and its processes;
 - b. Technology improvements related to user requirements; and
 - c. Resource needs.
- 5.3 Information Technology Managers shall submit the minutes of the Plan Review meeting to Top Management for approval.

6.0 IT PLAN UPDATE

- 6.1 After review of the Information Technology Plan, Information Technology Managers shall be responsible for implementing required updates.
- 6.2 Within three months of such updates, Top Management shall verify that updates to the Plan have been implemented and are providing the desired results.
- 6.3 Information Technology Managers shall maintain a complete record of any such update, for inclusion in the next formal Plan development (sections 2.0 and 3.0).

Forms:

- ITAD101-1 INFORMATION TECHNOLOGY PLAN
- ITAD101-2 IT PLAN REVIEW CHECKLIST

References:**A. CONTROL OBJECTIVES FOR INFORMATION AND RELATED TECHNOLOGY (COBIT)**

COBIT is a process model developed to assist enterprises with the management of information technology resources. The process model focuses on developing suitable controls for each of the 34 Information Technology processes, raising the level of process maturity in information technology and satisfying the business expectations of Information Technology.

COBIT, issued by the Information Technology Governance Institute and now in its third edition, is increasingly accepted internationally as good practice for control over information, Information Technology, and related risks. COBIT's Management Guidelines component contains a framework responding to management's need for control and measurability of Information Technology by providing tools to assess and measure the enterprise's Information Technology capability for the 34 COBIT IT processes. The tools include:

- Performance measurement elements (outcome measures and performance drivers for all Information Technology processes)
- A list of critical success factors that provides succinct, nontechnical best practices for each Information Technology process
- Maturity models to assist in benchmarking and decision-making for capability improvements

Detailed information on COBIT may be found at <http://www.isaca.org> or at <http://www.itgi.org/>.

B. ISO INTERNATIONAL STANDARD 27002:2013 - INFORMATION TECHNOLOGY - SECURITY TECHNIQUES - CODE OF PRACTICE FOR INFORMATION SECURITY MANAGEMENT

ISO Standard 27002:2013 and its companion standards, ISO 27001:2013 and ISO 27005:2011, provide a comprehensive set of controls comprising best practices in the field of information security. The standard treats information as an asset which has value to an organization and, therefore, needs to be suitably protected. Information security protects information from a wide range of threats in order to ensure business continuity, minimize business damage, and maximize return on investments and business opportunities.

NOTE: ISO 27002 was formerly known as "ISO 17799" and before that, as BS 7799:2. For more, see http://www.iso.org/iso/home/store/catalogue_ics/catalogue_detail_ics.htm?csnum=54533.

Additional Resources:

- A. Microsoft's web site provides an outline for developing an "accessible information technology" plan, which can be adapted to a general Information Technology plan. See <http://www.microsoft.com/enable/business/plan.aspx> for details.
- B. The Information Technology Governance Institute (ITGI) was established in 1998 in recognition of the increasing criticality of information technology to enterprise success. Effective IT governance helps ensure that Information Technology supports business goals, maximizes business investment in IT, and appropriately manages IT-related risks and opportunities.

ITGI is a research think tank that exists to be the leading reference on Information Technology-enabled business systems governance for the global business community. More on the organization may be found at <http://www.itgi.org/>.

- C. The Information Systems Audit and Control Association (ISACA)

ISACA is a globally recognized organization for information governance, control, security, and audit professionals since its founding in 1967. ISACA's IT auditing and control standards are followed by practitioners worldwide and its research pinpoints professional issues important to its membership.

To learn more about ISACA, go to <http://www.isaca.org/pages.default.aspx>.

Revision History:

Revision	Date	Description of Changes	Requested By
0.0	mm/dd/yyyy	Initial Release	

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ITAD101-1 INFORMATION TECHNOLOGY PLAN

A. Mission Statement

The Information Technology Department's mission is:

- To support and promote the productive use of state-of-the-art information technology within the Company;
- To ensure that Company information technologies are secure, reliable, and minimize risk;
- To provide quality, cost-effective technologies that meet the needs of the Company and its customers; and
- To stay current with information technologies in order to identify and provide new products and services that will further Company goals and objectives.

B. Business Goals, Objectives, and Measures

One-year

-

Three-year

-

Five-year

-

Information Technology Goals, Objectives, and Measures

One-year

-

Three-year

-

Five-year

-

C. Risk Assessment and Evaluation

D. Timelines**E. IT Resource/Budget Estimates**

Year one

•

Year two

•

Year three

•

Year four

•

Year five

•

F. Roles and Responsibilities**G. Distribution List**

CEO	<input type="checkbox"/>	Board of Directors	<input type="checkbox"/>
CFO	<input type="checkbox"/>	Other	<input type="checkbox"/>
Information Technology Managers	<input type="checkbox"/>	Other	<input type="checkbox"/>

Approved:

_____ Date: _____

Chief Executive Officer

_____ Date: _____

Chief Financial Officer

_____ Date: _____

Chief Technology Officer

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ITAD101-2 IT PLAN REVIEW CHECKLIST

Review Questions	Notes:
1.0 Business Goals, Objectives, and Measures Review	
<ul style="list-style-type: none"> Do Information Technology projects deliver expected results? 	
<ul style="list-style-type: none"> What do end user surveys suggest about: <ul style="list-style-type: none"> the quality of Information Technology service? 	
<ul style="list-style-type: none"> <ul style="list-style-type: none"> whether Information Technology is regarded as an enabler or as an inhibitor of change? 	
<ul style="list-style-type: none"> Are sufficient Information Technology resources, infrastructure and competencies available to meet strategic objectives? 	
<ul style="list-style-type: none"> What has been the average overrun of Information Technology operational budgets? <ul style="list-style-type: none"> How often and by how much do Information Technology projects go over budget? How does this influence the achieved vs. expected ROI? 	
<ul style="list-style-type: none"> Do Information Technology-related investments meet the ROI criteria of the enterprise? 	
<ul style="list-style-type: none"> How much of the Information Technology effort goes towards systems maintenance, patches or bug fixes versus enabling business improvements? <ul style="list-style-type: none"> Is the ratio acceptable and representative for the Company's specific industry? 	
<ul style="list-style-type: none"> Are enterprise and Information Technology objectives maintaining alignment with each other? 	
<ul style="list-style-type: none"> Is the Company accurately measuring the Information Technology value delivered? <ul style="list-style-type: none"> Are the assumptions reasonable? How are intangible benefits verified? 	
<ul style="list-style-type: none"> Have the strategic initiatives requested by executive management affected Information Technology's criticality relative to maintenance and growth of the enterprise? <ul style="list-style-type: none"> Are they appropriate? 	

3.0 IT Risk Review	
<ul style="list-style-type: none"> Is the enterprise clear on its technology risk position? (i.e., pioneer, early adopter, follower, or laggard). 	
<ul style="list-style-type: none"> Is the Company clear on its position of: risk avoidance versus risk taking? 	
<ul style="list-style-type: none"> Is the Company's risk position helping or holding back the Company from achieving its objectives? 	
<ul style="list-style-type: none"> Is there an up-to-date Information Technology risk register relevant to the enterprise? 	
<ul style="list-style-type: none"> What are the results of addressing those risks? 	
2.0 Board of Directors Reviews	
<ul style="list-style-type: none"> Is Information Technology a regular item on the board's agenda and, if so, is it addressed in a structured manner? 	
<ul style="list-style-type: none"> Does the board articulate and communicate the business objectives for Information Technology alignment? 	
<ul style="list-style-type: none"> Does the board review, and possibly approve, the Information Technology strategy? 	
<ul style="list-style-type: none"> Does the board have a clear view on the total Information Technology investment portfolio from a risk and return perspective? 	
<ul style="list-style-type: none"> Does the board receive regular progress reports on major Information Technology projects? 	
<ul style="list-style-type: none"> Is the board regularly briefed on those Information Technology risks to which the enterprise is exposed? 	
<ul style="list-style-type: none"> Is the board getting independent assurance on the achievement of Information Technology objectives and the containment of Information Technology risks? 	