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Service operations management: from the roots up

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Abstract

Purpose – The purpose of this paper is to assess developments in the service literature over the last six years and to lay out some challenges and opportunities for the operations management academic community.

Design/methodology/approach – The paper is based on issues raised in a previous paper and contains the results of a literature review and a content analysis of around 250 papers from three journals.

Findings – The paper suggests that there is a window of opportunity for operations academics to engage in the service arena and apply their knowledge and skills to answer fundamental questions in the areas of quality, productivity and efficiency, and to apply their expertise in business services and the not-for-profit and voluntary sectors.

Research limitations/implications – This polemic reflects the biased opinions of the author.

Originality/value – Assesses developments in the service literature.

Keywords Service operations, Customer service management, Research

Paper type General review

Introduction

“Service operations management: return to roots” (Johnston, 1999a, b) charted the development of service operations management from its manufacturing roots and a recognition that services are different, to the development of service specific concepts, through to the more recent emergence of service management (sometimes referred to as service marketing and management) as a subject in its own right. Academics involved in this “new” area came from several disciplines and functions, operations management, marketing, HRM, with contributions from psychologists, and others. Usually independently, sometimes in cross functional teams, often spurred on by service management conferences and journals, they have developed and tested management concepts, frameworks and tools for service organisations.

The paper suggested that we could be missing an opportunity to underpin these developments with the proven strengths and depths of the core functions (Slack *et al.* 2004). Operations management academics, in particular, seemed to be drawn away from their core competences (particularly the design and management of effective back-office operations) to enter the marketing arena of customer-based thinking, for example, concern with customer-based views of quality as opposed to the traditional (and largely unrepresented) notions of conformance to specification. While there are

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undoubted benefits from taking a cross and multi-function approach to management issues, using the strengths of our core discipline could have a profound influence on the development of the subject.

Nine areas were suggested as ripe for operations thinking to be applied. These included:

- (1) linking operations performance to business drivers;
- (2) performance measurement and operations improvement;
- (3) guarantees, complaints and service recovery – tools for improvement;
- (4) people management;
- (5) service design;
- (6) service technology;
- (7) the design of internal networks;
- (8) the service encounter; and
- (9) managing service capacity.

Over the last six years research has been carried out in all of these areas. Table I provides an unrepresentative sample of some of the outputs in these areas (with apologies in advance to the many people who have not been cited). Research in the area of service guarantees, complaints and in particular service recovery has been prolific, though with limited focus on using them for operational improvement. The area of managing service capacity appeared to be the least covered.

Linking operations performance to business drivers	Silvestro and Cross (2000), Johnston (2001), Bates <i>et al.</i> (2003), Lawrie and Cobbold (2004)
Performance measurement and operations improvement	Koljonen and Reid (2000), Neely (2000), Johnston <i>et al.</i> (2001), Heracleous <i>et al.</i> (2004)
Guarantees, complaints and service recovery – tools for improvement	Hays and Hill (1999), Boshoff and Allen (2000), Johnston (2000), Miller <i>et al.</i> (2000), Colgate (2001), Michel (2001), Johnston and Mehra (2002), Bjorlin Liden and Skalen (2003), Davidow (2003), DeWitt and Brady (2003), Hoffman <i>et al.</i> (2003), Holloway and Beatty (2003), Wirtz and Kum (2004), McCollough and Gremler (2004)
People management	Bowen and Johnston (1999), Carson <i>et al.</i> (1999)
Service design	Silvestro (1999), Pullman and Moore (1999), Berry and Lampo (2000), Cook <i>et al.</i> (2002), Meyer Goldstein <i>et al.</i> (2002), Verma <i>et al.</i> (2002), Silvestro and Silvestro (2003)
Service technology	Bitner <i>et al.</i> (2000), Meuter <i>et al.</i> (2000), Parasuraman (2000), Gunasekaran <i>et al.</i> (2002), Walker <i>et al.</i> (2002), Zhu <i>et al.</i> (2002), Voss (2003)
The design of internal networks	Evans and Berman (2001), Croom and Johnston (2003)
The service encounter	Hansen and Danaher (1999), Smith <i>et al.</i> (1999), Stauss and Mang (1999), Gremler and Gwinner (2000), Tansik and Smith (2000)
Managing service capacity	Pullman and Thompson (2003)

Table I.
Some publications in the
nine topics identified in
Johnston (1999a, b)

Based on an assessment of the content of two of the leading service journals, the *International Journal of Service Industry Management* and the *Journal of Service Research* (see later) it is clear that the area of service management is still dominated by service marketing academics, though by no lack of interest on the part of operations management or HR academics. The result simply reflects the greater number of marketing academics and the number of them interested in service. This is also evidenced by the large number of texts written in the last seven years (Kasper *et al.* 1999; Lovelock *et al.* 1999; Lovelock and Wright, 1999; Zeithaml and Bitner, 1999; Grönroos, 2003; Gustafsson and Johnson, 2003; Heskett *et al.* 2003; Lovelock and Wirtz, 2003; Van Looy *et al.* 2003; Fitzsimmons and Fitzsimmons, 2004; Prahalad and Ramaswamy, 2004; Wright and Race, 2004; Johnston and Clark, 2005). It is interesting to note that only two of the above have “operations” in the title. This may be as a result of their trying to appeal to a wider market. Only three of them, however, provide good coverage of operations issues.

In conclusion it is clear that the service management area has been fast developing with many old and new researchers stamping their mark on the area. Some taking cross-functional approaches and others rooting their work firmly in their base disciplines and functions.

From the roots up

So where is the subject going and what are the challenges for the future? The previous paper suggested four stages in the development of service operations management: service awakening, breaking free from product-based roots, the service management era, and return to roots. One question to ask is “Is there a fifth stage?”. Maybe not. But there is clearly more work to be undertaken from an operations perspective, which requires underpinning and strengthening by our operational tools and approaches. Three obvious candidates for this treatment are core operational areas of productivity, quality and efficiency.

Productivity

The area of service productivity is almost bare. Professor Evert Gummesson from Stockholm University managed a research project in this area, but I know he concluded that it was a very difficult area to develop. There have been a few papers in the past and a few recent ones (Smith and Reece, 1999; Brown and Dev, 1999; Johnston and Jones, 2004), but many questions remain, including for example:

- What is service productivity?
- How does it relate to (or trade off with) service quality and profit?
- How is it measured?
- What drives productivity and quality improvements?

Service quality

We still have not promulgated or researched an operations approach to service quality. As a result the term service quality has become synonymous with customer satisfaction. What about conformance to specification? And therein lies the problem. There is almost no work on service specifications and until we fill this gap I suspect we will have little to say from an operations point of view. Though I am aware that some

initial papers have been written based on research by Sofia Pinto from the Univeridade Católica Portuguesa (Pinto and Johnston, 2002, 2004). Some questions remain:

- What is a service specification?
- What mechanisms can be used to control service specifications including customer and employee behaviour and inputs to the process?
- How do we manage conformance to specification when the specification is implicit?

Efficiency

Efficiency, in particular process mapping and the approaches of lean thinking, have been applied, with a few exceptions, to the “manufacturing”, back-office parts of service organisations or heavily commoditised service processes. How can we create efficiency in the front office without compromising service quality or the customer’s experience? A recent paper by Womack and Jones (2005) has started to address this issue. Questions remain:

- How can “lean” be applied to service?
- What does “value” mean to customers and how can it be identified and captured?
- Are there different forms of waste in service operations?

New growth opportunities

While the three areas above are fundamental operations issues and are under-researched in a service context, I believe that the most exciting potential for service operation management research, however, lies away from the consumer arena.

My personal research ambitions, and indeed the original paper about the development of service management, were driven by two things: my background as an operations manager in the service sector (quite different to most if not all of my colleagues at the time) and the backgrounds of the students sitting in front of me. Faced with a combination of students who were predominantly working in service organisations and a literature firmly rooted in manufacturing which bore little resemblance to the issues I had faced as a service operations manager, my personal ambition was to make a contribution to the literature that would be of use to my students and reflect the nature of the service economy in which we lived.

Things have changed. So much so that today I see little distinction between manufacturing and service organisations, with most manufacturing companies knowing that they compete on service. Indeed one “metal-bashing” company I visited recently considered most if not all of its activities as “service”, including providing JIT services for clients, helping them manage their supply chain, providing HR support, and change management consultancy. There is no longer a need to persuade students that service matters. It is what they all do.

The challenge of B2B services

An even more radical change in my view is that the context of service has changed in the minds of my students. This can be illustrated by a quick analysis of their job titles. They are (and maybe they always were) internal IT consultants, help desk managers, account managers, technical specialists, project directors, internal and external

consultants, change managers, systems support and development, logistics managers, medical directors and managers, best value managers, improvement managers, etc.

Their view of service, and their need for education and information, has now radically shifted. They are no longer accepting of material based on consumer (B2C) services which has been the foundation for most if not all of the traditional service management literature (though there are other literatures which we occasionally refer to such as the business relationship literature). Ninety per cent of my students are involved in business-to-business (B2B) services, with either internal and/or external clients/customers. As a result, over the last few years the content of my courses, the cases and examples used, has shifted to contain around 80 per cent business services.

This shift is not, as yet, reflected in our literature. Figure 1 shows an analysis of the focus of the papers in *International Journal of Service Industry Management* (IJSIM) and the *Journal of Service Research* (JSR) (two of the leading publications for service research) comparing 1998/1999 (when the original paper was written) with 2004/2005.

Around 60-70 per cent of the papers are concerned with consumers, such as customer satisfaction, retention and dealing with customer complaints. Around 10 per cent are focused on business customers/clients, such as B2B relationships, franchising and supply chain issues. Around 10 to 20 per cent of the papers were concerned with internal customer issues, such as scheduling resources, managing employees or information technology. It is clear that the main focus of attention in the service literature is consumer services and, further, that this focus appears to have increased over the last five years.

I believe that the biggest challenge facing service management researchers today is to re-orientate their material towards B2B services. This is an important opportunity for operations management and, as marketers would say, we have a window of opportunity, but not for long. We have a solid foundation, expertise and a body of knowledge in supply chain management, logistics, managing information flows, lean thinking, efficient process management, process design, etc.

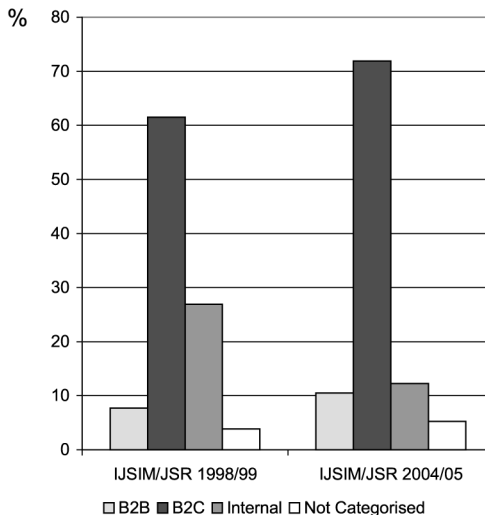


Figure 1.
Analysis of papers by
customer focus, 1998/1999
vs 2004/2005

It is interesting to compare the focus of the *International Journal of Operations & Production Management (IJOPM)* with *IJSIM* and *JSR*, see Figure 2.

IJOPM is almost the antithesis of the other two journals with its focus on internal and B2B issues. By applying operations thinking to the area of service management we have the chance to make a significant contribution both to the literature and to the needs of our student and client base. To some extent we have done this already. Many of the operations applications in the literature refer to both manufacturing and non-manufacturing contexts, however, I believe that it will only take a small but significant shift in our work to both recognise its impact on business services (both internal and external) and also develop, some might say re-label, our work to take account of this need/opportunity. There is some evidence of this movement already (Evans and Berman, 2001; Bolton *et al.* 2003; Staughton and Johnston, 2005).

Public and not-for-profit sectors

A second major opportunity lies in the not-for-profit sectors. These are a significant and growing section of developed countries' economies. For example, the UK government employs over 500,000 civil servants and the UK's National Health Service, with a turnover of £80 billion, employs around one million people, making it the world's third largest employer after the Chinese Army and Indian Railways.

Out of the 250 papers in my sample, only 2.5 per cent were based in either the public sector or the charity/non governmental agency (NGO) sectors. This does not compare well with an analysis of the backgrounds of the students in my classes which suggests that over 10 per cent work in these sectors. I suspect we are falling into the old manufacturing trap. You may recall that many of the old, and not so old, production/operations texts ended each chapter, on inventory, for example, by telling us that the same techniques and concepts applied just the same to service industries (though how was left to our imagination). Today, how many of us casually inform our students that the same issues/tools apply to not-for-profit organisations?

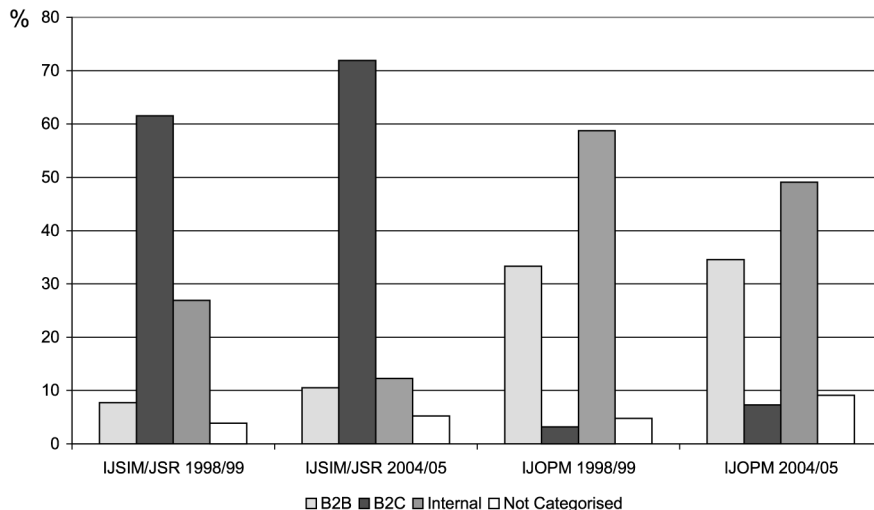


Figure 2.
Analysis of papers by
customer focus including
IJOPM

Of course some issues do apply but understanding and researching into this enormous sector of our economy will give us new and exciting insights not only into those organisations but will allow us to look with fresh eyes into the for-profit sector.

Furthermore the New Public Management (NPM) movement (Christensen and Lægreid, 2001; Osbourne and Gaebler, 1992; Pollitt and Bouckaert, 2000) is encouraging public sector organisations to create leaner, more flexible and customer-focused government and also to provide better value for money. Here lies a significant opportunity for operations management academics (Verma *et al.* 2005).

Let us not overlook the voluntary sector, again an enormous sector (try asking your students how many of them do some form of voluntary work – conservation projects, secretary of a club, assisting a political movement, scouts, guides, cadets, business groups, women’s groups, . . .). You might be surprised. The British Red Cross is one of the largest charity organisations in the UK and a leading member of the largest humanitarian network in the world, the International Red Cross and Red Crescent movement. It employs 2,500 staff supported by 35,000 trained volunteers working in its global operations. I think we have a huge amount to learn from these organisations. If only we could gain the passion and commitment from people who are paid nothing and transpose that into the paid work arena. Who says money is the greatest motivator?

Conclusion

There are several important challenges facing the operations management academic community. Underlying these is a question about its desire to enter and make a contribution to the service sector. My view is that if it does not it will be left high and dry like some developed countries’ manufacturing sectors. Marketing academics have certainly made their mark in the service management literature though they have taken a focus that is consumer-based which ignores to a large extent the important role of operations in designing and delivering service. There exists a window of opportunity for operations academics to seriously engage in the service arena and apply their knowledge and skills to answer fundamental questions in the areas of quality, productivity and efficiency, and to apply their expertise in business services (for both internal and external customers) and also to the important but often overlooked not-for-profit and voluntary sectors.

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