**Employer Set Project 2 – Pre-Task**

Research use of digital solutions in the finance/retail sector.

**Data Analysis and modelling**

* Financial models are used to predict or show an organisations past or future in regards to financial performance. Data and tools are used in combination with some financial modelling techniques in order to display the data effectively:
  + Historical data – using data collected from past references in essential when trying to determine any future predictions.
  + Assumptions – Analysing a company’s historical data and developing a strategy for building a financial model. They are the ‘inputs’ for financial models, but represent a company’s expectations and realities.
* Financial modelling techniques often utilise excel modelling and other spreadsheet tools win order to build their desired models.
* Financial data, such as purchasing behaviour, credit card data etc is very valuable data for financial institutions.
* Article by Softweb Solutions explains how data analytics have transformed the sector:
  + Enables finance executives to turn structured and unstructured data into insights that improve decision making.
  + Helps teams gather information about Key Performance Indicators (KPIs), such as revenue generated, net income, payroll costs etc.
  + Allows teams to detect fraud, particularly useful recently during an increase in digital fraud activity in 2020.
* Tools/other techniques used include:
  + Data Mining
  + Financial analytics
  + Microsoft Excel
  + Understanding business models
  + Risk management
* RETAIL – data analysis is useful to determine data such as types of products purchased and when, types of activity, what people search for versus what they purchase, the kinds of services they interact with etc.

**Data and Information Security**

* Data security is important for financial services, as the information they possess is valuable for criminals and is so wide reaching – such as individual customer details or even business details.
* Data Loss Protection is incredibly important for financial institutions as making sure it cannot be stolen or made useless is a key factor.

**Stock control and Point of Sale Systems**

* Technology used to manage stock and sell products to customers – includes use of Tills or handheld devices to sell products in a streamlined manner – e.g. MicroTill have a feature that manages stock on their electronic tills.
* Some EPOS systems integrate stock management within them, which notifies staff operating POS systems that stock is low, and can purchase additional stock. Important to keep sales and stock data in sync.

**Online Retail/customer loyalty schemes**

* Online retail can maximise the reach of businesses to sell their services or products. By operating online a business does not need to worry about the physical locations or space required to access multiple markets – examples include Amazon, ebay.
* Customer loyalty schemes maintain customer details for a businesses’ interests, whilst offering promotions and deals to those same customers. By keeping information, businesses can utilise their behaviours/purchasing habits to improve their sales, as well as maintaining regular customers by giving people reasons to shop again with the same business, such as Amazon Prime.