

Graphics in Society

N5 Graphic Communication

CAD – Computer Aided Design (3D modelling)

CAG – Computer Aided Graphics (DTP)

CAM- Computer Aided Manufacture (laser cutter, 3d printers, CNC routers etc)

Input Devices

- Keyboard
- Mouse
- Graphics Tablet
- Flatbed Scanner
- Hand Held Scanner
- Digital Camera

Output Devices

- Monitor
- Flatbed Plotter
- Drum Plotter
- Ink Jet Printer
- Laser Printer
- Wide Format Printing
- Speakers
- Offset Lithography

CAD Library - Advantages

- Reduce time required to model each component
- Reduce likelihood of CAD technician making errors
- Represents actual standard component parts
- A library would contain all common component parts
- The same parts would be used by all CAD technicians in the company
- Library components can be used by CAD users worldwide

CAD Advantages

- Convenience of use (Lap top, tablet etc..).
- Standardisation
- Paperless office (Easier to store drawings, less paper waste)
- Send drawings to another location quickly (to other offices, working from home)
- Use of environmentally friendly printing inks

CAD Advantages Over Manual Drawing

- Drawings can be produced quicker and very accurately.
- Drawings are easier to edit/change.
- Repetitive elements, libraries of various parts can be created.
- Drawings can be easily scaled up or down.
- Use of layers allows different parts to be drawn separately.
- New designs from existing designs.

CAD Disadvantages

- Data Theft or Viruses
- Power or System Failures
- Expense of set up and maintenance
- Training
- Social Factors – skilled workers losing jobs etc
- Continual need to upgrade systems to stay competitive

Paperless Office - Advantages

- Improves corporate image of company.
- Easier to enable remote working.
- Easier to collaborate on projects remotely.
- Reduced costs from storage.
- Reduced costs from use of ink, toner or paper.
- Reduced environmental impact from use of ink or toner.

Remote Working - Advantages

- Easy to send electronically to relevant people
- Easy to collaborate with more people in different locations
- Allows 24 hour working globally
- Option to work at different locations other than their own office
- Reduction in need to travel

Cloud Storage - Advantages

- One drive, Google drive, iCloud etc
- Very large storage platforms
- Ease of collaboration within company
- Potentially available on demand anywhere
- Many staff can collaborate simultaneously
- Can be accessed remotely
- Use with mobile devices

Cloud Storage - Disadvantages

- Cloud could be hacked
- intellectual property stolen
- Digital rights management issues
- Requires access to internet at all times
- Cloud servers may fail
- Virus in the system/software

Standardisation - Advantages

- Common language
- Aids comprehension
- Multiple people may be working on the same project
- Allows the creation of a library common parts recognised throughout an industry sector, such as BSI symbols.
- Allows users to recognise the industry standard throughout the world, such as BSI or paper size (A4,A3 etc..).