

Design management systems —

Part 3: Guide to managing service design

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Foreword

This Part of BS 7000 has been prepared under the direction of the Quality, Management and Statistics Standards Policy Committee.

In October 1993, BS 7000 *Guide to managing product design* was renumbered BS 7000-1 to accommodate further Parts. It is intended that BS 7000 will comprise initially the following Parts.

- *Part 1: Guide to managing product design* (identical with BS 7000:1989);
- *Part 2: Guide to managing the design of manufactured products* (in preparation in Panel QMS/41/- /2);
- *Part 3: Guide to managing service design* (this Part);
- *Part 4: Guide to managing design in construction* (in preparation in Panel QMS/41/- /5);
- *Part 10: Glossary of terms used in design management* (in preparation in Panel QMS/41/- /1).

Other Parts may be added.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 22, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

Introduction

Service design is the formative stage of a service. It should be used to meet the reasonable and foreseeable requirements of the potential users of the service whilst using the available resources with economy.

Services may be paid for directly by the recipient such as accountancy, banking or law. Other services may not be paid for directly, such as the civil service, social services, emergency services and charitable services.

The concepts, principles and quality system elements described are applicable to all forms of service, whether solely of a service character or in combination with the manufacture and supply of a tangible product. This can be shown as a continuum ranging from a situation where the service is directly related to a product to a situation where there is little product involved.

Figure 1 illustrates this concept for three types of service.

A poorly designed service may damage a company's reputation and prospects for growth, particularly if performed without due regard to customer expectations, safety and reliability. The benefits derived from the effective management of service design are therefore considered.

This Part of BS 7000 sets out the elements of the task for the following groups of people:

- a) senior management;
- b) project managers;
- c) design managers and designers.

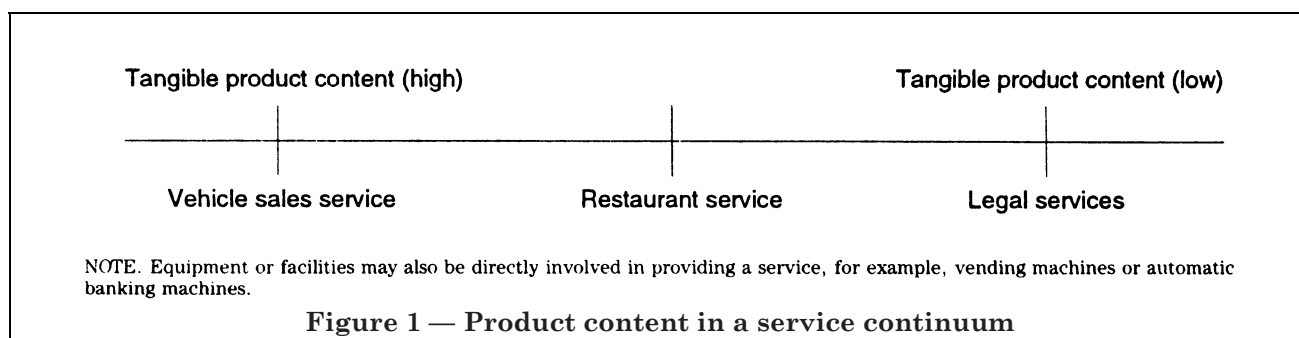
In a large organization the functions will probably be undertaken by different members of staff. In a small organization they may be undertaken by a single person, but are nevertheless distinct and different. All the staff concerned should be aware of their functions and it is recommended that they should understand the full content of this Part of BS 7000 while paying particular attention to the section that is most directly relevant to them.

This Part of BS 7000 provides guidance and it is not a specification. The recommendations and check-lists are believed to be generally applicable, but managers are advised to use the guidance given in accordance with the circumstances of their own operation.

The prerequisites for effective design management, in the context of this Part of BS 7000 and their own organization, are the following:

- 1) awareness of customers' interests and needs;
- 2) commitments to quality and reliability;
- 3) sincere and visible commitment to good design;
- 4) motivation of all staff involved;
- 5) a vision of the future and the provision of clear objectives;
- 6) provision of adequate resources in terms both of personnel and equipment;
- 7) provision of organizational systems;
- 8) awareness of competitors;
- 9) awareness of relevant activity and innovation in other fields;
- 10) understanding organizational capabilities and limitations.

Whilst the design process is described as a series of sequential steps, opportunities for parallel development should be considered to reduce lead time to introduction of the service.



Section 1. General

1.1 Scope

This Part of BS 7000 gives guidance on the management of the design of service at all levels, for all design organizations and all types of service.

The service that is the subject of a design brief may be the complete service in its own right or a component of a larger service, e.g. an airline service or the catering service component.

Guidance is given only on the application of general management principles and techniques to the management of design. Discussion of the techniques themselves, e.g. management of people, time, and their application to areas other than design and the design process itself are excluded.

NOTE 1 Appropriate reference is made to other documents for guidance on general management techniques. A bibliography is given in annex C.

NOTE 2 Guidance on procedures required to meet statutory requirements, e.g. health and safety, or product and service liability, is not intended to be comprehensive and reference should be made to other documents where appropriate.

1.2 References

1.2.1 Normative references

This Part of BS 7000 incorporates, by dated or undated reference, provisions from other publications. These normative references are made at the appropriate places in the text and the cited publications are listed on page 22. For dated references, only the edition cited applies; any subsequent amendments to or revisions of the cited publication apply to this Part of BS 7000 only when incorporated in the reference by amendment or revision. For undated references, the latest edition of the cited publication applies, together with any amendments.

1.2.2 Informative references

This Part of BS 7000 refers to other publications that provide information or guidance. Editions of these publications correct at the time of issue of this standard are listed on page 22, but reference should be made to the latest editions.

1.3 Definitions

For the purposes of this Part of BS 7000 the definitions given in BS 7000-1:1989, BS 4778-1:1987, BS 4778-2:1991, BS 4778-3.1:1991 and BS 4778-3.2:1991 apply, together with the following.

1.3.1

conceptual design phase

preliminary research and design studies to establish design alternatives that merit further development

1.3.2

customer(s)

the intended recipient(s) of a product or service

NOTE See BS 3811.

1.3.3

design evaluation

systematic examination of the result of an activity to establish the degree to which the original objectives have been fulfilled

NOTE 1 The term is usually linked to a specific activity, e.g. system evaluation, project evaluation. Results are usually measured in terms of time, cost and achievement.

NOTE 2 Evaluation generally takes place at the end of an activity, but progress can be maintained by carrying out intermediate or stage evaluation, particularly where intermediate stage achievements have been planned.

1.3.4

product champion

person dedicated to the promotion and introduction of a new product, although not necessarily responsible for any aspect of the programme

1.3.5

service quality control specification

document that specifies the requirements for effective control of the service to ensure that it consistently satisfies the service specification and the customer requirements

1.3.6

service

results generated, by activities at the interface between the supplier and the customer and by supplier internal activities, to meet customer needs

NOTE 1 The supplier or the customer may be represented at the interface by personnel or equipment.

NOTE 2 Customer activities at the interface with the supplier may be essential to the service delivery.

NOTE 3 Service is intangible and as such cannot be stored.

NOTE 4 Delivery or use of tangible product may form part of the service delivery.

NOTE 5 A service may be linked with the manufacture and supply of tangible product.

NOTE 6 This definition is identical with that in BS 5750-8, with the exception of note 4.

1.3.7

service characteristics

features and attributes that make up the totality of the service

1.3.8

service delivery

supplier activities necessary to provide the service

NOTE See BS 5750-8.

1.3.9**service delivery specification**

document that specifies those supplier activities and resources needed to supply the service

NOTE The service delivery specification forms part of the service specification.

1.3.10**service design** (noun)

- 1) Set of instructions (specifications, drawings and schedules, etc.) necessary to construct an artifact or service.
- 2) Artifact or service itself.

1.3.11**service design** (verb)

generation of information by which a required service or product can become a reality

1.3.12**service design brief**

document that describes the primary purpose of a service and gives guidance

NOTE 1 Guidance can relate to such matters as its style, grade, performance, appearance, conditions of use including health and safety considerations, characteristics, packaging, conformity, reliability, maintenance.

NOTE 2 The service design brief is often the result of a feasibility study and forms the basis of the design.

1.3.13**service resolution**

elements that determine the framework of the service

1.3.14**service result**

measure of the achievement of service delivery

1.3.15**service specification**

document that prescribes the requirements with which the service has to conform

NOTE A service specification should refer to or include drawings, patterns or other relevant documents and should also indicate the means and the criteria whereby conformity can be checked.

Section 2. Managing service design at corporate level

2.1 General

Management at the most senior level should take responsibility for the design of a service.

2.2 Corporate objectives

Corporate objectives should be precise and should, if possible, be quantified.

To manage design effectively the following information needs to be known:

- a) what business the organization is in;
- b) the identity of customers and their needs;
- c) the quantified targets for growth, profitability or success;
- d) the level of design protection required;
- e) the market position sought;
- f) the risks involved;
- g) the image of the service organization;
- h) capability of staff;
- i) other resource capability;
- j) other key factors critical to success, e.g. competitive pressure, regulation.

This information should be communicated to, and understood by, all concerned. Design should form an integral part of corporate planning.

2.3 Corporate planning

2.3.1 General

A business plan is required to set the targets to be met. This defines the boundaries and constraints within which design management should be conducted. The business plan should include the elements given in 2.3.2 to 2.3.5.

2.3.2 Financial plans

Financial plans should specify the investment and cashflow requirements of the service design plans to ensure that funds are available when required. Consideration should be given to whether any new service has to meet, for example, the following:

- a) a specified minimum profit margin;
- b) a minimum turnover;
- c) a maximum payback period;
- d) a maximum service development cost;
- e) budgetary constraints.

2.3.3 Service design plans

Service design plans should outline the methods of managing the design process, the controls and policies that need to be planned and executed. Consideration should be given to the following as to whether the new service:

- a) should have synergy with existing products and services within the organization;
- b) have a specific maximum commitment in management time;
- c) have a maximum design timescale;
- d) follow a specific sequence in design;
- e) is the most competitive design;
- f) is the most cost effective design.

It may also be necessary to consider additional factors, e.g. service confidentiality, product reliability, recording design data, quality assurances procedures, evaluation of the design process and service evaluation, including third party certification or approval.

2.3.4 Resource plans

Resource plans should define the resources available for design purposes. Consideration should be given to the following as to whether or not a new service:

- a) uses, or avoids using, certain areas of technology;
- b) meets some specified volume or demand;
- c) is to be made available by the organization or subcontracted.

It may also be necessary to consider the following additional factors:

- 1) use of design consultants;
- 2) training and retraining of managers and staff;
- 3) establishing performance incentives and appropriate career paths for staff;
- 4) equipment needed to design the service;
- 5) alterations to the organizational environment;
- 6) systems for controlling and monitoring the design project.

2.3.5 Marketing plans

Marketing plans should ensure that once services are available, they can be delivered in the market place. These plans should cover pricing, distribution and promotion. They should also include a procedure for continuing review and assessment of new service ideas and of the market itself. The marketing plans should consider if any new service should be any of the following:

- a) available by a certain date;
- b) an extension of the existing product/service range;
- c) promoted or sold in a particular manner.

2.4 Internal corporate communication

As all design is multidisciplinary, the plans given in 2.3.2 to 2.3.5 should be communicated to and across departmental boundaries. Procedures should be established so that effective communication is maintained throughout the design.

2.5 Corporate monitoring and controlling

The following actions are essential.

- a) The market need should be continually reviewed.
- b) Business plans should be updated periodically.
- c) The manager at corporate level responsible for all service design should measure progress against identifiable targets so that timely corrective action can be taken if required.
- d) Design progress should be reviewed in the context of business development and performance overall.
- e) The manager at corporate level should receive reports from the design manager on the progress of the project. It is essential to understand the effect of change on the project and the business and take appropriate action.

NOTE These management roles should be incorporated into the service organization if they do not already exist.

- f) Review points should be announced well in advance to enable staff to plan their own work schedules and prepare for such reviews in good time.

2.6 Check-list for senior management

The check-list should include the following.

- a) Define, and periodically redefine, the corporate objectives.
- b) Make the objectives known and understood by all involved.
- c) Review, and periodically update, the business plan in line with corporate objectives.
- d) Ensure that finance, service design, resource and marketing plans are compatible.
- e) Provide finance and other resources to match the business plan.
- f) Determine the method of managing the design and assign responsibilities.
- g) Ensure that the organizational policies and procedures are adequate.
- h) Ensure that those responsible for design have clear objectives and are personally motivated.
- i) Ensure that the design process is planned.
- j) Ensure that achievement and expenditure are monitored against time.
- k) Maintain a sincere and visible commitment to high standards of service design.
- l) Evaluate achievements, lack of achievements and shortfalls in achievement and communicate this evaluation to all concerned.
- m) Ensure appropriate commercial protection by means such as trade marks, copyright, patent action or design registration, where this is applicable.

2.7 Evaluation

It is recommended that, after the launch of the service, a final project appraisal should be carried out by corporate management, to assess the success of the design project. (See 4.3.5 to 4.3.8.)