P2 –Explain the four pillars of the IoE and how its innovations can transform businesses

You need to produce a presentation with detailed speaker notes that identifies the interconnection of the four pillars of the IoE (people, data, process and things)

1.5 The four pillars of the IoE, i.e.:   
• people – how people interact using the internet?  
  
• data – a huge amount of data is generated, the key to it is that the data needs to be interpreted for analysis.  
  
• process - data is processed by large organisation to identify trends  
  
• things (devices and objects) – explain the different devices that are used to access the internet and the benefits and drawbacks of each.

1.6 People – explain how each uses the internet   
• students   
• members of society   
• connecting people in relevant ways

1.7 How do people connect with each other and the internet

• devices   
• social networks   
• wearables

1.8 Converting data into information to allow people to make decisions. Explain this can be used to analyse trends and to identify peaks and troughs in demand.  
  
1.9 Data, i.e.:   
• raw data   
• connected things (devices)   
• analysis   
• decisions   
• results   
  
1.10 Information gathering devices, i.e.:   
• computers – questionnaires, times of usage.   
• smart phones – location services, when devices are used  
• vehicles – speeds, insurance for younger drivers the “black box”  
• other devices with sensors – scanners in super markets, also counting the number of customers who enter a store etc.

1.11 Process, i.e.:   
• delivery of information – the time it takes to process data into information may be a concern for time and meeting deadlines. For example, software can be used to predict demand for certain products which means that it is easier for a company to interpret customer demand so that they can have in stock the relevant goods for customers to buy, rather than a pile of products which are not being bought resulting in money being tied up within the company.  
  
• delivery to whom – it is important to identify which users should be privy to information rather than everyone within an organisation as it may be too sensitive.   
  
• timing of processing – for example, processing information over a short period of time may give inaccurate predictions. A longer time may be of more benefit to predict demand.  
  
• methods to deliver processed information – a computer could be automatically set aside to process large amounts of data at the end of a working day for example to gain the best data capture.

1.12 Processing capabilities, i.e.:   
• local – this could just be a pc which is limited to processing power and collecting the data.  
  
• server - larger processing capabilities would be useful and the data could be shared.  
  
• big data technologies – large processing such as main frame computers to process large amounts of data, for example phone bills and heating bills etc  
  
• cloud services – data could be shared and easily accessed online with specific users. However, there is concern over how secure the data is from hacking etc.