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ARE YOU BEING SERVED? RESEARCH INTO SERVICE DESIGN MANAGEMENT COMPARED TO PRODUCT DESIGN AND THE DEVELOPMENT OF BS 7000 – 3 'GUIDE TO MANAGING SERVICE DESIGN'

B. Hollins

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1. Introduction

The Importance of services (retailing, finance, health, transport etc) continues to grow in Europe and America. In the UK 80% of employment (67% GNP) is now in the service sector. Research was undertaken by the author into the development of new services by companies operating around London. This research and results will be described

This research coincides with, and was used in, the compilation of the new standard on service design management. This will replace the standard that was published in 1994. Details of this new simplified standard will be shown at the presentation.

People are an important part of any design process. This is especially true with services where, by definition as production and consumption occur together, the customer often interacts directly with the supplier. The differences in this interface as observed within developed and developing countries will be described In this part of the paper.

2. Methodology

Starting in October 2002, questionnaires were distributed to managers and senior managers currently working in the service sector in and around London. The full questionnaire will be available at the paper presentation but some of the key questions are shown at the end of this paper. 25% of the questionnaires were returned. Most (68%) stated that they were actively involved in the development of new services for their organisations. The purpose of the research was to identify whether service design was now effective in organisations and which aspects of service design management were most used.

The results of this research are being used in the development an updated version of the British Standard BS 7000-3 Guide to Managing Service Design. These results imply that a more simple and accessible document was needed and this is being produced. This will also be backed up by support publications from the Design Council. This will be the first time that BSI and the Design Council have operated in conjunction in this way.

3. Results

The results have shown that those managing the process of new service development in and around London (and probably elsewhere) are operating at a sub optimal level and, as such, are not developing their new services effectively. One third of the companies questioned do not have a product strategy

document and only one fifth have a written process for the delivery of new services. If the management of new services is the organisation of the process for developing these services – then why no process? How do the managers given this responsibility know how to start? Those few that do at least review it on a regular basis to keep it updated.

3.1 Market Research

It has been known for many years that market failure is the main reason for failure of products and services. Yet 48% do no research for new services prior to their development. If no market research is undertaken then the designers are working in the dark when it comes to satisfying the potential customer's wants and needs. This market research would typically be done near the start – at the low cost end of the process. It is here that the most obvious failures should be detected and eliminated. Not after these services have had all the development costs pumped into them only to be shown up as failures, when in the full view of the market like recent large UK service failures - ITV Digital or the Millennium Dome.

Furthermore, what some companies state as being MR can hardly be considered as adequate. When seeking new ideas several stated that they look at their competition or the market leaders. This 'me-to' attitude has been shown to be an unsuccessful route to new product success. You cannot overtake the competition by just copying what they do. Quite a few companies seek ideas only from inside their organisations, such as ideas from Directors, senior managers and even suggestion boxes. This is all right as long as it is backed up by some market research to show that there are customers out there who want the benefits that these new ideas may provide. Sadly, the results indicate that this is generally not the case. One respondent's only apparent market research was quoted as 'cocktail parties' – fun but not effective.

Another surprising response in these times of TQM and ISO 9000 was that 'customer complaints' is still quoted as a source of new ideas. It is wondered if those customers will still be around for these company's products when they have sorted out these complaints?

3.2 Specifications

One of the main reasons for new products failing is that a full set of requirements is not considered at the early stage of the process (Hollins & Hurst 1995). It is here, right near the start, that all the compromises (new products are all about compromises) need to be resolved. For example, can the company actually produce the new service? Can they market it? Can they afford to develop it? Can it be made to work? (Hollins & Hollins 1999). It is this low cost, front end of the process where most product and service failures are rooted and yet this research shows that it is here that the service companies are most inadequate.

Unlike manufacturing organisations, in service design specifications (the controlling documents) tend not to be written. As a result, such companies are not in control of their design function. The majority of people involved in developing new services within organisations have never seen an adequate written design specification. Most tend to describe an inadequate set of documents. In fact, more than half do not produce any written spec. at all

Forty eight percent of the respondents have not seen a specification for the development of a new service in the past seven years (remembering that most were actually involved in the development of new services). Of those who have, in only 16% of the companies did this specification appear to be adequate. (A guide for specifications in the service sector is currently being compiled – BS 7373 part 3).

3.3 Front End Decsion-Making

All of these decisions need to be confronted in the early stages when (as has been known for years in manufacturing) 80% of the management decisions are taken and 80% of the funds committed but only 15% of the actual expenditure made (Berliner & Brimstone 1988). It is this low cost, front end of the process where most product and service failures are rooted and yet this research shows that it is here that the service companies are most inadequate.

But unlike (most but sadly not all) manufacturing organisations, service companies tend to start the process at the concept stage thus missing out altogether the vital first 15% of the design process. In manufacturing the most costly part of the process is tooling up for manufacture that typically takes 47% of the total design cost. With service design there are no figures available for the cost of the various stages of the process. This is because (as said) most in the service sector do not consider that they are designing. As such, they do not identify the cost of the various stage of the process. Although no figures exist, and although there is great variation between types of services, it can be estimated that the later stages of the process are the most expensive. Rather than 'tooling up for manufacture,' in services this can be considered as 'implementation'.

3.4 Innovation

Only about half the respondents had a reasonable idea or definition of design or innovation. Innovation, being an important subset of the design process, is poorly applied in the service sector. Innovation can occur in all stages of the whole life of a product, especially (and increasingly) at the service end when customers are more likely to be directly involved with the delivery of the service. Innovation is generally easier with services as there is less of an existing infrastructure to be replaced by the new. As such, customers more readily accept changes brought about through innovation.

What the research did show was that the few companies that did appear to be effective (about 17%) were very good. This was further shown in the fact that 16% generated greater than 30% of their turnover from services developed in the past three years.

3.5 Standards

The overwhelming finding was that service design is still not widely managed in an organised manner in spite of there having been a British Standard guide since 1994. In fact, only 28% of those that responded used any British Standards in the development of their new services – showing, perhaps, the apparent poor marketing effort on behalf of BSI. This confirmed the results of earlier research (Topalian & Hollins 1998) into the operations of highly innovative organisations. Here too Standards were rarely used in managing design. Perhaps even more surprising was that none of the respondents in this research used the Design Council. Both of these findings could suggest that the potential users may not know of the output from these bodies or find it too difficult, or unsuitable for their needs.

Part of this problem could be addressed if the two bodies worked more closely together. The Design Council has a good 'voice' inasmuch as they produce a lot of good looking and well meaning information but little of it advises managers on actually how to manage design. On the other hand, the British Standards Institution researches and produces standards stating what should be done but package these in a form that is far from user friendly and markets these badly to a limited market. Both parties would benefit through greater co operation in which standards were produced by BSI and marketed in a more presentable form by the Design Council. The overall winner would be the design managers operating in business.

Developing this design standard within BSI has been undertaken throughout with the co operation of the Design Council who have an active representative on the six person committee.

When preparing this new draft standard the committee took the decision that it should be visually appealing and the visual side would make the standard easier to use. To this end, the standard is presented as a 'spread sheet' - a design process blueprint. Before this there is a short section on 'how to read this document'. The top 'layer' of the blueprint covers 'Develop the Business', 'Design and Develop the Service', 'Deliver and Support the Service' and 'Operate and Optimise Potential'. In the next layer the design model is 'unfolded' from 'Trigger' through to termination, disposal and review.

At each stage the pages are divided into an introductory 'Purpose and Objectives', 'Typical Actions', 'Typical Outputs' then a 'Stage Gateway' at which point the project is sanctioned to proceed or not.

Throughout, words are kept to a minimum and as a guideline the committee decided that each line should be either a 'recommendation' (it is a guide) for action or assessment. As a result, the standard is quite brief and therefore, it is hoped, clearer than most standards. It is believed that this more simple structure will be more acceptable to those operating at a basic level of design management understanding

There is a large bibliography that relates to further reading focused on each stage of the design process. There is also a more 'traditional' section for those using the document at the 'Corporate' level.
It is hoped that the BSI will accept this radical departure from standard presentation (described fully in BS 0 'A Standard for Standards') but if they do not, the document will be published elsewhere, probably by the Design Council.
The results of the research described in this paper have been used to inform this standard at every stage in the realisation that it needs to be used by the naive 'design manager' operating in the service sector. The British Standard on Service Design Management is already well advanced and the conference should coincide with the publication of the first draft for public comment. The latest and much more 'user friendly' structure will be presented at this conference.

4. People in Service Design

One of the main differences between the delivery of manufactured products and services is the involvement of people. By definition (BS 7000 - 10) in services, products and consumption occur simultaneously. This means that people are part of the service and the quality of a service is often down to the person giving it.
In industrialised countries several things have come together over the past ten years to improve the face-to-face service that customers receive. Staff are an expensive necessity so there tends to be fewer of them but they are better educated and better trained. With the wider adoption of Total Quality Management and Quality Assurance these employees are empowered to take responsibility and make decisions. Furthermore, (an important aspect of service management) the occasional mistake is tolerated by management and is an indication where further training is required rather than a reason for punishment.
All this helps when things go wrong. Where possible, the service provision should be blueprinted and all eventualities considered and planned for at the design stage. But as services involve people and as said at Rover 'people are 50% of any process' (Hollins & Hollins 1999) and it is clearly much higher than this with services. When people are interfacing with people it cannot be expected that a blueprinted process (Shostack 1986) will always run exactly as written. It is therefore important that employees who face customers are sufficiently flexible to cope with the unexpected and sufficiently skilled to solve the problems that arise.
By and large, in Europe and some parts of USA this is now the case. When something goes wrong the person in front of the customer will sort things out. Ability and willingness to make snap decisions is a function of good service delivery nowadays.
There are exceptions, the National Health Service in the UK being one. Owing to the trend in the UK (following that which has happened in the USA) for patients to litigate against the health provider, people working in the health service are less prepared to make fast decisions. They first demand a bank of test results which increases the cost to the health service and delays the onset of treatment
This author has made some preliminary observations in developing countries. These observations demonstrate an inability to take responsibility often occurs where labour costs are low. In low cost economies it is easier to employ a large number of staff but the training that these people are given is very much focused on doing specific tasks and they are not empowered to make decisions beyond this training. This works well when everything operates in a satisfactory manner – according to the blueprint. But when people are involved one cannot expect a repeatable 'production process' to take place with every service encounter. Those providing the service need to be trained to deal with the unexpected. Furthermore, they should be empowered to make decisions when the unexpected occurs. Too often in developing countries those who show the initiative are 'punished' and the effect of this is a rigidity in the service provision which results in a something that is far from Deming's 'delighting' the customer.
Therefore, worldwide, the training of those who will deliver the service must be included as part of the service design but it must go beyond the obvious. Hitherto, this aspect of service design management tends not to merit the focus that it deserves. In manufacturing, staff will be trained to 'do the job'. In services, due to the coincidence of production and consumption and people being part of the service

delivery, the staff must also be trained in how to effectively serve the customers and that goes beyond just 'doing the job'. This will involve a larger human relations context within the training and this must all be part of the design management process.

5. Conclusions

It would appear from this research that the majority of service organisations around London are not effectively managing their new services. They are, therefore, vulnerable. Only about one in six manage the process in a logical and effective manner. Many senior managers involved in the service sector are still unaware of the benefits that design can bring to their offerings and, as a result, their organisations are operating at a sub-optimum level.

It has been said that 'the analysis of successful and unsuccessful new services indicate that a formal and planned approach to NSD (new service development) leads to better performance.... Aside from using a detailed NSD process, the success in new service development depends on getting the necessary commitment and interaction from management and from their different functional specialities within the firm.'(de Brentani 1991).

Managers responsible for developing new services are not using the tools and techniques that are now common-place in the management of design in manufacturing. The main differences in the management of the design of services compared with manufactured products tend to be in the later stages of the process. The similarities at the important front end of design mean that those currently applying their skills in manufacturing can apply their knowledge in this much larger sector.

If new and improved services are designed and planned with a 'front-end' focus, poor ideas can be easily eliminated and better ideas more fully thought out whilst still 'on paper'. This avoids changes later in the process - at the high cost end of design. This will result in a more efficient use of the resources available within tight constraints.

5.1 We Can Help?

Traditionally educated designers tend not to be widely employed in service companies. As a result, there is a dearth of knowledge and understanding of design (management) techniques within most of the service sector. In a manufacturing company they may not do design well but they will know what it is. In the service sector, many people still believe that design is something to do with aesthetics and, in most cases, not relevant to them.

This implies two requirements: Firstly, that the personnel in such companies need to be educated not only about the importance of design, but also how to do it. Secondly, design projects require well-trained leadership and a strong Product Champion to encourage those involved as to the realities and benefits of using design.

The main differences in the management of the design of services and manufactured products tend to be in the later stages of the process. The similarities at the important front end of design mean that those currently applying their skills in manufacturing can apply their knowledge in this potentially much larger sector.

As service design and its management tend to be poorly planned, it is quite easy for a company to gain a competitive advantage through the application of some quite simple design techniques. On the other hand, about one service company in six is very effective in this area and seems likely to thrive.

It has been shown in this and earlier research that managers do not use British Standards or the Design Council to assist in their methodologies. These bodies should consider why their abilities and output are being ignored by the majority and take steps to rectify the situation. This would benefit both parties as well as design managers operating in both the manufacturing and service sectors. A start is being made with the new service design standard. This new British Standard has been developed to be more acceptable to those operating at the lowest level of design management understanding, a design management task in itself. It has yet to be seen if this radical departure will be allowed by the conservative editorial staff of the BSI. If it is not then it is likely to be published anyway outside of their auspices

The operation of the providers of services have been observed in developed and developing countries. It is apparent that the service provision needs to be included in service design. Proposals have been

made that this should include an aspect of dealing with the unexpected – which is far more likely to occur when delivering services.

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SOME KEY QUESTIONS FROM THE QUESTIONNAIRE USED IN THE RESEARCH:

1. In what type of organisation are you employed (e.g. public, private, not for profit/charity etc.)?
6. Is there a document that sets out new product strategy within your company?
7. What are your company's principle sources of ideas for new service concepts?
8. In your organisation is there a written process for the development of new services?
9. How does your organisation research the market for new services prior to their development?
10. Within the past seven years have you seen a design specification for a new service that is about to be developed within your organisation?
1. 10A. If yes, please describe this specification? [How many pages, was it compiled to a check list, other features?]
11. How does your company capture and harness knowledge and expertise within the company for new service development?
12. How does your company capture and harness the knowledge and expertise outside the company for new service development?
15. How does your company seek to learn from new service failures within your company?
16. What proportion of company turnover is devoted to developing new services?
17. What percentage of your company's turnover derives from services introduced in the past three years?
18. Is your company currently involved in alliances to develop new services?

Bill Hollins
Westminster Business School
University of Westminster
35 Marylebone Road, London NW1 5LS UK
Telephone: 00 44 (0) 207 911 5000
E-mail: hollinb@westminster.ac.uk