

IT OUTSOURCING IN TOURISM BUSINESSES IN THE UK: DECISION-MAKING APPROACH

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Abstract

As sophistication and complexity in information technology (IT) increases, organisations are discovering difficulties in managing their information systems efficiently and effectively for commercial success. The access to state-of-the-art technologies has accelerated the need for different approaches to managing IT resources. Companies increasingly perceive IT outsourcing as a necessary organisational resource-acquisition venture, and tourism enterprises are not an exception. This paper is based on a recent research study into IT outsourcing in tourism businesses. It investigates the attitudes towards IT outsourcing in the industry, identifies the benefits sought from outsourcing arrangements and the results achieved, and based on how the benefits and detriments of outsourcing are measured and justified, evaluates the 'quality' of IT outsourcing decision-making. The research is theoretically supported, drawing reference to general published literature on outsourcing and linking this to observations arising from the findings based on a survey of managers and those involved in IT decisions in 56 tourism organisations in the UK.

Keywords: IT outsourcing; tourism; benefits; risks; decision-making.

1 INTRODUCTION

Many empirical studies have shown that the outsourcing of IT is a decision that should not be taken lightly even though it can appear to be an attractive option, providing a number of benefits to a company such as improved performance, functional specialisation, and reduced costs of maintaining and managing in-house information systems, etc. (Currie, 1998; The Outsourcing Institute and Dun and Bradstreet, 2000). Outsourcing can be used to derive a competitive advantage by contracting out weak activities of an organisation (Martinsons, 1993:22; Loh and Venkatraman, 1997). On the other hand, it carries with it potential dangers and risks such as the loss of strategic flexibility (Ward and Griffiths, 1997), the uncertainty of long-term benefits, the provider's failure to support business needs and the difficulty of re-building a company's own IS architecture and information management expertise after these have been unsuccessfully outsourced (Martinsons, 1993). Moreover, without careful delineation of outsourcing type and scope, as well as retained capabilities and management processes, companies may involuntarily lose control of an essential competitive resource (Lacity and Willcocks, 1997).

However, IT outsourcing in *tourism* has received little attention from both academics and practitioners, despite growing evidence of wide use of IT applications within the sector (Buhalis and Main, 1998; Labi, 2000; Louvieris et al, 2001). This was the prime motivation for initiating the research which aimed at understanding how managers and those responsible for the management of IT in tourism enterprises perceived and practiced IT outsourcing deals, and whether they realised all the risks and benefits inherent to such contracts.

1.1 Importance of IT outsourcing in tourism

IT remains a potent force driving change in the tourism sector. Fuelled by the increasing capabilities of the Internet, vast opportunities for tourism companies to extend customer interaction, market reach, revenue generation and reduce costs, providing capable, reliable and flexible technological infrastructures still provide the basis for generating strategic and operational advantage. The emergence of ASPs adds to the complexity of managing IT infrastructures (Ngonzi, 2000; DeWitt and Landes, 2001). Tourism organisations, just like organisations in other industries, find it very difficult to manage their information systems on their own (Feldman, 2000; Donoghue, 2001). Acknowledging the importance of aligning IT/IS plans with corporate strategy, managers become concerned with how to best deploy this critical resource. Many of them resort to outsourcing either to access cutting edge technology and skills, or to share risks of new technology with the third party. Many tourism companies today are becoming increasingly aware of the potential distribution, promotional and interactive marketing advantages that a Web presence offers (Louvieris et al., 2001), and outsourcing is perceived by them to be an option to establish and develop their on-line services. Thus in many tourism organisations, such as Rosenbluth Travel and the National Trust (UK), IT outsourcing has become a significant element in business planning. However, there have only been a small number of empirical studies which only briefly mention IT outsourcing in tourism, thus, underestimating its importance for the industry.

2 BENEFITS OF IT OUTSOURCING

Outsourcing decisions have far-reaching, short and long-term consequences, both positive and negative. Therefore, they should be the outcome of a careful management decision-making process, which takes into account both the benefits and costs outsourcing entails. The reviewed literature shows that benefits of IT outsourcing may fall into a few major categories including focus on core activities/core competencies, cost saving, organisational finances, quality, access to technology and skills, flexibility, organisational change and organisational politics (Dekkers, 2000; Willcocks and Sauer, 2000; Lacity and Willcocks, 2001). IT is outsourced for many reasons, ranging from a bandwagon effect and cost pressures to the search for the improved performance and added value (Lacity and Hirschheim, 1993; Lacity and Willcocks, 1997; Willcocks and Lacity, 2000; Bryson and Sullivan, 2003). External IT suppliers can offer access to the external market, to technical expertise in short supply, change fixed to variable costs, and/or through headcount reduction and purchase of IT assets, improve the financial position of a client organization.

Moreover, vendors can provide IT staff with more opportunities to specialise in certain areas and work at the edge of technological developments (Willcocks and Sauer, 2000; Samuels, 2002). For many organisations, it is difficult to follow new developments in IT. They therefore turn to external suppliers that are familiar with the new technology. Especially in the tourism domain, outsourcing can be seen as a competitive necessity in the eBusiness era (Pollock, 2001; DeWitt and Landes, 2001). However, while using external IT suppliers may well be efficient and effective, it is not free. There are costs – the costs of transacting – and pitfalls, some general and some specific, to entering into such contracts. It remains true that if organisations are to maximise the benefits of outsourcing, they must understand the nature of the risks and costs, and how these might be minimised.

3 HIDDEN COSTS AND RISKS

Empirical research into outsourcing experiences shows that clients often complain about the vendor's failure to provide the expected high service level and quick response. In some instances vendor service was worse than IT service before outsourcing (Loh and Venkatraman, 1992). Drawbacks and potential dangers of outsourcing are closely related to the risk of non-performance, and mainly stem from the absence of shared understanding between the parties, problems of coordination, cooperation, and trust (Ngonzi, 2000; Lacity and Willcocks, 2001; DeWitt and Landes, 2001). There are also costs, implicit and explicit, costs of monitoring and the risk of losing control (Lacity and Hirschheim, 1995; Bendor-Samuel, 2000; Lacity and Willcocks, 2001; Aubert et al., 2004). The outsourcing vendor may fail to support business needs of the client either because of self-interest or due to the lack of the necessary competencies and resources. At the same time, the client organisation may lose experience and skills, its learning capability and shared values. According to Hendry (1995), the loss of shared understanding, experience and circumstances may threaten the ability of a company to coordinate its activities effectively and to nurture and sustain its own competence. Organisations must therefore ensure they do not lose specialist tacit knowledge in the outsourcing process for if they do, this could diminish its core competencies and implicit value added (Quinn et al., 2000). Furthermore, an organization will find it very costly and very difficult (perhaps impossible) to rebuild its own IS architecture and information management expertise after these activities have been handled by an outside party for a considerable period of time. In addition significant hidden costs associated with

service degradation, power asymmetries in favour of vendors, and loss of control over IT destiny have been observed (Willcocks and Lacity, 2000).

However, not all the aforementioned risks are inevitable. Nor are they necessarily sufficient to outweigh the very real and much more immediate economic benefits of outsourcing and cutting back to the core. The outcomes of IT outsourcing deals will largely depend on the managerial decision-making which takes into account how the benefits and detriments of outsourcing in a particular company are measured and justified. The early awareness of benefits and costs outsourcing entails can help organisations establish which outsourcing strategies are the most influential in determining outsourcing outcomes. Organisations have to find the most effective way of limiting the vendor opportunism, maintaining the degree of control and obtaining the long-term value. The crucial question here is whether the organisation is capable of being a smart client.

4 METHODOLOGY

As the research outlined in this paper was concerned with how IT outsourcing is perceived and practiced in the tourism industry, the elements of the population consisted of tourism organisations and companies. Hotels, airlines, tour operators, travel agents and tourist boards were considered to be the primary targets for the sample as they are the main players in the field (Werthner and Ricci, 2004). The size of the business was not considered a constraint to outsource given an ASP facilitated outsourcing had made this an affordable choice for all. Moreover, since the main purpose was to evaluate the process and quality of IT outsourcing decision-making, the research instrument was targeted at senior executives, general management or other decision-makers with knowledge or involvement in IT, as it is they who are often faced with decisions to outsource IT functions and are considered to be in the best position to give firsthand information about the issues at stake. The sampling called for special efforts to locate and gain access to such people. Since there was no complete list of all tourist companies, several directories were used to obtain contact names and addresses. Among them were International Hotel and Restaurant Association (IHRA) members' directory (www.ih-ra.com), HCIMA Hospitality Yearbook 2001, HCIMA's electronic directory (www.hcima.org.uk), Association of British Travel Agents (ABTA) directory (www.abtanet.com), European Regions Airline Association, European Tour Operators Association and International Airline Travel Association (IATA) electronic resources.

A total of 550 questionnaires were distributed, 400 electronically and 150 by post, together with a covering letter explaining the study. The return of 67 completed questionnaires yielded a response rate of 12%. However, 11 responses from outsourcing companies were only partially completed and therefore discarded. Thus, only 56 responses were used in the analysis. It should be noted here that posted questionnaires had a higher response rate (23.3%) than electronic ones (only 7.5%). The low response rate might be partly attributed to the fact that posted questionnaires, which proportionally had a smaller number, were preferred in the targeted sample. The questionnaire was also a long one which could have affected the response rate. The questionnaire contained *list* questions, *category* questions, *ranking* questions and questions asking respondents to provide ratings on a 5 point Likert scale. It was mainly quantitative but included open questions to capture the qualifying explanations and reasons for IT outsourcing. Content validity of the survey instrument was confirmed through a small pilot study which also helped to maximise its reliability.

Factor analysis was used to explore the data on benefits and to identify some patterns among the original thirty variables. Principal Component Analysis was used to summarise the characteristics of organisational decisions to outsource IT (Hair et al., 2001). Outsourcing performance was measured by the gap between the desired and realised benefits, and a *paired samples t-test* was employed (Ryan, 1995) to determine the level of significance. SPSS and MS Excel were used in the analysis of all quantitative data.

5 ANALYSIS OF SURVEY FINDINGS

5.1 Tourism organisation types in the sample

The 56 participants represent a wide variety of organisations in different sectors of the tourism industry. It emerged from the survey that out of the 56 respondents, the majority (35) were hotels (either independent or chains), 8 were airlines, and 2 were tour operators. The 12 remaining organisations categorised as ‘others’, belong to the following tourism business segments: travel agency - 1; tourist board (area and national) - 5; hotel management company - 2; travel industry association - 1; Internet hotel reservation company - 1; and airport operator - 1. The fact that hotels are over-represented in the sample cannot be seen as undermining the significance of the research findings since the *units of analysis* here are sourcing decisions across the tourism sector as a whole and not individual organisations as such. Moreover, the findings clearly reflect the diverse nature of the tourism industry where hotel sector is proportionally much larger than other sectors of the industry. Hence a higher response rate would still reflect the same apparent bias.

5.2 Attitudes to IT outsourcing in tourism

The results of this investigation show that the majority of tourism organisations (37) in our sample had outsourced at least some of their IT activities. Tourism organisations appear to follow a common outsourcing pattern. However, while empirical studies on IT outsourcing generally distinguish between firms that outsource their IT and firms that do not, this ‘IT outsourcing versus no IT outsourcing’ dichotomy does not account for the full range of attitudes towards IT outsourcing. In this research, therefore, organisations which did not outsource were further subdivided into four groups: (1) organisations that had never considered an IT outsourcing option; (2) organisations that had done or were planning to do an outsourcing evaluation; (3) organisations that had done an outsourcing evaluation and made a negative decision regarding IT outsourcing; and (4) organisations that made a positive decision regarding IT outsourcing from such evaluation. Thus, information was obtained on two important dimensions:

- the percentage of companies that planned to outsource IT in the future and the percentage of companies that had done or were planning to do an outsourcing evaluation gives valuable insight on the maturity of the IT outsourcing phenomenon for the tourism sector;
- the percentage of companies that had a negative outcome from their IT outsourcing evaluations gives information on the reluctance to IT outsourcing. Simply stating that an organisation does not currently outsource is insufficient to determine whether it is actually reluctant to outsource.

The data shows that out of 56 organisations, 37 (66.1%) outsourced at least part of their IT. Hence, IT outsourcing has become a central concern for a significant proportion of tourism organisations. Among the rest 19 (33.9%) organisations which did not outsource IT, 13 (23.2%) had never

considered an outsourcing option, while only 6 organisations (10.7%) had done or were planning to do an outsourcing evaluation. Among companies which did not outsource IT but which had already carried out an outsourcing evaluation, only 3 (5.4%) reported a positive outcome. While only these three organisations were certain about their plans to outsource at least some of their IT in the future, 7 (12.5%) respondents did not exclude such an option. Two organisations (3.6%) decided against outsourcing after examining the feasibility of an outsourcing alternative. On the whole, 8 (14.3%) out of all 56 respondents seemed to be totally opposed to IT outsourcing, and had no plans to do so in the foreseeable future.

A further examination of the reasons for rejecting IT outsourcing suggests cost escalation was one of the main reasons for not outsourcing IT. It was quoted by 36% of organisations as the main factor for the rejection. These findings corroborate those of Lacity and Willcocks (2001), where expense was found to be the most common reason for rejecting outsourcing. It suggests that tourism companies are becoming increasingly aware of the danger of hidden costs for which many companies in the past failed to account, and, therefore, they are now more cautious. Yet, another interpretation is that since the appropriate expertise can often be acquired by outsourcing to a large reputable vendor, the small size of some companies serves as a barrier to affording such expertise. Interestingly, among other most important reasons for not outsourcing were inadequate external supplier expertise and fear to lose flexibility. The outsourcing market has clearly matured over the last decade, with many niche suppliers, as well as mega-suppliers and sub-contractors available. However, it seems that outsourcing can still be rejected on the grounds that no suitable supplier possessing the needed skills could be found. On the other hand, the majority (15) of these participants from *non-outsourcing organisations* considered their internal IT department efficient and their IT staff capable of handling all the IT work. Among all the 19 respondents, only three seemed to be dissatisfied with current performance of internal services. These results support earlier empirical findings by Teng et al. (1995), which were based on the study of 188 firms in the US. On the whole, one can see that IT outsourcing is a widespread practice in the tourism industry. Although some organisations were not yet engaged in IT outsourcing practices, they were considering this alternative as a way to improve their performance.

5.3 Triggers for initiating outsourcing evaluations

Reaction to the efficiency imperative is often cited to be the first reason for initiating outsourcing evaluations (Lacity and Hirschheim, 1995; DeLooff, 1997). Cost efficiency used to be the primary reason for considering outsourcing in the past. In this research, however, the main triggers that gave rise to outsourcing evaluations (stated by 6 respondents in non-outsourcing companies) appeared to be the desire to gain and maintain a competitive edge, and focus on core business competencies. Reduction of operating costs was the trigger in only one organisation. Provision of eCommerce solution for an organisation's business processes was yet another motive for starting outsourcing evaluations. It is not possible, of course, to make any generalisations from these findings. However, this data is valuable in the sense that it helps us to see that among tourism companies, there are those which recognise the strategicness of IT support operations, their ability to add value, and IT outsourcing as a tool to increase the benefits from IT.

5.4 Benefits perceived by non-outsourcing organisations

To fully understand various attitudes towards IT outsourcing, non-outsourcing organisations were also asked to express their views on what they believed to be the significant potential benefits of such 'contracting'. Thus, the top two benefits of IT outsourcing were believed to be core business focus

(13% of the respondents) and opportunity to focus on more strategic systems (12% of the respondents). Cost reduction and access to additional skills were given much less importance than might have been expected. This is again indicative of the shift towards more strategic rather than tactical line of thinking. IT outsourcing was clearly seen as an important strategic tool, even by those who had not yet outsourced.

5.5 Benefits desired versus results achieved

It is typical that certain benefits are expected prior to awarding an outsourcing contract. These desired benefits or expectations are referred to in this study as 'goals'. Contract performance is usually a congruence between improvements sought and results achieved. Thus, where the actual results fall short of goals (expectations), under-performance might be said to have occurred. This happened to be the case in some prior studies on outsourcing (Fraser, 1998; Domberger et al., 2000). To see whether the same was true of IT outsourcing contract performance in tourism organisations, a two-part question in the questionnaire was devised. In its first part, the outsourcing clients responding to the study were asked to indicate the degree of importance they attached to specific variables when making decisions to outsource. In its second part, the respondents were asked to indicate the degree to which their goals were realized. The scale for the desired and realised benefits ratings was from 1 to 5. A rating of 1 corresponded to 'not important' for the former and 'significantly worse than expectations' for the latter, 3 corresponded to 'somewhat important' for the former and 'exactly on target' for the latter, while 5 corresponded to 'very important' and 'significantly better than expectations', respectively. Ratings which were not reported were excluded.

The purpose of the question was twofold. First, it was aimed at better understanding of outsourcing objectives, particularly in the tourism business context. Second, it was designed to measure performance based on the degree to which those objectives had been achieved. Only three variables had a mean score equal or greater than three, namely: (1) to improve customer service (mean = 3.26, SD=1.442); (2) to add more personnel to cope with certain IT activities (necessary due to insufficient in-house capacity) (mean = 3.06, SD=1.476); and (3) to improve quality of services and infrastructure (mean = 3, SD=1.557). Quality of service improvements and people who can add to in-house capacity thus seem to be the primary drivers of IT outsourcing in the tourism organisations. This is quite a discernible shift from the primary forces identified in the early outsourcing literature where cost savings appeared to be the leading goal for IT outsourcing. For instance, Lacity et al. (1996) found that cost reduction was quoted as the major incentive for IT outsourcing by 85 per cent of the managers they interviewed. The result is equally different from the 1999-2000 in-depth survey into IT outsourcing experiences in the lead markets of the US and the UK, where cost reduction was again a major requirement for most organisations (Lacity and Willcocks, 2001). In this research, overall, it appears that tourism organisations are paying much more attention to strategic objectives in comparison with companies in other industries. On average, there is a much greater emphasis on getting access to best-practice capabilities in strategic areas and 'best of class' applications, on being able to concentrate on core business, and on becoming more competitive rather than on cost reduction.

Principal component analysis (PCA) was employed to provide insight to the pattern of responses as well as identifying the key areas underpinning IT outsourcing decisions for tourism organisations. PCA yielded the factor structure given in Table 1. The first factor accounted for 20% of the variance, the second and third factors - for 10%, and the fourth, fifth, sixth and seventh factors - for 9%. The Cronbach's alpha for all factors was greater than 0.7.

Variable	Factors							
	F 1	F 2	F 3	F 4	F 5	F 6	F 7	F 8
1. Reduce IT costs	0.40	-0.18	0.32	0.11	0.09	0.26	0.51	0.16
2. Reduce time – vendor can complete the job faster than in-house team	0.83	0.04	0.29	0.12	-0.03	0.13	0.18	-0.12
3. Reduce time by dividing the effort	0.34	0.66	0.27	0.13	0.17	-0.06	0.31	0.28
4. Obtain cash flow	0.17	-0.22	-0.09	0.17	0.84	0.03	-0.01	-0.26
5. Make the user department(s) accountable for IT services	0.14	0.16	0.02	0.15	0.78	0.26	0.05	0.26
6. Be able to get penalties for non-performance	-0.27	0.21	-0.14	0.23	0.67	0.16	-0.09	0.09
7. Acquire expertise not available in-house	0.41	0.07	0.76	0.06	-0.04	0.01	0.28	-0.02
8. Add more personnel to cope with certain IT activities (necessary due to insufficient in-house capacity)	0.22	0.17	0.66	0.44	-0.06	0.10	0.06	-0.33
9. Add more personnel to fill a short-term, part-time or transient need for effort	0.15	0.26	-0.09	0.84	0.20	0.05	0.19	-0.26
10. Keep in-house staffing levels more stable	0.32	-0.05	0.32	0.64	0.15	-0.06	0.19	0.24
11. To reduce direct employees	0.14	-0.27	0.16	0.84	0.16	0.15	-0.01	0.12
12. Improve customer service	0.78	0.22	0.24	0.29	-0.01	-0.07	0.17	-0.09
13. Improve response to organisational objectives and strategies	0.28	0.15	0.29	0.18	0.03	0.15	0.79	0.03
14. Allow core business focus	0.23	0.20	0.79	0.08	-0.03	0.20	0.03	0.23
15. Obtain control over outsourced project management process	0.15	0.21	0.18	-0.03	0.28	0.69	0.27	0.14
16. Share or reduce risks	0.27	0.16	0.50	0.21	-0.32	0.35	0.30	-0.04
17. Improve quality of services and infrastructure	0.75	0.17	0.38	0.06	0.09	-0.16	0.23	0.08
18. Facilitate business change	0.29	0.17	0.02	0.12	0.01	0.23	0.80	0.01
19. Access new technology	0.77	0.15	0.13	0.03	0.17	0.18	0.03	0.03
20. Increase IT leverage	0.63	0.12	-0.06	0.18	0.28	0.46	0.16	0.23
21. Aid future planning	0.50	-0.08	0.06	0.06	0.39	0.13	0.33	0.43
22. Be more competitive	0.71	-0.02	-0.04	0.26	-0.09	0.24	0.24	0.29
23. Improve efficiency	0.82	0.15	0.34	-0.02	-0.002	0.08	0.21	-0.02
24. Access to best-practice capabilities in strategic areas	0.15	0.73	0.48	-0.15	0.05	-0.23	0.25	-0.07
25. Access to world-class IT skills via strategic partnership with a world IT leader	0.03	0.82	0.04	-0.04	0.13	0.22	0.07	-0.23
26. Improve effectiveness and explore new strategies, products or services	0.47	0.82	0.01	0.06	-0.14	0.23	-0.15	0.21
27. Provide greater flexibility	-0.004	0.51	0.29	0.49	-0.01	0.35	0.19	0.37
28. Rationalise assets	0.09	-0.01	0.06	0.12	0.26	0.87	0.12	-0.03
29. Keep pace with the industry development	0.50	0.20	0.06	0.28	0.0001	0.47	0.32	-0.21
30. Obtain temporary solution (resolve present difficulties)	0.19	0.17	0.19	-0.17	0.54	0.37	0.33	-0.04

Table 1. Orthogonal factor loading matrix for thirty outsourcing goals

To ensure practical significance of factor loadings, only loadings of .50 or greater were considered, in accordance with guidelines on the measure of sampling adequacy (MSA) (Hair et al., 2001). The highest loading for each variable on any of the eight factors was identified until each variable could be associated with only one factor.

Table 1 serves as a basis for explanation of what variables represent in terms of their groupings. The **first factor** addresses competitiveness based on quality and efficiency via access to new technology i.e. by outsourcing IT, organisations hope to gain access to new technologies which will help achieve better quality and efficiency, and therefore, increase their competitive position. The **second factor** addresses strategic advantage gained through access to world-class IT skills and best-practice capabilities, and by dividing the effort between the client organisation and its strategic outsourcing partner. The **third factor** is competencies. Organisations outsource to obtain competencies either through divesting of ‘non-core’ activities or by acquiring competencies not available in-house from an outside expert. The **fourth factor** relates to personnel. IT outsourcing is seen as a way to optimise an organisation’s staffing levels. The **fifth factor** implies that companies want to off-load the IT

transferring the cost base to ensure the accountability. The **sixth factor** is controlled rationalization, whereby organisations outsource to rationalize their assets but feel that they have to maintain control over the process. Lastly, the **seventh factor** implies that organisations outsource to improve response to business changes and strategies, one of which is to reduce IT costs.

Thus, with the help of factor analysis, key areas of decision-making in IT outsourcing have been identified. These are quality and efficiency, strategic advantage, competencies, personnel, transferring of cost base and accountability, controlled rationalization and improved response to business changes and strategies. In much broader terms, outsourcing is initially seen as an investment in people who can provide the necessary competencies, which then lead to improved quality and efficiency, access to new technologies and ultimately help to obtain 'value added'. Moreover, by transferring the cost base to the vendor, the client organisation ensures accountability of the user. It is, in a sense, a trade-off or an exchange of assets. Companies also feel they want to rationalize assets but in the manner that the internal control is maintained. Generally, IT outsourcing is seen as a tool to improve response to organisational objectives and strategies.

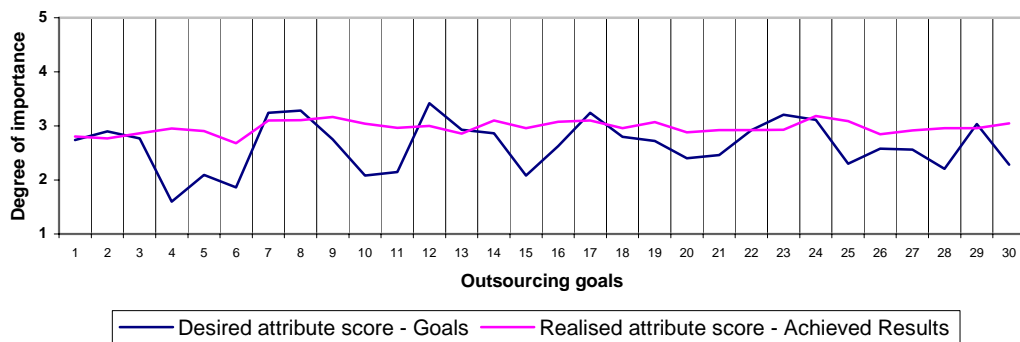


Figure 1. Objectives versus Benefits

*Figure 1 shows the difference between mean scores as to the thirty different goals of outsourcing and their actual realisation. It demonstrates that there is a slight tendency to over-perform relative to the improvements sought.

Furthermore, the thirty attributes listed in Table 1 were also taken to represent measures of performance. For the purposes of analysis and estimation, a *gap analysis* approach was adopted (Ryan, 1995:216-218). The realized performance was considered relative to the base, as represented by the goals (desired benefits) ratings. This required a *paired samples t-test* where the observations were made in pairs, one drawn from each group. The result of this test is depicted in Figure 1 above, where the mean score is simply drawn on a 5-point scale for each item.

The result demonstrated that there was a slight tendency to over-perform relative to the improvements sought. However, the gaps showed that many organisations received certain benefits which they did not consider to be of importance when making outsourcing decisions. Table 2 shows the significant differences in mean scores where the actual benefits in fact exceeded the desired improvements.

Attribute	Goal mean score (desired performance)	Mean of the realized performance	t	p
Obtain cash flow	1.60	2.95	-4.613	0.000
Make the user department(s) accountable for IT services	2.10	2.90	-2.414	0.025
Be able to get penalties for non-performance	1.86	2.68	-2.614	0.016
Keep in-house staffing levels more stable	2.08	3.04	-3.767	0.001
To reduce direct employees	2.15	2.96	-3.252	0.003
Obtain control over outsourced project management	2.08	2.96	-3.308	0.003

process				
Access world-class IT skills via strategic partnership with a world IT leader	2.30	3.09	-3.219	0.004
Rationalise assets	2.21	2.96	-2.530	0.019
Obtain temporary solution (resolve present difficulties)	2.29	3.05	-2.415	0.025

Table 2. Outsourcing goals and their realisation

On the other hand, those goals, which were of primary importance, were not achieved. The ‘disappointment gap’ is particularly apparent in some cases. Those ‘attributes’ for which under-performance has occurred are listed in Table 3. The table depicts the result of subtracting the desired from the realised rating for each of these attributes.

Attribute	Goal mean score (desired performance)	Mean of the realized performance	Mean of the realized minus desired performance	t	p
Reduce time - vendor can complete the job faster than in-house team	2.90	2.77	-0.13	0.528	0.601
Acquire expertise not available in-house	3.24	3.10	-0.14	0.528	0.602
Add more personnel to cope with certain IT activities (necessary due to insufficient in-house capacity)	3.29	3.11	-0.18	0.644	0.525
Improve customer service	3.42	3.00	-0.42	1.580	0.125
Improve response to organisational objectives and strategies	2.93	2.86	-0.07	0.273	0.787
Improve quality of services and infrastructure	3.24	3.10	-0.14	0.447	0.659
Improve efficiency	3.21	2.93	-0.28	0.869	0.392
Keep pace with the industry development	3.04	2.96	-0.08	0.235	0.816

Table 3. The Disappointment Gap

Although the differences between mean scores are not significant ($p > 0.05$), they should not be overlooked. They may in fact represent potential problem areas. The wider the gap is, the greater the disappointment. Thus, as the above result shows, improvement of customer service was most desired but not always achieved. Moreover, the disappointment was found to be directly related to attributes which fall within two broader areas of outsourcing decision-making, that is, ‘quality and efficiency’ and ‘competencies’ - areas previously defined by the factor analysis. When under-performance occurs, that is, when outsourcing fails to deliver, organisations pay extra costs and waste their resources. Unnecessary resources, on the other hand, often seem to be applied to over-performing in less or non-important areas. Thus, resources should be distributed in a manner so that the client organisation first of all applies them to areas where improvements are most needed. In general, it is not necessary outsourcing itself which fails to deliver but rather it is important to investigate whether the organisations themselves had set clear and realistic expectations of the outcome, had clearly identified responsibilities, and had set up appropriate performance measures and effective relationships.

6 CONCLUSIONS

In conclusion, it appears that many tourism organisations already view outsourcing as a way to achieve strategic goals, principally to improve customer satisfaction as well as providing other efficiency and effectiveness improvements. But like any organisational decision, outsourcing is not free of risk and requires effective management from the outset of the outsourcing evaluation through the life of the contractual relationship. The main implication from these findings is that although outsourcing has a benefit of permitting organisations to redirect their resources onto greater value-

adding activities, these resources are not always properly being applied. The findings clearly indicate that gaining a business advantage from outsourcing requires a comprehensive sourcing strategy with emphasis on goal alignment, risk awareness, clear requirements, monitoring and management of the vendor for over performance *and* under performance against the service level agreement. The alignment of expectations among all the stakeholders to ensure that sourcing objectives are met is key to success. Closing the expectation gap will require clients to set the objectives and clearly define the service including service levels to be delivered.

Finally, based upon our findings, we conclude on a note of caution: The validity of cross industry generic findings in the established outsourcing literature, which emphasise cost reduction as the main driver for outsourcing, are not necessarily applicable to organisations in specific industry sectors such as tourism. In turn, it follows that outsourcing vendors will have to adapt their offerings and the provision of specific IT services to a specific segment or industry, and if their marketing strategies are to succeed, they have to look into organisational objectives and resources for outsourcing to make sense. Similarly, the development of tourism industry specific guidelines to support IT related outsourcing decisions is certainly worthy of further consideration given the service idiosyncrasies of the tourism industry.

References

- Aubert, B. A., Rivard, S. & Patry, M. (2004). A transaction cost model of IT outsourcing, *Information & Management*, 41(7), 921-932.
- Bendor-Samuel, P. (2000). *Turning Lead into Gold: The Demystification of Outsourcing*. Executive Excellence Publishing, USA.
- Bryson, K-M & Sullivan, W. (2003). Designing effective incentive-oriented contracts for application service provider hosting of ERP systems, *Business Process Management Journal*, 9(6), 705-721.
- Buhalis, D. & Main, H. (1998). Information technology in peripheral small and medium hospitality enterprises: strategic analysis and critical factors, *International Journal of Contemporary Hospitality Management*, 10(5), 198-202.
- Casale, F. J. (2000). The Outsourcing Revolution. In: *The Outsourcing Index 2000: Strategic Insights Into U.S. Outsourcing*, The Outsourcing Institute and Dun and Bradstreet, p. 1.
- Currie, W. L. (1998). Using multiple suppliers to mitigate the risk of IT outsourcing at ICI and Wessex Water, *Journal of Information Technology*, 13, 169-180.
- DeLooff, L. A. (1997). *Information Systems Outsourcing Decision Making: A Managerial Approach*. Idea Group Publishing, USA.
- Dekkers, R. (2000). Decision models for outsourcing and core competencies in manufacturing, *International Journal of Production Research*, 38(17), 4085-4096.
- DeWitt, S. & Landes, B. (2001). Is an ASP Property Management System in your future? *Andersen Hospitality and Leisure Executive Report*, 8 (1), 1-7.
- Domberger, S., Fernandez, P. & Fiebig, D. G. (2000). Modelling the price, performance and contract characteristics of IT outsourcing, *Journal of Information Technology*, 15, 107-118.
- Donoghue, J. A. (2001). Sharpening maintenance IT tools, *Air Transport World*, 38(3), 72-76.
- Feldman, J. M. (2000). IT, Culture and Southwest, *Air Transport World*, 37(5), 45-49.
- Fraser, N. (1998). *Benefits and Risks in Outsourcing - Industry Trends*. Deloitte and Touche Consulting Group.
- Hair, J.F., Anderson, R.E, Tatham, R.L. & Black, W.C. (2001). *Multivariate Data Analysis*. Prentice Hall, New Jersey.

- Hendry, J. (1995). Culture, Community and Networks: The Hidden Cost of Outsourcing, *European Management Journal*, 13(2), 193-200.
- Labi, A. (2000). Easy Does It, *Time*, September 18, 57.
- Lacity, M.C. & Hirschheim, R. (1993). *Information Systems Outsourcing: Myths, Metaphors and Realities*. Chichester: John Wiley & Sons.
- Lacity, M. & Hirschheim, R. (1995). Beyond the Information Systems Outsourcing Bandwagon: The Insourcing Response. Chichester: John Wiley & Sons.
- Lacity, M.C. & Willcocks, L. (1997). Information systems sourcing: examining the privatisation option in USA public administration, *Information Systems Journal*, 7, 85-108.
- Lacity, M.C. & Willcocks, L. (2001). *Global Information Technology Outsourcing: In Search of Business Advantage*. Chichester: John Wiley & Sons.
- Lacity, M.C., Willcocks, L. P. & Feeny, D. F. (1996). The value of selective IT sourcing, *Sloan Management Review*, 37 (3), 13-25.
- Loh, L. & Venkatraman, N. (1992). Determinants of information technology outsourcing: a cross-sectional analysis, *Journal of Management Information Systems*, 9 (1), 7-24.
- Loh, L. & Venkatraman, N. (1997). Information technology outsourcing: a cross-sectional analysis. In: R. D. Galliers & B.S.H. Baker (Eds.), *Strategic Information Management: Challenges and strategies in managing information systems* (pp. 263-281). Butterworth-Heinemann.
- Louvrieris, P., Jung, T. H. & Pandazis, Y. N. (2001). Investigating the Web Presence of London Hotels. In: P. Sheldon, K. Wober & D. Fesenmaier (Eds.), *Information and Communication Technologies in Tourism: Proceedings of the International Conference in Montreal, Canada, 2001*. Springer-Verlag Wien, New York.
- Martinsons, M. G. (1993). Outsourcing Information Systems: A Strategic Partnership with Risks, *Long Range Planning*, 26 (3), 18-25.
- Ngonzi, E. (2000). Hospitality eProcurement - Will the industry take advantage of these Internet models and strategies? Andersen Hotel and Leisure Executive Report, New York, 1-6.
- Pollock, A. (2001). Beyond 2001: A Net Space Odyssey. White Paper, DestiCorp Limited.
- Quinn, J. B., Julien, F. & Negrin, M. (2000). Outsourcing strategy: Managing strategic risk, *Global Focus*, 12 (3). See also in: Andersen Consulting web site, 2001, Outsourcing Resources at www.andersen.com
- Ryan, C. (1995). *Researching Tourist Satisfaction: Issues, Concepts, Problems*. Routledge, London.
- Samuels, M. (2002). Travel group used its little grey cells to produce a top-quality web presence, *Computing*, 24 January 2002, 25-26.
- Teng, J., Cheon, M.J. & Grover, V. (1995). Decisions to outsource systems functions: testing a strategy-theoretic discrepancy model, *Decision Science*, 26, 75-103.
- The Outsourcing Institute and Dun & Bradstreet. (2000). *2000 Outsourcing Index: Strategic Insights Into U.S. Outsourcing*. The Outsourcing Institute, 1-12.
- Ward, J. & Griffiths, P. (1997). *Strategic Planning for Information Systems*. (2nd ed.). Chichester: John Wiley & Sons.
- Werthner, H. & Ricci, F. (2004). E-Commerce and Tourism, *Communications of the ACM*, 47(12), 101-105.
- Willcocks, L. P. & Lacity, M. C. (2000). Information technology outsourcing - Practices, Lessons and Prospects, Research Paper, Oxford Institute of Information Management, 1-15.
- Willcocks, L. & Sauer, C. (2000). *Moving to E-Business: The Ultimate Practical Guide to Effective E-Business*. London: Random House Business Books.