34 A CASE STUDY APPROACH TO EXAMINING SERVICE INFORMATION REQUIREMENTS

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ABSTRACT

In this paper, we propose a case study approach to examine and assess the information required to underpin services for particular industrial service offerings. The focus of this paper is on the means by which service information requirements may be extracted and understood, as opposed to on how service information requirements are subsequently used.

The term *service information requirements* refers to a set of information needed to support the delivery of a service to a customer. The area of service information requirements is a new, and a less researched, area compared with product information requirements. Service is important for both product and service delivering organizations as companies move toward the provision of integrated solutions. Within manufacturing, one of the most significant trends is toward servitization, in particular for high-value, complex goods, where the focus of the product and service providers is on the associated service delivered.

Information is important in service as a means of enhancing decisions. The information has no direct value, but the impact of improved information quality can reduce costs or enhance service decisions. In the context of product servicing, the information can provide details about the condition and usage of the product. In a service delivery context, information provides the specification of the customer to enable service delivery decisions to be made.

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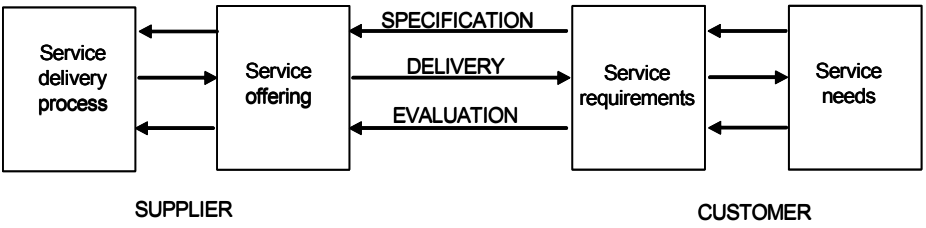

Figure 1. Service Information Model

This research proposes a process of obtaining service information requirements in order to determine the needs of the customer and to determine the information required for the supplier to deliver this service to the customer. To achieve this approach, we propose a service information model (see Figure 1).

The first stage of this approach is to identify the *specification process* or the information needed to translate the customer need into requirements in the form of a performance-based contract.

Having gained an understanding of the requirements of the service, the actual process for the *delivery* of the service is mapped to identify the information needed to deliver the service.

The *evaluation* stage determines the information needed to assess the service provided against that specified, and the means by which the measurements of service delivery are achieved.

Analysis of the approach should assess the role of information and its impact on the performance of the service delivery process as well as an understanding of the consequences of a variation in information quality throughout the requirements, delivery, and evaluation processes. From this analysis, two questions need to be answered.

(1) What is the impact of the information on the service performance?
(2) What is the current quality of the information?

The proposed approach to service information requirements collection, detailed in the paper, will test the effectiveness in determining the information requirements for service provision. This will be achieved through a series of cross-sector case studies. A further extension to this could assess the industry status of information requirements.

About the Authors

Rachel Cuthbert graduated in 2000 with an M.A. and M.Eng. in Engineering from Cambridge University with a specialization in fluid mechanics and thermodynamics. Following this, she successfully completed the Advanced Course in Design, Manufacture and Management (ACDMM, now ISMM) in 2001 at the Institute for Manufacturing, Cambridge University. She has gained significant industrial experience from her work in the chemical process and inkjet industries from research anf development, manufacturing, and supply chain roles. Rachel is a

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