Integrated Management Education and Training Guidance

Prepared by the Chartered Quality Institute Integrated Management Special Interest Group

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1 Introduction

This document provides guidance on structuring and procuring integrated management education and training based on the experience of the IQA Integrated Management Special Interest Group (IMSIG) members. The guidance is broad and detailed and may be interpreted appropriately for courses covering specific integrated management topics such as integrated management systems but also integrated management as a whole from initial awareness through to detailed application of principles and established practice. Consequently the duration of the course may span from a day to months or years depending on the objectives.

Wherever ‘training’ is used in this document it also includes ‘education’ where appropriate.

This guidance may be used to assist in the:
- Structuring of an organisation’s own internal training programmes;
- Evaluation of training courses on integrated management and integrated management systems offered by training providers;
- Structuring of competency profiles for line managers and management professionals;
- Helping to structure advanced management courses such as diplomas and degrees.

It is IMSIG’s view that an integrated approach to management and an integrated approach to management training have significant advantages over fragmented approaches that include:
- Enhanced understanding of the theory and practice of management through its’ simplicity and structured minimalist principles;
- Faster training times by the avoidance of duplication of principles and practice;
- Reduced training resource requirement.

It is the policy of the IMSIG not to endorse specific integrated management training courses or any associated materials.

Any feedback on this document should be directed to the IQA IMSIG secretary.

2 General Considerations

2.1 Target Trainees

The guidance has been formulated for integrated management training that may need to be delivered to management professionals and top, middle and first line managers.

2.2 Prerequisites

No prerequisites are assumed. The pace and structure of a specific course should reflect the experience and aptitude of the trainees. Specialist courses
on integrated management would assume completion of an introductory basic course on integrated management.

2.3 Delivery
The course should mix theory and practice, promote discussion and include practical exercises performed both individually and in teams.

2.4 Terminology
It is recommended that the training uses the terminology defined in the IQA Integrated Management Special Interest Group Glossary.

3 Training Objectives
The following integrated management training objectives have been identified and classified according to likely importance to a general organisation. These classifications may need to be adjusted by organisations according to their size, type and the specific stakeholders that have an interest in their performance e.g. the degree that the organisation has an environmental impact. The order and grouping of the objectives does not imply that the training course should necessarily follow this structure.

3.1 Classification Codes

*** Essential

** Desirable

* Should be considered depending on the organisation’s size, type and stakeholders.

S Topic should be introduced in a basic course on integrated management but may require a specialist course to elaborate the basic principles.

3.2 Training Objectives

3.2.1 Introduction to Integrated Management

1. Understand what integrated management and integrated *** management systems are.

2. Understand the basic components of an organisation as an *** integrated system of assets that includes:
   - corporate leadership given by top management including formulating vision, strategy, objectives, planning and resourcing;
   - management system comprising all the formally defined arrangements (vision, strategy, objectives, rules and guidance) for controlling and guiding the organisation’s assets and processes;
   - organisation culture;
• knowledge base;
• product production or service delivery system and processes (core, supporting and contingency);
• stakeholders (including the prime position of customers);
• aspects of consciousness (awareness, creativity, stress).

3. Understand the IMSIG definition of integrated management and be able to explain why it embraces all other diverse non-integrated approaches to management including:
   • systems and process management
   • sustainable management
   • risk management (various)
   • quality management
   • value management
   • lean management
   • knowledge management

4. Be able to communicate the advantages, challenges and implications of integrated management to senior, peer and subordinate managers.

3.2.2 Systems and Processes

5. Understand an organisation as a hierarchy of systems designed to permit and facilitate processes, sub-processes and sub-sub-processes etc. Recognise typical terminology that is commonly used to label sub-systems in various industries and types of organisation.

6. Understand why system configuration and process design impacts an organisation’s performance with respect to desired and undesired transformations.

7. Understand the range and the nature of the principal parameters that stakeholders use to judge the performance of an organisation.

8. Be able to design a hierarchical structure of key performance indicators (KPIs) relevant to the company as a whole and its processes.

3.2.3 System and Process Analysis

9. Understand the principal reasons for analysing the organisations systems and processes.

10. Understand the principal ways that processes may be graphically mapped and analysed to support different types of process analysis such as risk, value add, critical path etc.
11. Be able to draw simple system diagrams and process maps representing the structure and operation of the organisation. Be able to select the appropriate type of process map for the circumstances and objective of the analysis.

12. Understand how process and process outcome parameters can vary and the implications for an organisation's performance and risk. Understand different types of variation, how they can be modelled, measured and controlled using statistical methods.

3.2.4 Regulations, Standards, Certification and Standards

13. Understand the difference between management and other types of standards.

14. Understand that regulations and standards are effectively a list of controls based on generic risk assessments of organisations, products or services. Understand the use and limitations of regulations and standards with respect to optimising the performance of organisations.

15. Understand that regulations and standards can represent stakeholder needs and aspirations.

16. Be able to review a regulation or standard and identify the sections that correspond with each aspect of a systematic approach to management such as the plan-do check-act cycle.

3.2.5 Organisation and Stakeholder Relationships

17. Understand the principal ways that an organisation's processes can positively and negatively impact a product or service's customers with respect to health, safety, environment, security, finance and reputation.

18. Understand the principal ways that the operation of processes within an organisation can impact stakeholder needs and expectations.

19. Understand the way stakeholders can influence and exert power over an organisation.

20. Be able to conduct a simple stakeholder analysis.

3.2.6 Personnel and Organisation

21. Be able to design integrated personnel organisation structures for the organisation and projects that take account of:
   - the management of business streams;
• providing quality, technical, health, safety, security, financial, personnel, environmental and any other expert advice in a structured and coherent way to support the organisation as a whole and specific business streams and processes;
• the provision of monitoring services.

22. Understand the essence of competence and the implications for defining, selecting, enhancing and monitoring competence.

23. Be able to define job (post) profiles that include:
   • job description;
   • responsibilities;
   • competency embracing qualifications, skills and personal qualities;
   • essential and desired training.

24. Understand and be able to manage the life cycle of an employee from recruitment through appointment, induction, maintenance and development of competence and wellbeing to resignation, discharge or retirement.

25. Understand the principal human motivators (Maslow).

26. Understand the nature of culture as a social group behaviour based on the motivations related to a group.

27. Understand why culture is so strong and takes a long while to change.

28. Understand the different types of sub-cultures that can exist.

29. Understand and be able to classify failures of people to comply with management arrangements in terms of violations and errors and their respective sub-classifications.

3.2.7 Knowledge, Information and Data

30. Understand the critical role of different types of knowledge, information and data to an organisation.

31. Be able to map an organisation’s knowledge, information and data needs.

32. Understand the types of records that need to be managed within an organisation to meet regulatory requirements and effectively support the operations of an organisation.

33. Have an appreciation of the principal requirements of an integrated relational database for managing the general needs
3.2.8 Training

34. Understand the role of training in developing competence and how an integrated approach to training is more effective and efficient than fragmented approaches. Understand that training is managed as an integral part of an integrated management system.

35. Be able to identify the current and future training needs of an organisation to manage its systems and processes both now and in the future, to support the management review process.

36. Be able to construct an integrated training plan that expresses and prioritises the total training needs of an organisation, its perceived benefits, how it will be implemented and resourced, to support the management review process.

37. Understand the types of training that may be employed to meet a training objective.

38. Understand the key documents and their interrelationships that can be used to manage integrated training cycles within an organisation.

39. Be able to structure and specify a training course and its modules to satisfy one or more training objectives. Be able to draw maps demonstrating the sequential elaboration of training objectives.

3.2.9 Risk

40. Understand the domain of risk within an organisation.

41. Be able to state formal definitions for hazard and risk applicable to any aspect of an organisation.

42. Understand the ‘hazard’ and ‘risk’ as universal management concepts. Be able to explain the objective and subjective aspects of risk. Understand the ‘human risk thermostat’.

43. Understand the difference between uncontrolled and controlled residual risk.

44. Understand the difference between risks that are low, tolerable and intolerable and the associated required management actions.

45. Understand that risk is ultimately consciousness based.
judgement or perception related to personal beliefs, personal values and cultural values.

46. Understand the limitations of the risk assessment process and when risk assessment not possible?  

47. Understanding risk management and quality management as two sides of the same coin.

48. Understand and be able to apply the principles of reducing risk:  
   - hazard avoidance;
   - risk control;
   - providing redundancy, diversity and segregation in the design of systems and processes;

49. Understand common cause failure and how human beings are one of the most common sources of common cause failure.

50. Integrating risk assessment with the ‘plan, do, check, act cycle’ such that the non risk assessment components of the management system are risk informed promoting integration.

51. Understand how lean management principles can increase risk.

52. Be able to embed risk assessment into the management system integrated with process mapping.

53. Be able to compile risk registers using simple universal risk rating scales applied to all dimensions of stakeholder values such as quality, health, safety, security, environment, finance, reputation etc.

54. Understand the evolution of a risk register through the life cycle of a product or process e.g. design, manufacture, construction, commissioning, operation and decommissioning.

55. Be able to use Microsoft Excel for constructing risk registers and process plans.

56. Be able to apply traffic light colours in Microsoft Excel automatically to enhance communication of risk.

57. Be able to identify the critical controls that require enhanced monitoring.

3.2.10 Monitoring

58. Understand the reactive and proactive monitoring roles and the need for both to effectively manage an organisation.
59. Be able to design hierarchical proactive monitoring arrangements that take account of risk and experience. 

60. Understand the nature and role of first, second and third party audits.

61. Understand how to plan, design and conduct integrated audits, surveys and inspections.

62. Understand the benefits of everyone being involved in the proactive monitoring process.

63. Understand how to select and manage a certification body for an integrated management system.

64. Understand the need to report events that include accidents, incidents and near misses.

65. Understand the difference between immediate and root causes and be able to conduct root cause analysis.

66. Understand the advantages and disadvantages of Key Performance Indicators (KPI’s).

67. Be able to design a hierarchical structure of Key Performance Indicators (KPI’s).

3.2.11 Review

68. Understand the role of review in managing an organisation and the various ways it is used.

69. Be able to design a hierarchical structure of management reviews headed by the top management review.

70. Be able to draw up an agenda for a management review.

71. Be able to structure a post management review action plan.

3.2.12 Structuring a Management System

72. Understand the role of a management system as a system of arrangements for controlling and guiding processes to achieve the totality of objectives of the organisation.

73. Understand the principal attributes of a good management system.

74. Understand how a management system can produce the evidence for assurance.
75. Understand the degrees that management systems can be integrated and the sequential steps that can be taken to further or optimal integration.

76. Be able to structure an integrated management system embracing the plan-do-check-act or similar cycles such that it can manage all types of company objective (quality, health, safety, environment, sustainability, finance, public relations, ethics etc.) and is user friendly to all those who have need to access it.

77. Understand the implications for paper and electronically based management systems.

78. Understand that the implementation of an integrated management system is a management change issue.

3.2.13 Change Management

79. Understand the external and internal influences that initiate change within an organisation.

80. Understand an organisation as a system and the components that may be subject to change either directly or indirectly during a change initiative.

81. Be able to define a change initiative and assess the associated hazards and risks.

82. Understand the difference between temporary and permanent change.

83. Understand ‘management of change programmes’ as a project or series of projects.

84. Be able to define an organisation and responsibilities for managing a ‘change initiative’.

85. Be able to design a change programme.

86. Be able to apply project risk assessment to a change programme.

87. Understand how to monitor, review and apply corrective action to a change initiative.

88. Understand how to conduct a post change evaluation.
4 Selecting Specialist Training Providers

When selecting a training provider to supply integrated management training consider including the following actions to increase the likelihood of satisfaction:

- Clearly specify the integrated management training needs and consider prioritising them;
- Approach more than one supplier and ask for detailed proposals of training that can be supplied;
- Request the supplier to provide a map demonstrating how the training objectives are sequentially elaborated into the structure of the course;
- Check CV’s of those providing the training to see that they have relevant practical experience in implementing integrated management and is not restricted to theory or research;
- Request references of previous work and contact the organisations to gauge their satisfaction;
- Do not accept substitute trainers without validating them;
- Send a single delegate on a course and carefully evaluate the course before adopting it more widely within your organisation.