Operations Management and Supervision

LEARNER GUIDE

Module #	226302001-KM-05
NQF Level	L05
Notional hours	60
Credit(s)	Cr6
Occupation or Specialisation	226302001: Occupational Health and Safety Practitioner
Associated Occupation	226302: Safety, Health and Quality Practitioner

Name	

Contact Address	
Telephone (H)	
Telephone (W)	
Facsimile	
Cellular	
E-mail	

Note to the learner

This Learner Guide provides a comprehensive overview of the module. It is designed to improve the skills and knowledge of learners, and thus enabling them to effectively and efficiently complete specific tasks.

Purpose:

The Occupational Health and Safety Representative: Serve as a link between employees and management regarding safety and health aspects in the workplace, they monitor and inspect the workplace, record and investigate incidents and ensure that the Occupational Health and safety needs of employees are prioritised and dealt with.

Topic elements to be covered include:

- ✓ 226302001-KM-01, Fundamentals of Occupational Health and Safety, NQF Level 2, Credits 9
- ✓ 226302001-KM-02, Fundamentals of Communication, NQF Level 3, Credits 6
- ✓ 226302001-KM-03, Occupational Health and Safety applications, NQF Level 4, Credits 17
- ✓ 226302001-KM-04, Occupational Health and Safety Management, NQF Level 5, Credits 38
- ✓ 226302001-KM-05, Operations Management and Supervision, NQF Level 5, Credits 6

Exemptions

- **None:**

Entry Requirements:

Relevant work experience or an appropriate NQF level 4 qualification. (The technical work content is not covered in this qualification. Learners need to acquire the required technical skills, knowledge and experience through gaining work experience or qualifications in related technical occupations. Each industry will prescribe the technical requirements relevant to that industry

Equipment needed:

Learning material, Learner workbook, Pen, Ruler

PLEASE NOTE: THE USE OF PENCILS OR TIPPEX IS NOT ALLOWED.

IF YOU USE A PENCIL THE VALIDITY OF YOUR WORK COULD BE QUESTIONABLE, AND THIS COULD LEAD TO FRAUD.

Provider Accreditation Requirements for the Knowledge Module

1. Physical Requirements:

- ✓ Providers must have access to:
- ✓ a. Back up facilitators;
- ✓ b. A physical address and access to proper lecture facilities, audio visual aids and equipment with appropriate contingencies;
- ✓ c. Maximum facilitator/learner ratio should not exceed 1:15;
- ✓ d. Venues must have adequate seating, and ergonomic requirements to cater for the number of learners.
- ✓ e. Facilities must be provided for break away sessions and all the simulations and other resources as stipulated in the module specifications.
- ✓ f. Appropriate learning resources must be available and accessible to meet the requirements as set out in the curriculum.
- ✓ g. All learners must be provided with easy access to the required learning materials and resources.
- ✓ h. Providers must have the administrative ability to maintain records of all learners and monitor the progress of the learners.
- ✓ i. Providers must have adequate policies and procedures in place to review and manage the progress of learners and learners must have access to their progress reports.
- ✓ j. Providers must be able to access and comply with reporting requirements as set by the External assessment Quality Partner

Provider Accreditation Requirements for the Knowledge Module

2. **Human Resource Requirements:**

- ✓ Facilitators of learning must:
- ✓ a. Be in possession of a recognized qualification in the field of OHS at a level of at least NQF 3 or equivalent;
- ✓ b. Have completed at least three years relevant work experience;
- ✓ c. Be in possession of a recognised Adult Learning qualification at the level of at least a Facilitator Certificate. â€“ or prove this through relevant recognition of prior learning.
- ✓ e. Appropriate arrangements must be in place to conduct learner assessments in a fair and equitable manner.

Provider Accreditation Requirements for the Knowledge Module

Legal Requirements:

- ✓ The providers must prove an acceptable arrangement of co-operation with recognised employers to facilitate the practical skills and assist learners to get exposure to the work experience components;
- ✓ b. Facilities must comply with all relevant regulatory requirements;
- ✓ c. Providers must obtain and retain ISO certification.

Venue, Date and Time:

Consult your facilitator should there be any changes to the venue, date and/or time.

Refer to your timetable.

Assessments:

The only way to establish whether you are competent and have accomplished the learning outcomes is through continuous assessments. This assessment process involves interpreting evidence about your ability to perform certain tasks. You will be required to perform certain procedures and tasks during the training programme and will be assessed on them to certify your competence.

This module includes assessments in the form of self-evaluations/activities and exercises. The exercises, activities and self-assessments will be done in pairs, groups or on your own. These exercises/activities or self-assessments (Learner workbook) must be handed to the facilitator. It will be added to your portfolio of evidence, which will be proof signed by your facilitator that you have successfully performed these tasks.

Listen carefully to the instructions of the facilitator and do the given activities in the time given to you.


Hi! My name is Pule,

When you see my sign you must do an activity/exercise or conduct an experiment

5.2.1. KM-05-KT01:

Theories, concepts and principles of strategic planning and how this applies to occupational health and safety management. (Intermediate)

KT0101	Describe the basic business system; (NQF Level: 6)
KT0102	Describe the fundamental business planning process and describe the role of strategy in it; (NQF Level: 6)
KT0103	Explain what is meant by: Strategy, vision, mission and business objectives; (NQF Level: 6)
KT0104	Describe how the fundamental business processes are applied within the occupational health and safety environment. (NQF Level: 6)
KT0105	Describe the concepts and principles of integrated value chain management. (NQF Level: 6)

DESCRIBE THE BASIC BUSINESS SYSTEM;

At the center of every successful business there are five core business systems that hold that business together. Each one supports the other and holds the whole structure together. When you are missing a business system it will make the other systems weaker and put your business at risk of crumbling. You need all five systems in place to keep your business strong and functional.

The **5 Core Business Systems** are:

1) **Marketing**
2) **Sales**
3) **Accounting**
4) **Fulfillment**
5) **Management**

Your **Marketing System** is essential to your company because that is how your company exists. If you don't market it, no one will know about it, and you will quickly go from owning a business to owning only debt. You need to systematize your marketing efforts to make sure they are effective and that you are getting a good return on investment.

Your **Sales System** is the sister-system to your marketing system. This is how you bring in the money. Again, if you aren't making sales you will quickly lose your business and be in an extremely difficult financial situation. Systematizing your sales will make it more effective by

increase the amount of sales you make. It will also make your sales more consistent over time. Think of your marketing and sales systems as the two stones at the bottom of the arch. Without them your business has nothing to build on.

Your **Accounting System** is the next stones up. For your business to stay profitable and functional you have got to have your accounting practices standardized and easy to follow. Everything from budgets, to bills, to forecasts, to payroll needs to be accounted for.

A **Fulfillment System** is the system that keeps the goods and services flowing to your customers in a quick and predictable manner. Fulfillment systems will vary widely from business to business, but the ones that work are the ones that are organized. Having a step-by-step process here will remove so many headaches from your life. These are the next stones up in the arch, the ones that make it tall and strong.

The **Management System** is the keystone or your arch. It is what holds all the other stones in place. Without the keystone of a good management system you other systems will become uncoordinated and gaps in service will occur. This is the system that facilitates communication and problem solving.

The Basic Concepts (or Features) of a Business System:

7 important features (or concepts) of a business system are as follows:

1. Purpose:

A system is purposeful, goal-oriented entity. Purpose is the basic reason for a system's existence. Purpose provides a sense of direction to a system. The purpose of a business system, for instance, is to earn profits through provision of goods and services to the society. A business system is directed towards the achievement of certain objectives. The important objective of a business is earning profits for survival and growth in the environment by supplying the goods and services required by the society. The business has other objectives also like providing good working conditions to workers, providing high quality goods to the society and contributing towards the achievement of national goals.

2. Environment:

A business organization function under two sets of environment, namely, internal and external. The internal environment includes production sub-system, marketing sub-system, finances sub-system, human resource sub-system etc. These sub-systems operate under the influence of external environment which is known as 'Supra system'. The external environment includes all those factors which lie outside the system such as economic, politico-legal, socio-cultural, investors, customers, supplier's competitors, international factors,

etc. A business system gets various inputs form the external environment and gives, in turn, its output to it.

3. Sub-systems:

Sub-system constitutes the operating level of a system. The parts that make up the structure of a system are called sub-systems. And each sub-system, a system in itself, in turn, may be a sub-system of a still larger whole. Thus, a department is a subsystem of a company, which may be a sub-system of a conglomerate (group of companies), which is a sub-system of the national economy as a whole, which is a sub-system of the world system.

4. System boundary:

Each system has a boundary, this means choosing which entities are inside the system and which are outside-part of the environment. In a closed system this boundary is rigid and solid; in an open system, the boundary is more flexible and porus. In the context of a business organization, it has many boundary contacts or 'interfaces' with many external systems like suppliers, creditors, customers, government agencies, etc.

5. Input-output conversion process:

A business system involves 'input-output conversion' process. The essence of this process lies in the fact that a business system imports inputs (like materials, equipment, human effort, technology, and information) from external environment, transforms them (through the organizational and managerial processes adopted by the sub-systems), and exchanges or exports output (like goods and services) to the external environment.

The whole process is a source of energy for the organisation. The output is worth more than the input — some value is added by the transformation process. The output exported into the environment provides the source of energy for the organisation to recycle the process continuously. The organisation renews itself, survives, and grows by the recycling of energy on a sustained basis.

6. Feedback:

Feedback is the key to system enrolls. As operations of the system proceed, information is fed back to the appropriate people or perhaps to mechanical devices so that the work can be assessed and, if necessary, corrected.

Control Mechanism: There are many control systems within a business system. The control systems are designed by the management. Management is an important force with a business which takes all important decisions and activities to convert inputs into outputs and to respond to environmental opportunities and constraints.

7. Synergy:

Synergy means that the whole is greater than the sum of its parts. It means 2 + 2 = 5. In organizational terms, synergy means that as separate departments within an organisation cooperate and interact, they become more productive than if each had acted in isolation. There is proper integration of various sub-systems of the business. As a result the contribution of the whole system is greater than the sum of the contribution f all sub-systems. This is called the law of synergy which implies that whole is greater than the sum of its parts.

The enumeration of the various basic concepts (or features) of a business system unmistakably suggests that a business enterprise is an open, adaptive, goal-oriented system with its environment acting as supra-system.

DESCRIBE THE FUNDAMENTAL BUSINESS PLANNING PROCESS AND DESCRIBE THE ROLE OF STRATEGY IN IT;

During the planning process, a small business's owner and team forecast -- or model -- the company's future in terms of the strategic actions that will be taken in order to reach the company's goals, and of the financial results of those actions. Although companies use a number of different planning approaches, models of a company's future results are based on a few fundamental principles.

Start With a Vision

The first step in planning is to create your long-term objectives -- the vision for what you intend your company to accomplish in the future. The vision is critical because it defines the long-term direction for the company. Some business owners have grand visions. Others have more modest ones. Either way, the vision is the ultimate destination you hope to reach. With that in place, planning becomes a process of devising the action steps to reach the desired destination.

Assessment of the Current Position

During the annual planning process, the owner and management team of a business identify the strengths and weaknesses of the company in comparison to major competitors. They seek to mitigate or eliminate the weaknesses over time and take advantage of the company's strengths. Planning also requires an assessment of the major issues or challenges facing the company, for example changes in government regulation that will affect the company's operations. Strategies are then devised to minimize any negative effects from these issues or challenges.

Measurable Goals and Metrics

Goal setting is a fundamental element of planning. Without measurable goals in place, it is difficult to see whether the company is making progress toward the long-term objective, the

realization of the owner's vision. Some goals are quantifiable, such as the percentage increase in revenue for the upcoming year. Others are more qualitative, but still measurable. A goal of improving customer service can be measured by a decline in customer complaints. Along with the larger goals, smaller ones called metrics are also included in the plan. These show what must be accomplished to reach the larger goals. Increased sales could come about because customer traffic goes up, or because the average amount purchased per customer increases. Goals for both customer traffic and average purchase are set as well.

Based on Sound Assumptions

The more a small-business owner understands the environment in which the company operates, the more realistic the plan will be. The assumptions are models of what the environment will look like. For example, the company would use an assumption about the growth of the industry and the general economy. Another assumption would be about the number and strengths of competitors the company will go up against in the upcoming year. If the assumptions turn out to be incorrect, the company will probably not reach its planned revenue and profit goals. For example, the company might be planning on having record sales for the next year, but the entry of two new strong competitors was not taken into account when the goals were set.

Adjust to Changes in the Environment

Actual results are likely to vary from what had been forecast because the business environment changes during the year. It can be difficult to predict how customers will respond to the company's products or services and its marketing strategies. During the year the owner may decide to adjust strategies or even adjust the forecast if the changes in the environment are significant. This fundamental principle is flexibility. The plan is continually evolving, not something that is set in stone at the conclusion of the planning process.

THE BUSINESS PLAN FORMAT

In reality there is no standard format for the presentation of a good business plan. Business plans vary in content and size according to the nature and size of the business concerned and on the emphasis that is placed on certain critical areas as opposed to others. Every business plan should address a number of fundamental issues without which it would not be complete.

These issues can be grouped under six major areas that are the pillars of every business activity whether large or small.

The six major areas are:

- Sales and Marketing
- Operations
- Human resources
- Finance
- Technology and ITC
- Management Information

The best way to show bankers, venture capitalists, and angel investors that you are worthy of financial support is to show them a great business plan. Make sure that your plan is clear, focused and realistic. Then show them that you have the tools, talent and team to make it happen. Your business plan is like your calling card, it will get you in the door where you'll have to convince investors and loan officers that you can put your plan into action.

Advertisement

Once you have raised the money to start or expand your business, your plan will serve as a road map for your business. It is not a static document that you write once and put away. You will reference it often, making sure you stay focused and on track, and meet milestones. It will change and develop as your business evolves.

Do I need a business plan?

Not everyone who starts and runs a business begins with a business plan, but it certainly helps to have one. If you are seeking funding from a venture capitalist, you will certainly need a comprehensive business plan that is well thought out and contains sound business reasoning. If you are approaching a banker for a loan for a start-up business, your loan officer may suggest a Small Business Administration (SBA) loan, which will require a business plan. If you have an existing business and are approaching a bank for capital to expand the business, they often will not require a business plan, but they may look more favorably on your application if you have one.

Reasons for writing a Business Plan include:

Support a loan application

Raise equity funding

Define and fix objectives and programs to achieve those objectives

Create regular business review and course correction

Define a new business

Define agreements between partners

Set a value on a business for sale or legal purposes

Evaluate a new product line, promotion, or expansion

What's in a Business Plan?

A business plan should prove that your business will generate enough revenue to cover your expenses and make a satisfactory return for bankers or investors.

Advertisement

Executive Summary --features the highlights of your plan and sells your idea in two pages or less.

Company Summary -- a factual descrisption of your company, ownership, and history.

Products (or Services or both)--describes your products and/or services and how they stand out from competitive products and services.

Market Analysis-provides a summary of your typical customers, competitive landscape, market size, and expected market growth.

Strategy and Implementation - describes how you will sell your product, how you will put your plan into action, and establishes milestones.

Management Summary-provides background on the management team, their experiences, and key accomplishments.

Financial Plan - contains key financials including sales, cash flow, and profits.

EXPLAIN WHAT IS MEANT BY: STRATEGY, VISION, MISSION AND BUSINESS OBJECTIVES;

VISION (THE DREAM)

Your vision communicates what your organization believes are the ideal conditions for your community – how things would look if the issue important to you were perfectly addressed. This utopian dream is generally described by one or more phrases or vision statements, which are brief proclamations that convey the community's dreams for the future. By developing a vision statement, your organization makes the beliefs and governing principles of your organization clear to the greater community (as well as to your own staff, participants, and volunteers).

There are certain characteristics that most vision statements have in common. In general, vision statements should be:

Understood and shared by members of the community

Broad enough to encompass a variety of local perspectives

Inspiring and uplifting to everyone involved in your effort

Easy to communicate - for example, they should be short enough to fit on a T-shirt

Here are a few vision statements which meet the above criteria:

Healthy children

Safe streets, safe neighborhoods

Every house a home

Education for all

Peace on earth

MISSION (THE WHAT AND WHY)

Developing *mission statements* are the next step in the action planning process. An organization's mission statement describes *what* the group is going to do, and *why* it's going to do that. Mission statements are similar to vision statements, but they're more concrete, and they are definitely more "action-oriented" than vision statements. The mission might refer to a problem, such as an inadequate housing, or a goal, such as providing access to health care for everyone. And, while they don't go into a lot of detail, they start to hint - very broadly - at *how* your organization might go about fixing the problems it has noted. Some general guiding principles about mission statements are that they are:

Concise - Although not as short a phrase as a vision statement, a mission statement should still get its point across in one sentence.

Outcome-oriented - Mission statements explain the overarching outcomes your organization is working to achieve.

Inclusive - While mission statements do make statements about your group's overarching goals, it's very important that they do so very broadly. Good mission statements are not limiting in the strategies or sectors of the community that may become involved in the project.

The following mission statements are examples that meet the above criteria.

- "To promote child health and development through a comprehensive family and community initiative."
- "To create a thriving African American community through development of jobs, education, housing, and cultural pride.
- "To develop a safe and healthy neighborhood through collaborative planning, community action, and policy advocacy."

Mission vs. Vision

Mission (purpose) = defines why you are in business and what you are doing now.

Example:

Masterful Marketing partners with small business owners as their trusted marketing advisor to help them achieve success by learning, incorporating and executing marketing strategies and programs that take their business from mediocre to marvelous.

Vision = defines what you want your business to be or be known for. It's useful to develop a 1, 3 and 5 year vision to ensure you can progress to where you want to be through well defined measurable steps:

Example:

One year: By December 30, 2010, Masterful Marketing will be offering quality information products in addition to coaching services that make up 20% of the overall revenue for the company.

Three year: By December 30, 2013, Masterful Marketing will be recognized as one of the top three marketing brands for small businesses in the United States.

STRATEGIES

Strategies explain how the initiative will reach its objectives. Generally, organizations will have a wide variety of strategies that include people from all of the different parts, or sectors, of the community. These strategies range from the very broad, which encompass people and resources from many different parts of the community, to the very specific, which aim at carefully defined areas.

Examples of broad strategies include:

A child health program might use social marketing to promote adult involvement with children

An adolescent pregnancy initiative might decide to increase access to contraceptives in the community

An urban revitalization project might enhance the artistic life of the community by encouraging artists to perform in the area

Five types of specific strategies can help guide most interventions. They are:

- Providing information and enhancing skills (e.g., offer skills training in conflict management)
- Enhancing services and support (e.g., start a mentoring programs for high-risk youth)
- Modify access, barriers, and opportunities (such as offering scholarships to students who would be otherwise unable to attend college)
- Change the consequences of efforts (e.g., provide incentives for community members to volunteer)
- Modify policies (e.g., change business policies to allow parents and guardians and volunteers to spend more time with young children).

BUSINESS OBJECTIVES are clearly defined targets that are set by management or business owners. They give directions and the mode in which the business needs to operate. Business managers devise plans to meet these objectives and keep track of progress and deviations. Business objectives are a blend of the needs of various stakeholders who are affected by your organization's activities. Business goals and objectives are part of the planning process. They are describing what a company expects to accomplish throughout the year. Business owners usually outline their goals and objectives in their business plans. These goals and objectives might pertain to the company as a whole, departments, employees, customers

and even marketing efforts. Most companies use specific measurements to keep track of their goals and objectives.

The following are examples of business objectives:

Increasing Profitability

Most organizations operate because their owners want to maximize wealth. Therefore, improving profitability is one of the prime objectives of a business. When a business achieves incremental profit margins, it shows that the operations of the business are probably reducing costs proportionally .

Increasing Return on Investment

Increased return on investment shows how quickly your business returns profit on the money or capital that interested parties have invested in it. A higher rate ROI ensures that owners receive funds more quickly for investments in other ventures, or that funds can be further reinvested in the business.

Maintaining Cash Flow

Increased cash flow is a financial objective that allows smooth running of the business in the form of timely payments to employees and creditors. It also enables business owners to draw earnings in cash from the business.

Improving Market Share

Businesses often compete to rule a market by growing their market share. You can obtain increased market share by increasing revenues; your revenue increases as customers buy more of your products. Improved market share also shows that your products or services may be more desirable.

Achieving Business Globilization

Businesses want to grow their market share not only within their country's borders, but also across the globe. You can measure globalization by identifying the amount or number of exports you make. You also can determine your globalization standing by measuring the market value of your businesses that are operating in other countries.

Creating Process Improvements

Businesses have significant internal objectives that they try to achieve to create superior customer values. Your company can eliminate non value-added activities from its processes by setting process improvement goals. This enables your organization to be more efficient and cost-effective in delivering its products and services.

Research and Development

Research and development, or other learning or innovation goals, improve your company's capabilities for serving the market and its interests. A basic market research resulting in

identification of your product's minor flaws may go a long way in helping you attain your financial, market and reputational objectives.

Improving and Maintaining Goodwill

Some businesses strive to maintain their image and goodwill in the market. These enterprises want the masses to view them favorably. For this purpose, enterprises need to comply with moral, ethical and legal standards, and let these compliances be known to relevant stakeholders.

Superior Brand Recognition

Superior brand recognition occurs when a business or its products are readily and positively identified by the masses. For example, many consumers recognize that the crocodile on a shirt represents Lacoste. Through heavy advertising and product differentiation, organizations aim to achieve superior brand recognition.

Brand Loyalty

Brand loyalty occurs when the customer buys only your particular brand and is uncomfortable using goods or services of another entity. Marketers use a partnership of advertising and the quality of products and services to build brand loyalty. They also use schemes such as loyalty cards, which provide discounts to repeat customers, to create brand loyalty.

DESCRIBE HOW THE FUNDAMENTAL BUSINESS PROCESSES ARE APPLIED WITHIN THE OCCUPATIONAL HEALTH AND SAFETY ENVIRONMENT.

Business Processes includes strategies of ensuring efficiency and profitability. The oraganisation will need to be guided by good business processes in developing a sound Organizational Occupational Health and Safety Process.

The Fundamental Business Processes can be applied in an OHS Environment

Business Vision:

Inspiring statement of what the business aspires to be in a given future. What is the vision of the company in terms of protecting the health and safety of its workers, clients or customers and the environment.

Business Mission:

A statement of reason why the business was formed. The OHS procedures should be included in the mission statement.

Assess current Business Position:

SWOT Analysis- to include measurement and evaluation of OHS policies and procedues

Setting Goals: in setting goals a good business manager should not overlook Health and Safety goals.

Business Strategies:

Identify operational and support processes

Assign processes and agree on targets

Conduct Process Efficiency Audits

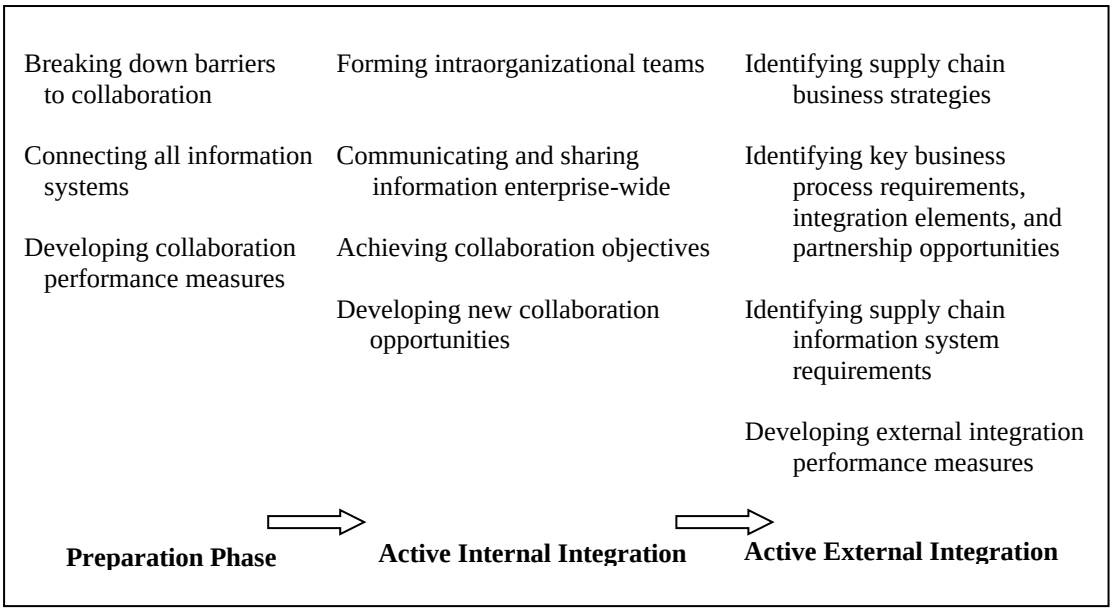
Organize Benchmarking Activities

Review your current benchmarking through innovation processes

Conduct a performance measurement on OHS objectives regularly and carry out reviews and follow ups

DESCRIBE THE CONCEPTS AND PRINCIPLES OF INTEGRATED VALUE CHAIN MANAGEMENT.

The Supply Chain Process Integration Model



The Preparation Phase

To adequately prepare the organization for external integration and supply chain management efforts in general, managers must first create an internal environment where teamwork and information sharing are encouraged and rewarded. To accomplish this, existing barriers to collaboration must be removed, information systems within the organization must be unified under one central database, and collaboration performance measures must be designed, implemented, and periodically reviewed.

Breaking Down Internal Barriers to Collaboration

Internal barriers to collaboration can be classified as technological (information system software/hardware) barriers, structural (management hierarchy, goals, procedures) barriers, and cultural (employee values, norms, behavior) barriers. There are a number of information system problems, including the purchasing of software applications at different times or purchasing best-of-breed software solutions from different vendors, both of which require integration middleware to tie the systems together, or the use of web services and web portals to create information sharing capabilities for the disparate applications. These could be considered **technological barriers to collaboration**.

A few years ago Washington-based fashion retailer, for example, Nordstrom's online site, nordstrom.com, found itself unable to accept gift cards purchased by customers at Nordstrom stores (it lacked a linkage process to the Nordstrom bank's mainframe required to validate and execute the transaction). The company adapted quickly by using **XML web services** to integrate its systems and create a standard data format that all of the company's systems could understand. XML web services are becoming the basic platform for application integration. Applications are constructed using multiple XML web services from

various sources that work together regardless of where they reside or how they were implemented.



© 1996 Ted Goff, http://www.ted.goff.com

Structural barriers to collaboration include the often slow, bureaucratic decision-making hierarchy in firms; poorly designed pay systems and incentives; and ineffective administrative procedures and policies. An incentive pay system that encourages groups of employees to work against one another is a structural problem, for example. Steve Banker, senior supply chain analyst at the ARC Advisory Group in Massachusetts advises companies to establish compensation methods that reward teamwork. "If you tell people to work as a team, to make it work, you need metrics that measure supply chain performance. Then you have to tie punishments and rewards to those metrics."[1] Structural change involves a **top-down management approach**, because the expertise and resources needed for administrative improvements requires the involvement of middle and upper management. When problems such as a lack of communication and teamwork are acting as barriers to internal process integration, structural changes are needed, and this requires upper and middle management to take the initiative to propose and implement structural solutions. Structural change implementation tactics can include employee education, instituting cross-training

and process teams, and manager/worker negotiations to achieve acceptance of the changes.

Internal Integration Performance Measures

Work Groups Number of traditional and virtual work groups formed Number of cross-functional work-groups formed Number of workers participating in one or more work groups Percentage of work group objectives met Number of projects completed by work groups Number of jointly developed products or product improvements Number of jointly developed processes or process improvements
Information Systems Number of ERP application implementations and upgrades Percent of employees using ERP applications Percent of departments using ERP applications
Employees/Training Hours of team-based training sessions provided Hours of cross-training sessions provided Hours of ERP application training provided Number of top management discussions of collaboration in company newsletter Employee trust and satisfaction survey ratings
Reward Systems Reward amounts paid to work groups Percent of work groups earning rewards Percent of reward funds paid out to work groups



FORMATIVE ASSESSMENT -ONE

- ✓ IAC0101 Given a range of OHS related problems in various business operations be able to: a. Describe the origin and impact of these problems in relation to the business system; b. Indicate the role that planning played in these problems and what needs to be changed in the planning processes to prevent similar problems in the future.

5.2.2. KM-05-KT02:

Learning and development process and cycle and how this is used to improve the effectiveness of occupational health and safety (Intermediate)

KT0201	Explain the typical Learning and development life cycle ADDI; (NQF Level: 5)
KT0202	Describe the impact of each element of the learning and development life cycle on Occupational Health and safety; (NQF Level: 5)
KT0203	Describe the criteria for effective learning material (NQF Level: 5)
KT0204	Explain the basic principles of adult learning (NQF Level: 5)

EXPLAIN THE TYPICAL LEARNING AND DEVELOPMENT LIFE CYCLE ADDI;

The **ADDIE model** is a framework that lists generic processes that instructional designers and training developers use. It represents a descriptive guideline for building effective training and performance support tools in five phases.

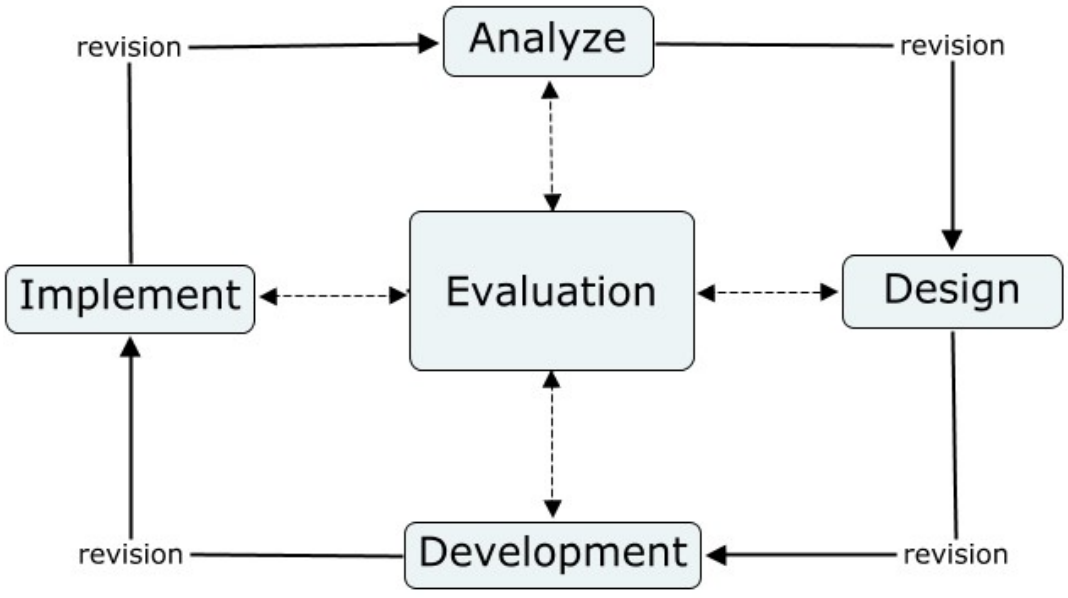
Analysis

Design

Development

Implementation

Evaluation



ADDIE is an Instructional Systems Design (ISD) framework. Most current ISD models are variations of the ADDIE process. Other models include the Dick & Careyand Kemp ISD Models. Rapid Prototyping is a commonly used alternative to this approach; rapid prototyping is the idea of reviewing continual or formative feedback while creating instructional materials. This model strives to save time and money by catching problems while they are still easy to fix. A more recent expression of rapid prototyping is SAM (successive approximation model).

Instructional theories also play an important role in the design of instructional materials. Theories such as behaviorism, constructivism, social learning and cognitivism help shape and define the outcome of instructional materials.

DESCRIBE THE IMPACT OF EACH ELEMENT OF THE LEARNING AND DEVELOPMENT LIFE CYCLE ON OCCUPATIONAL HEALTH AND SAFETY;

Phases of ADDIE (Analysis, Design, Development, Implementation and Evaluation)

Analysis phase**:**

The analysis phase clarifies the instructional problems and objectives, and identifies the learning environment and learner's existing knowledge and skills. This kind of analysis can be applied during training of workers in health and safety practices. Questions the analysis phase addresses include:

Who are the learners and what are their characteristics?

What is the desired new behavior?

What types of learning constraints exist?

What are the delivery options?

What are the pedagogical considerations?

What adult learning theory considerations apply?

What is the timeline for project completion?

Design phase:

The design phase deals with learning objectives, assessment instruments, exercises, content, subject matter analysis, lesson planning, and media selection. The design phase should be systematic and specific. *Systematic* means a logical, orderly method of identifying, developing and evaluating a set of planned strategies targeted for attaining the project's goals. *Specific* means each element of the instructional design plan must be executed with attention to details. The design phase may involve creation of 'design document/design proposal' or 'concept & structure note' to aid in final development.

Development phase

In the development phase, instructional designers and developers create and assemble content assets blueprinted in the design phase. If e-learning is involved, programmers

develop or integrate technologies. Designers create storyboards. Testers debug materials and procedures. The project is reviewed and revised according to feedback.

Implementation phase

The implementation phase develops procedures for training facilitators and learners. Training facilitators cover the course curriculum, learning outcomes, method of delivery, and testing procedures. Preparation for learners includes training them on new tools (software or hardware) and student registration. Implementation includes evaluation of the design.

Evaluation phase:

The evaluation phase consists of two aspects: formative and summative. Formative Evaluation is present in each stage of the ADDIE process, while summative evaluation is conducted on finished instructional programs or products.

Other versions:

Some institutions have modified the ADDIE model for their needs. One version of note is the United States Navy version. It is called PADDIE+M. The P phase is the planning phase. In this phase, the project goals, project objectives, budget, and schedules are developed. The M phase is the Maintenance phase. This phase involves the life cycle maintenance of the training product using continuous improvement methods. This model is gaining acceptance in the United States government as a more complete model of ADDIE. Some organizations have adopted the PADDIE model without the M phase. Pavlis Korres (2010), in her instructional model (ESG Framework),[6] has proposed an expanded version of ADDIE, named ADDIE+M, where M=Maintenance of the Learning Community Network after the end of a course. The Maintenance of the Learning Community Network is a modern educational process which supports the continuous educational development of its members, by using social media and web tools.

DESCRIBE THE CRITERIA FOR EFFECTIVE LEARNING MATERIAL

The National Science Education Standards set broad content goals for teaching grades K-12. For science teaching programs to achieve these goals—teachers and students need textbooks, lab kits, videos, and other materials that are clear, accurate, and help students achieve the goals set by the standards. Selecting Instructional Materials provides a rigorously field-tested procedure to help education decision-makers evaluate and choose materials for the classroom. The recommended procedure is unique, adaptable to local needs, and realistic given the time and money limitations typical to school districts.

When you are developing and creating your Learning Materials, you can consider the following checklist as a reminder of the important aspects of your module to work on. After

completing and edit your module, consider every item on checklist and assess your module for its strengths and weaknesses, using the criteria to target possible areas of improvement. It is often helpful to ask colleagues or mentors to review your module for you as well. Finally, if in the future you decide to revise your module or submit it for publication, you may return to these criteria to reevaluate your module and perfect it.

A. Accuracy: Content should be valid and reliable and material should be accurate, up-to-date and complete. Provide your creation and revision dates. If future revisions may be needed, explain this and give a time frame for future updates. If the content contains treatment guidelines or other recommendations that may become obsolete over time, these should be updated as needed or a link should be provided to a resource with the most current guidelines. The content should be complete in scope without missing important information. Limiting yourself to a certain amount of content will be a difficult task. Design your content around your learning objectives. Remember that you can choose fewer learning objectives to keep the module length manageable. The citations, references, credits or links should also be appropriate and relevant the module should offer access to a wide range of resources supporting course content. These sources should be upto-date, accurate and relevant. This should include sources used, references and helpful places to find additional information if interested: textbooks, journal articles, websites, etc.

B. Methods: The material is effective as a teaching tool. Targeted learners will be able to achieve the learning objectives effectively with this material. Learning objectives are clear and appropriate for the target learners and learning context .Your set of learning objectives is one of the key components of you're the learning process. Think about what you would like your target learners to come away with and what is appropriate for their education level, and write your learning objectives accordingly. Take care to be completely clear, since students will use the objectives to gauge their own understanding of the material. The material should accommodate multiple learning styles. it should provide multiple visual, textual, kinesthetic and/or auditory activities to enhance student learning. It should also provide multiple activities to help students develop critical thinking and problem-solving skills. (Key: interactivity and self-assessments!). The material engages and motivates the learner. A primary means of engaging students is through self assessments that are interesting and thought-provoking (but not so challenging that they cause frustration) at every major teaching point. Making the learning process interactive also engages the learners: for example, on anatomy, histology and pathology slides, clicking for labels allows for interaction and self-testing; clicking on diagrams that change under different conditions (physiology, disease processes) engages the learner and allows comparison of different states.

C. Assessment – assessment methods should be appropriate to expected learning outcomes. The interactivity (e.g., feedback) is effective and maintains learner dignity. The questions and feedback should be neither too easy nor too difficult. They may increase in difficulty within the same section; at every major teaching point a final question or two should allow advanced application of the concept being taught. One common way this is done is through clinical vignettes or case scenarios with diagnosis and treatment questions. Multimedia features enhance the learning experience and facilitate achievement of objectives, do not distract and are used appropriately.

D. Presentation: The material should presented effectively and user-friendly. Content (including video, audio, photographs, etc) must be presented with clarity, focus, and organization. Oral or written communication is easy to understand and employs appropriate vocabulary Glossary terms should be linked from the content. The links can either take the user to a glossary page with all the definitions, or open a pop-up window with one definition. The information is presented in ways that are familiar to students All web pages should be visually and functionally consistent throughout the learning process. The material must easy to navigate. The content should be well-organized and easy to navigate. Learners should be able to easily understand its structure.

EXPLAIN THE BASIC PRINCIPLES OF ADULT LEARNING

In order for adults to learn effectively, training needs to be designed in a way that meets the following core principles of adult learning:

1. Self-Directing

Adults are autonomous and self directing, meaning that they live under a large degree of self-governance and to their own laws, beliefs and values. They need to know the benefits, values and purposes of a learning program. They need to know why they are learning what they're learning. If they cannot appreciate the purpose or value, they will be reluctant to engage in the learning intervention.

2. Learn by doing

Adults learn through direct experience; therefore, their training and learning interventions must include active and practical participation and offer implementable techniques and methodologies that will immediately improve their everyday lives.

3. Relevance

The content of a training program must be meaningful and relevant to the adult learners, their lives and their business. They have to very clearly see why and how this is important to them personally and how it applies to their life. The immediate use of the learning needs to be clearly understood by the learner. If they can't see how they personally can apply the learning to their own life and roles, it is suggested that motivation towards the training intervention will be significantly reduced.

4. Experience

Adult learners need to be able to draw upon their past experiences to aid their learning. Training needs to be contextualized to use language that they are familiar with. We need to select case scenarios and examples that they can relate to, as well as refer to their direct past life, work and social experiences to bring the meaning of the learning into their world as they understand it.

5. All of the Senses

Adult learners need multi-sensory learning and teaching methodologies. We must ensure that our learning interventions have appropriately proportioned delivery techniques that meet the needs of audio, visual, reading/writing, kinesthetic, dependent and independent learning preferences.

6. Practice

Adult learners are often engaged in learning because a problem needs to be solved. Practicing skills in a controlled environment allows them to grow self-efficacy in new tasks that prepare them to act autonomously outside of the learning environment. The more an adult learner can practice new skills, competencies or the application of knowledge, the more transformational impact the learning intervention will have.

7. Personal Development

The intrinsic, personal desires and ambitions of an adult learner need to be considered when planning and delivering adult learning programs. As learners get older, their cause for participation in learning programs often moves from external drivers (such as getting a promotion), to internal drivers, like simply learning out of pure pleasure or interest in learning something new.

8. Involvement

Effective adult learning programs have planned for learner feedback and consultation. Adults need to feel as though they have a sense of responsibility, control and decision-making over their learning. They need to be involved in the planning, evaluation and consultation of their own learning process to be fully on board with its successful execution.

In terms of education, this requires the flexibility of the learning situation, the learning program and most importantly, the educator to actively involve the participant in a way that allows them to have a degree of control over what they do, or, in fact, how much they learn.

In my eBook, we take a look at the basics of what these principles mean for the learner, the educator and the overall considerations that need to be made in order to prepare an effective learning program.



FORMATIVE ASSESEMENT - TWO

- ✓ IAC0202 Given various organisational OHS learning and development needs, competency profiles and descriptions of different learning and development structures, strategies and resources. Be able to: a. Identify possible deficiencies in the learning and development processes; b. Describe actions to deal with the given learning and development challenges

5.2.3. KM-05-KT03:

Concepts and principles of change management and how to apply these principles when implementing new systems. (Intermediate)

KT0301	Define change and give reasons why the implementation of changes in an organisation must be managed; (NQF Level: 5)
KT0302	Explain the typical responses of people to change and how they impact on the effectiveness of implementing changes in organisations. (NQF Level: 5)
KT0303	Describe a typical change management process and give examples of what must be done to help people understand and accept change. (NQF Level: 5)
KT0304	Give examples of the use of change management in relation to occupational health and safety issues. (NQF Level: 5)

DEFINE CHANGE AND GIVE REASONS WHY THE IMPLEMENTATION OF CHANGES IN AN ORGANISATION MUST BE MANAGED;

Change is an act or process through which something becomes different. In managing change the managers and staff need to appreciate the process, tools and techniques to manage the people side of **change** to achieve the required business outcome. **Change management** incorporates the organizational tools that can be utilized to help individuals make successful personal transitions resulting in the adoption and realization of **change**.

Some people get set in their ways, get comfortable and resist change because it causes them to undo habitual processes in their lives. However, successful organizations understand that doing things the same way will produce the same result and that sometimes changing things is needed to take an organization to the next level.

According to Albert Einstein, it is a sign of insanity if one does the same thing over and over again and expecting different results. So whether it is transitioning to a new software program, new policies and procedures for processing material, office change or a change in an employee benefit plan, change needs to be managed to be successful. So why do people resist change? Often it is fear of the unknown or perhaps how the change will impact them.

When people don't know all the answers they feel like they have lost control and that makes them feel hopeless. Organizational leaders have the responsibility to manage change efforts to minimize the negative impact on employees.

To effectively manage change efforts, it is important to help people understand what the change will be and the reasons behind the change. The more detailed the communication

about the vision for the change, the better employees understand the need and the less resistant they will be to the change.

8 Steps to Implementing Change

1. Management Support for Change

Employees develop a comfort level when they see management supporting the process. It is critical that management shows support for changes and demonstrates that support when communicating and interacting with staff. There is nothing worse than sending a mixed message to employees. If you can't support the change 100% don't even think about making it. Employees will know it and it will self-destruct.

2. Case for Change

No one wants to change for change sake, so it is important to create a case for change. A case for change can come from different sources. It can be a result of data collected on defect rates, customer satisfaction survey, employee satisfaction survey, customer comment cards, business goals as a result of a strategic planning session or budget pressures. Using data is the best way to identify and justify areas that need to improve through change initiatives.

3. Employee Involvement

All change efforts should involve employees at some level. Organizational change, whether large or small, needs to be explained and communicated, specifically changes that affect how employees perform their jobs. Whether it is changing a work process, improving customer satisfaction or finding ways to reduce costs, employees have experiences that can benefit the change planning and implementation process. Since employees are typically closest to the process, it is important that they understand the why behind a change and participate in creating the new process.

4. Communicating the Change

Communicating change should be structured and systematic. Employees are at the mercy of management to inform them of changes. When there is poor communication, and the rumor mill starts spreading rumors about change which can create resistance to the change. Being proactive in communications can minimize resistance and make employees feel like they are part of the process.

5. Implementation

Once a change is planned, it is important to have good communication about the rollout and implementation of the change. A timeline should be made for the implementation and changes should be made in the order of its impact on the process and the employees who

manage that process. For instance, if your organization is upgrading its software program, employee training should be done before the software is installed on their computers.
An effective timeline will allow for all new equipment, supplies or training to take place before fully implemented. Implementing without a logical order can create frustration for those responsible for the work process.

6. Follow-up

Whenever a change is made it is always good to follow-up after implementation and assess how the change is working and if the change delivered the results that were intended.

EXPLAIN THE TYPICAL RESPONSES OF PEOPLE TO CHANGE AND HOW THEY IMPACT ON THE EFFECTIVENESS OF IMPLEMENTING CHANGES IN ORGANISATIONS.

Change is an inevitable part of business; however, for some it is an easier process to deal with than it is for others. In fact, some employees put up resistance to the process, which can have some negative effects for the company in question. These effects can be widespread and may affect the morale of the staff if they are not addressed in a timely manner. Understanding the negative effects of resistance to change in your organization is the first step.

Lower Morale

When staffers resist a change taking place at work, they may feel less optimistic and hopeful about their professional future with the company. This is particularly so if there is a lack of communication regarding the change. Among other negative effects of resistance to change, lowered morale can spread throughout the entire staff, which can in turn cause issues with both recruiting and retention.

Lessened Efficiency

When employees spend time focusing on resisting the changes taking place in the workplace, they become less focused on doing the daily tasks associated with their jobs. This leads to a reduced level of efficiency and output among staff, which can affect the company's bottom line. In fact, a reduced level of efficiency may fly directly in the face of the reason for the changes in the first place, as changes are often made to become a more effective and productive company.

Disruptive Work Environment

Another negative effect to resistance among staff to changes may be a more disruptive work environment. Employees resisting changes may cause commotions with outbursts regarding the changes or a combative attitude with management staff. They may spread

that same negativity among other staff members, encouraging them to act in a similar manner, which can, in turn, end up causing greater unrest among staffers.

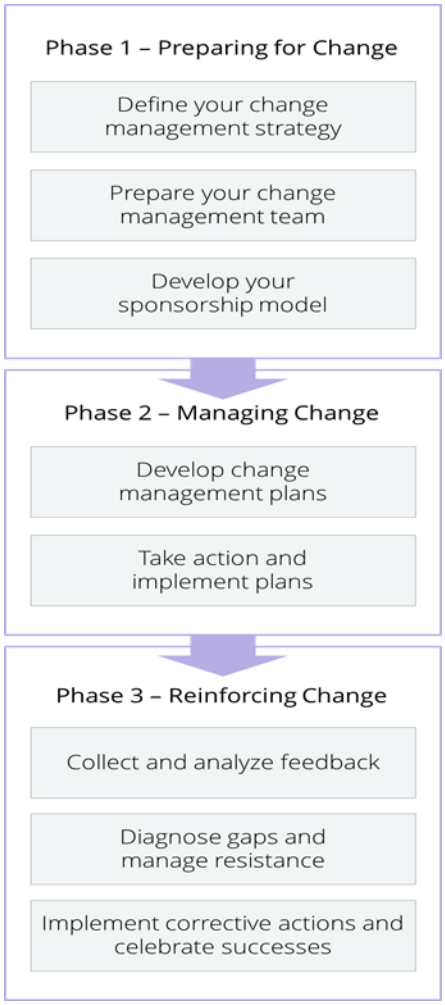
Additional Considerations

There are numerous ways that you can mitigate the negative effects of resistance to change among your staff. From holding all-staff discussions in which everyone can air their grievances regarding the changes to providing extra training and resources to help staff adapt, taking the steps to make employees feel more comfortable with changes may go a long way toward creating more beneficial effects from the change than negative ones.

DESCRIBE A TYPICAL CHANGE MANAGEMENT PROCESS AND GIVE EXAMPLES OF WHAT MUST BE DONE TO HELP PEOPLE UNDERSTAND AND ACCEPT CHANGE.

The change management process is the sequence of steps or activities that a change management team or project leader follow to apply change management to a change in order to drive individual transitions and ensure the project meets its intended outcomes. The elements below have been identified from research as key elements of a successful change management process.

These elements are incorporated into Prosci's 3-Phase Process.



NINE ELEMENTS OF A SUCCESSFUL CHANGE MANAGEMENT PROCESS:

1. Readiness assessments

Assessments are tools used by a change management team or project leader to assess the organization's readiness to change. Readiness assessments can include organizational assessments, culture and history assessments, employee assessments, sponsor assessments and change assessments. Each tool provides the project team with insights into the challenges and opportunities they may face during the change process. What to assess:

Assess the scope of the change:

How big is this change?

How many people are affected?

Is it a gradual or radical change?

Assess the readiness of the organization impacted by the change:

What is the value-system and background of the impacted groups?

How much change is already going on?

What type of resistance can be expected?

You will also need to assess the strengths of your change management team and change sponsors, and then take the first steps to enable them to effectively lead the change process.

2. Communication and communication planning

Many managers assume that if they communicate clearly with their employees, their job is done. However, there are many reasons why employees may not hear or understand what their managers are saying the first time around. In fact, you may have heard that messages need to be repeated five to seven times before they are cemented into the minds of employees.

Three components of effective communication

Effective communicators carefully consider three components:

The audience

What is communicated?

When it is communicated

For example, the first step in managing change is building awareness around the need for change and creating a desire among employees. Therefore, initial communications are typically designed to create awareness around the business reasons for change and the risk of not changing. Likewise, at each step in the process, communications should be designed to share the right messages at the right time.

Communication planning, therefore, begins with a careful analysis of the audiences, key messages and the timing for those messages. The change management team or project leaders must design a communication plan that addresses the needs of frontline employees, supervisors and executives. Each audience has particular needs for information based on their role in the implementation of the change.

3. Sponsor activities and sponsor roadmaps

Business leaders and executives play a critical sponsor role in times of change. The change management team must develop a plan for sponsor activities and help key business leaders carry out these plans. Research shows that sponsorship is the most important success factor.

Avoid confusing the notion of sponsorship with support

The CEO of the company may support your project, but that is not the same as sponsoring your initiative. Sponsorship involves active and visible participation by senior business leaders throughout the process, building a coalition of support among other leaders and communicating directly with employees. Unfortunately, many executives do not know what this sponsorship looks like. A change manager or project leader's role includes helping senior executives do the right things to sponsor the project.

4. **Change management training for managers**

Managers and supervisors play a key role in managing change. Ultimately, the manager has more influence over an employee's motivation to change than any other person. Unfortunately, managers can be the most difficult group to convince of the need for change

and can be a source of resistance. It is vital for the change management team and executive sponsors to gain the support of managers and supervisors. Individual change management activities should be used to help these managers through the change process. Once managers and supervisors are on board, the change management team must prepare a strategy to equip managers to successfully coach their employees through the change. They will need to provide training and guidance for managers, including how to use individual change management tools with their employees.

5. **Training development and delivery**

Training is the cornerstone for building knowledge about the change and the required skills to succeed in the future state. Ensuring impacted people receive the training they need at the right time is a primary role of change management. This means training should only be delivered after steps have been taken to ensure impacted employees have the awareness of the need for change and desire to support the change. Change management and project team members will develop training requirements based on the skills, knowledge and behaviors necessary to implement the change. These training requirements will be the starting point for the training group or the project team to develop and deliver training programs.

6. Resistance management

Resistance from employees and managers is normal and can be proactively addressed. Persistent resistance, however, can threaten a project. The change management team needs to identify, understand and help leaders manage resistance throughout the organization. Resistance management is the processes and tools used by managers and executives with the support of the change team to manage employee resistance.

7. **Employee feedback and corrective action**

Managing change is not a one way street; employee involvement is a necessary and integral part of managing change. Feedback from employees as a change is being implemented is a key element of the change management process. Change managers can analyze feedback and implement corrective action based on this feedback to ensure full adoption of the changes.

8. **Recognizing success reinforcing change**

Early adoption, successes and long-term wins must be recognized and celebrated. Individual and group recognition is a necessary component of change management in order to cement and reinforce the change in the organization. Continued adoption needs to be monitored to ensure employees do not slip back into their old ways of working.

9. **After-project review**

The final step in the change management process is the after-action review. It is at this point that you can stand back from the entire program, evaluate successes and failures, and identify process changes for the next project. This is part of the ongoing, continuous

improvement of change management for your organization and ultimately leads to change competency.

These elements comprise the areas or components of a change management program. Along with the change management process, they create a system for managing change. Good project managers apply these components effectively to ensure project success, avoid the loss of valued employees and minimize the negative impact of the change on productivity and a company's customers.

GIVE EXAMPLES OF THE USE OF CHANGE MANAGEMENT IN RELATION TO OCCUPATIONAL HEALTH AND SAFETY ISSUES.

According to Drucker & Drucker (1994), the new economy is based on knowledge, and this contributes to the ensuring of the sustainability of resources and the development of enterprises, in order to become more competitive. In this context, an important resource that brings added value to the knowledge management approaches is the intellectual capital (composes by human, structural and relational capitals). The intellectual capital development is strong related to education investment, train the trainers (or educators, teachers trainings) and lifelong learning programs implementation. At the organizational level, competitiveness is gained through the high level of human resources competencies and expertise valorisation. Thus, training programs implementations and organizational development strategies are important ways for employees' competencies up-date and development. The article will debate the way in which knowledge management processes could support the OHS culture development.

Any undertaking aimed at obtaining profit and activity resources (in a sustainable manner) will be affected by the way business process are monitoring and controlled. But operating in an uncertain and turbulent environment, organizations are forced to control and monitor a large amount of data and information that are variable and in continue dynamics, evolution. Thus, the need of knowledge management is tremendous in order to have a positive impact on risk management, including the OHS risks. This has to be the core activity of modern management and this will assure a healthy organizational culture development, too. Continuous training in the field of OSH has to underline the usefulness and implication of the knowledge processes in order to eliminate, mitigate, and control risks together with their effects.

The organizational practice in the field of OHS requires researches, but they need most innovative solutions to the occurred problems. An organization is regulated by government but it should go beyond just complying with externally imposed criteria. Simultaneously, the organization should concentrate on the nurture and sustain of its culture. There must be an emphasis on the need for every employee to "own" and take responsibility of his/her actions for safety improvement, rather than seeing this as an imposed act, action from outside

Organizations have to be more careful on how their safety knowledge is managed with the support of related processes: how knowledge is created, transferred, exchanged or share and used or exploited by their employees (including managers from different levels). This will positively affect safety culture and simultaneously, will change employees' safety behavior into a desirable one. The suggested knowledge management processes can also be decomposed into sub-processes and activities for all the inter-relations within an organization.



FORMATIVE ASSESEMENT - THREE

- ✓ IAC0301 Given various occupational scenarios where new systems and/or processes are being introduced, use the change management principles to develop an appropriate programme to ensure the smooth implementation of these processes.

5.2.4. KM-05-KT04:

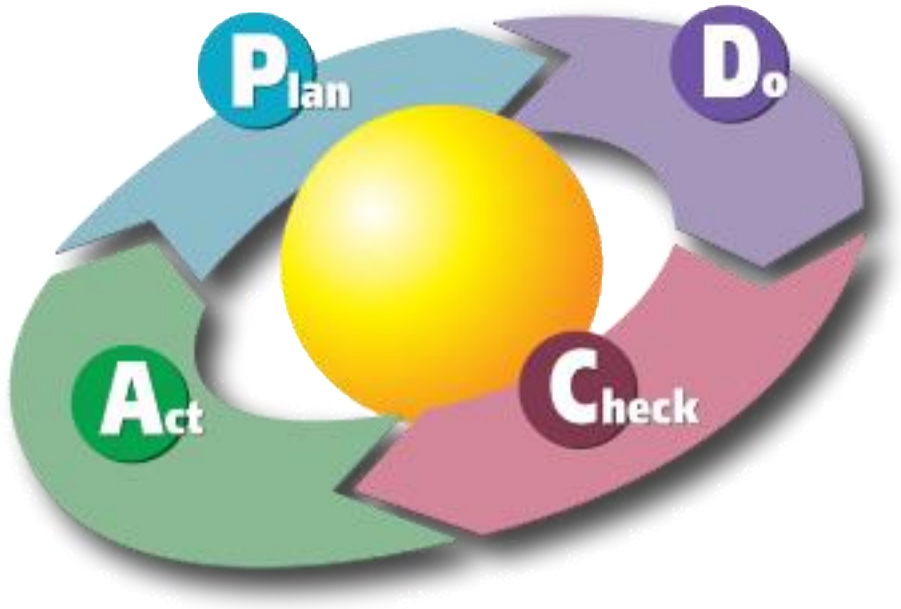
Concepts, principles and leading practices associated with continuous improvement (Intermediate)

KT0401	Describe what is meant by continuous improvement and how it it manifests in the plan, do, check, act cycle: a. Comparison with the management functions (POLC); b. Discuss the principles of effective controls within the management functions (ISMECC) (NQF Level: 5)
KT0402	Give examples of continuous improvement processes in various work places. (NQF Level: 5)
KT0403	Describe the advantages and implications of the effective use of continuous improvement processes. (NQF Level: 5)
KT0404	Explain the typical practices associated with continuous improvement processes: a. Occurrence management; b. Deviation and non-conformance management; c. Lessons learnt and organization wide implementation; d. Modification management; e. Proper commissioning and change management. (NQF Level: 5)
KT0405	Explain the importance of standards and specifications in ensuring continuous improvement (NQF Level: 5)

DESCRIBE WHAT IS MEANT BY CONTINUOUS IMPROVEMENT AND HOW IT MANIFESTS IN THE PLAN, DO, CHECK, ACT CYCLE:

A. COMPARISON WITH THE MANAGEMENT FUNCTIONS (POLC);

PDCA (**plan–do–check–act** or **plan–do–check–adjust**) is an iterative four-step management method used in business for the control and continual improvement of processes and products.. Another version of this PDCA cycle is OPDCA.



The following is a summary narrative of each step:

Plan

During the plan phase, establish the objectives and processes necessary to deliver results in accordance with the expected output (the target or goals). By establishing output expectations, the completeness and accuracy of the specification is also a part of the targeted improvement. When possible start on a small scale to test possible effects.

Do

During the **do phase**, implement the plan, execute the process, make the product. Collect data for charting and analysis in the following **check** and **act** steps.

Check

In the **check phase**, study the actual results (measured and collected in **do** phase above) and compare against the expected results (targets or goals from the **plan phase**) to ascertain any differences. Look for deviation in implementation from the plan and also look for the appropriateness and completeness of the plan to enable the execution, i.e., the doing. Charting data can make this much easier to see trends over several PDCA cycles and in order to convert the collected data into information. Information is what you need for the next step: **act**.

Act

If the **check phase** shows that the **plan phase** which was implemented in **do phase** is an improvement to the prior standard (baseline), then that becomes the new standard (baseline) for how the organisation should **act** going forward (new standards are thus said to be *enacted*). Instead, if the **check phase** shows that the **plan phase** which was

implemented in **do phase** is not an improvement, then the existing standard (baseline) will remain in place. In either case, if the **check phase** showed something different than expected (whether better or worse), then there is some more learning to be done... and that will suggest potential future PDCA cycles. Note that some who teach PDCA assert that the **act phase** involves making adjustments or corrective actions, but generally it would be counter to PDCA thinking to propose and decide upon alternative changes without using a proper **plan phase**, or to make them the new standard (baseline) without going through **do** and **check** steps.

B. DISCUSS THE PRINCIPLES OF EFFECTIVE CONTROLS WITHIN THE MANAGEMENT FUNCTIONS (ISMEC)

In the case of safety, if you want to influence the outcomes you have to focus on the process, which in this case is the safety management system. In particular pay attention to the content of the system, specifically what are the activities that must be performed to increase enterprise safety and reduce the losses? There are activities dedicated to identifying and controlling hazards and risks (loss exposures) to enterprise's people, equipment, material and environment before they can lead to an accident or loss

I**SMEC**, an acronym which stands for

I identify the specific safety activity

S tandard are then set for that activity

M easure compliance to the standards

E valuate deviation and effectiveness

C orrect deviation and/ or revise standard.

GIVE EXAMPLES OF CONTINUOUS IMPROVEMENT PROCESSES IN VARIOUS WORK PLACES.

Continuous improvement is based on the idea that even though you may be doing fine, you never rest on your laurels. Companies and individual employees need to be continually thinking about ways to improve, how to deliver better products, creating products targeted to customer needs, and filling those needs quickly or more conveniently.

The best way to see this is through a sports metaphor. You may have practiced for years to be a good runner. You can win the race, you have good form, you train regularly and you're dedicated. What happens when a new runner comes along? Their shoes are equipped with padding that provides them more of a lift with each step. It improves their performance because their feet go up a fraction of a second quicker after each step that touches the ground. It may just be tiny increments, but a runner with the new shoes still ends up beating you.

The tape doesn't care if you were only 0.000025 seconds behind. Somebody else crossed it before you.
The same is true of sales, marketing or any other company function. Either you made the sale to the customer, or someone else did. In a world where 85 percent of people say they use the Internet to find information, the entire Internet is the other runner. You have to be faster than them.

Choose small, manageable improvements.

Companies and employees do best when a culture of continuous improvement is instituted in small, manageable ways. For example, if one of your company's goals is to increase sales, set a measurable goal of 5 percent for each salesperson. Even the top-selling agent needs to increase their sales 5 percent. Make it clear that goals are not static, but should improve continually.

Monitor improvement with the plan-do-check-act method.

Driving a culture of continuous improvement requires monitoring to ensure performance goals are met. A good method to use is plan-do-check-act. This works as a loop. First, roll out a plan so every employee knows the requirement. If salespeople are to increase sales, have informational meetings about it. Then, once the initiative for sales increases is implemented, see how your people do. Set a meaningful time frame to track the changes. Check to see the status of the improvement. Have sales risen? If they have risen over plan, great! If they are at the desired goal, that's also great. It acts as compound interest does to ensure a rise in your business as the years go by. The act stage is where you assess the do stage. If the goals are met, great.

However, if your salespeople are falling short, is it because they do not have enough leads? Is it because they are not closing effectively? Is it a shortfall in the products that needs to be fixed by the engineering department? Although all the stages of plan-do-check-act are critical, act is the perhaps the most critical. It pinpoints what in the loop needs to be changed for continuous improvement to occur. For example, if you find out that your salespeople are not generating enough leads or closing effectively, you might consider a series of short e-learning courses on how to generate leads and how to close. This can help to institute the cultural of continuous improvement. Your salespeople will be improved by their access to best practices, which they can then implement. You will monitor the implementation, check and act again.

Provide timely feedback.

Companies that wait too long to gather data and process it into the information loop tend to die. If you want to increase sales 5 percent, you need to know whether that is happening after the first week. If it's not, you can institute measures to assess why and plug any holes going forward. If you wait for a month or a financial quarter, you lengthen the time to fix any challenges that stand in the way.

Unleash your employees.

A passionate and committed workforce is your biggest asset in driving continual improvement. Employees are on the front lines with customers and products – selling them, creating them, building them. They are perfectly positioned to see where process improvements could help. Do the salespeople feel that less paperwork would let them talk to customers more? Does more talk equal more sales? Do they have an idea for a streamlined process? Go for it. It's said that the Google 20 percent time plan brought us Gmail and AdSense. Under Google 20, employees were encouraged to spend 20 percent of their time generating ideas to benefit Google. It capitalized on their creativity and sense of market needs to create great products.

Motivate your employees.

Finally, make sure your employees are encouraged. Mention those that met goals or created a new method in an email newsletter. Have an award for best new plan of the month. Buy a free lunch for the top improver. Institute an electronic suggestion box for new ideas to continually improve.

DESCRIBE THE ADVANTAGES AND IMPLICATIONS OF THE EFFECTIVE USE OF CONTINUOUS IMPROVEMENT PROCESSES.

A Continuous Improvement Plan is a set of activities designed to bring gradual, ongoing improvement to products, services or processes through constant review, **measurement** and action. The Stewart Cycle (also known as PDCA which stands for the Deming Cycle of Plan, Do, Check, Act) or an approach called Kaizen are the two most well-known frameworks used to support continuous improvement.

Continuous improvement is a critical dimension of all major quality frameworks and methodologies, including Six Sigma, ISO and Baldrige.

Why Continuous Improvement is implemented

Organizations dedicated to continuous improvement recognize the importance of these actions for strengthening the quality of a product, improving customer satisfaction, and for improving efficiency, productivity and profits.

In process-intensive industries and applications, the continuous improvement program allows individuals and groups to identify inefficiencies or bottlenecks. This affords people the opportunity to streamline processes minimizing time, effort, and waste. Continuous improvement is inherent in the Toyota Production System or Lean methodologies and their use of Kaizen.

In hardware product-centric applications, a program of continuous improvement based on customer feedback allows the manufacturer to improve quality of the product, enhance product capabilities in subsequent products and identify opportunities to streamline manufacturing processes, thus reducing costs.

In Service-focused industries, continuous improvement is implemented to improve efficiency and strengthen the quality of service delivery. From catering to car washes, these firms must regularly measure customer satisfaction and observe activities in order to identify opportunities to improve results.

In many software development activities and methodologies, including waterfall and agile approaches, the theory and practice of continuous improvement is inherent. In waterfall, a product is developed according to detailed specifications and the completed application is tested for bugs. The bugs are repaired and a new release is tested, with the expectation of a diminishing number of bugs over time. Agile methods incorporate shorter development cycles and provide continuous customer feedback, with subsequent releases that are improved in terms of capability, quality, and performance.

The Shewart Cycle

The Shewart Cycle (PDCA) is most often a circle with no beginning or end, meaning that continuous improvement is a process that never stops. Remember, the process is a cycle. If the test fails, repeat the entire process. If it works, monitor results and start over again with a new plan to promote additional improvements. Therefore, the work of continuous improvement is never-ending, implying that the business will continue to get better and better everyday.

Kaizen

Kaizen is a Japanese term that stands for "change for the better." Kaizen supports the perspective that everything can be improved, even if it's incremental. Continuous incremental improvements over time are viewed as desirable and can translate into improved quality, reduced costs, simplified work processes, less waste, and ultimately improved customer satisfaction and profits. Kaizen is a critical part of the broader Toyota Production System.

Continuous Improvement is a Way of Life, Not a One-time Program

The late quality guru, W. Edwards Deming said that managers and organizations must have a consistency of purpose and a deep and abiding dedication to constant, ongoing improvement in order to satisfy customers, beat the competition, and retain jobs.

Deming's focus was on ensuring that continuous improvement was bred into the culture, not something that was momentary or occasional. He often criticized managers for being short-sighted and focusing on the wrong measures. He encouraged managers to invest in the long-term by focusing on meaningful measures of continuous improvement.

Organizations that excel at continuous improvement incorporate it into their values and reflect it in their hiring and training. They also incorporate it in their employee evaluation and compensation system. If you visit a firm that excels at this work, the signs of continuous improvement are visible in every aspect of the culture. Continuous improvement is a way of life, not a passing fad or program of the month.

EXPLAIN THE TYPICAL PRACTICES ASSOCIATED WITH CONTINUOUS IMPROVEMENT PROCESSES:

A. OCCURRENCE MANAGEMENT;

An occurrence is any event that has a negative impact on an organization, including its personnel, the product of the organization, equipment, or the environment in which it operates. All such events must be addressed in an occurrence management program.

B. DEVIATION AND NON-CONFORMANCE MANAGEMENT;

Centuri Deviation Management enables you to quickly identify and respond to deviations and unexpected events in all types of business processes. The system's user-friendliness, flexible architecture and high performance makes it reliable, adaptable and very easy to use. Your organisation will quickly adopt the system, thereby enabling you to manage, follow up and continuously improve everything from customer to production processes, effectively and with a high clearance rate.

Process improvements in all their forms, auditing and inspection, quality and environmental work, all require some type of deviation management. A system where changes or deviations from the standard or the norm, or from what is planned and expected, can be reported and followed up in an efficient manner. Centuri Deviation Management provides an easy-to-use and flexible system that ensures that all faults, defects and changes are noted and addressed quickly. The system's customisable roles and case features also ensure that all the relevant people and roles are involved and kept informed in every deviation process, so that no case is left unattended, ignored or forgotten.

C. LESSONS LEARNT AND ORGANISATION WIDE IMPLEMENTATION;

Below are five steps that you can take to ensure that your organization is engaged in continuous improvement, learning important lessons along the way:

1. Schedule Lessons Learned Meetings at Project Launch (and Keep Them). Most organizations have great intentions when it comes to conducting a lessons learned session upon completing a project phase. The problem is that it's easy to get caught up in the next phase or to spend your time on project components that require more immediate attention. Momentum and necessity propel us forward, making any concerted effort to review a previous phase feel like a lack of progress. One way to mitigate this perceived inertia is by scheduling lessons learned sessions as part of the project plan. Rather than being an extraneous activity – something that feels like something that exists outside of the project flow – set those dates in advance and get them on the integrated project team's schedule. Resist the urge to cancel them as the urgency of other projects encroach in the moment.

2. Ask Three Simple Questions.

Let's face it. Lessons learned sessions can be unappealing if they're viewed as overcomplicated and time consuming. The essential lessons learned collection process really boils down to three questions:

What went well?

What didn't go so well?

How can we do more of what worked and less of what didn't work?

Anything more than that, and you'll likely find them so cumbersome that everyone will want to abandon the exercise.

3. Elicit Feedback in Advance.

Since you know the date and the questions in advance of the meeting, why not collect, aggregate and distribute responses beforehand? This step serves two primary purposes:

It allows the introverts or lower-ranking members of the team to have their say whereas they might not get their chance to share input during the meeting itself.

If you can collect and send out the combined notes before the meeting, participants can analyze the input, identify common patterns and focus team time on the nuances and specifics.

It also makes the meeting much more efficient because you won't be wasting valuable time brainstorming from scratch.

4. Assign a Primary Note Taker to Record Accurate, Comprehensive Notes

How many times have you attended a meeting where everyone was so engaged in the discussion that nobody took the responsibility for capturing the proceedings? Various participants may have recorded incoherent scribbles, but there is no comprehensive

account of what transpired during your time together. By assigning a note taker, you can avoid this unfortunate occurrence. One recommendation is to identify someone whose only role is to listen and record. Assign someone independent of the Integrated Product Team to facilitate and/or record key aspects of the lessons learned session.

Be sure they have a tool or template that allows them to easily categorize decisions captured, consensus reached/not reached, points of view. Moreover, make sure they type the notes directly into a digital document rather than handwriting them so that you lose no time in distributing the notes afterward. Bullets are best so that it's easy to review. Another best practice is to conclude with a brief summation of new ideas and action items that resulted from the session. Attach each of those actions items to a responsible person and a timeline for completion to ensure that they get done.

5. Review Those Lessons the Next Time You Launch the Same Phase in a Subsequent Project.

So let's say you captured those notes, distributed them and maybe even saved them in a central repository. Well done. So what keeps those notes from being nothing more than another file taking up space in your shared drive? Take them out and review them for 10-15 minutes as part of your next project. Before you even get into the specifics of a new project or project phase, remind yourself of the positives and pitfalls from prior efforts. Commit to maximizing the productive aspects of previous projects and minimizing repeat mistakes.

One other quick note is that a team may derive secondary or residual lessons learned through this process based on how well previously discovered lessons learned were implemented during the most previous engagement/project. In other words, an effective lessons learned process has a compounding effect for an organization that is committed to consistent, continuous improvement.

D. MODIFICATION MANAGEMENT;

Companies need to continuously improve their products, services, and processes to remain competitive, yet many companies struggle in this area. Making use of a continuous improvement model eases the process, but perseverance and persistence become necessary. Improvements take time, and small changes will be needed to see major improvements with time. Continuous improvement strategies help significantly throughout the process. Strategies for continuous improvement provide the desired results when implemented properly and used regularly.

E. PERFORMANCE MANAGEMENT

Companies in need of Continuous improvement strategies for performance management often turn to the 5S technique. With the use of this philosophy, companies find they are better able to maintain a work space that is organised and clean, promoting enhanced functionality, efficiency, and productivity. Five strategies are actually used here: sort, set in

order, shine, standardise, and sustain. Sorting involves removing all unnecessary items, setting in order requires one organise their tools and resources in specific areas so they can easily be accessed, and shine means one puts things away when they are no longer being used. Standardise involves organising all workstations that conduct the same job in an identical manner to ensure job processes are standardised, and sustain requires these standards be maintained and reviewed regularly to allow for continuous improvement.

F. SERVICE ORGANISATIONS

Those in need of a Continuous improvement strategy for service organisations may find the Kaizen technique to be of great assistance. This long-term approach focuses on making small changes over a period of time. Although results won't be seen immediately, the end results tend to be impressive. What makes this technique so beneficial is the fact that all employees are fully involved in the process, as this helps to ensure future improvement in all processes. Quality circles, teamwork and personal discipline are three traits that are highly coveted within this strategy.

G. MANUFACTURING

The Lean technique focuses on maintaining the quality of one's products while eliminating waste and reducing the employee workload. Areas addressed when using this technique include wasted resources, wasted time and wasted money. When this technique is used, companies witness improved customer satisfaction, an increase in employee morale and processes that are more efficient and streamlined. The goal is to remove any activities that don't add value to the company to transform a business into one that is more competitive, agile, and profitable.

EXPLAIN THE IMPORTANCE OF STANDARDS AND SPECIFICATIONS IN ENSURING CONTINUOUS IMPROVEMENT

There are different types of specifications, which generally are mostly types of documents, forms or orders or relates to information in databases. The word *specification* is defined as "to state explicitly or in detail" or "to be specific". A specification may refer to a type of technical standard .

Using the word "specification" without additional information to what kind of specification you refer to is confusing and considered bad practice within systems engineering.

A **requirement specification** is a set of documented requirements to be satisfied by a material, design, product, or service.[1]

A **functional specification** is closely related to the requirement specification and may show functional block diagrams.

A **design or product specification** describes the features of the solutions for the Requirement Specification, referring to the designed solution **or** final produced solution.

Specifications are needed to avoid errors due to lack of compatibility, for instance, in interoperability issues. For instance, when two applications share Unicode data, but use

different normal forms or use them incorrectly, in an incompatible way or without sharing a minimum set of interoperability specification, errors and data loss can result. Applications may avoid such errors by preserving input code points, and only normalizing them to the application's preferred normal form for internal use. Such errors may also be avoided with algorithms normalizing both strings before any binary comparison.

Standards can be used to streamline the internal processes of a company, for example by reducing the time needed to perform specific activities in the various business functions, decreasing waste, reducing procurement costs and increasing productivity. The case studies consistently report that the contribution of standards to the gross profit of companies ranges between 0.15% and 5% of the annual sales revenues.

2: Innovating and scaling up operations. Some case studies provide examples where standards served as the basis for innovating business processes, allowing companies to expand their suppliers' network or to introduce and manage new product lines effectively. In other instances, standards helped mitigate the risk to companies of introducing new products onto national markets. Key benefit

3: Creating or entering new markets - Standards have been used as the basis for developing new products, penetrating new markets (both domestic and export), supporting the market uptake of products, and even creating markets. In exceptional cases, the impact of standards far exceeded the figure mentioned above, with companies achieving a gross profit contribution of up to 33% of their annual revenue, which helped them position themselves as leaders in their field, at least over a certain period of time.

The following is another view of the benefits of using Standards in an organization:

- ✓ Reduce product lines to a limited number of standardized products
- ✓ Improve control over materials provided by suppliers, thereby ensuring the quality of supplies
- ✓ Simplify supplier management by insisting on the use of standards
- ✓ Share information efficiently between internal departments
- ✓ Reduce production costs and limit the generation of waste
- ✓ Improve training of staff by referencing standards
- ✓ Unify documentation, packaging and labelling practices for most of its products
- ✓ Instill a culture of continuous improvement in the company



FORMATIVE ASSESEMENT - FOUR

- ✓ IAC0401 Given a range of organisational occupational health and safety scenarios describe the leading practices that can be applied to ensure continuous improvement

BIBLIOGRAPHY

Jump up Piskurich, G.M. (2006). Rapid Instructional Design: Learning ID fast and right.

^ Jump up to:[a] [b] Branson, R. K., Rayner, G. T., Cox, J. L., Furman, J. P., King, F. J., Hannum, W. H. (1975). Interservice procedures for instructional systems development. (5 vols.) (TRADOC Pam 350-30 NAVEDTRA 106A). Ft. Monroe, VA: U.S. Army Training and Doctrine Command, August 1975. (NTIS No. ADA 019 486 through ADA 019 490).

Jump up^ Ed Forest: The ADDIE Model: Instructional Design, Educational Technology

Jump up^ *NAVAL EDUCATION AND TRAINING COMMAND INTEGRATED LEARNING ENVIRONMENT COURSE DEVELOPMENT AND LIFE-CYCLE MAINTENANCE. Naval Education and Training Command. November 2010.*

Jump up^ Pavlis Korres, Maria (2010). Ph.D. thesis. Development of a framework for the e-education of educators of special groups aiming to improve their compatibility with their Learners. University of Alcala, Spain.

*Molenda, Michael (May–June 2003). "In Search of the Elusive ADDIE Model". Performance improvement. **42** (5): 34–37.* Amended version available at the author's web site at Indiana University (Bloomington). (link is dead)

Strickland, A.W (2006). "ADDIE". Idaho State University College of Education, Science, Math & Technology Education. Archived from the original on 9 July 2006. Retrieved 2006-06-29.

National Research Council. 1999. Selecting Instructional Materials: A Guide for K-12 Science. Washington, DC: The National Academies Press. https://doi.org/10.17226/9607

INTRODUCTION TO BUSINESS PLANNING. June 2011by Maltaenterprises

Fundamental Principles of Strategic & Business Planning Models by Brian Hill

Morrison, Gary R. Designing Effective Instruction, 6th Edition. John Wiley & Sons, 2010.

Peer Review Special Interest Group (HEAL). Preliminary List of Review Criteria, 1/14/2004, and Draft Peer Review Criteria for Digital Scholarship, 6/2004.

CSU Chico Faculty and Staff. ROI: Rubric for Online Instruction, http://www.csuchico.edu/celt/roi/index.html

Peter, David. Course Module Evaluation Rubric. http://david-peter.com/papers/rubric/course_module_evaluation_rubric.htm (His resource: Gary S. Moore, Kathryn

Winograd, and Dan Lange. You Can Teach Online: Building a Creative Learning Environment. McGraw-Hill Higher Education, a division of The McGraw-Hill Companies. New York, NY, 2001.)

Berends, J.J. (1996). On the Measurement of Safety Culture (graduation report). Eindhoven University of Technology, Eindhoven.

2. Cox, S., Cox, T. (1991). The structure of employee attitudes to safety: an European example. Work and Stress, 5 (2), 93-106.

3. Geller, E.S. (1994). Ten principles for achieving a Total Safety Culture. Professional Safety September, 18-24.

4. Guldenmund, F. W. (2000). The nature of safety culture: a review of theory and research. Safety science, 34(1), 215-257.

© 1996 Ted Goff, http://www.ted.goff.com