Skillseekers Analysis Exercise

## **1.** **Introduction**

A medium sized company specialises in providing information technology training for the unemployed on Government training programs. The company is a subsidiary of a large training organisation. Mr Davies is the director in charge of operations.

Currently there are three training programs in operation

* Skillseekers for 16 or 17-year-old school leavers or first-time entrants to the labour market under the age of 25.
* Training for Work for adult job seekers who have been unemployed for over six months.
* New Deal for young people between the ages of 18 and 24 who have been claiming job seekers allowance for six months or more.

Programs are run by the Local Enterprise Company and the training company is awarded contracts to supply training. The company is required to keep detailed records for each trainee and to make monthly returns to the Local Enterprise Company (LEC). There is an additional requirement to supply equal opportunities information.

The company has a database containing relevant trainee information. The current system is an old MS Access system and is rather limited in the features that it offers. Mr Davies feels that he would like something more up to date and user friendly.

## **2. The** **investigation**

**The interview**

An interview was arranged with the director and the manager of the company. A list of questions was drawn up prior to the interview.

Q. **Could you give some basic information about the training schemes**

A. There are three trainee sections; Skillseekers, Training for Work and New Deal. Each section requires the same basic information, but some may have additional information. We would like the one easy to use system to give all the information we need quickly and for the information to be well presented.

Q. **How are trainee records currently stored?**

A. At present there is an old Access database and a paper-based system. All records are stored in this, but the original database was very limited and additional tables have been added as required. That is why we have the paper system.

Q. **What problems are encountered with the current system?**

A. There are now problems with duplicated data and disjointed records, e.g the trainee personal information does not always tie up with their achievements. This has to be checked by hand and amended as required. If this was not done it could be a major problem. Sometimes records are lost particularly the paper ones.

Q. **What information is stored about each trainee?**

A. Full name; address; national insurance number; gender; date 0f birth; details of outcomes achieved; ethnic origin; start date and finish date

Q. **How many trainees are there?**

A. We have about 250 trainees currently registered

Q. **How many trainees are added in an average week?**

A. This varies. Trainees are added in small blocks if there is a recruitment drive or in single numbers.

Q. **What outputs are required from the system?**

A. A monthly report of all the trainees is required by the LEC. This includes name, address, national insurance number, date of birth, program start date, finish date and outcome.

The company take a register twice daily and the details are entered in the system. This should be able to be printed or viewed on screen as required

Q. **What outputs would be required of the new system?**

A. The same as at present but with no duplicates and the information should be correct with only a small amount of sampling required.

In addition, we must be able to extract information that is now currently required to satisfy contracts, namely equal opportunity information. The information required is

* analysis of type of ethnic trainees
* level of achievement of ethnic trainees
* ratio of male achievers compared to females.

Reports are generated monthly or on request

Q. **What are the main objectives of the new system?**

A. To store the trainee details in an easy to use database. It would be good to auto generate the registration number. At the moment this is entered manually, and mistakes have been made. The format is four characters (skil for skill seekers, work for training for work and deal for new deal) followed by a four-digit number.

Reports should be generated automatically and printed with the company logo. Reports will be based on individuals; programs; specific dates; achievement by specific criteria e.g ethnic origin, gender etc

1. **What resources are available for the new system i.e. hardware and software?**
2. We would like the system to be installed on the LAN so that it can be accessed by all staff as required. The software can be installed on one of the servers.

All the client machines are fairly up to date with i7 processors; an average of 12Gb RAM. The operating system on the server is Windows 2022 server and the clients have Windows 10 or 11. All machines have Office 365.

1. **Is there a budget for the project?**

A. We would like the new system to cost no more than £15000. This would include a support period and any necessary training

1. **Is there a timescale for the project?**
2. The new contracts are due in six months. Ideally, we would like to be up and running with the new system within 4 months so that we have a few weeks to iron out any problems and train staff.

**Instructions:**

**Exercise:**

Read and analyse the above scenario and Interview.

Under the following headings, type up:

1. Introductory paragraph (what you have been asked to do)

I have been tasked with analyzing the current situation of a medium-sized company that specializes in providing information technology training to the unemployed under government training programs. The company is seeking to upgrade its current training system, which is an old MS Access-based database, to a more modern and user-friendly solution. I will identify the functional and non-functional requirements for the new system, as well as the constraints that need to be considered when designing and implementing this new solution. This system will be essential for managing trainee information, generating reports, and ensuring compliance with governmental contracts.

1. A brief Background to the Company?

IT training to unemployed individuals under various government programs. These programs include:

Skill seekers: 16–17-year-olds or first-time job entrants under 25.

Training for Work: Targets adults who have been unemployed for over six months.

New Program: Designed for young people aged 18-24 who have been claiming job seekers allowance for six months or more.

The company works under contract with the Local Enterprise Company (LEC) and must provide regular reports on trainee progress, including personal details, achievements, and equal opportunities data. The current system used to manage trainee records is a combination of an old MS Access database and a paper-based system, both of which are inefficient and prone to errors.

1. A list of Functional User Requirements

User-Friendly Interface: The new system must have an intuitive, easy-to-use interface to ensure efficient data entry and retrieval.

Trainee Information Storage: The system must store detailed trainee information, including: Full name, Address, National Insurance number, Gender, Date of birth, Program start and finish dates, Achievements, Ethnic origin

Reports should be customizable to filter data based on specific criteria such as program, gender, ethnic origin, etc.

Reports should be printable and viewable on screen with the company logo included.

The system should allow for the easy entry of daily attendance data, which can then be accessed or printed as required.

The system should support concurrent access by multiple staff members over the LAN.

Reports should include the company logo and be available for printing or on-screen viewing.

he system should ensure data is stored securely, with role-based access for staff, ensuring that sensitive information is only accessible to authorized users.

4} A list of non-functional Requirements

The system must be able to handle up to 250 trainee records efficiently, with the ability to scale as the number of trainees grows.

It should be capable of generating reports quickly (within a few seconds) even with large amounts of data.

The system must have an intuitive and user-friendly interface, ensuring that staff members with varying technical expertise can navigate and operate the system effectively with minimal training.

Data entry, retrieval, and report generation should be straightforward and require minimal steps.

The system must be highly reliable, with minimal downtime. It should be accessible during working hours (9:00 AM to 5:00 PM) and, ideally, be available outside of office hours for backup and maintenance.

The system should support continuous access for all authorized users via the company’s Local Area Network (LAN).

Sensitive personal information (e.g., National Insurance numbers) must be encrypted both in storage and during transmission.

The system should include audit logging to track changes and actions performed by users for security and compliance purposes.

5) A list of constraints

The project has a strict budget limit of £15,000, which must cover the development, installation, support period, and any necessary training for staff.

The system must be implemented within 4 months, with a goal of being fully operational before the start of the new contracts in 6 months. There should also be time for testing and staff training.

The system must comply with government contract requirements, particularly regarding equal opportunities data and the accurate reporting of trainee outcomes.

The system must be able to migrate existing data from the old MS Access database and paper records without data loss or major issues.