### SESSION PLANS

**COURSE:** ABE Level 5 Analytical Decision-Making

**ELEMENT:** Element 2: Source and use of data, systems and technologies for relevant decision-making

## **LEARNING OUTCOME 2**

**Assess business information management data and systems appropriate for analytical decision-making in a variety of contexts.**

* 1. Evaluate data retrieval, analytics and information management systems and methodologies
	2. Assess how data sources and use of technology can benefit analytical decision-making in varied contexts
	3. Examine a range of varied data sources and sets for a specific purpose in a range of organizational functional and complex contexts
	4. Evaluate the validity of data sources in contemporary contexts

**NUMBER OF SESSIONS:** Three - approximately 9-12 hours in total plus self-study

**SESSION TOPICS:** Session 1: Management information and systems

 Session 2: Data sources and technology

Session 3: Information in contemporary business

**Note to tutors: this is the recommended session plan for learning outcome 2 of the ABE Level 5 Analytical Decision-making. You should follow the plan, using the resources (referenced as ‘slides’ here) and activities provided. It is important to enhance all sessions with local examples and case studies, involving the learners ACTIVELY wherever possible.**

### SESSION 1: Management information and systems

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| **Approx.****Duration** | **Topic** | **Tutor Activity** | **Slides** | **Learner Activity** | **Formative Assessment** |
| **3-4 hours total** | Introduction to learning outcomes and associated assessment criteriaSession outcomes | Use file: **5UADM Presentation E2** Assessment criterion 2.1Introduce unit and structure with learning outcomes and assessment criteria | 1-4 | Suggest early in sessions, students are put into action learning groups (ALG) so they undertake tasks and support each other through process | This is a good time to bring in assignment brief, if available or if already covered, get update on student progress to link to sessions |
|  | Concepts of the learning organisation | Input – Theory and quotations behind concept of knowledge in organisations and how this has developed into the notion of **the learning organisation** to achieve competitive advantage | 5-7 | Discussion on concept of the learning organisation*Classroom discussion*: In small groups/pairs, learners should identify examples of business information which demonstrates Explicit and Implicit (tacit) knowledge with feedback |  |
|  | Role of management information | Input – **Role** of management informationManagement information purpose and uses - link to functional areas of the business (marketing, HR, finance, procurement, operations etc.) | 8-9 | Question and answerIdeas generationDiscussion *Classroom discussion:* Use the Role of management information diagram on slide 9 to get students to brainstorm ideas about role of MI to support executive, knowledge and operational activities |  |
|  | MIS | Input **- Systems** and structures;Types and methods of data collection used in business organizations. Use diagram on slide 11 to dissect the structure of the MIS into transactions, databases, internal information (links to finance, operations, marketing and HR) and outputs reporting methodologies and processes for continuous, frequent and periodic, routine and non-routine | 10-12 | Question and answerIdeas generationDiscussion *Classroom discussion:* Develop a series of activities for each aspect of the slide 111 Bus transactions (10mins)2.External databases (10 mins)3.Functional database4.Data outputs*Session activity* - Management Information Systems and Structure | **5UADM E2 LO2 Activity 1 –** Management Information Systems and Structure |
|  | Data retrieval and analytics | Input **Data retrieval** – tasks and evaluation of efficacy of data.Discussion on article: **“How fake data could lead to failed crops and other woes”** Extract from Economist on ‘recall and belief’Test: VACS (valid, accurate, current, sufficient) | 13-15 | Q&A and discussion on who is responsible for data retrieval in their organisationDiscussion on fake data*Session activity:* Discussion on fake/misleading information *Session activity*: Data retrieval and VACS test | **5UADM E2 LO2 Activity 2 –** Fake Data Case study**5UADM E2 LO2 Activity 3 –** Data Retrieval - VACS |
|  | Recap of session and learning outcomes | Run through session outcomes to demonstrate coverageQuestion and answer session – suggest this could be done with students asking each other the questions to be answered by one of the other students | 16 | Q&A involvementHomework and study guide reading for Learning outcome 2 | **5UADM E2 LO2 Activity 4 –** Data Retrieval HOMEWORK |

### SESSION 2: Data sources and technology

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| **Approx.****Duration** | **Topic** | **Tutor Activity** | **Slides** | **Learner Activity** | **Formative assessment** |
| **3-4 hours****Total** | Recap from session 1Review of homeworkIntroduction to session topic | Use file: **5UADM Presentation E2**Assessment criterion 2.2 | 17-18 | Quiz or equivalentReview of homework and VACS |  |
|  | Data sources | Input: **Sources** – internal (contextualised to functional areas i.e. customer records, production data), Market and external; stakeholder; industry-related, competitor, media, political and economic, national, international, global; historic and forecast | 19-22 | *Session activity: Use* slide 22 as a basis for this research activity. Divide the group into Internal, Market, External.Select a company (with a website) of your choice. This company should have accessible data through the internet. Alternatively you can introduce the students to Nestlé’s website. We will be using this company extensively in the next elements. So it might be useful to get the students used to this now. | **5UADM E2 LO2 Activity 5 –** Data Sources |
|  | Business Intelligence | Input – Definition of **business intelligence**Discussion: What is difference between research and information and business intelligenceDefine BI and describe the pyramid of BI from data to action | 23 | Discuss the processes and differences between data and knowledgeEvaluate the benefits of continuous collection |  |
|  | Technology | Input - Use of **technology,** industry- brands, standard and specialist systems and software (to aid information sourcing, analysis and management; machine learning and data mining (examples of brands may include Microsoft Power BI, Oracle) | 24-26 | *Session activity:* Compare well known brands from case study links e.g. SAP, IBM, Qlik Alternatives included in case material are Microsoft Power BI and Oracle | **5UADM E2 LO2 Activity 6 –** BI – Technology in action |
|  | Review of session and learning outcomesHomework | Run through session outcomes to demonstrate coverageRecap Question and AnswerHomework briefing | 27 | Q&A involvementHomework and Pre-session reading on data in functional areasstudy guide reading for Learning outcome 2 | **5UADM E2 LO2 Activity 7 –** Pre-session preparation |

### SESSION 3: Information in contemporary business functions

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| **Approx.****Duration** | **Topic** | **Tutor Activity** | **Slides** | **Learner Activity** | **Formative assessment** |
| **3-4 hours total** | Recap from session 2Review of homeworkIntroduction to session topics | Use file: **5UADM Presentation E2**Assessment criteria 2.3 and 2.4 | 28-29 | Quiz or equivalentReview of homework – Pre-session preparation |  |
|  | MIS in business functions | Input – **MIS** as part of infrastructure of the organisation and **functional areas**/activities of a businessPurpose of research – routine, non-routine; continuous, specific; commissioned; operational; strategicTypes of data – qualitative and quantitative; statistics - primary and secondary; historic; continuous, frequent, periodic, commissioned; intelligence and opinion | 30 | *Session activity:*  Identification of functional areas and discussion of types of information they would use.*Session activity*: Types of researched data - review of data research activities in functional area | **5UADM E2 LO2 Activity 8 –** Information in functional areas**5UADM E2 LO2 Activity 9 –** Types of researched data |
|  | Focus on marketing (activities) | Input – **Marketing information**MKIS, marketing intelligence v market research, planning, communications, CRM | 31-34 | *Classroom discussion: Data usage in marketing**Session activity*: Data usage in marketing | **5UADM E2 LO2 Activity 10 –** Data usage in marketing |
|  | Focus on finance and accounts (activities) | Input –**Accounting** cycleTypes of softwareFinancial planning process for organisationsInterpreting accounts over multiple timelines (example: HSBC) | 35-38 | *Session Activity:* specific examples of the purpose and data usage in finance and accounting operations activities:*Session Activity:* HSBCReview HSBC account highlightsTrends and reasons | **5UADM E2 LO2 Activity 11 –** Finance and accounts**5UADM E2 LO2 Activity 12 –** HSBC |
|  | Focus on Procurement (activities) | Input – role of data in **procurement** and links to The value system | 39-42 | *Session activity*: Procurement and data in the value system | **5UADM E2 LO2 Activity 13 –** Procurement |
|  | Focus on Production and operations | Input – **Production** cycle and differences with **services** | 43-44 | *Session activity*: Production sequence*Classroom discussion: Operations cycle in the service sector**Session activity:* services in bank, hospital and travel company | **5UADM E2 LO2 Activity 14 –** Production and operations**5UADM E2 LO2 Activity 15 –** Services |
|  | Other functional areas and quality control | Input – Data in **other** functional areas eg IT, HRM, R&DEffect of quality management systems including control through DMAIC | 45-47 | Discussion and Q&A |  |
|  | Contemporary issues | Input –Contemporary **issues**: data validity, security, BI, ethics, costs | 48 | Q&A with class examples |  |
|  | Review of session and learning outcomes | Run through session outcomes to demonstrate coverageRecap Question and AnswerHomework briefing | 49 | Q&A involvementHomework and study guide reading for Learning outcome 2 | **5UADM E2 LO2 Activity 16 –** Data validity HOMEWORK |