
17 EXHIBITIONS, OPEN DAYS AND DISPLAYS

Presented by

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(with acknowledgement to D J Plumb)

Introduction

People of every walk of life usually like looking at exhibits. They are intrigued to know what other people do, particularly if the information is supplied in an attractive style and in comfortable surroundings. There is, in effect, a captive audience that will come along, but it will not stay long if the organization is poor, the exhibits do not convey information clearly and interestingly. The aim of the exhibition or open day will also be lost if the audience goes away with incomplete information or with a misunderstood conception.

From the start, it must be quite clear in the organizers' mind what is the purpose of the exhibition:

- a. To enlighten the general public about the Organization's activities i.e. to break down barriers of ignorance?
- b. To facilitate the exchange of information between scientists?
- c. To promote a product, a process, or the Organization itself?

The purpose will in the main govern the type to be presented. There are broadly four main types:

1. Exhibition for the public in general

This has the advantage that this type can be geared towards a specific geographical area, there is more scope for graphic design, and less detail to be conveyed.

2. Scientific exhibition of a specialised kind, but covering a variety of subjects

Conversations by professional associations fall into this type. It has the advantage that experts come to it who are quick to appreciate the finer points of what is being shown.

3. Exhibition at a high technical level but concerned with one particular field e.g. measurement instrumentation, insect pest control in coffee.

The advantage here is that the visitors are already generally conversant with the subject matter and therefore likely to be receptive of new ideas directed to them.

4. Exhibition concerned with one particular trade or sector e.g. textiles, glass, coffee processing, range management. The advantage of this type is that the visitors have come to learn something of advantage to them.

In the early planning phase, therefore, we need to ask ourselves:

- What do we have to say?
- To whom are we saying it?
- What is the best way of saying it?

In visual terms, the purpose of any exhibition, open day or display is to convey information in a three dimensional plane. The incorporation of the third dimension, supported by two-dimensional methods of graphic and visual imagery and the printed word, demands that not only must the last two methods be modified for the purpose, but that also a method be devised of presenting static, semi-static and sometimes mobile exhibits to a mobile audience.

With the introduction of this third dimension together with mobile and static elements, there is added the factors of space, in which the exhibits are contained and in which they can be observed (which also have easy access), and time in which the exhibits can be comfortably viewed.

The success of communication is dependent upon the manner in which these elements are conceived, designed and implemented within the accommodation, scope of audience and financial limitations.

The human factor

In the planning stage, it must be borne in mind that a display structure needs to possess two essential properties. It must have the capacity of transmitting information quickly and efficiently, and it be so constructed that there is easy access and little interference to the free flow of visitors, avoiding congestion and confusion.

For the physical movement of people, several factors must be taken into consideration:

1. The various physical characteristics and intellectual level of the visitors. These will determine the degree and form of explanation required, the amount of space and time necessary to understand the message being conveyed before moving on to the next display.
2. The individualistic nature of people in their response to different forms of displays and their subject matter.
3. General inquisitiveness of human beings which affects both the provision of supporting information, either verbal or visual, and the security of the exhibits.

A guide to the physical area requirements can be gained from work done in the United States by Henry Dreyfuss in his check list of human dimensions for the working person. Although this was primarily researched for use in the design of control panels and ergonomic principles behind the type of movement required for the successful operation of such panels, certain of the dimensions given will be useful in the design of displays, exhibition stands etc.

Standard display height (stand): 36"

Standard minimum width of corridors: 21"-24" for 1 man
48"-54" for 2 men
108"-120" for 3 men

Ramps: 10° slope is optimum

Headroom: Allow 10% over the average height of ethnic groups using facilities.

Visual angle: Allow 50° above and 70° below the average eye level for visual angle without head movement.

Allow 30° either side of the central sight line for horizontal vision without head movement.

Reach radius: Allow 4'0" from security barrier to exhibit, even more if the exhibit is considered a target for theft or damage.

This information is not complete but should act as a guide to the type of information that is required in regard to human dimensions in the routing of people in limited spaces, the building of structures to be used for particular functions and the provision of security.

The presentation of exhibits within the display area(s) has to take into account not only these physical factors, but also the natural inquisitiveness of human being in either the quest for information or the novelty of seeing or using a piece of equipment. Any item that is of a manipulative nature or that has manipulative parts such as keyboards, control or activating buttons, switches or levers or those which are noise or light making are all liable to either cause congestion around their display area(s) or present problems by their liability to theft, breakage, or cause of accidents to the user, all of which destroy the effectiveness of communication. Congestion also must be expected in any area in which films, demonstrations either visual or physical, are taking place or at which film, TV or Radio interviews are being held. Knowledge as to the type of visitor is useful in planning both access and display areas and taking the necessary steps in providing certain special display or security features.

Movement

Initially, the manner in which the flow of visitors takes place is determined by the exhibition/exhibit planner, and the success at which it is implemented in practice is dependent upon his or her ability to estimate (1) the number

of visitors at any one display area at any one time, (2) their physical and time requirements, (3) the rational sequence of presented information and (4) the manner in which it is actually presented.

To help in the planning of an exhibition, it is first necessary to obtain a ground plan of the total area in which the exhibition is to take place and the individual display areas allocated. If the exhibition is to be contained in the normal working environment (research or training establishment) it is more important to make sure that both the display areas and the flow of visitors are planned in greater detail than if working in a completely open area or if one is designing these areas for the specific purpose of the exhibition. The reason for this is in the fact that there is a greater chance of having to adapt an existing area, usually used for more sedentary uses than for allowing a large number of people to move, stop, observe and move on with the minimum of effort and confusion. Irregular shaped rooms at the end of narrow, dark corridors and containing fixed laboratory benches are not the best venues for displays or exhibits, but nevertheless present the type of problem that has to be solved by the planner.

An exhibition planned for out-of-doors can be a disaster if during the middle of the day torrential rain sets in, and there is no provision made for alternative facilities. Careful planning can avoid this and also provide for the safe, satisfactory movement of people either at their leisure or hastened by an unexpected event.

The question of movement is not necessarily confined to the exhibition areas only. Visitors have to arrive and depart the site. Some will come by foot, others by public transport and others by private car, so details of general access for all these must be planned.

Display

The prime consideration in display is to present the facts as they appear and in the best possible manner. These facts may be represented as the complete object, as part of the object, as a collection of whole objects or a collection of parts of objects. They may involve movement or a series of movements or have to be exposed from positions normally hidden from view in either a static or mobile situation. The facts could also be seen as graphic interpretations of functions in the form of film, slide, diagram or photograph supported by spoken or visual commentary.

In planning the display aspect, several matters must be considered

1. Does the object present all the facts in itself? If it does, what is the best way to show the complete object? If it doesn't, what must be done in order that these facts may be presented?

2. Does any object require additional support material in order that the facts may be presented fully? For example, a computer could be seen as a working object but the facts or functionary process still remains hidden i.e. electronics. In this case, supporting material in the form of diagrams or working models may be required in order that the function can be explained.
3. Does the object rely upon a sequence in its function? If it does then this sequence may have to be worked out and displayed accordingly.
4. What sort of appeal does the object have? The fact that a television camera may have a greater crowd appeal than a cement mixer, especially if it is in operation, dictates that special display facilities, as well as display area will have to be provided.
5. Might the object have too much crowd appeal which might require extra or more rigid security measures?
6. What space and lighting, natural or artificial, is available? and
7. The amount of time allowed for the preparation of display items, which might include object modification, model making, supporting material preparation and display assembly.

The normal physical requirements of distance and height of viewing must also be taken into account together with the previously mentioned object size, appeal, function available display area(s) and lighting conditions, either natural or artificial.

In outdoor situations there is a danger that the object of display is seen against conflicting or confusing backgrounds. This can be avoided by the construction and use of screens.

Captions used in conjunction with the display must be visible, legible and comprehensible, and only contain enough information to be of value to the viewer.

Colour

The use of colour in the display must be controlled by the object. If the object itself is highly coloured, or contains a single, strong colour, then its surrounding display colour must be neutral or white. If on the other hand, the object contains little or no colour, then a strong colour as a background would project the object as a focal point.

Be careful of using two strong colours together. Red, when used with green or blue tends to give a 'jazz' effect around the edges, and unless this were planned, could have a detrimental effect on the display as a whole. For the reverse reasons, avoid using weak colours. White and yellow merge as one, and the lighter shades of other colours, when used with white present a neutral effect, satisfactory if a background is required, but should not be considered for the presentation of graphic images.

Certain colours, unless they have been specially formulated, have the tendency to fade, especially in strong sunlight. The ability of colour to withstand this is called 'Light Fastness' and most paint and printing ink manufacturers can give the information as to the degree of Light Fastness of any of their products.

Lighting

The effectiveness of display can, when the situation allows, be increased by the manner in which the displayed objects are lit. The use of spotlights can place emphasis on certain areas of the display, especially if the areas illuminated present the only lighting and are seen against a black or dark background.

Flood lighting can be very effective in presenting a total area of light.

With most lighting systems the facility to introduce colour is offered in the form of gelatines.

The light transmission properties of certain material i.e. acrylic (Perspex) can be used to great effect especially in the more adventurous displays where time, planned inventiveness and finance allow.

The properties of ultra-violet lighting in totally darkened situations allow for the more dramatic use of display techniques, especially if the object displayed lends itself by either its material of manufacture, its use or construction.

The back projection of visual material could be the only form of lighting in any one particular area of the display, and by so, places a higher degree of emphasis on the information displayed.

Any lighting manufacturer or contractor can give information regarding the properties of any particular lighting system to be used for display, provided that you have considered the functional requirements in lighting as an integral part of the communication process.

Construction

Most display situations require some sort of construction either to act as a screen to separate the displayed objects or areas from possible distractions, as a complete exhibition or display area which contains not only the display but also reception and rest facilities or as single display units to be used within the total area.

The complexity of construction is governed by the type of display required, the type of objects to be displayed, the financial limitations always encountered and the ability of the planners, who might have to build it.

The site in which construction is to take place, or be a part of, is important in deciding its form, for often the improvisation of existing facilities, materials and space is the governing factor.

Any construction, whether it be designed and produced professionally or non-professionally must be capable of (1) allowing easy access by the visitor, (2) being strong enough to withstand constant use, (3) providing the necessary security, (4) conforming to the necessary safety and fire regulations that may be in force, (5) ease of manufacture and erection and (6) being within the budget of the organising body.

If an exhibition is a regular event, it may be an economy to purchase ready-made display screens or modular units that are easy to erect and store and flexible enough to suit most needs, and would also avoid the necessity of re-thinking and making for each event.

If the display is to be transported, it must be capable of being assembled and dis-assembled easily and be contained in strong crates for travel. In this case, the lightness of construction is an advantage if the strength factor can be worked out.

Signing and captioning

As an aid to the smooth flow of visitors, it is essential that both the signing and the captioning of displays is clear, concise and easy to understand.

People must know the way in, the way round and the way out, and be encouraged by the exhibition layout to conform to the instructions displayed as signs.

Captions should be of a size that does not interrupt vision of the displayed object and contain enough information to suit the requirements of the viewer and be of a type-size that is legible from a distance of about five feet.

Ready-made lettering can be bought in the form of cut-out letters made of cork, polystyrene or one of the dry transfer systems that require little practice in applying. The advantage of three dimensional lettering is that it can be coloured to suit the display colour scheme and has possibilities with respect to light and shade when used in display lighting.

If circumstances dictate that you must produce your own lettering, try and choose a simple style that is easy and quick to draw and possibly cut-out. If a proportionate grid is drawn up on graph paper, then it is easy to scale-up lettering of a size that you require. The finished drawings can then either be cut-out from cardboard or hardboard or painted directly onto the fascia or display panel.

Any colours chosen must be done so with a view to legibility, especially in the case of directional or warning signs, and must be displayed in a prominent position, above head height, but not too high.

Research done in the design of motorway signs in the United Kingdom proved that, contrary to popular belief, all capital letters are more difficult to read than if words start with a capital and use lower-case for the rest of the letters. It might be borne in mind when designing your signs.

Planning

Exhibitions and Open Days do not just happen, and are not merely pretty displays and gimmicky gadgets. If exhibitions and open days are to achieve their purpose, a great deal of thought must also be directed at an early stage to the planning. For this purpose, a planning committee should be convened with various Task Forces delegated to deal with specific aspects of the planning.

Fixing the date and venue must be the first decision:

- Will the desired audience be less busy at that time?
- Is the weather at the time suitable?
- Is there a clash with other events?
- Can it be fitted in with other events to save on travelling?
- Will it be convenient for a dignitary to open or attend?

Planning Task Forces should be formed to cover the following aspects:

Finance

- to ensure sufficient funds
- to budget for the various items of expenditure
- to decide on disbursement of funds
- to account for expenditure

Exhibits

- to decide on theme and format
- to decide on exhibitors
- to engage graphic designers and photographers
- to approve plans
- to arrange manning of exhibits

Publications and Publicity

- to decide on advance publicity
- to arrange publications and support literature
- to liaise with press, radio and television
- to arrange special viewing for publicity people
- lapel badges for officials and visitors

Site Planning

- to allocate space for exhibits, bearing in mind the traffic flow required
- to ensure provision of different kinds of facilities
 - Workshop for quick repairs
 - Catering
 - Toilets
 - Car parking
 - Film showing
 - Lectures
 - First aid and rest rooms
 - Public address systems
 - Press arrangements
 - Services - Water
 - Electricity
 - Gas
 - Telephone
 - Security

Staffing

- Guides at strategic points
- Manning of exhibits and demonstrations
- Attendants at car park
- Catering arrangements
- Central Enquiries and Information desk

The Planning Committee should also give consideration to separate showings for special audiences, such as school-children, as well as for the press and other publicity agents.

Farm Walks, Factory Inspections, and Demonstrations

Special problems arise with on-site and outside demonstrations and exhibits:

Transport

- straw bales or grain sacks on lorries and tractor trailers
- bicycles
- coaches

Displays

- sturdy and weather-proof
- size of lettering and graphics

Size of Visitors' Groups

Public address systems

- portable types
- hand-free microphones
- questions or comments from visitors

Alternative or supplementary indoor programmes

Press and publicity arrangements

The first decision is whether to try to interest the general public in your event. If the answer is yes, you must work with the media. Nominate a press officer and spokesman, and keep him fully informed of all plans. He will contact the editors and reporters, both to attract their interest in advance and to ascertain their requirements.

Journalists are busy people: give them plenty of notice. Journalists are not specialists in your field of work: help them to understand it, and to sympathise with it.

Treat them as valuable partners in a process of public education. Provide as much information as possible in advance, if possible in written form: if necessary, ask the press not to publish information until an agreed date.

Give them a chance to ask questions, to meet the people who take the decisions.

Remember, news means new things: stale news is useless.

Ensure that, if newspapermen need telephones, there are telephones: if cameramen need lights, that there are lights: if radio people need a quiet room, a quiet room is available.

Always ask the media people what they need, and do your best for them. They will repay you with a fair and accurate story. Your interests and the interests of the media are the same: to tell the truth clearly.

Work with the media, not against them. They will pay you back.

Working Check List

Type of event:	Exhibition Open Day Display within a conference, exhibition etc.
Theme of event:	Industrial Scientific Domestic General Interest
Space available:	Indoors Outdoors Both
Venue:	'In-House' (At training or research centre etc.) Travelling (Nationally) Travelling (Internationally) Other

Type of Exhibit:	Large Small Demonstrative (Static) Demonstrative (Mobile) Audience operated Mechanical Electrical General including all of the above
Type of Audience:	Professional (in subject of exhibition) Professional (general) Educated Non-educated Rural Urban General
Feedback:	Is there any professional/public feedback from the exhibition required in the form of general research regarding the use or reaction to the exhibits, sales information, census etc?
Services	Water Electricity Gas Telephone Security
Information:	Is there any information regarding various or all of the exhibits required to be made available to the public?
Facilities:	Is it intended to use part of the exhibit for entertaining purpose or as a Press Room? If so what facilities are being offered?
Budget:	What is the extent of the financial resources available?
Publicity:	Posters Handbills Press, Radio or TV coverage or advertising
Anticipated number s:	Large Small Unknown (This information is required for the production of catalogues or other informative items)

Any special requirement not included in the above list must be considered in order that the fullest possible use is made of planning time, finance and general effectiveness of the exhibition.

Bibliography: Dreyfuss, Henry (1960) The measure of man.
Whitney Library of Design, New York.