Implementation of yield management practices in service organisations: empirical findings from a major hotel group

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Implementation of Yield Management Practices in Service Organisations: Empirical Findings from a Major Hotel Group

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This article presents findings on the development and implementation of a centralised yield management project by an international hotel group in its over 160 hotel units. Data were collected over two years from the participant hotel group's three management levels through semi-structured interviews, observations and document analysis. The research findings reveal that developing and implementing a centralised yield management project is contextually a very complex and challenging task. Major problems and difficulties appear to have originated from the participant company's organisational structure and culture. In addition, a high labour turnover, poor HRM practices, ongoing developments and changes across the company seem to have had an impact on the implementation of yield practices. The existing literature on yield management seems to view yield implementation as a tactical activity and therefore fails to explain the strategic implications of deploying yield practices in service organisations. The overall recommendation of this article are that scholars and practitioners working in this area should view yield implementation more from the perspectives of strategic management and change management fields.

INTRODUCTION

In the service industries, in particular in airline, hotel, car-rental, cruise-line, restaurant and entertainment companies, managing demand is important

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because of the fixed level of supply in the short term. These service organisations therefore aim to ensure that their capacity is fully utilised and that revenue from it is maximised. For example, an empty seat in an aeroplane or an unoccupied room in a hotel represents an opportunity cost due to the perishable nature of the product. The marginal cost of selling another seat in an aeroplane or a room in a hotel is far less than the marginal revenue. It therefore makes sense to sell more seats or rooms at discounted rates as long as the revenue is greater than the cost of the service. Many service organisations try to solve this problem with advanced computerised yield management (YM) practices. In other words, factors affecting service organisations such as fixed capacity, a perishable inventory and uncertain demand have necessitated the use of YM techniques in airlines [Beloboba, 1989; Belobaba and Wilson, 1997; Botimer, 1996; Brumelle and McGill, 1993; Johns, 2000; Smith, Leimkuhler and Darrow, 1992], hotels and resorts [Brotherton and Mooney, 1992; Kimes, 1999, 2002], restaurants [Kimes, 1999] and health care [Chapman and Carmel, 1992]. Electric utility, car rental, cruise-line, railway, sports, shipping, advertising, entertainment, telecommunication and publishing organisations have also noticed the success of YM in the airline and hotel industries and have therefore tried to adapt YM concepts to their industries [Bodily and Weatherford, 1995]. It is even claimed that YM has considerable potential even for manufacturing operations [Harris and Pinder, 1995].

Yield management is a method that can assist an organisation to sell the right inventory or product unit to the right type of customer, at the right time and for the right price [Kimes, 2002]. Jauncey, Mitchell and Slamet [1995] view YM as an integrated, continuous and systematic approach to maximising revenue through the manipulation of product's price in response to forecasted patterns of demand. According to Kimes [2000: 22] YM 'guides the decision of how to allocate undifferentiated units of limited capacity to available demand in a way that maximises profit or revenue'. The basic idea behind YM is that different customers are willing to pay different amounts for the service [Badinelli, 2000]. In fact, YM is not truly a new concept nor is it an innovation in the service industry. As noted by Brotherton and Mooney [1992] and Forte [2000], service organisations have been trying to maximise their revenues for many centuries. The only difference from the situation in the past is that organisations now aim to improve and manage their revenues in a more efficient and professional manner with the help of advanced computerised systems. In other words, information technology is now regarded as the main factor enabling the effective implementation of YM in service firms. It is claimed that service organisations that efficiently employ computerised YM techniques can achieve increases in revenue of between two and five per cent and gain a competitive advantage over

their competitors [Belobaba and Wilson, 1997; Kimes and Wagner, 2001]. For example, American Airlines benefited from the deployment of YM practices to the tune of around US$1.4 billion over three years, which exceeded the net profit of the company during that period [Smith, Leimkuhler and Darrow, 1992].

Given its significance, there have been a growing number of research projects and publications on YM in the service industry, particularly in airline, travel and hospitality firms. However, despite the progress and accumulated knowledge, much of the available literature on YM is still fragmented and repetitive. In addition, the YM literature still focuses very much on technical, forecasting, decision-making and mathematical modelling issues. In particular, very few studies have so far provided detailed discussions and explanations on the implementation of YM practices and their potential implications for managing service organisations. In other words, the question of how service organisations can best manage change in relation to deploying contemporary YM practices and how they can deal with the implications of YM on other functional areas remains unanswered. This article therefore specifically aims to report on findings on the process of implementing a YM project in a service organisation. First, it reviews previous research on YM and its implementation in service organisations. Next, it explains the research methodology utilised and provides some background information about the participant company. It then presents the empirical findings and discusses their implications on the theory and practice. Finally, the article ends by drawing key conclusions from the research. Recommendations for practice and future research are also given.

DEPLOYMENT OF YIELD PRACTICES IN SERVICE ORGANISATIONS

The use of YM techniques can improve the ability of service organisations to both target sales and marketing activities more effectively and achieve greater revenues from a fixed inventory. Implementation of YM techniques is therefore considered a powerful tool for helping managers generate higher revenues as well as achieve greater customer satisfaction [Johns, 2000]. However, the complex and multidimensional nature of implementing yield practices is often referred to in previous studies. This is because multiple key factors need to be considered and controlled simultaneously when deploying yield practices, including market segmentation, production costs, sales costs, demand cycles, forecasting patterns, pricing knowledge, management's ability to monitor performance and analyse the activities of competitors, the customer–hotel interface, and training and incentives for managers and employees [Griffin, 1995, 1996; Kimes, 2000; Lieberman, 1993; McMahon-Beattie and Donaghy, 2000; Schwartz, 1998; Upchurch, Ellis and Seo, 2002].

In addition, the majority of previous studies advocate education, training and communication as key aspects in the implementation of yield practices in service organisations. In particular, training the relevant front-line staff, adjusting the reward system in favour of using the system and educating customers about the new yield practices are recommended activities for the successful deployment of yield management practices in service organizations [Brotherton and Mooney, 1992; Donaghy, McMahon-Beattie and McDowell, 1997; Kimes, 2000].

Studies by Ingold and Huyton [2000], Johns [2000] and Russell and Johns [1997] have discussed the importance of YM, its historical development in the airline and hotel industries and the main drivers behind the use of YM in service organisations. However, they have little to say on the process of implementing YM practices in airlines and hospitality organisations. Based on a detailed analysis of the views and actions of managers, Donaghy, McMahon-Beattie and McDowell [1997], Jones and Hamilton [1992] and Lieberman [1993] found that managers in service organisations often had a superficial knowledge of the definition of YM, its actual drivers and how YM practices can best be employed in service organisations. More specifically, on implementing YM practices, Donaghy, McMahon-Beattie and McDowell [1997] and Farrell and Helan-Ryan [1998] discussed deploying yield strategies and proposed yield implementation models. These authors viewed the development and implementation of a yield project as a linear and rational process. For example, Donaghy, McMahon-Beattie and McDowell [1997] utilised Lewin's [1951] three-stage model of change: unfreezing, changing and refreezing. The need for change is emphasised during the unfreezing stage, and the transition from old techniques to new ones takes place in the next phase. Finally, an evaluation of the new system is undertaken in the final refreezing stage. These authors stated that organisations follow this three-stage change model when deploying yield practices. However, recent views such as those expressed by Dawson [1997] and Wilson [1992] hold that Lewin's three-stage model has little practical value in cases of continuous and complex change.

Jones and Hamilton [1992] proposed a seven-step yield implementation model in hospitality organisations: (1) develop a yield culture, (2) analyse overall demand, (3) establish the price–value relationships, (4) create appropriate market segments, (5) analyse the pattern of demand, (6) track declines and denials, and (7) evaluate and revise the system. Jones and Hamilton stated that a successful YM system depends on people as much as on sophisticated technology. Donaghy and McMahon [1995] also proposed a ten-stage YM model, which seems to be similar to the above model proposed by Jones and Hamilton [1992]. Kimes [1999] provided a five-step implementation model for YM practices in restaurants. These steps are: (1) establishing

a baseline, (2) understanding the drive, (3) making recommendations, (4) implementing the changes, and (5) monitoring outcomes. All of these three studies view the development and implementation of YM practices as linear and rational procedures and there are important similarities among them in terms of proposed stages and propositions.

Using the critical success factors theory and administering a survey, Griffin [1995] identified 27 critical success factors to deploying yield management systems in lodging firms. Griffin further categorised these critical success factors into system, user-education, user traits, organisational support and external environment and claimed that the grouping and use of these independent variables determines the success of the yield system. He further claimed that these factors should be developed, employed and used by both middle management and top management. These 27 factors identified by Griffin are similar to those recommended in some previous studies [Brotherton and Mooney, 1992; Jones and Hamilton, 1992; Lieberman, 1993].

In an empirical study employing qualitative research techniques, MacVicar and Rodger [1996] investigated the implications of deploying yield management practices in human resources management (HRM) in two service organisations. Based on their research findings, they concluded that deploying YM practices can have significant implications on employee relations, recruitment, training, empowerment and on the delivering of quality services in service organisations. Thus, they stated that the human resource management function should play a key role when YM practices are employed. Their study was largely an exploratory one and did not provide further propositions on why and how YM could have an impact on the HRM function and which practices managers in service organisations should particularly undertake when implementing YM practices.

Luciani [1999] reported on the implementation of YM practices in small- and medium-sized hotels in Florence, Italy. Following previous studies, Luciani developed a model, which consists of factors such as technology, human resources, information systems, decision systems and external activities. He particularly referred to the role and importance of training and communication between hotel owners, managers and employees in implementing yield practices in small- and medium-sized hotels in Florence. This study provided interesting findings on how small hotels try to deploy their yield practices. However, it did not provide any specific recommendations on the implications of YM for the entire business as well as for other functional areas.

Yeoman and Ingold [2000] examined YM decisions and their implementation from the perspectives of rational, bounded rational, expert and chaos decision-making models. Based on a small number of cases, they provided

empirical evidence on the implementation of YM practices and concluded their study by recommending:

> an equation model: a chaos paradigm X rational/normative decision model = logical incrementalism. This model states that we take decisions in a chaos vacuum, for which yield management is seen to be a rational/normative decision model. But as managers do not take decisions using that model because of heuristics, it is proposed that the yield management process is that of logical incrementalism [2000: 128].

However, current research findings and debates in the decision-making field do not provide much support for the explanation provided by Yeoman and Ingold [2000]. This is because, through combining the rational and the chaos decision-making models, one cannot have or reach the logical incrementalism decision-making model since both decision-making models have opposing propositions. In addition, it is known that the logical incremental decision-making model is limited in explaining complex, rapid and radical change cases [Miller, Hickson and Wilson, 1999; Okumus, 2003a].

Peng and Litteljohn [1998, 2001] provided findings related to yield implementation practices in three hotel firms. Their research findings indicate that structural arrangements, organisational culture, communication and training are essential in implementing yield practices in hotels. Contrary to other studies, their findings provide support for a comprehensive approach to looking at yield practices. Sigala, Lockwood and Jones [2001] suggested that yield practices need to be integrated into the management and marketing of hotels since YM practices have wider implications for many functional areas in managing organisations. Supporting this, Donaghy, McMahon-Beattie and McDowell [1997] further stated that classic organisational structures are not effective in managing and employing advanced yield practices. They recommended a team approach which requires commitment and participation from all management levels when deploying YM.

The above section has reviewed the literature on the implementation of YM in the service industry, particularly in airline, travel, hospitality and restaurant organisations. Based on this review, it can be summarised that despite the progress made in recent years, the majority of previous studies are conceptual and the literature on YM is still far from offering sound theoretical and practical propositions on implementing YM practices in service organisations. It emerges that yield implementation is mainly interpreted as involving the installation of advanced information technology and the introduction of mathematical decision-making models in service organisations. There is limited knowledge of the strategic implications of YM on functional areas as well as on the organisational structure and culture. Finally, many studies appear to propose linear yield implementation models. However, this linear approach

to change has been found to be of limited practical value in complex and dynamic change situations.

METHODOLOGY

A case study approach was adopted for this study as this method provides an opportunity to explore issues in-depth through the systematic piecing together of detailed evidence in its context [Eisenhardt, 1989; Yin, 1994]. This approach was also chosen since, as in the case of the yield management field, it is particularly useful when the existing knowledge on the researched area is limited. Access to a major international hotel group was facilitated in order to investigate how the company implemented a centralised yield management project (YMP) in its over 160 hotel units. For the purpose of confidentiality, the name of the company is disguised. It will hereafter be referred to as the 'participant company' or 'the hotel group'. It is a diversified international hotel group, acting as the owner-manager, franchiser and management company, and operating at all levels of the hotel market. When the study was conducted between mid 1997 and late 1999, the company operated over 400 hotels in around 50 countries across Europe, the Americas, Asia, the Pacific, Africa and the Middle East. The hotel group was acquired by a conglomerate in the mid-1990s and became a strategic subsidiary generating the highest revenues within this conglomerate. Although the company had significant overseas operations, the implementation of the yield management project was first executed in hotels in the home country; therefore, its implementation process had to be investigated domestically.

A case study protocol [Yin, 1994] was developed in order to identify and follow the necessary requirements during the research process. The investigation of the yield management project was completed in three overlapping phases. In the first stage, the research focused on the level of the head office, where ten interviews were carried out with the corporate executives including two board members, the yield director and the project manager. These interviews lasted around one hour and all of them were tape-recorded. Company documents, reports and memoranda related to the project were also collected from the head office. The researcher carried out participant and non-participant observations at the head office and observed two YM workshops, which were organised by the Yield Department for the relevant people at head office and those at unit levels who would be utilising the yield system. In the second stage, the research concentrated on the regional and operational levels of the company. Here, eight hotel units were visited and a series of in-depth semi-structured interviews were carried out with relevant people such as regional managers, hotel general managers, deputy hotel managers, front office managers and other appropriate employees. These interviews lasted

from 30 to 90 minutes. All of the interviews were tape-recorded, but notes were also taken before, during and after each interview. Relevant documents and reports were also collected from hotel units. Ten days were spent in three hotel units to observe the implementation practices of the project. The nature of the observations was open non-participant. A contact summary form [Miles and Huberman, 1994] for each interview, observation and document was developed. As the data were collected over a long period of time, the majority of respondents were approached again for further questions about the first interview and also to follow up on the progress of the project. Feedback gained from this second round was also incorporated into the findings. In the third stage, the analysis of the collected data was undertaken through the coding of the data, identifying categories and subcategories and, finally, by explaining the relationships among the categories. Finally, an interim case summary was developed [Miles and Huberman, 1994; Yin, 1994]. It was believed that developing a 'thick' or 'rich' description [Denzin, 1998; Eisenhardt, 1989] of the investigated YMP could assist in identifying key themes, issues and patterns. A detailed research report was submitted to the yield director and other appropriate executives and managers in the participant hotel group. Further issues emerged from the discussions on the research report with the yield director and other company executives. Although the actual data collection process ended in late 1999, the researcher maintained contact with some key respondents until late 2000 in order to follow the progress of the deployment of the YMP.

FINDINGS

Organisational Structure, Culture and Business Strategy of the Hotel Group

The company was acquired by a conglomerate in the mid-1990s. Following this change in ownership, radical structural changes took place across the company during the investigation of the YMP. For example, new appointments were made to the senior positions of chief executive officer, marketing director, sales director, directors of three brands and IT director. Despite all of these structural changes, the company still had a bureaucratic organisational structure and the company's organisational culture was not very receptive to new ideas and changes. It was apparent that the company did not possess such a unique organisational culture that managers and employees would feel part of it. There were also variations in terms of power sharing and organisational culture among hotel brands. For example, London hotels were seen across the company as being dominant, which was not well received by other brands. Again there were also important differences in organisational culture between head office and hotel units as head office staff often felt superior to those who worked in hotel units. Reflecting the company's

organisational structure and culture, the overall communication system was mainly 'top-down' and 'formally documented'. Many respondents commented that the communication system (technically and culturally) was not very effective at creating collaboration between departments and at getting the right messages across different management levels. For example, one board member noted, 'We have a poor communication system in the company that goes back to structure and culture. It makes strategy implementation more difficult and challenging'.

Historically, there had been ongoing conflicts and misunderstandings between head office and hotel units when introducing and implementing strategic projects. Managers and employees were often sceptical about the projects coming from head office. For example, it was often implied that the company would introduce projects with great enthusiasm, but after a certain period of time the majority of the introduced projects were withdrawn with the explanation that they were no longer appropriate. One informant at head office explained the situation between the head office and the hotel units as follows:

> There is always a 'them and us' situation between the hotels and the head office ... 'This is another project they are trying to give us – waste of time' that is what the attitude has been.

It was evident from company reports, interviews and industry reports [Bailey, 1998] that prior to the change in ownership, the company had an unsatisfactory financial performance due to both poor management practices and recession in the early 1990s in the home country. Therefore, the company's overall business strategy seemed to be that of a 'turn-around strategy' or, as Baden-Fuller and Stopford [1994] put it, a 'rejuvenation of the company'. Although the YMP was perhaps a small component of this turnaround strategy, it was believed that it could help the company's revenues, ultimately leading to profits. Many informants, particularly from head office, believed that this initiative was of particular importance, as it would help hotels improve the company's overall revenue and profitability. It is worth noting that the YMP was implemented in a positive economic cycle. The hotel group reported significant increases in its occupancy and revenue figures between 1995 and 2000 in particular. Several informants therefore questioned whether the company would have invested in the project had there been a recession during this time.

In order to achieve the strategic objectives of the hotel group, some other projects and developments were being developed and implemented across the company. Table 1 lists some of these strategic projects, which were identified during the investigation of the YMP. There were strong links between some of these projects. For example, the YMP either complemented previous or

TABLE 1
PROJECTS THAT WERE DEVELOPED AND/OR IMPLEMENTED DURING THE LIFE
CYCLE OF THE YMP

Grouping	Related projects	Unrelated projects
Initiatives implemented before the YMP	• The Central Reservation System Project • Developing a database to store the necessary data	• Restructuring process after acquiring a new hotel chain
Initiatives being considered and/or implemented during the life cycle of the YMP	• Rate by length of stay project	• A radical structural change at the operational level (introducing regional hotel managers)
	• Implementing the YMP in international properties	• Radical structural change and appointment of new senior executives
	• Revenue Management [name disguised]	• Excellency in Customer Service

current related projects, or the stability of the yield project relied on these projects, particularly the Central Reservation System (CRS), database and agent interface development (AI). The related future projects were intended to develop the yield project one step further.

The Development and Implementation Process of the YMP

Phase I. Yield management was not a new concept to the case study firm. There was a range of different manual systems across the company as each hotel unit had its own way of managing yield. Because of this disparity, the efficiency and effectiveness of managing yield very much depended upon the ability and experience of the rooms and reservations managers at the unit level. From the perspective of the head office, marketing and sales departments had to rely on the forecasts made by the units, which often resulted in undesirable outcomes such as inaccurate forecasting and subsequent low generation of revenues. Developments in information technology provided an opportunity to design and implement a centralised YM system. In short, the company aimed to design a computerised system that could predict and monitor the demand for every hotel and, based on this, provide daily recommendations to each hotel for the next six months.

A similar project was first tested on the company's budget hotel brand and, further to this trial, a yield project was introduced in 1994. However, due to other priorities, such as the deployment of the company's centralised reservation system (CRS) and the acquisition of another hotel group, the

project was postponed and the project team was disbanded. Some members of the new project team stated that trying to re-introduce a previously unsuccessful project was more difficult than developing and implementing a new project. The change in ownership of the participant company had a positive impact on the YMP, as the new owners had acknowledged the need to implement a centralised YMP as an important business initiative. However, a series of sound project proposals was presented both to the new owners and also to the hotel group board in order to achieve and maintain the support and commitment of company executives. The hotel group defined distinct quantifiable financial objectives and established a set of written plans group and allocated over £4 million for the implementation of the YMP. In addition, a Yield Department was formed at the head office to implement the project. A yield director with substantial experience and background in the YM field was appointed and several yield analysts were then recruited. A Project Board was also formed, consisting of several members including the two managing directors of operations, the IT director, project manager, the yield director, and the inventory director. A company project management handbook was the primary tool used to implement the project. It offered a step-by-step implementation model and provided suggestions about what to do at each stage.

Further to the acquisition of the hotel group, the IT department underwent a restructuring process and many IT activities were outsourced. Therefore, the hotel group had to work with two external firms to develop and implement the yield software. One company was responsible for the development of the yield software and the other was in charge of its maintenance. These external companies were vital in designing and implementing the project since the hotel group did not have sufficient knowledge and competence in computing and mathematics. Active coordination, communications and discussions took place between the yield team and representatives of the two external companies during the process of designing and improving the yield system.

The main preparation and implementation activities of the YMP as well as the key developments within the hotel group are summarised in Table 2. Although these preparation and implementation activities did not seem to be so visible nor was their importance recognised, it was apparent that they were significant in terms of building the infrastructure for the YMP. For example, the deployment of a new CRS was key, since the company had then developed a two-way interface between the property management systems (PMSs) in units and the CRS. Many respondents considered the development of this interface to be the first phase, as the reliability and stability of the YMP depended heavily upon these two previous projects. In other words, the YMP was built on these two previous projects.

At the operational level, each hotel was required to form a yield committee consisting of relevant managerial staff including the hotel manger, deputy

TABLE 2
YIELD IMPLEMENTATION ACTIVITIES AND OTHER KEY DEVELOPMENTS IN THE
HOTEL GROUP FROM EARLY 1990 TO 2000

- A basic yield system was tested on the company's budget brand
- A yield project was introduced but suspended due to other priorities
- Deployment of the Central Reservation System (CRS)
- Developing an interface between the CRS and PMSs
- Second introduction of the yield management project
- A new yield department and project management group were formed
- A project proposal was prepared and presented to the Hotel Board
- A series of formal presentations were made to members of the Hotel Board
- The project proposal was approved and £4 million were allocated for the project
- Operational plans were designed
- Data was collected from PMSs in hotels and a database was developed
- An Agent Interface was developed between the PMSs in hotels and the company's CRS
- Training workshops and a training handbook were prepared
- Yield recommendation reports and forms were designed
- Computers were installed in hotels and hotels began receiving trial reports
- The project was piloted in two hotels
- Training workshops were introduced
- Yield Committees were formed in hotels
- Hotels started going live with the system and following the recommendations
- Problems with the yield system: inconsistent and unreliable recommendations
- Problems encountered with the external companies
- Further resources were made available
- Changes and improvements made in the yield system
- Further yield training workshops due to a high labour turnover and other changes
- The 'rate by length of stay' phase of the project was introduced
- Appointment of the new CEO and structural changes
- Presentations on the YMP were made to new incoming executives
- Inventory and Yield Departments were combined under 'Revenue Management'
- New working agreements with other external companies were signed to work on designing and implementing the YMP and other forthcoming projects
- Communication and training were seen as ongoing implementation activities
- Monitoring the project and its progress was seen as an ongoing task
- Discussions were held on implementing the management project in international hotels
- Discussions were held on new complementary projects

general manager, front of house manager and reservations manager. Some of the members of this committee were expected to examine the yield recommendation reports every morning before 10 AM and inform the yield department at head office if they wanted to make any changes. This committee was also required to hold weekly meetings to examine yield reports and discuss yield issues. It is worth noting here that there were variations in the hotels' capabilities and skills in YM practices and that this had implications for the implementation process of the YMP. For example, in large hotels there was a dedicated reservation manager and staff who specifically focused on YM practices. In smaller hotels, the front office staff performed all of these functions, which meant that they also needed to be trained and prepared to manage

yields. Some brands had small hotels that were not connected to the company's CRS. These hotels were therefore excluded from the project. Finally, hotels in big cities like London attracted more employees, while some provincial hotels faced problems recruiting qualified staff.

The YMP was communicated to managers and employees in hotels via yield workshops. First, seven workshops were organised for managers and employees from head office and from 160 hotels. Each workshop lasted one day and was attended by between 60 to 75 people from about 25 hotels. The hotels were grouped into different categories depending on their PMSs, and each group's training workshop was modified and adjusted accordingly. People from hotels were first required to attend training courses on PMS, the CRS and the agent interface before attending a yield workshop. There were criticisms of the way the project and its implications were first communicated to lower levels. Many informants from the hotels stated that their initial understanding was that the YMP was going to take control away from them. For example, one front office manager stated that:

> When I first heard about the project it made me quite nervous because it seemed to me that the business was going to be recommended on my behalf . . . There was a bit of fear and apprehension.

One yield analyst also commented on that:

> The very first workshops we had were extremely negative . . . There were big changes being made across the company and people from hotels were called to come along to a yield workshop. We were telling them about a new system where they initially perceived that we were just going to take all their responsibility away from them, which further led them to feeling even more insecure about their jobs.

After this initial confusion stage, the project and its implications were communicated following a more consultative approach, and the use of yield workshops was positively received. The content and quality of the workshops were evaluated after each session and improvements were made. However, due to ongoing structural changes across the hotel group, communication problems related to the project continued.

Many informants at the operational level and at head office were pleased to be associated with such a new initiative, often claiming that it was a rewarding experience for them to try something new and that it would be good for their future career. However, the majority of informants claimed that, although the YPM would provide new skills and extra time, it would not provide any financial benefits for them in the short term. Senior managers also confirmed that employees would not receive anything from the implementation of the YMP. For example, the managing director of the UK Hotels stated that

'employees will actually get nothing . . . It is just a tool to enable them to do their job properly',

Phase II. The operational plans developed earlier were primarily used for the implementation process of the YMP. However, members of the project team could not follow their initial plans in a precise manner because unexpected problems and difficulties resulted in delays in implementing the project. The main reasons for the delay were that the yield software was not reliable and that many hotels had received irrelevant and inconsistent reports. This was because the yield system was initially designed for airlines and the project group and the external companies were trying to adapt it to the hotel business. To overcome these problems, the project team and the external companies had to make improvements to the yield software, which required more resources and time. Some parts of the system had to be changed and modified. However, the two external companies were not particularly helpful in responding in time to the demands and requirements of the project team and, unfortunately, the contracts signed between these companies and the hotel group did not impose strong penalties on the external firms. Some members of the yield team were particularly frustrated with the slow response and lack of support from the external firms. Halfway through the project deployment, the hotel group cancelled the agreement with these companies and signed a new contract with the third company. A further issue of working with external companies was that, as the technology was fast-changing, the systems being implemented were becoming outdated but the hotel group did not seem to have a vast amount of resources to invest in new versions of the software. Another reason for the delay was that due to high labour turnover across the company, some hotels did not have employees and managers who were trained to look at the yield reports and recommendations. A final reason was that managers from hotels showed resistance to the project, claiming that because of the YMP's restrictions, hotels could upset and lose their loyal customers. Additional financial resources were needed to redesign the yield software and also to arrange further training workshops. This also took time, since the members of the yield team had to convince the executives of the new owning company as well as the members of the hotel board of why more resources were needed.

Halfway through the implementation of the YMP, the CEO left the company and several months later a new CEO was appointed. Further to this, radical structural changes took place again and new appointments were made to senior positions. To complement these changes, the Yield and Inventory Departments were combined into a 'Revenue Management Department'. The inventory director left the company and the existing yield director was appointed as the revenue director world-wide, reporting to the director of the Distribution and Revenue Department, which was also a new department

reporting to the managing director of sales and marketing world-wide. Yield analysts needed to report to the revenue director, but they would also have a separate line of communication to the managing directors of each brand. These new appointments meant changes to the project group and required the yield team to further communicate and sell the project to the new incoming executives, including the new CEO.

One of the main aims of the YMP was to adopt a new 'yield culture' at the corporate, regional and unit levels. This new yield strategy gave more emphasis to the whole hotel product and experience rather than to just the room type. This meant a cultural change for many employees. Training workshops organised by the Yield Department were instrumental in the adoption of such a yield culture across the company. However, one day of training was not enough to adopt a yield culture. Second, a high labour turnover, particularly at the unit level, was a major problem in implementing the YMP. This put extra pressure on the yield team, as they had to organise further yield workshops for new people when already trained and experienced operational staff had left the company. Not only did this result in additional costs in terms of resources and time but it also made it difficult to create and sustain a 'yield culture' in hotels. The Yield Department started arranging training workshops on a continuous basis in order to minimise the negative impact of the constant labour turnover on the project deployment.

One of the most important issues remaining to be addressed was the need to communicate with customers about the new yield strategy. Managers and employees in the hotel units had not been prepared to explain the implications of the new yield strategy to customers and to handle customer complaints. Many respondents at the unit level had serious concerns about losing and upsetting their existing loyal customers due to the recommendations and restrictions given by the YMP. Some of the issues arising from the interviews were:

> Customers will not like what we are trying to do. Airlines do it but they do not just draw the curtains, they also change magazines, food and service. In good times like now it is okay, but how about our bad times, how can we retain our loyal customers? [A front office manager] There is a culture beginning in ... whereby we do not actually sell a double or twin room to a customer, we just sell them a room. We are more interested in rates and revenues. I believe that this is wrong and I think it is going too far. This new culture takes yield management a little too far. [A hotel manager]

It was known that the yield system was flexible enough to allow hotel units to book rooms for their loyal customers. It seemed that the managers and employees from hotel units often used the issue of alienating loyal customers as an excuse to resist the project.

Towards the end of the investigation, many informants believed that, although the deployment of the yield system in hotel units was almost completed, the YMP itself was still new within the company and that therefore it would take a few years to see its actual outcome. However, the informants, particularly from head office, argued that a number of objectives of the project had already been achieved. These included: (1) the completion of an agent interface between the company's CRS and PMSs, (2) the system was producing recommendation reports to over 160 hotels and (3) the system was providing management information for the marketing, sales and HRM departments. Although some of the results and implications of the project were apparent, there was still a question about how customers would react to this strategy. Company executives were also trying to understand and evaluate how and where they could use the information produced by the yield system. It was apparent that the hotel group had focused on simply installing the yield software and was not completely successful in adopting the yield culture at the time of the investigation. For example, the managing director of one brand stated that 'I wish we could have thought more about the need to change attitudes rather than just install the technology'. Put another way, many uncertainties and questions emerged from the implementation process of the YMP. In addition, by the end of the investigation the yield team started to work on new and more comprehensive projects including upgrading the yield system and implementing the yield strategy in international properties. They signed a contract with another external company to work on these new projects. With these new projects, the executives of the company were hoping to manage the yield and occupancy of the group as well as to apply the yield practices in the conference and in the food and beverage sides of the business. However, in early 2000, further radical changes in structure took place across the hotel group. Subsequently, many managers and executives, including the yield director, left the company and new ones were appointed.

DISCUSSION

Further to providing a rich and critical description of how the YMP was implemented in the participant hotel group, the section aims to discuss and synthesise the implications of the research findings in light of previous research studies into yield implementation. The following discussions are based on several key themes that emerged from the empirical data presented above.

The Role and Importance of Context in Implementing Yield Projects

The research findings do not provide much support for linear yield implementation models. There was actually no definite and formal starting point for the

deployment of the project. The participant company had been trying to maximise its yield for many years manually or by using property management systems. In other words, managing yield was not an entirely new concept and therefore there was no need to abolish the existing practice. The only difference was that, with the help of an advanced computerised system, the company was aiming to improve and manage its revenues in a more efficient and professional manner. It was also difficult to clearly identify where the development stage ended and where the implementation stage began. The impression was that the company had a 'strategic intent' to deploy a centralised yield system or advance yield management practices across its hotel units, but the design and deployment of the strategy was viewed as an incremental process of trial and error, and perhaps as more of a learning process. As presented above, neither the 'unfreezing' nor 'refreezing' stage [Lewin, 1951] seemed to exist, as the hotel group was continuously developing and implementing radical or incremental changes to adapt to changes and developments within and outside the company. In other words, the company seemed to be in a continuous process of yield implementation, building on previous practices. These findings, therefore, do not provide strong support for previous studies such as those by Donaghy and McMahon [1995], Donaghy, McMahon-Beattie and McDowell [1997], Farrell and Helan-Ryan [1998], Jones and Hamilton [1992]   and Kimes [1999], which viewed yield development and implementation as a linear process. Although such linear and rational yield models are simple and easy to understand, the development and implementation of the yield practices seem to be much more complex and dynamic, which makes impossible to follow such a linear approach. In the fields of strategy and strategic change management, there have been criticisms of these linear change models [Dawson, 1997; Okumus, 2003b; Pettigrew, 1998; Wilson, 1992], suggesting that more contextual approaches are essential when analysing and evaluating complex and dynamic change processes.

The research findings suggest that the deployment of yield practices not only offers considerable potential revenue benefits but also provides valuable data support and guidance in the making of marketing, finance and HRM decisions. It was apparent that in the participant company the YMP started providing data for marketing, finance and HRM decisions. However, it seemed that the executives and managers of the company were still learning how to retrieve and use the information produced by the system. It was also evident that executives and managers from other functional areas were not very aware of the fact that the yield system could provide information for them. The reason for this was that the participant company's organisational structure and culture did not facilitate active coordination, cooperation and communication between different functional and management levels. This resulted in a limited amount of organisational learning for all of the parties

involved in the implementation process of the project. The implication of this finding is that the context, particularly the organisational structure and culture of a company, is important not only to provide suitable conditions for smooth and successful implementation but also to pass experience, knowledge and relevant data to other management and functional levels.

Multiple factors were found to play key roles in the deployment of yield practices. In other words, the participant company implemented the yield project through utilising or employing operational plans, by carrying out structural changes such as forming a yield department at the head office and a yield committee at the unit level, recruiting relevant employees and managers, and holding training workshops and communication activities. In addition, allocating financial resources and using advanced technology were also key to implementing the project. These findings are in line with the suggestions and findings of previous studies into YM [Brotherton and Mooney, 1992; Donaghy, McMahon-Beattie and McDowell, 1997; Griffin, 1996; Jones and Hamilton, 1992; Lieberman, 1993; Schwartz, 1998]. However, the important emerging point here is that that using these elements was not a one-time activity. It was rather a continuous process in which these elements were used continuously and simultaneously depending upon the situation.

It was further evident from the research findings that using these elements on a continuous basis was still not sufficient, as wider issues need to be considered such as the changes and developments in external environment as well as in a company's structure and culture. Alongside the YMP, many related and unrelated changes and projects were ongoing within the participant company, which had a negative impact on the deployment of the YMP. These findings are important, as previous studies on yield management have focused on a single change. In other words, the tendency has been to look at only yield management practices and their implementation and ignore dynamics, politics, other changes and developments within a company. The research findings suggest that without considering these issues, implementing any yield project does not seem to be feasible. It can therefore be suggested that when looking at the development and implementation process of yield management practices, executives, managers and researchers should consider previous, current and future projects and their potential implications on yield implementation and also consider the potential implications of developments in the external and internal environment of an organisation. This finding provides further support for a comprehensive and contextualist approach to yield implementation.

Viewing Yield Management from Different Decision-Making Models

Looking at the development and implementation of the investigated project, the research findings do not support one specific decision-making model.

For example, the YMP was designed and implemented in order to improve the company's overall economic performance. There were formal plans and budgets to be followed for its deployment and the project had quantifiable financial aims and objectives. The company employed experts both in yield management and information technology to work specifically on the project. These findings suggest that the participant hotel group employed some elements of the rational, bounded rational and expert decision-making models. The research findings further indicate that the YMP was implemented in an incremental way, based on trial and error. As described, it ultimately emerged as a result of implementing previous related projects, and the success and the reliability of the project very much depended on the performance of these previous projects. As the implementation process progressed, the members of the yield team realised that new concepts, issues and challenges were emerging, and learned from their experiences and mistakes. They further realised that the company's structure and culture had an impact on the implementation process of the project. These findings further suggest that elements of the logical incrementalism decision-making model were present. In addition, given the size and diversity of the hotel units, the yield team did not impose uniform rules and procedures when launching the project at the unit level. They needed to be flexible to meet the specific operating environments that hotels of different sizes and locations had to cope with when serving different markets. Changes and developments in the company's external environment were considered, and they also had an impact on the deployment of the project. In short, some elements of the contingency decision-making model could also be observed in the case study.

It was further evident that in order to implement the project the company was trying to develop cooperation between people at different management levels; change the company's structure; adopt a yield culture; allocate resources; develop formal and informal communication systems; and recruit, train and motivate employees. To come to a consensus about the project and gain commitment to it from all levels was an easy and realistic task to achieve. In addition, as the company had been taken over only a few years earlier, the new owners were implementing additional projects and radical structural changes right across the company, which had a further impact on the company's structure, culture, resources, employees and channels of communication. As a result, the members of the yield team had to continuously spend extra effort and resources in order to overcome these emerging problems and issues. It seemed that the participant company was operating in a state of non-equilibrium or 'bounded instability' [Stacey, 1995]. Having to cope with such contradictory forces and not being able to achieve the desired coherence to implement a yield project showed the implications of the chaos model of decision making. To conclude, according to the

research findings, relying on a single decision-making model to understand and evaluate the development and implementation of yield decisions does not seem to be a reliable and preferable approach. Due to the complex and evolving nature of the implementation process, depending on the situation the implications of the rational, bounded rational, cognitive, contingency and chaos decision-making models provide useful explanations and guidelines. In other words, consistent with Miller, Hickson and Wilson [1999] and Okumus [2003a] decision-making models complement rather than compete with each other, and simultaneously considering multiple decision-making models provides a better understanding and explanation of YM practices.

Working with External Companies

When developing and implementing advanced YM systems, service organisations often rely on external IT companies. This is because many organisations lack the knowledge, expertise and technical skills to develop the YM systems by themselves. This was also the case for the participant hotel group, which worked with a number of external IT companies to design and implement the YMP. Although working with external IT firms helped the hotel group in terms of transferring knowledge and technology, there were some serious unexpected technical and cultural problems between the participant group and these external firms. This was because, similar to the findings of Donaghy, McMahon-Beattie and McDowell [1997] and Kimes [2000], the external companies were trying to adapt a yield system from the airline industry to the hotel business. It was further evident that there were conflicting interests and different understandings of YM between IT suppliers and the hotel group in implementing yield systems, which seemed to undermine the deployment of the project. In addition, an informal working relationship, coordination and communication seemed to be crucial in developing and maintaining a healthy working relationship with external companies. The overall implication of this finding is that working with external companies can be problematic and therefore a detailed analysis should be conducted before signing a contract with an external supplier to ensure that there will be no clashes between companies in terms of business aims, organisational structure and working culture. In addition, the contract should be comprehensive enough to secure the needs and expectations of service organisations. The existing YM literature is also limited in this area and future studies can perhaps provide further evidence of how service organizations can better work with external IT suppliers in developing and employing yield practices.

Preparing Employees and Customers

In a number of previous studies [e.g., Kimes, 2002; Jones and Hamilton, 1992; Lieberman, 1993] it is recommended that yield implementation should not

only be seen as a matter of investing in technology. The research findings indicate that the participant company initially viewed the deployment of the project more as an investment in technology and failed to consider its cultural implications. It was in the later stages that the need to focus on more cultural change was recognised. It was apparent that the project did not provide any visible rewards for the relevant employees and managers. Moreover, many employees initially perceived the project as a threat to their jobs. It is also worth mentioning that a number of factors such as unfavourable working conditions, low pay and poor HRM practices resulted in a high turnover of labour in the hotel group, which subsequently had a negative impact on the deployment of the YMP. This means that poor HRM practices and a high labour turnover can have negative implications for the implementation of yield projects.

Kimes [2002] emphasised that service organisations should convince their customers that they are fairly treated. The research findings reveal that in order to educate customers, the participant group needed to train their managers and employees and change the company's yield culture. However, due to the high turnover of labour and also to the fact that the yield workshops did not actually focus much on this issue, the education of customers was neglected until a very late stage in the deployment of the project. In addition, both the training and convincing of employees seemed to be a slow process that required continuous training and communication activities. This finding implies that in order to educate and inform customers about yield practices, internal customers should first be educated and convinced. In addition, labour turnover should be minimised and good HRM practices should be employed. However, this seems challenging, since longstanding characteristics of the tourism and hospitality industry are involved. As stated by Kusluvan [2003] and Wood [1997], tourism and hospitality organisations have so far failed to employ professional HRM practices.

CONCLUSIONS AND RECOMMENDATIONS

This is one of the first studies aimed at providing empirical evidence of the implementation process of yield management practices in service organisations. Several key conclusions can be drawn from an evaluation of the research findings. First, implementing yield management practices in a large service organisation seems to be contextually a very difficult and complex task. There is no quick fix or simple recipe to follow. Second, developing and implementing a yield management project is not a rational and linear process. It appears to be a dynamic and continuous process where the organisational structure, culture and dynamics of a company play important roles. There seems to be no starting or ending point in yield implementation activities and many learning outcomes are associated with the deployment of YM

practices. Third, the existing literature on yield management appears to view yield implementation as a tactical activity and therefore fails to explain the strategic implications of deploying yield practices in service organisations. In other words, most previous studies have tended to look at yield practices and ignore the wider context in which the project is implemented. The research findings suggest that it is the context and other changes/developments that often determine the progress and success of the yield implementation process. Therefore, researchers and executives should view YM practices from more a holistic perspective. Fourth, the implementation of yield management practices does not appear to be only about computerisation and forecasting. Organizations need some form of cultural and structural changes in order to become more receptive to change and also to facilitate the active support, coordination and communication of all levels of management. However, these cultural and structural changes cannot be achieved within a short period of time by sending memos and delivering short training workshops. All relevant staff and managers not only need to be trained about the fairness of yield management practices but also be convinced that they need to change their habits and working practices. Customers also need to be informed and educated about these YM practices, which also seem to be a challenging task due to poor HRM practices in among hoteliers in particular. Fifth, the characteristics of the hotel industry, such as its dynamic nature, acquisitions, high labour turnover, traditional organisational structures and cultures, seem to have an impact on YM implementation practices. The overall conclusion of this article is that the existing literature on yield implementation is still limited; therefore, scholars and practitioners working on this area should look at yield implementation more from the perspectives of the literature on strategy and change management.

This study has a number of limitations. First, it presented empirical data about only a single case study from a large hotel group. Second, it provided qualitative empirical data collected via interviews, observations and document analysis. Third, as the participant company had been acquired earlier, during the investigation there were ongoing radical structural changes across the company that had an impact on the deployment of the project. These limitations should be considered when evaluating the research findings. However, it is essential to note that the intention of this study is not to generalise its research findings but develop a deeper and richer understanding of complexities and dynamics of yield implementation in service organisations. This has been missing in the literature on yield management. Nevertheless, it should further be remembered that for the last ten years most major hotel groups have either acquired other chains or been acquired by other conglomerates [see Bailey, 1998; Sangster, Wolton and McKenny, 2001]. Poor HRM practices, a high labour turnover and traditional organisational structures are

also common, particularly in tourism and hospitality organisations [see Kusluvan, 2003; Wood, 1997]. It is hoped this study will stimulate further research into this area and that future studies will provide more empirical evidence on yield implementation in service organisations.

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