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| 1a | Must include context for maximum 4 marks  No context, 2 marks max  Advantages:   * Easy to use – intuitive (1)….this will make it easier to order a takeway via the app (1) * No extra peripherals such as a mouse are needed (1)….customers can order on the go (1) * Touch screen is the main interface on smart phones and tablet computers. (1)….which allows more customers to order online (1) * Can make use of finger gestures (1)….making it easier to select items on the menu (1) * Any other reasonable example.   Disadvantages   * Not very accurate (selecting detailed objects can be difficult with fingers) (1)//customers may place an order that is incorrect (1) * Dirt/smudges could get on the screen (1)…this could make it difficult for customers to place an order (1) * Older people may not use smart devices (1)….this could make it difficult to place an order (1) * Any other reasonable example. |
| 1b | Speech recognition |
| 1c | Gesture (Max 3)   |  |  | | --- | --- | | **Pros** | **Cons** | | Replaces mouse and keyboard | Obstruction from other objects | | No physical contact with the computer. | If the distance between the device and user becomes greater then performance will decrease. | | Communicate at a distance. | Lighting could affect detection. |   Virtual Reality (Max 3)   |  |  | | --- | --- | | **Pros** | **Cons** | | Changes the way in which people communicate. | High costs and not affordable for all right now. | | Opportunity to experience things that wouldn’t happen in real-life. | Some people can suffer from motion sickness. | | Allows users with disabilities to experience a different world. | Become addicted to using the technology. |   Augmented Reality (Max 3)   |  |  | | --- | --- | | **Pros** | **Cons** | | Enhances natural environment by embedding virtual elements. | Can be expensive to invest in this technology. | | Easy to use. | Privacy issues surrounding the capture of data in real-time. | | Many smartphone apps now use AR technology. | Become addicted to using the technology. |   Traditional (Keyboard/Mouse) (Max 3)   |  |  | | --- | --- | | **Pros** | **Cons** | | Most computer users are familiar with them and requires little training. | They need a flat space close to the computer. | | Mouse and Keyboard work well together for data entry. | Disabled people often find keyboards difficult to use. | | A skilled typist can enter data very quickly | Excessive use can lead to health problems such as repetitive strain injury (R.S.I.) |   Biometrics (Max 3)   |  |  | | --- | --- | | **Pros** | **Cons** | | Can improve security as it helps authenticate a user. | Potential misuse of data collected. | | High degree of accuracy in recognising the correct person. | Not 100% accurate so could still lead to incorrect identification. | | Fully automated and now available on modern smart devices. | Privacy concerns – users feel like they’re under surveillance. |   Accept other reasonable examples if not included on the mark scheme. |