Case Studies

Design Consultancy
Control Room, NOC, Data Bridge, NMC

Human Factors
Technology Interfacing
Concept Design
3D Rendering
Full Design Brief

If you would like Harp Visual Communication Solutions to help put you clearly in control-

please call us on 01329 844005, and ask for the Business Manager

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HARP
VISUAL COMMUNICTION SOLUTIONS

Control room design from first principles.

Who needs to do what and what do they need to do it?

SURVEY AND ANALYSIS

The first part of the design brief is to conduct a survey into how the operations centre currently operates, or is intended to operate, down to a micro level. Each job is analysed with respect to function, skills required, responsibilities and work load. A total picture from the ground up can then be built, identifying the needs of the business and the staff.

At the macro level the overall objectives of the operations group, management, sales people and clients need to be incorporated into the study. Only after all this information has been gathered can the concept and layout be considered.
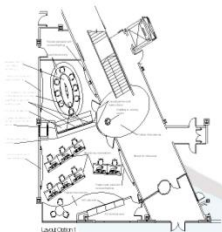
CONCEPT

From the survey, initial conceptual ideas can be created based on both how individuals work and how the group structure operates.

At this early stage ideas can be spawned and sketches created to test the concepts and see how they would work.
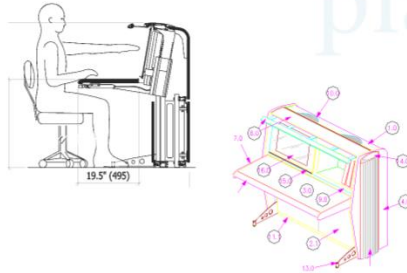
DESIGN

2D drawings can be created based on the sketches in order to qualify the ideas. These would start to bring in some of the detail with respect to consoles and display devices. The designs can be tested against the analysis and against the technology to be used. Conflicts can be identified and resolved at an early stage in the design. This inital work will start to dictate how the room is laid out and which working groups sit where.

CONSOLES

Many different types of furniture exist. Whether to use standard desking or custom made consoles will need to be determined. The benefits and drawbacks of each option have to be assessed. Also to be considered is the impression the team wants to leave with its visitors.

TECHNOLOGY

All operators use workstations on their desks, be they Microsoft, Andoid or UNIX based. Often the operators need to access different workstations at local and remote sites to maintain the network or process. This can be achieved in many ways, through browser interfaces, remote access viewers, KVM switching and remote secure interfaces. All these sources need to be taken into account when designing the operations layout. Many of the applications need to be shared to ensure that the expected workload can be dealt with.

PEOPLE

The control room operators are normally highly skilled, knowledgeable and sometimes working in a high stress environment. They need to be supplied with the right information so they can quickly evaluate and respond to situations that arise, enhancing the clients operational effectiveness.

These are valuable people who often have to sit in front of screens for many hours a day. The correct posture, tools and ease of access will make them much more productive.

INFORMATION DELIVERY

Operations staff need to be fed information so that they are made aware of problems that have to be dealt with. This can be achieved with sound or vision. If the same information needs to be delivered to many people then larger screen LCD's or video walls can be considered. Detailed interaction will still be done at the operators PC.
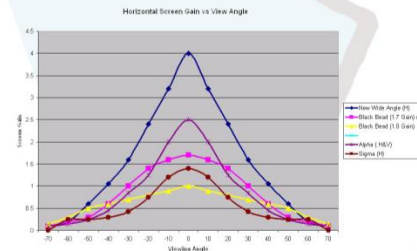
If video walls are considered then the operators ability to read the information is paramount. Character legibility and angle of view are critical in the selection of video projection devices. Harp have the skills and the knowledge to advise on the best solution.
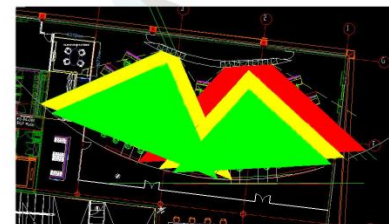
LARGE SCREEN DISPLAYS

Harp can recommend video walls for any application which can deliver large amounts of information to many people simultaneously. These range from 49" LCDs, to 55" Full HD ultra thin bezel LCDs DLP cubes, to advanced 4K LED solutions. Complementing these display devices Harp can tailor the video wall processor with consideration to whether the wall is mission critical or just for show.

If video walls are to be deployed careful selection of screen technology and projection technologies are key to a successful installation.

The characteristics of the screens can be matched to the room layout and the relationship between the operator and the video wall can be optimised.

INTERIOR DESIGN

As the concept evolves it is vital that the total look and feel of the environment is taken into account. At this stage details such as corporate branding can be fed into the design. All the detail from how the layout works to how the room is lit comes into play.

The final part of the design is the 3D rendering which is used to qualify the design with the client. It is often used as an internal selling tool to the board so that they know what they are going to get before construction has started. It is true WYSIWYG.

WHAT YOU SEE IS WHAT YOU GET

DELIVERABLES

Harp will generate a brief from which the whole room can be constructed. This will include detailed drawings , finishes and recommendations on which technology should be incorporated and how they can best be deployed.

The pack will include:-

Job Analyses
Concept Sketch
Technology Interfacing
2D Design Options
3D Rendering