

Wasted millions: Revenue management in Dutch culinary restaurants

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The concept of revenue management is widely adopted in various industries including the hospitality industry. Yet, its application to the restaurant industry has been limited. Especially culinary restaurants appear to be a somewhat unexplored area of study, thus indicating a gap in the literature for restaurant revenue management. No previous research in the Netherlands has included culinary restaurants as a separate category in studies on restaurant revenue management. The research method is a case study approach leading to explanatory interviews, in addition to the experience of two of the authors themselves with over a total of 25 years of experience in the culinary restaurant business in the Netherlands. Eleven key stakeholders representing the Dutch hospitality and restaurant industry were interviewed. The interviews were then analysed and conclusions drawn. Dutch culinary restaurants do not consciously practice revenue management and thus do not have a strategy for it. This means that if culinary restaurants in the Netherlands could achieve the 2–5% revenue improvement that is typically associated with the application of revenue management, overall revenues could be increased by eight million Euros annually, almost all directly added to the bottom-line of these businesses.

Keywords: financial management, restaurant management, Dutch fine-dining restaurants, increased profits

Introduction

Restaurants have been operating throughout history. The dictionary defines a restaurant as “a place where people pay to sit and eat meals that are cooked and served on the premises” (Oxford Dictionaries, 2013). Restaurants operate in a complex business environment and suffer some of the highest failure rates amongst business start-ups (Camillo, Connolly, & Gon Kim, 2008; Enz & Canina, 2012). Consequently, it is essential that restaurants operate their businesses effectively. Two key elements for an effective operation depend on how a restaurant manages both the demand and the capacity of the restaurant (Cross, Higbie & Cross, 2008; Gehrels & Dumont; 2012; Kimes, 2004b). These elements mentioned include decisions on, for example, accepting reservations and assigning customers to specific tables (Kimes, 2004a). Many restaurants take these decisions based on intuition and personal observation. The mentioned examples, however, involve a set of decisions and techniques for which restaurants should have a strategy (Kimes, 2004b).

Research into these elements led to theories of (restaurant) revenue management. Kimes (1999) states that restaurant revenue management is about selling the right seat to the right customer at the right price for the right duration. This paper will examine how revenue management in Dutch culinary restaurants is currently managed. Historically, it was in France that the first so-called “culinary restaurant” was opened in 1765 (Surlemont & Johnson, 2005). Today culinary restaurants are recognised as fine-dining restaurants, gourmet restaurants or gastronomic restaurants that operate at the upper segment of the restaurant market sector (Cross,

1997; Thompson, 2010; Guo, Xiao, & Li, 2012). This segment distinguishes itself by offering exclusive service, and quality food and beverages (Gehrels & Dumont, 2012). Culinary restaurants provide (sell) experiences and, according to Pine and Gilmore (1999), companies stage an experience whenever they engage customers, connecting with them in a personal, memorable way. Michelin describes the top level of culinary restaurants as “worth a special journey”. In a personal encounter between the author and the head-inspector of Michelin Benelux (Belgium, the Netherlands and Luxemburg), the inspector referred to perfectly prepared dishes as a “souvenir”. According to Johnson et al. (2005), Michelin-star rated restaurant chefs are tremendously successful as culinary artisans; however, the financial success of the Michelin-star rated restaurants is far more heterogeneous (Siguaw & Enz, 1999). Johnson et al. (2005) reported that only 8 of the 15 three-Michelin-star restaurants they investigated in terms of their financial performance turned out to be profitable. The ultimate goal of a sustainable business is making money and profit; therefore, applying restaurant revenue management to Dutch culinary restaurants could improve both revenues and profits (Gehrels & Dumont, 2012).

Revenue management

Revenue management stretches back over almost five decades (McGill & Van Ryzin, 1999; Lieberman, 2003) and has successfully been adapted to many industries, which include: airlines, rental-cars, convention-centres, movie theatres, golf-courses, stadiums and arenas, internet service providers, cruise-lines, continuing-care hospitals, hotels, and more recently

the restaurant industry (Muller, 1999; Anderson & Xie, 2010; Haensel & Koole, 2011). Revenue management originated in the airline industry following the airline deregulation in 1978. Market conditions at the time necessitated the need for a new approach towards managing the airlines' perishable product. Airline deregulation was a revolutionary concept that enabled the industry freedom in developing pricing and marketing strategies (Shoemaker, 2003; Smith, Leimkuhler, & Darrow, 1992). Revenue management was originally referred to as yield management or perishable-asset management (Kimes et al., 1998; Yeoman & Watson, 1999; Kimes, 2008b). There is no commonly agreed definition for revenue management and therefore definitions vary per industry and perspective (Cross, 1997; Yeoman & Watson, 1997; Kimes, 2001; Kimes & Wirtz, 2003). A commonly used definition (Cross, 1997) says that revenue management is the application of disciplined tactics that predict consumer behaviour at the micro market level and optimise product availability and price to maximise growth. Typically, revenue management is a practice that is used to increase companies' revenues (Cross, 1997; Kimes & Wirtz, 2003; Hwang & Yoon, 2009; Thompson, 2007). The literature confirms that this is achieved through effective management of three main areas: firstly, pricing strategy; secondly, inventory control; and thirdly, the control of availability (Thompson, 2007; Thompson & Kwortnik, 2008; Kimes, 2010a). In other words, revenue management is an important tool for matching supply and demand by segmenting customers into different market segments based on their willingness to pay for an experience, and allocating capacity to the different market segments in a manner that will maximise the company's revenues (Thompson, 2002; Thompson 2003a; Kimes & Wirtz, 2007).

Lieberman (2003) states that revenue management is fundamentally about making the right short-term trade-offs to increase long-term revenues and profits. This view is shared by Kimes and Wirtz (2003), who argue that short-term revenue growth could damage customer relationships. The essence of revenue management, however, is in many cases more revenue-focused rather than customer-focused (Kimes & Wirtz, 2003; Kimes & Thompson, 2004; Cross et al., 2008). Furthermore, Cross et al.'s study from 2008 indicates that a long-term perspective will be added to the discipline, leading towards a customer-centric approach, thus, focusing on demand management instead of purely revenue management (Cross et al., 2008; Heo & Lee, 2010). Different studies indicate that companies practicing revenue management report an increase in revenues of 2 to 5% (Hanks, Noland & Cross 1992; Smith et al., 1992; Kimes, 2004b) without any significant investments made, which in some cases resulted in a 50–100% increase in profits. For example, over \$100 million is generated annually at Marriott Hotels (Cross, 1997).

Revenue management in restaurants

Kimes (1998) found that restaurant businesses are similar enough to other service industry business that it should be possible to apply revenue management principles to restaurants. The potential lies in management's ability to market and manage every available moment of the restaurant as a unique product (Kimes, 1998). Although not specified under the name of revenue management, other different approaches have been put forward to increase revenues for

restaurants. Muller (1999), for instance, proposes that the restaurant industry could gain from the application of some "manufacturers'" management tools like calculating capacity use, modelling and simulation, and forecasting. Quain, Sansbury, and LeBruto (1999) address managerial factors that can increase restaurants' profitability, such as controlling seating, expanding capacity, and developing partnerships. A tool introduced earlier for restaurant profitability that is still powerful today is menu engineering (Parsa et al., 2005; Kimes, 2010b; Kimes & Kies, 2012). This was introduced as a tool for restaurants back in the 1980s. Menu engineering is a method of menu analysis and item pricing that considers both the profitability and popularity of competing menu items (Ninemeier, 2001). Restaurants operate in a complex business environment, with many different factors determining the failure or the success of operating a restaurant, and Parsa et al. (2005) provide an overview of which elements could determine this success or failure (Parsa, et al. 2005; Kimes & Kies, 2012). Some elements of failure include: poor communication with customers, lack of documented strategy (only informal or oral communication of mission and vision) and lack of operational performance evaluation systems (Kimes & Wirtz, 2002; Gehrels & Dumont, 2012). Some elements of success include: adapting desirable technologies, having a distinctive restaurant concept that has been well researched, and regular communication of these values and objectives to employees (Ansel & Dyer, 1999; Needles & Thompson, 2013). Successful restaurants are usually operated by an owner with passion, high energy levels and an authentic restaurant concept. Camillo et al. (2008) propose that the success of a restaurant hinges on five constructs with as many as fifty different variables (Camillo et al., 2008; Thompson, 2010; Kimes, 2008a). The mentioned constructs are: strategic choices, competitive factors, marketing, resources and capabilities, and owner-manager traits, often lifestyle-based. The restaurant industry presents a challenging, and complex business environment in which to be profitable (Camillo et al., 2008; Kimes & Kies, 2012).

Locking or pooling

Thompson (2010) suggests that the term restaurant revenue management focuses on revenue rather than on profitability. He presents a decision-based framework for restaurant profitability management that involves a broader way of looking at restaurant revenue management. Thompson (2010) views restaurant revenue management from the perspective of emergent themes; the two dominant themes are "capacity management" and "customer experience". Thompson (2002) first investigated the impact of "combinability" in restaurants that only accept "walk-in business" (i.e., no reservations are accepted). Combinability refers, for example, to the possibility of a restaurant to combine two four-top tables (two tables that both seat four people) in order to accommodate a party of eight. Thompson (2003a) introduced different steps to enhanced profitability using table-capacity optimisation. This process involves the simulation of alternative configurations in order to evaluate the different performances. Later, Thompson (2007) developed a tool (a web-based restaurant table mix optimiser – RTMO) to identify the best mix of tables for a restaurant, and reports that restaurants could increase their peak revenue by almost 15% by implementing a more

effective table mix and thus turning away fewer customers. Kimes and Robson (2004) asserted that the method developed by Thompson proves useful in determining an appropriate mix of tables for a restaurant, yet argue that the method is not able to suggest guidelines for positioning, configuration and styles of the recommended table mix.

Thompson and Kwortnik (2008) examined how assigning restaurant reservations to tables affects operational efficiencies; should a reservation be “locked” to a specific table at the time the reservation is made, or should the reservations be “pooled” and assigned to a table in real time? (Huang & Chang, 2011). The results confirmed the benefit of “pooling” restaurant reservations in comparison to locking reservations to specific tables, comparable to the situation in the airline industry (Huang & Chang, 2011). However, different seating arrangements deliver different experiences and satisfaction levels. Hwang and Yoon (2009) report that customers are willing to pay more for a better table location. Restaurants could charge different prices for different table locations like they do, for example, in theatres and airlines. Few restaurants have applied this location-connected seating tactic. Because this is not a common practice, customers might perceive price differentiation by table location as being unfair (Hwang & Yoon, 2009).

Information technology

Another important part of revenue management is the application of information technology. Kimes (2008c) states that the appropriate technology can help restaurants to increase revenues and profits. Information technology can support restaurants in many decisions and can assist in achieving higher revenues and increased guest satisfaction. Kimes (2009) also comments that restaurant customers appreciate the convenience of making reservations online, and provides suggestions for restaurant operators to manage online reservations. Amongst these suggestions is the consideration for restaurants to use third-party websites such as Opentable.com. Kimes (2012) further reports that there is no reason to believe that the current growth of online-reservations use will not continue, and therefore advises restaurants to develop a comprehensive distribution strategy that will help to maximise revenues through all distribution channels. However, there is some way to go before the use of distribution channels such as these are commonly used, although two companies similar to Opentable.com are rapidly growing (SeatMe.nl and Couverts.nl). Third-party websites offer packages that include reservations software modules. The danger here is that restaurants do not seem to be aware that they are literally giving away their data, perhaps not realising that their inventory will be “controlled” by a third party.

Furthermore, there is the application of social media for restaurants. Needles and Thompson (2013) report that although many restaurants are using social media, many owners lack well-defined social media strategies, both in terms of purpose as well as targets set. Social media is considered as a low-cost marketing tool, and Needles and Thompson advise restaurants to consider strategic social media marketing activities that are tailored to the restaurant’s market based upon the restaurant’s strategic goals. They further state that besides the revenue opportunities, active participation in social media can assist restaurants to manage their online reputation.

Research approach

The method for this study is that of a qualitative approach. As mentioned earlier culinary restaurants operate in a complex business environment. In addition, few quantitative data are available for culinary restaurants. Furthermore, restaurant revenue management is concerned with practices, interactions, philosophies and attitudes. According to Baarda, de Goede and Teunissen (2001), this is exploratory research. Robson (2002) considers exploratory study as a valuable means of finding out what is happening; to seek new insights; to ask questions; to generate ideas and hypotheses for future research and to “assess” phenomena in a new light. A case study research was organised including different pilot studies leading on to in-depth interviews. One of the author’s previous working places, a deluxe five-star hotel with four culinary restaurants, and his working experience played a key role during the case study. Data were gathered over a period of six years of research through document studies, non-participant observation and observation. The results from these experiences and studies formed the basis for the research of this paper. Data from structured interviews from eleven experts representing the restaurant and hospitality industry in the Netherlands were analysed. These experts were asked about their thoughts, experiences and perceptions. The resulting rich data were coded and analysed to identify themes, patterns and relationships.

Quality levels in Dutch culinary restaurants

Overall the importance and applicability of revenue management principles, as mentioned earlier, are confirmed by the respondents, albeit that these are presently not being applied consciously, but rather by “gut” feeling by independently owned culinary restaurants, as opposed to culinary restaurants operated by hotel chains, where these principles are being applied to a large extent as part of their business strategy. The non-practitioner interviewees highlighted the relatively conservative approach to new trends and technologies and noted that culinary restaurants by and large have been slow in adopting new technologies. Independent owners indicated that they lack sufficient scale, staff and funds to adjust to these developments on their own and would welcome a common approach by colleagues and the alliance of other restaurants. This dilemma is quite well illustrated by a very interesting observation by a respondent: *“It is unfortunate that revenue management is not practiced more extensively by culinary restaurants, because this would enable them to get more revenues out of their operation, which could again be invested into their business”*. All of the respondents recognised that culinary restaurants could still improve by applying the principles of restaurant revenue management in all relevant areas.

Sustaining the current quality levels reached in Dutch culinary restaurants

The interviewees derive their views from different perspectives; nevertheless, all in some manner stated that the most important factors to sustain quality are a combination of product, service and ambiance. Several interviewees mentioned that quality is

the complete "picture" of a customers' experience. Service (personalised) was specifically mentioned as an important factor, as different interviewees believed that the quality of food is already expected to be very good at culinary restaurants; customers should feel "at home". A next important success factor is professional and skilled employees who are able to present and translate the philosophy of the restaurant to customers. One interviewee stated that the most important part of quality is "sustainability". Several interviewees believed that culinary restaurants should have their own philosophy and the chef should have his own "signature". Culinary restaurants cannot easily be compared; they all have their own products and unique menus. Therefore, the overall view is that revenue management is not practiced in culinary restaurants in the Netherlands. In fact, some practitioners have never heard of the application of revenue management in restaurants. All respondents shared the opinion that culinary restaurants do not have a strategy for the application of revenue management, yet agreed that restaurants practice some revenue management tactics unconsciously.

Two respondents provided examples of culinary restaurants that managed to increase revenues with the application of a revenue management strategy. Social media was mentioned by several respondents as an important "new" tool that could lead to generating additional revenues. Most of the respondents thought that many culinary restaurants are mainly preoccupied with their "product and service". As one respondent put it, *"They seem to be less focused on the optimisation of revenues, the analysis of data, marketing and social media strategies. They seem to focus on the day-to-day business"*. Another interviewee stated: *"It seems the higher the restaurant segment, the less money they make"*.

Restaurant owners seem reluctant to involve their employees in determining the strategy for their restaurant. One restaurant owner stated: *"I make sure that the restaurant is full; the employees should then make sure that the restaurant stays full"*. The data suggest that when restaurants do practice revenue management, there is a reluctance to involve employees. One respondent said that he *"would involve the 'middle management' only"*. Only two respondents said that they would involve the whole team. The restaurateurs in the study had a tendency towards life-style business, where being their own boss and creating excellent dishes and service were the most important things to them, and so other business practices such as revenue management often came lower down in their list of priorities.

This means that the significant majority of the respondents do not have procedures in place for handling restaurant reservations; it seems that many restaurants manage their reservations on gut feel and experience of "what happened last week on the same night". Only a few restaurants have an automated reservation system, and in addition, few have the opportunity for direct online restaurant reservations. Two of the respondents had a reservation system that is able to provide seating suggestions. The practitioners are concerned with no-shows; nevertheless there were no clear procedures in place for cancellations and no-shows amongst the respondents. Some restaurants provide a "courtesy call system" to remind their customers; however, two respondents thought that *"this would be a lot of additional work"* and don't call and remind their customers. Guaranteeing restaurant reservations by

credit-card guarantees is applied in restaurants inside hotels, but mainly for group business. One interviewee, however, stated: *"Credit-card guarantees are difficult to manage; the culture inside the Netherlands is not like in, for example, the United States"*. Furthermore, another interviewee commented: *"Credit-card guarantees need a signature in order to be able to charge the credit-card; this requires a lot of deskwork"*. The respondents generally agree that double seatings are not accepted by customers in Dutch culinary restaurants. On the other hand, from anecdotal evidence, interesting developments are taking place in the application of double-seating settings by various popular restaurants. It may well be that customers of culinary restaurants will be more receptive to double-seating arrangements if the total dining experience is not affected.

In general, independent culinary restaurants do not make budgets and forecasts; one respondent stated that he *"[does not] believe in making budgets; a small business is managed differently and not like larger businesses"*. A significant majority of respondents mentioned that the most important indicators for measuring success are the total sales and the cash-flow of the restaurant. Clearly, these are issues that are important to the day-to-day management of their restaurant and important for its survival. With this in mind, one interviewee mentioned that *"a lack of cash could cause a business to go bankrupt despite a possible healthy balance-sheet"*. The study data suggest that employees are not usually involved in financial matters; one respondent stated that he likes to *"share [his] vision, the restaurant financial results and the expectations [he has] for the business, once a year with [his] employees"*.

Culinary restaurants inside hotels tend to follow the hotel procedures concerning both budgeting and forecasting, and involve the middle and senior management in the budget and forecasting procedures. One respondent from such a business mentioned that he has to *"measure, report and evaluate the guest satisfaction index of the restaurant"*. The study data show that, in general, payroll, food and beverage costs, average-check and total sales are measured. However, one respondent says that he does not like numbers and statistics and wonders what they say, or sometimes does not know what they mean. Clearly, the data show that independent culinary restaurants cannot be compared against culinary restaurants in hotels; one respondent stated: *"Restaurants in hotels do not pay rent: in addition, sales and marketing, accounting, engineering, everything is organised for them by the hotel"*.

The majority of respondents agreed that budgeting and forecasting are important for an effective operation. One respondent mentioned that *"you cannot manage a restaurant effectively on gut feeling"*. Another stated: *"You cannot live in the blind, you need information about your business to survive"* and added that whenever a forecast is accurate, the rest becomes easy. He further added that the lower the restaurant segment, the more important budgeting becomes. One interviewee suggested measuring revenue per square metre: *"Imagine having a restaurant of 300 square metres – how many seats are you going to create?"* Another respondent noted that many restaurants focus on their direct costs, and stated: *"An interesting discussion would be to look at rent and real estate, as these expenses have tremendously increased over the years"*.

The overall view of the study respondents was that revenue management is not practiced in many independent culinary

restaurants in the Netherlands. In fact, data show that some practitioners have never heard of the application of revenue management in restaurants. All respondents shared the opinion that independent culinary restaurants do not have strategies for the application of revenue management, yet agreed that restaurants practice some revenue management tactics unconsciously, for their businesses to survive in a competitive sector.

All respondents, stated that the most important factors to sustain quality in their restaurants are a combination of product, service and ambiance. Several interviewees mention that quality is the complete “picture” of a customers’ experience. Service (personalised) is specifically mentioned as an important factor as different interviewees believe that the quality of food is already expected to be very good at culinary restaurants; customers should feel “at home”. Also an important success factor is professional and skilled employees who are able to present and translate the philosophy of the restaurant to customers.

The data show that revenues in culinary restaurants are maximised in various manners; the following random examples were given by the interviewees: up-selling of cheese, after-dinner drinks, privately labelled products, exclusive waters, special coffees, “friandise” trolleys, dessert trolleys, special wine-arrangements, exclusive wines, special menus, extra dishes, and cook-books. Other possibilities for increasing revenues that were mentioned are: charging room-rental for private dining rooms (areas), hotel rooms, restaurant buy-outs for exclusive parties, and master classes. Mainly chefs can give demonstrations, participate in commercials or attend special events as a guest chef. In terms of product, the respondents generally agreed that most culinary restaurants prefer to sell extensive menus with limited options. Several of the respondents preferred to sell these menus in combination with extensive wine arrangements. Some interviewees, however, mentioned that serving wine arrangements is very labour intensive and that in some cases selling exclusive bottles of wines generates more revenue.

The lay-out of the restaurant (configuration) is not strategically managed in culinary restaurants; however, practitioners have a good understanding of their restaurant configuration, although it is managed on gut feeling and experience. One respondent stated that “*restaurants could put effort into supporting their experience with hard data*”. Another respondent stated that “*it is all about recording data; decisions should be based on statistics*”. The practitioners find the ambiance particularly important for culinary restaurants; the visual impression is very important. The majority of respondents mentioned that customers should experience a comfortable and pleasant atmosphere in a restaurant, and that much effort is put into providing quality and privacy for customers. A significant majority of respondents stated that it is important to determine the maximum capacity for a restaurant in order to sustain the quality level. One respondent said, “*Serving more customers does not always result in more revenue; but staffing levels need to be considered as well*”.

All the culinary restaurants in the sample practiced cost-based pricing. All practitioners explained that they generally work with a fixed cost-percentage. One respondent said, “*Restaurants could be more creative in setting their sales-prices. There are many possibilities, and these are*

underutilised in the Netherlands” Another respondent remarked that “*sometimes you can sell more at a lower profit*” and continued, “*especially wine-sales should not be done with a percentage, but rather with a mark-up*”. As most culinary restaurants do not practice revenue management, staff are obviously not trained in the necessary skills. Nevertheless, the significant majority of respondents stated that they train their staff in up-selling. This on-the-job training is usually given by the sommelier or restaurant manager. One respondent stated that analytical skills are important: you need to be able to interpret data. He stated that “*people in the restaurant business are not trained in these skills*”. Another respondent recommended the implementation of a staff evaluation system where everything can be measured on different levels throughout the organisation. The majority of the restaurants in the sample organised a daily shift briefing, where items are discussed such as which guests are coming, who is expected, and potential wine and food sales for the day.

The future of (restaurant) revenue management

The significant majority of respondents believe that the future for revenue management mainly involves new technological developments. One respondent stated that “*the current systems will become more sophisticated*” and added that customers react positively towards “new” technology. Another respondent stated that “*the future will integrate the different technological systems; point of sales, reservations systems, kitchen-management systems*”. A significant number of respondents believed that online-bookings will soon be made by mobile-phone; one respondent stated that “*Internet will soon do its work, all restaurants will move to reservations by internet*”. Other respondents believed that social media will become an important part of business. Nevertheless, the significant majority of respondents remarked that culinary restaurants in the Netherlands are behind trends and are slow to adopt new technology. One respondent stated: “*Restaurateurs think that things are going all right*”.

One respondent stated that “*hard revenue management tactics are not directly the most obvious for culinary restaurants*”, but added that this doesn’t imply that there is no room for applying revenue management principles. A significant majority of respondents agreed that public relations and marketing are important; one respondent said, “*A good reputation indirectly provides the opportunity to raise prices*” and added that in that manner you are not just focusing on revenue. Another respondent was sceptical about the future of revenue management and stated that “*It is just not in the character of the industry*”, and further stated that culinary restaurants are all independent and lack economy of scale; in addition, no real changes have taken place over the last years in culinary restaurants. Another respondent commented that “*restaurants in the USA are managed on facts and number; in Europe, however, restaurants are managed on emotion*”.

A significant majority of respondents generally agreed that social media will become an important part of business. One respondent mentioned that they are very active on social media and that their chef has over 10 000 followers on Twitter. He referred to an event that was organised and communicated on Twitter which caused the restaurant to be sold out within 30 minutes. Another respondent stated that “*you need to manage*

social media in a way that people talk about their experience at your restaurant and become part of a community; others have to say that you are great". A fellow respondent mentioned that "independent restaurants usually do not have the manpower to manage new technologies such as social media", and another respondent mentioned that "social media is managed by the marketing department in the hotel". A small majority of the respondents thought that social media was basically a new form of customer relationship management, and many mentioned that they are currently renewing their websites. The key point made was that restaurants should have a good, functioning website so that customers can easily find their restaurant.

Conclusions

From the literature review carried out it is evident that restaurant revenue management is perceived as a set of management tools, multifaceted in nature, addressing aspects relating to strategy, tactics, people, and forecasting, that holds considerable potential for the restaurant industry to increase revenues by 2–5% at almost no additional investment or cost to the business. Potentially, this means that if all culinary restaurants in the Netherlands could achieve the 2–5% revenue improvement that is typically associated with the application of revenue management, overall revenues of these restaurants could increase, estimates from the research suggest by up to eight million Euros annually, almost all directly adding to the bottom line of these businesses.

Clearly, insights from the restaurant owners themselves reveal that in the Netherlands culinary restaurants are not applying restaurant revenue management tools, while, on the other hand, the data in this paper show that culinary restaurants owned by hotel chains are using revenue management tools extensively, and suggest that increases in revenue are noted because of this. The independent restaurant owners are focusing on the vital importance of "knowing the customer" as the basis for a sustainable operation of a culinary restaurant, and recognise that they should be alert to technological developments in relation to restaurant reservation booking, internet sites and customer use of booking online reservations.

The importance of the "personal touch" was highlighted by all independent restaurant owners in this study. By sharing with the authors their insights into their day-to-day operations, the respondents allowed the authors to gain a broad and deep understanding of the daily practice of professionals in Dutch culinary restaurants, as compared to the methods described in the theory on restaurant revenue management. Therefore, it can be concluded that Dutch culinary restaurants can improve the management and profitability of their business specifically by implementing restaurant revenue management techniques.

References

Anderson, C. K., & Xie, X. (2010). Improving hospitality industry sales: Twenty-five years of revenue management. *Cornell Hospitality Quarterly*, 51(1), 53–67. <http://dx.doi.org/10.1177/1938965509354697>

Ansel, D., & Dyer, C. (1999). A framework for restaurant information technology. *Hotel and Restaurant Administration Quarterly*, 40(3), 74–84. <http://dx.doi.org/10.1177/001088049904000322>

Baarda, D. B., de Goede, M. P., & Teunissen, J. (2001). *Kwalitatief onderzoek*. Groningen: Wolters-Noordhoff B.V.

Camillo, A. A., Connolly, D. J., & Gon Kim, W. (2008). Success and failure in Northern California – Critical success factors for independent restaurants. *Cornell Hospitality Quarterly*, 49(4), 364–380. <http://dx.doi.org/10.1177/1938965508317712>

Cross, R. G. (1997). *Revenue management – Hardcore tactics for market domination*. New York: Broadway Books.

Cross, R. G., Higbie, J. A., & Cross, D. Q. (2009). Revenue management's renaissance – A rebirth of the art and science of profitable revenue generation. *Cornell Hospitality Quarterly*, 50(1), 56–81. <http://dx.doi.org/10.1177/1938965508328716>

Enz, C. A., & Canina, L. (2012). Strategic revenue management and the role of competitive price shifting. *Cornell Hospitality Report*, 12, 4–11. www.chr.cornell.edu

Gehrels, S. A., & Dumont, B. (2012). Quality assessment in small businesses: The case of Dutch culinary restaurants. *Research in Hospitality Management*, 1(2), 75–84.

Guo, P., Xiao, B., & Li, J. (2012). Unconstraining methods in revenue management systems: Research overview and prospects. *Advances in Operations Research*. <http://dx.doi.org/10.1155/2012/270910>

Haensel, A., & Koole, G. (2011). Booking horizon forecasting with dynamic updating: A case study of hotel reservation data. *International Journal of Forecasting*, 27(3), 942–960. <http://dx.doi.org/10.1016/j.ijforecast.2010.10.004>

Hanks, R. B., Noland, P., & Cross, R. G. (1992). Discounting in the hotel industry: A new approach. *Cornell Hotel and Restaurant Administration*, 33(3), 40–45.

Huang, K., & Chang, K. (2011). A model for airline seat control considering revenue uncertainty and risk. *Journal of Revenue and Pricing Management*, 10(2), 161–171. <http://dx.doi.org/10.1057/rpm.2009.19>

Hwang, J., & Yoon, S. Y. (2009). Where would you like to sit? Understanding customers' privacy-seeking tendencies and seating behaviors to create effective restaurant environments. *Journal of Foodservice Business Research*, 12(3), 219–233. <http://dx.doi.org/10.1080/15378020903158491>

Johnson, C., Surlmont, B., Nicod, P., & Revaz, F. (2005). Behind the stars – Concise typology of Michelin Restaurants in Europe. *The Cornell Hotel and Restaurant Administration Quarterly*, 46(2), 170–187. <http://dx.doi.org/10.1177/0010880405275115>

Kimes, S. E. (2010a). *Successful tactics for surviving an economic downturn: Results from an international study*. Ithaca, NY: The Center for Hospitality Research at Cornell University.

Kimes, S. E. (2010b). *The future of hotel revenue management*. Ithaca, NY: The Center for Hospitality Research at Cornell University.

Kimes, S. E. (2009). *How restaurant customers view on-line reservations*. Ithaca, NY: The Center for Hospitality Research at Cornell University.

Kimes, S. E. (2008c). The role of technology in restaurant revenue management. *Cornell Hospitality Quarterly*, 49(3), 297–309. <http://dx.doi.org/10.1177/1938965508322768>

Kimes, S. E. (2008a). *A consumer's view of restaurant reservations policies*. Ithaca, NY: The Center for Hospitality Research at Cornell University.

Kimes, S. E. (2008b). *Hotel revenue management: Today and tomorrow*. Ithaca, NY: The Center for Hospitality Research at Cornell University.

Kimes, S. E. (2004a). Restaurant revenue management: Implementation at Chevys Arrowhead. *The Cornell Hotel and Restaurant Administration Quarterly*, 45(1), 52–67. <http://dx.doi.org/10.1177/0010880403260107>

Kimes, S. E. (2004b). *Restaurant revenue management*. Ithaca, NY: The Center for Hospitality Research at Cornell University.

Kimes, S. E. (2003). Revenue management: A retrospective. *The Cornell Hotel and Restaurant Administration Quarterly*, 44(5-6), 131–138. [http://dx.doi.org/10.1016/S0010-8804\(03\)90117-0](http://dx.doi.org/10.1016/S0010-8804(03)90117-0)

Kimes, S. E. (2001). *The "4-C" strategy for yield management*. Ithaca, NY: The Center for Hospitality Research at Cornell University.

- Kimes, S. E. (1999). Implementing restaurant revenue management: A five-step approach. *The Cornell Hotel and Restaurant Administration Quarterly*, 40(3), 16–21. <http://dx.doi.org/10.1177/001088049904000315>
- Kimes, S. E., & Kies, K. (2012). *The role of multi-restaurant reservation sites in restaurant distribution management*. Ithaca, NY: The Center for Hospitality Research at Cornell University.
- Kimes, S. E., & Robson, K. A. (2004). The impact of restaurant table characteristics on meal duration and spending. *The Cornell Hotel and Restaurant Administration Quarterly*, 45(4), 333–346. <http://dx.doi.org/10.1177/0010880404270063>
- Kimes, S. E., & Thompson, G. M. (2004). Restaurant revenue management at Chevys: Determining the best table mix. *Decision Sciences*, 35(3), 371–392. <http://dx.doi.org/10.1111/j.0011-7315.2004.02531.x>
- Kimes, S. E., & Wirtz, J. (2002). Perceived fairness of demand-based pricing for restaurants. *The Cornell Hotel and Restaurant Administration Quarterly*, 43(1), 31–37. [http://dx.doi.org/10.1016/S0010-8804\(02\)80006-4](http://dx.doi.org/10.1016/S0010-8804(02)80006-4)
- Kimes, S. E., & Wirtz, J. (2003). Has revenue management become acceptable? Findings from an international study on the perceived fairness of rate fences. *Journal of Service Research*, 6(2), 125–135. <http://dx.doi.org/10.1177/1094670503257038>
- Kimes, S. E., & Wirtz, J. (2007). *Customer satisfaction with seating policies in casual-dining restaurants*. Ithaca, NY: The Center for Hospitality Research at Cornell University.
- Kimes, S. E., Barrash, D. I., & Alexander, J. E. (1999b). Developing a restaurant revenue-management strategy. *The Cornell Hotel and Restaurant Administration Quarterly*, 40(5), 18–29. <http://dx.doi.org/10.1177/001088049904000505>
- Kimes, S. E., Chase, R. B., Choi, S., Lee, P., & Ngongzi, E. N. (1998). Restaurant revenue management: Applying yield management to the restaurant industry. *The Cornell Hotel and Restaurant Administration Quarterly*, 39(3), 32–39. <http://dx.doi.org/10.1177/001088049803900308>
- Lieberman, W. H. (2003). Getting the most from revenue management. *Journal of Revenue and Pricing Management*, 2(2), 103–115. <http://dx.doi.org/10.1057/palgrave.rpm.5170055>
- McGill, J. I., & Van-Ryzin, G. J. (1999). Revenue anagement: Research overview and prospects. *Transportation Science*, 33(2), 233–256. <http://dx.doi.org/10.1287/trsc.33.2.233>
- Muller, C. C. (1999). A simple measure of restaurant efficiency. *Hotel and Restaurant Administration Quarterly*, 40(3), 31–37. <http://dx.doi.org/10.1177/001088049904000317>
- Needles, A., & Thompson, G. M. (2013). Social media use in the restaurant industry: A work in progress. *Cornell Hospitality Report*, 13(7), 6–16.
- Ninemeier, J. D. (2001). *Planning and control for food & beverage operations* (5th ed.). Michigan: American Hotel & Lodging Association.
- Oxford Dictionaries. (2013). Restaurant. <http://oxforddictionaries.com/definition/english/restaurant?q=restaurant>
- Parsa, H. G., Self, J. T., Njite, D., & King, T. (2005). Why restaurants fail. *The Cornell Hotel and Restaurant Administration Quarterly*, 46(3), 304–322. <http://dx.doi.org/10.1177/0010880405275598>
- Pine, B. J., & Gilmore, J. H. (1999). *The experience economy: Work is theatre & every business is a stage*. Boston: Harvard Business School Press.
- Quain, B., Sansbury, M. W., & LeBruto, S. M. (1999). Revenue enhancement, Part 4. *The Cornell Hotel and Restaurant Administration Quarterly*, 40(3), 38–47.
- Robson, C. (2002). *Real world research – A resource for social scientists and practitioner-researchers*. Oxford: Blackwell Publishing.
- Shoemaker, S. (2003). Future of revenue management: The future of pricing in services. *Journal of Revenue and Pricing Management*, 2(3), 271–279. <http://dx.doi.org/10.1057/palgrave.rpm.5170074>
- Siguaw, J. A., & Enz, C. A. (1999). Best practices in food and beverage management. *Cornell Hotel and Restaurant Quarterly*, 40(5), 50–57. <http://dx.doi.org/10.1177/001088049904000509>
- Smith, B. A., Leimkuhler, J. F., & Darrow, R. M. (1992). Yield management at American Airlines. *Interfaces*, 22(1), 8–31. <http://dx.doi.org/10.1287/inte.22.1.8>
- Surlemont, B., & Johnson, C. (2005). The role of guides in artistic industries: The special case of the “star system” in the haute-cuisine sector. *Managing Service Quality*, 15, 577–590.
- Thompson, G. M. (2010). Restaurant profitability management – The evolution of restaurant revenue management. *Cornell Hospitality Quarterly*, 51(3), 308–322. <http://dx.doi.org/10.1177/1938965510368653>
- Thompson, G. M. (2007). *Restaurant capacity effectiveness: Leaving money on the tables*. Ithaca, NY: The Center for Hospitality Research at Cornell University.
- Thompson, G. M. (2003a). *Dedicated or combinable? – A simulation to determine optimal restaurant table configuration*. Ithaca, NY: The Center for Hospitality Research at Cornell University.
- Thompson, G. M. (2003b). Optimizing restaurant-table configurations: Specifying combinable tables. *Cornell Hotel and Restaurant Quarterly*, 44(1), 53–60. [http://dx.doi.org/10.1016/S0010-8804\(03\)90046-2](http://dx.doi.org/10.1016/S0010-8804(03)90046-2)
- Thompson, G. M. (2002). Optimizing a restaurant’s seating capacity: Using dedicated or combinable tables? *The Cornell Hotel and Restaurant Administration Quarterly*, 43(4), 48–57.
- Thompson, G. M., & Kwortnik, R. J. (2008). Pooling restaurant reservations to increase service efficiency. *Journal of Service Research*, 10(4), 335–346. <http://dx.doi.org/10.1177/1094670508314267>
- Yeoman, I., & Watson, S. (1999). *OR methods – The fundamentals of revenue management*. <https://www.theorsociety.com/Pages/ORMethods/RevenueManagement/project/modelling.htm>
- Yeoman, I., & Watson, S. (1997). Yield management: A human activity system. *International Journal of Contemporary Hospitality Management*, 9(2), 80–83. <http://dx.doi.org/10.1108/09596119710164821>

