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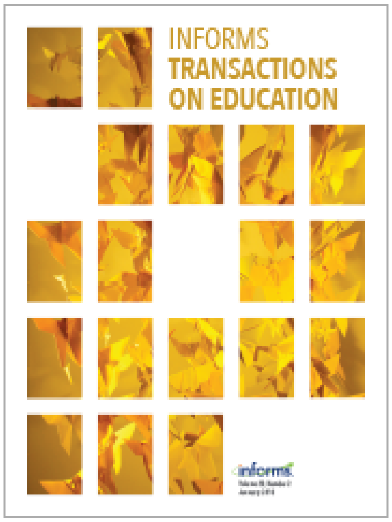

INFORMS Transactions on Education

Publication details, including instructions for authors and subscription information:
http://pubsonline.informs.org

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INFORMS TRANSACTIONS ON EDUCATION
Vol. 23, No. 1, September 2022, pp. 46–55
ISSN 1532-0545 (online)
https://pubsonline.informs.org/journal/ited

Game

Gimme a Better Price! A Negotiation Role Play on B2B Pricing in Hotel Revenue Management

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Received: August 31, 2020
Revised: November 4, 2021; November 19, 2021; December 17, 2021
Accepted: December 20, 2021
Published Online in Articles in Advance: February 2, 2022

https://doi.org/10.1287/ited.2021.0268

Abstract. We present a classroom role play to immerse students in the difficulties of applying value-based pricing principles to the practice of B2B price negotiations at different levels of the hotel value chain. The students assume roles as hotel chain and individual hotel management and as key business clients to the individual hotels. Through strategic and tactical preparations that rely on incremental additions of information on the goals, students prepare themselves to negotiate aspects linked with B2B pricing in a hotel revenue management context and collect points based on their success. After the negotiations, they systematically reflect on their performance vis-à-vis their set intentions. The role play is targeted to be an assignment in master's level hotel revenue management teaching, but it could be modified to target bachelor's students or other fields in which value-based pricing is still at its infancy. Based on our experience with running the game in a classroom as well as twice remotely because of COVID-19, it is compatible with both forms of learning and could potentially be extended to an asynchronous online learning environment.

Supplemental Material: The e-companion is available at https://doi.org/10.1287/ited.2021.0268.

Keywords: value-based pricing • hospitality management • role play • student reflection

1. Introduction

Pricing is of strategic importance to the successful implementation of revenue management in the capacity-constrained hotel industry (Cross et al. 2009). Seeking to reduce opportunity costs by stimulating price-sensitive demand to book in advance, hotels typically employ progressive revenue management systems (RMS) that forecast demand to allocate capacity optimally, apply length-of-stay controls, and determine a room rate structure with associated terms and booking conditions. One key development that stimulated progress in hotel revenue management was the adoption of dynamic pricing models (Abrate and Viglia 2016). A factor that, to some extent, has limited the ability of RMS to reach the full potential of dynamic pricing, however, is the inherent competitor orientation of room rate pricing in the hotel industry (Enz et al. 2016).

Some hotel chains have started to adopt value-based pricing methods to set room rates for their properties. A major drawback of this customer-centric pricing approach, found to be superior compared with cost and competition-based approaches (Liozu and Hinterhuber 2013), is that (in addition to the capital investments in systems needed to implement value-based pricing) it demands advanced levels of particularly intangible resources (Raja et al. 2020). Such human and social capital in pricing (e.g., knowledge of the negotiation strategy of the customer, know-how of how to separate sincere customer concerns from negotiating postures, development of consensus within the hotel revenue management team) has received research attention in the strategic management literature (Dutta et al. 2003), and it constitutes a strategic capability consisting of cross-disciplinary processes at various intraorganizational and interorganizational hierarchical levels. Without this capability, hotels are unable to align effectively functional levels to overcome constraints arising from organizational tensions, interpersonal realities, and goal conflicts (most prominently between sales and revenue) and implement successfully a pricing policy that is truly value-driven (Van der Rest et al. 2018).

In this article, we present a negotiation role play that immerses students in the difficulties of applying value-based pricing principles to price negotiations in the absence of social capital and at different levels of the hotel value chain. As such, it adds a strategic management perspective to the extant pricing literature in hotel revenue management, which commonly is operations-oriented. Through the role play, assuming the roles of managers at hotel property and corporate levels and their key clients, students engage in strategic and tactical interfunctional planning activities that rely on incremental additions of information on the specific goals. Students prepare for negotiating aspects in the context of a company pricing policy that is evolving toward value-based pricing, collect points based on their success, and learn to reflect systematically on their performance vis-à-vis their set intentions.

2. Price Negotiations and Value-Based Pricing

A hotel can be viewed "as offering a product line consisting of different types of rooms and different types of occupancy, usually single or double" (Monroe 1990, p. 312). In this product line, each room needs to be priced correctly (with associated terms and booking conditions) in relation to other rooms. In addition, the number of rooms at each price has to match the demand for rooms at those prices. The pricing of such a product line, however, is complicated by two special pricing problems: (1) perishability and (2) binding capacity constraints. First, if a sale is not made, the perishable nature of a room implies that the revenue is lost forever and that various expenses (e.g., payroll, depreciation) cannot be recovered (Schlissel and Chasin 1991). Seasonal and irregular demand patterns further complicate decisions, for example, on how to cover fixed costs. Second, fixed capacity complicates the examination of opportunity costs at different points of the booking horizon. Given demand uncertainty, it is rather difficult to know whether capacity will be sufficient; only after setting room rates can actual demand be observed. The setting of room rates, thus, depends on the ability to rapidly change rates when unexpected peaks in demand develop (Shugan and Xie 2004). This pricing practice can be severely impeded by room rate policies and structures that are established long before peaks emerge. In most hotels, the policies and structures are competitor-oriented, and these hotels risk becoming financially unstable if margins are low, missing out on chances to grow if price wars arise and their customers losing sight of the hotel's value proposition.

Value-based pricing refers to the degree to which prices are set to match perceived value. Perceived value, however, is a complex and intensely debated concept in marketing theory, "relative by virtue of its comparative, personal, and situational nature," a utility trade-off as well as a combined utilitarian-hedonic response that is "preferential, perceptual, and cognitive-affective in nature" (Sánchez-Fernández and Iniesta-Bonillo 2007, p. 427). It is a multidimensional concept that is measured on a four-dimensional scale: (1) functional value: practical or technical benefits (quality) of using a hotel room; (2) emotional value: utility derived from the affective state that a hotel room generates; (3) price value: relative sacrifice in cost, time, or effort to book a hotel room; and (4) social value: status, prestige, etc., that come with the use of a hotel room (Sweeney and Soutar 2001, Walsh et al. 2014). An increasing number of scholars, however, define and measure perceived value as the maximum willingness to pay (WTP), the reservation utility value, or reservation price (Moorthy et al. 1997). In this context, Wang et al. (2007) argue that this threshold value comprises a range of reservation prices rather than a single value with three significant price points: (1) the reservation floor level below which there is 100% purchase probability, (2) the indifferent level with 50% purchase probability, and (3) the reservation ceiling level above which there is zero purchase probability. The advantage of conceptualizing perceived value as the reservation price is that its monetary measurement is more straightforward (see Hofstetter et al. (2021) for an overview of methods), albeit it remains challenging to measure and analyze perceived value in practice.

In theory, value-based pricing is considered superior as it enables the capturing of customers' WTP (i.e., reservation price) while accounting for competitors' relative prices, but implementing such a policy is far from easy as there can be high implementation costs and considerable organizational challenges (Hinterhuber 2008). As a result, cost- and competitor-based approaches remain widespread in practice (Avlonitis and Indounas 2006). Its appeal to managerial practice, nevertheless, remains strong (Ingenbleek 2007).

Van der Rest et al. (2018) investigate why value-based pricing is so hard to implement in hotels. Collecting data from a fast-growing, four-star, upscale hotel chain in Europe that has 33 owned, leased, managed, or franchised hotels with 46–673 rooms and that is located in 18 cities and 16 countries in Europe, they find that, whereas the hotel chain "thought it was implementing a value-driven pricing policy, in reality it kept with, and still thought and acted in, the (old) competitor-oriented way" (Van der Rest et al. 2018, p. 39). The chain failed to recognize that a greater allocation of human and social resources was needed to implement value-driven pricing policies. These intangible resources were needed (a) to address information constraints in the determination of customer value and the interpretation of this information and (b) to develop routines to solve interfunctional and interpersonal goal conflicts in the context of pricing decisions under conditions of uncertain and incomplete information.

It is the development of this social capability—routines to solve interfunctional and interpersonal goal conflicts in B2B price negotiations—on which this role play focuses. Through this development, it seeks to add to extant work on the practical application of hotel pricing tools and analytical processes (Anderson et al. 2009, Jaureguiberry and Tappata 2015). The role play setting was created building on the work of Liozu et al. (2012, p. 20), who find that "a lack of capabilities, organizational resources, top management sponsorship and other factors" prevent the companies they investigate from implementing value-based pricing. During the role play, students experience the difficulties of applying an evolving, value-based, B2B pricing policy to negotiations at different levels of the hotel value chain. The play zooms in on the fourth dimension of the Van der Rest et al. (2018) value-based pricing implementation challenges: negotiating and explaining prices.

These findings from the hotel industry align with seminal work from Dutta et al. (2003), who are first to conceptualize pricing as a process and a strategic resource that requires extensive investments in time, team effort, technology, and human capital. This capability comprises the development of a comparative advantage in competences (e.g., knowledge, skills, and attitudes) and relational resources (e.g., routines, coordination mechanisms, and relationships) essential for addressing and solving pricing issues relative to competitors. Subsequent work focuses on, for example, personal traits and value-based capabilities (Hinterhuber 2017, Kienzler 2017), value-based pricing and cognitive bias (Kienzler 2018), learning and value-based capabilities (Raja et al. 2020), and barriers to implementation (Hallberg 2017, Töytäri et al. 2017). However, as (Hinterhuber and Liozu 2017, p. 2) argue, these studies "barely scratch the surface of this rich and complex domain."

3. Description of the Role Play

The game includes three types of negotiation stakeholders: (a) hotel chains, (b) hotel properties belonging to the chains, and (c) key business clients. The play requires students to gain knowledge of the focal city and introduces them into the dynamics of a hotel market. We used hotels and their client companies in the neighboring city of Lyon as the play environment, but the city context (and stakeholders) may be selected anywhere in the world. None of the real-life hotels or clients were part of the role play preparation. Instead, their names served to facilitate student preparation.

We divided the students into 14 groups: two hotel chain head offices, four properties in each chain, and four key clients (see Table 1). As the group size for all stakeholders is flexible, the play can accommodate a large variety of class sizes. We have tested the play three times with a group of 35–50 master's students. For very small or large classes, it is also possible to increase or reduce the number of hotels and clients. The play, as presented here, takes approximately one full day (six hours) with preparatory tasks given to students in advance. For the stakeholders (student groups), the immediate goal of the play is to collect as many points as possible through negotiations with other stakeholders as identified in the accompanying points scheme. However, the points merely guide the groups during the negotiations and are not intended as evaluation criteria. The evaluation links with the learning outcomes of the play that target understanding and application of value-based pricing as discussed in Section 4.

3.1. Advance Preparation

Before the role play, students must learn to know the market, the hotel chains, and the hotels in the game. In our setup, we chose the two dominant hotel chains in Lyon and picked four hotels from each chain. Smith Travel Research (STR), the data provider we used, classifies these hotels as economy (two hotels), midscale (four hotels), and upper midscale (two hotels) classes. Considering the type of key clients in the city, the lower end of the city's price range was suitable for the play. The essence of the play would not change were the hotels in upper scales instead. However, because of the different pricing strategies used in luxury hotels, we do not recommend using them.

The students received three STR trend reports that provide monthly averages for occupancy, average daily rate (ADR), and revenue per available room for the past five years, one report for each hotel class. These reports help the students to understand the market they face and enhance their learning although they do not directly connect with the role play. The students further received an STR pipeline report that includes current hotels and known future development in the city and its surroundings, detailing the number of rooms that is expected to be added in the foreseeable future in each hotel class (contracts signed or construction started). Academic institutions can receive such reports free of charge by contacting the STR Share Center (Smith Travel Research 2020). This allows customization of the game to a relevant location and receiving up-to-date data for each new round. However, data from any provider or data created by the instructor also allow students to prepare in advance.

Using the reports and any other sources available, such as hotel websites and reviews on TripAdvisor, the students were tasked to analyze the Lyon hotel market in advance (see exact task in the excel workbook, described in Section 3.2). Furthermore, all students investigated the value attributes and rates of the eight hotels and prepared value–price matrices indicating their relative standings during a two-hour class

Table 1. Groups in the Game

Group	Type	Name	Group size	Hotel class/key client focus
1	Hotel chain 1	Accor Hotels	3	
3	Property 1	Ibis Budget Lyon La Part Dieu	3	Economy class
4	Property 2	Ibis Lyon Centre Perrache	3	Midscale class
5	Property 3	Ibis Styles Lyon Bron Eurexpo	3	Midscale class
6	Property 4	Mercure Lyon Centre Chateau Perrache	3	Upper midscale class
2	Hotel chain 2	Louvre Group	3	
7	Property 5	Premiere Classe Lyon Centre Gare Part Dieu	3	Economy class
8	Property 6	Kyriad Lyon Centre Perrache	3	Midscale class
9	Property 7	Campanile Lyon Centre Gare Part Dieu	3	Midscale class
10	Property 8	Golden Tulip Lyon Millenaire	3	Upper midscale class
11	Key client 1	EuroNews	4	Rate focus
12	Key client 2	Renault Trucks	4	Rate focus
13	Key client 3	Biomerieux	4	Value focus
14	Key client 4	Sanofi-Pasteur	4	Value focus

session that focused on discovering customer WTP in a B2B price negotiation context. This contributed further to their preparedness to understand the value proposition of each property. It also allowed a classroom discussion on what actually constitutes value-based pricing. In particular, we focused on how such pricing differs from classical hotel revenue management practice, which tends to guess WTP in B2B price negotiations instead of measuring WTP for room attributes and differentiating the room offering to elicit WTP responses. Moreover, the class exercise stimulated a discussion of whether a sound understanding of WTP is sufficient to apply value-based pricing in practice or if other (in)tangible resources are needed. The main purpose of the preliminary work and the class session, however, was to ensure all participants were familiar with the market they were to face during the negotiation role play day and that they had insights into the attributes of each hotel. The prereport submission was considered a pass/fail assignment, but we motivated students by giving a small grade bonus to the 10 best submissions.

3.2. Instructor Materials

We developed an accompanying Excel workbook (Role play - main file.xlsx) that contains the key materials for the game. These include a role play structure table, the preassignment task, databases needed to facilitate the game, materials given to the students gradually during the play, and reflection guidelines. The databases are linked in Excel with the materials so that changing game stakeholders and negotiation outcomes can be done easily.

Sheets 2 and 3 of the workbook present the structure of the game; sheet 2 is intended for instructor use, and sheet 3 can be handed out to each group. Sheet 4 presents the instructions for the preassignment, and sheet 5 contains the background data. By changing hotel, chain, key client, and student names (in blue), the game can be tailored for a desired hotel market and cohort. By changing the negotiation outcomes and/or their point values (in green), the players can be motivated toward certain outcomes. The outcomes may also be modified. All these changes automatically link with relevant sheets.

Sheets 6 and 7 contain the materials handed out to students during the play. They set the stage for each group to create their strategy and choose their negotiation tactics. They consist of role descriptions and fictitious emails from colleagues and upper management, and they also provide point values of negotiation outcomes. The instructions guide students toward thinking about attributes that customers value. All rate outcomes are expressed as percentages to avoid comparison between room rates in the game and real market room rates as, during the first time the game was played, such comparison created confusion. Moreover, a focus on actual rates would require in-depth empirical analysis of the value of each attribute to a potential client. Instead, the game focuses on how proposed changes in value can alter key clients' WTP. Sheet 8 presents a reflection structure for the students, adapted from the Gibbs reflective cycle (Gibbs 2013). Finally, sheet 9 presents grading criteria for the proposed assignment. The sheets are designed to be printed out on paper or as pdfs in A4 format for easily handing them out before and during the D-day.

In addition to the main workbook, the materials include a separate Excel sheet for students to calculate their negotiation points (Point calculation with links. xlsx). The workbook links directly with Sheet 5 (Data) of the main workbook to allow easy modification of the game. To avoid errors, the direct links must be turned into values before sending the calculation template to students. The file includes a separate sheet for each stakeholder type, and we sent only the relevant sheet to each group to avoid confusion. After a negotiation is finished, the students select outcomes from drop-down menus. The bottom of the sheet displays total points and average daily rate changes that are used during the reflection phase.

3.3. Structure and Play

The role play consists of four phases: strategy formulation, negotiation preparations, negotiations, and reflection (Table 2). The next paragraphs describe the purpose and practicalities of each phase in detail. During all the phases, students can ask questions from the instructor at any point. Keeping the groups in one space or several nearby spaces is essential for managing this.

3.3.1. Phase 1: Strategy Formulation. After a common introductory session, the students start working in their predefined groups and roles. Sheet 6 (Strategy preparation) contains instructions and goals for each stakeholder group and role with a special emphasis on identifying attributes that bring value to the B2B clients in the game. Fictitious email exchanges aim at helping students to adopt their roles. Corporate travel teams (key clients) are looking for rooms they will pay for and use to accommodate their business guests. Therefore, they represent the customer if not the guest. The key clients are split in two types (Table 1, budget and quality focus; noted as A and B, respectively, on the excel sheets) that appreciate different hotel attributes and have diverse price sensitivities. In the strategy instructions, these key clients are guided to emphasize basic or midscale value attributes (examples include cleanliness and comfortable beds or additional shuttle service and a gym). This is intended to differentiate demand and match the key clients with certain classes of properties in the play although the hotels could also invest in upgrading their services, should they decide to pursue such a strategy.

For head offices and individual hotels, this phase includes planning investments that the properties require to improve customer value and discussing potential changes in rate structure. It is important to emphasize that, as a fundamental principle of value-based pricing, the two must connect. Head offices are instructed to contact the key clients to research their preferences, and hotels must analyze customer comments to get an idea of what real-life clients value in their hotels (with the groups soon realizing that they must focus on business travelers). The deliverables of this phase (for all groups) are a strategy of how to add value to clients and an understanding of the value that the key clients search. Both contribute to the final evaluation.

At this point, the students do not yet know the exact negotiation topics. Therefore, the focus is on thinking about the value the different hotels can offer from a property, chain, or key client perspective. Individual properties, based on their research before and during the session, must identify strengths and weaknesses in their value propositions and guide investments in those areas. Chains must consider the differentiation between their different properties and avoid a situation in which their hotels overlap too much while listening to the key clients' thoughts on value attributes. Key clients must consider, based on the descriptions given, which hotels best align with their accommodation priorities and provide the best value for them in relation to price while preparing to communicate their preferred value attributes during the negotiations. The materials give further guidance on the aspects the different groups need to consider.

3.3.2. Phase 2: Preparing for the Negotiations. At the time specified, the instructor hands out or shares electronically the negotiation goals. There are stakeholder-based differences in these, but the goals of chains and properties, and properties and key clients mirror each other, so the counterparts have common topics and outcomes to discuss. Chain headquarters and key clients do not negotiate directly in this phase, but they were encouraged to meet earlier. At this point, the instructor also sends the groups their respective point calculation sheets. For time management, it was found better to prepare the emails in advance or use a system that allows each group to pick up their sheet at this point.

Table 2. Role Play Structure

Phase	Description	Duration	Materials	Deliverable(s)
0	Preassignment	Hand-in before the play	STR reports; secondary research	Market study
1	Opening	15 minutes		
2	Strategy preparation	60 minutes	Role backgrounds	Strategy presentation
3	Negotiation preparation	75 minutes	Negotiation goals and points	Negotiation tactics
4	Negotiation	90 minutes	Point accounting sheet	
5	Reflection	60 minutes	Reflection model	Role play reflection and presentation
6	Key reflection sharing + closing	60 minutes		Sharing of learning
7	Presentation	Deadline: end of day		Evaluation

Sheet 7 (Negotiation goals) includes the goals and negotiation tips for each stakeholder group in the game. As discussed earlier, the two key client types are incentivized slightly differently with their points to either accept higher rates in return for value or to aim at fairly basic attributes when those are done well. The key clients also have somewhat different preferences for the number of rooms they wish to negotiate in one hotel. To mirror the latter aspect, the two lower end hotels in each chain are incentivized to seek larger contract sizes in terms of rooms, whereas the higher end properties aim at justifying rate increases through value and prefer smaller contracts (the types noted as C and D, respectively, on the Excel sheets). In other words, whereas the negotiation goals and outcomes match, the incentives (points) for various outcomes are asymmetric. The Excel point calculation templates facilitate easy accounting of the points accumulated and allow the groups to simulate the value of outcomes in advance.

It is important to emphasize to the students that they can only earn points as presented in the instructions. No extra points can be earned for further discounts or larger contracts than the ones specified. Based on experience, the groups may otherwise negotiate unrealistic rate changes. We emphasize that the key clients and the hotels have already had contracts, and therefore, negotiating large changes to those rates is not expected. Students should also consider the strategy they prepared during the previous phase in their negotiation tactic; during their reflection, they have to evaluate how well they implemented the strategy in practice. For example, if they decided to aim for significant investments to improve value to customers, they must plan on how to highlight this value during the negotiations.

We do not recommend connecting evaluation directly with the total amount of points earned. Whereas we have estimated the chances of each stakeholder type to obtain a certain number of points roughly the same, it would be hard to guarantee exactly equal points opportunities for all groups without extensive simulation. The role of the points is to create the aforementioned asymmetry in the negotiations to force students to seek compromise.

3.3.3. Phase 3: Negotiations. This phase is arguably the most hectic during the role play. The students conduct the negotiations in which they wish to engage. For head offices, there is a requirement to meet all properties in their chains. Similarly, each property must meet with its head office. Failure to agree with the head office means significant point losses to each party; this reflects the difficulty of implementing value-based pricing principles in practice (Van der Rest et al. 2018). The properties and the key clients may organize as many meetings as they have time for and conduct several rounds of negotiations if needed. The restricting factor is the total capacity demanded; once the key clients have fulfilled their needs, they do not commit to more room purchases.

During this phase, the instructors need to make themselves available for ad hoc questions from the groups. Two instructors are an asset here. Should negotiations not progress between a hotel and a client, the groups may always approach other hotels/clients. There is a tendency for the negotiations between clients and hotels to revolve around room rate, and this reflects reality (to the frustration of some students). However, it is important to remind the hotel groups about the meaning of value-based pricing and that they have to emphasize the value their hotel can offer to justify their room rates. Similarly, the key clients may need encouragement to compare their value expectations with the offer and recognize when the two match by not engaging in relentless bargaining. This is an important learning opportunity.

The groups generally get very involved in the negotiations. Therefore, the instructor needs to manage time and inform the groups of the time remaining. Furthermore, the groups must select a member to account points on the sheet given and take notes on negotiation successes and failures to support them during the reflection.

3.3.4. Phase 4: Reflection. After the negotiations are closed, the students return to their groups. During this phase, they must use the reflection questions (sheet 8) to analyze their performance during the negotiations. The points from each task and the final ADR change help in this, and the groups must compare their outcomes with their original strategies. The purpose of this phase is to give the students the opportunity to look back at the play, often a busy experience, and think what they could have done differently.

We adapted the Gibbs (2013) model to develop support for systematic reflection. We took the stages of the original model and related the questions to the role play. The goal is not only to find alternative actions for similar real-life situations, but also to discover connections between strategy development and its implementation during the negotiations. Connecting the two can be difficult in real life. The model also asks the students to reflect on the assessment itself as this can bring up valuable development ideas for future play. We further presented three questions at the end of the reflection instructions. These are intended to stimulate the final session of the day, in which students share learnings with a focus on value as a basis for B2B price negotiation.

3.3.5. Phase 5: Final Presentation (Suggested Evaluation). Instead of evaluating the groups based on points received, we recommend final presentations as the assessment of the role play. This gives the students the incentive to focus on the most important revenue management content of the play: planning and implementing B2B negotiation and pricing strategies with a particular focus on value. In the beginning, we used the remainder of the day for each group to give a 10-minute presentation. However, with more experience, we decided to focus on the sharing of learning on value-based pricing and ask students to submit, at the end of the day, a presentation narrated with audio or written comments. We encouraged the groups to work on the presentation already during the planning sessions and gave them the same evening to finish the work. This can, obviously, be easily tailored by an instructor.

The presentation is divided between three main parts: planning, execution, and reflection. This allows the groups, first, to share their plans and, subsequently, reflect on how well they succeeded in actioning those plans. Whereas points earned are not a grading criteria, students must present the summary sheet from the Excel calculator as a starting point for their reflection. Suggested grading criteria for the assessment is presented on sheet 9 of the Excel workbook.

The presentation may be complemented with other assignments that students can complete after the role play day, such as developing a revenue management action proposal for one of the hotels in the game. This can include further strategies and tactics beyond value-based pricing and, thus, provide summative course evaluation. Alternatively, the students could write individual reflective reports of their negotiation experience. Depending on the needs of the program, the role play allows flexible evaluation of how well learning outcomes were reached.

4. Pedagogical Objectives and Learning Outcomes

The pedagogical goal of this role play is to simulate managerial situations and challenge students to connect pricing in theory with decisions in practice. As seen during the literature review, perceived value and the pricing process are complex topics to implement in practice. Therefore, we aim the play at master's level students, who we believe to benefit most from such thinking. This does not prevent using the play with bachelor's students as it can also introduce hotel revenue management and pricing in general. However, the pedagogical objectives and learning outcomes discussed next focus on managerial skills for applying pricing theory to practice at master's level. Application to bachelor's courses is discussed at the end of the article.

Revenue management combines several competencies and topics under one discipline. This negotiation role play focuses on B2B value-based pricing, and it revolves around the challenges that hotel chains and properties belonging to those chains face when trying to implement this sophisticated form of pricing. In terms of competencies, the students develop discipline-specific knowledge and practice critical and strategic thinking, problem solving, communication, teamwork, and self-reflection. The play is set in a hotel scenario, but it could also be used to develop pricing and value analysis skills in general management programs that focus on service industries. With this broad set of competencies, the role play responds to the requirements of the 21st century competencies and Organisation for Economic Co-operation and Development expectations (National Research Council 2011, Organisation for Economic Co-operation and Development 2014).

The aim of the play is to prepare students for internal and external pricing decisions by highlighting the role of customer-perceived value as a basis for setting prices. This learning is further enhanced through reflection with some reflection outcomes shared across the groups. At the end of the role play, students will be able to

- Analyze and evaluate a hotel market and create fitting pricing strategies.
- Justify pricing arguments to B2B counterparts in a value-based price negotiation context.
- Interpret behavior and propose improvements through systematic reflection to enhance continuous learning.

5. Student Feedback and Development of the Play

5.1. Student Feedback and Lessons Learned

After two years of very positive but only qualitative feedback from the students, we adapted a student survey from Cole and Snider (2020) to collect quantitative results on how students perceived the third version of the role play. We received 28 responses, a satisfactory response rate from a cohort of 36 students. As the sample size does not allow advanced statistical analysis, we provide descriptive statistics (Table 3). All answers were given on a seven-point Likert-scale. In general, the group strongly agreed with all the statements (highest average 6.75, lowest 5.36). The group was particularly positive on questions 1, 2, 7, and 8. The survey, thus, supports that the role play was an interesting learning method, increased students' awareness on value-based pricing, and supports that simulations are an efficient learning method. The question on the future of the role play as part of the course prompted the highest average agreement (6.75). The questions that focused on the trickiest parts of learning through simulation, using value arguments to support rates, the stakeholder setup and teamwork (3, 4, 5, and 6) scored slightly lower averages with higher standard deviations. However, all questions clearly supported the value of the play as a learning tool for achieving the learning outcomes.

Table 3. Survey Results (n = 28)

Question	Minimum	Maximum	Mean	Standard deviation
1. The role play was an interesting way to learn about value-based pricing.	5	7	6.32	0.6
2. The role play has made me aware, more than before, of how complex and demanding it is to implement value-based pricing in practice.	5	7	6.36	0.77
3. The negotiation aspect of the role play was an effective way to simulate the real-world challenges (e.g., understanding customer perceptions of value, measuring WTP, dealing with psychological biases) that come with putting value-based pricing in practice.	2	7	5.71	1.13
4. The role play encouraged me to prioritize price (ADR) over volume (OCC), as such that I negotiated using value arguments whilst holding onto my price rather simply offering to discount in order to close the deal and bring volume in.	2	7	5.36	1.37
5. Dealing with multiple negotiation stakeholders at the hotel chain, property, and key-client levels and their value-based pricing challenges and stakes was a valuable learning experience.	3	7	6.00	1.10
6. Our team generally agreed on the final decisions after considering everyone's input.	2	7	5.54	1.35
7. Revenue management classes are best understood if real-world situations are simulated.	4	7	6.39	0.82
8. This role play should continue to be included in this course.	4	7	6.75	0.63

Based on qualitative comments from the survey and the informal feedback from earlier years, students enjoy the role play for its dynamism and application to a real business situation. Multiple comments included excitement over the unusual learning method, in which students themselves create the learning environment. Others valued the application of pricing theory to near practice and felt that this approach was a major improvement over traditional learning methods. Naturally, there were also situations in which the instructions needed to be clarified, either noticed as misunderstandings during the play or commented in feedback. Other feedback focused on how to use the time slots more efficiently (e.g., making it possible to prebook meetings) and provided thoughts on including additional aspects to the play. An interesting comment was raised related to the negotiations as one hotel group was frustrated that the discussion was all about rate and not about hotel attributes. Whereas we adjusted the instructions to emphasize the role of the value the key clients perceive, we also pointed out that this resembles real-life hotel management practice and demonstrates the challenge hotels face. Properties have to invest in facilities and services to improve their value, but hard work is required to convince customers to increase their WTP for rooms as a result. The major development between the first and the third version of the play focused on improving the emphasis on investigating attributes of value before and during the negotiations to avoid students getting involved in bargaining. Whereas commoditization is a battle faced by all hoteliers except those in the luxury segment and exposed to different pricing dynamics (Beldona et al. 2015), the aim of the play is to emphasize focus on value instead of rate. We also included the structured reflection based on the adapted Gibbs (2013) model in the second iteration as we felt this provided an important addition for learning.

5.2. Benefits and Limits of the Role Play

Arguably the biggest benefit of the role play is that it provides students with an unusual learning environment that engages them in cocreation of learning. This evaluation is supported by quantitative and qualitative feedback from the students. Whereas play can never fully reflect real life, it creates many situations common in negotiations in terms of both pricing theory and the need to react and think on your feet. This engagement enhances learning, and the student groups responded to this extremely positively. We are confident that our approach transforms traditional learning into an experience that reflects the core topic, the complexities of B2B hotel room pricing, in a way that traditional classes never could.

The game has its limitations. In our view, the biggest challenge is creating realistic scenarios to avoid negotiation behavior that would be irrelevant in the real world while not restricting students into a mold that suppresses innovation and creative thinking. This is a balancing act that can be continuously fine-tuned. Providing students with new tools to evaluate from where the key clients draw value is also an area that requires further development. A further limitation we acknowledge is the lack of connection with the real-life stakeholders. Involving the hotels and the companies represented in the play would evolve the learning to a new level. In our environment, trying to attract the interest and motivation of these companies would not be the most efficient use of limited resources. Elsewhere, it could be a viable option.

5.3. Potential Variations and Extensions

5.3.1. Bachelor's Level: Introduction to Value-Based Pricing or Pricing in General. As discussed in the introduction, this play is targeted at master's education. The negotiation context is value-based pricing, and the goal is to learn the managerial and psychological complexities that this approach introduces to B2B pricing decisions. However, the play could also be used in two types of bachelor's courses with some modification.

Final-year hotel finance and revenue management students who are introduced to price negotiations could play the first three phases of the game. However, our advice would be to emphasize planning and execution but limit reflection. The play could also be modified to act as an introduction to B2B pricing for younger students. In this case, the aspect of value-based pricing, as opposed to negotiating prices in general, would be reduced. This could be achieved by removing investments as a negotiation topic and focusing only on room rates. In this case, more potential outcomes for rates and volumes should be added. Furthermore, the reflection could be replaced by detailed descriptions of how the rate negotiations proceeded.

5.3.2. COVID-19: Live Online Negotiations. Because of COVID-19, the second and third times, the role play took place in a live online environment. Such an environment differs significantly from asynchronous online education as the instructor and the class were all in a videoconferencing classroom simultaneously. The student groups further communicated synchronously with each other in their preferred ways (e.g., WhatsApp, Skype, and Teams). A major change was to give the students the strategy goals in advance and lengthen the time used for the different activities. As already discussed, live final presentations were replaced by offline ones to allow more time for online interaction that happens more slowly, and we intend to keep the latter change also in future, traditional class situations.

At first, the groups were hesitant in conducting both within- and between-group negotiations online (most students were in individual locations), and a few misunderstandings slowed some of them down at the start. Under normal circumstances, the instructor would have quickly noticed these misunderstandings and easily fixed them, but in the online environment, this took longer. For the second online iteration, we were able to iron out many of these issues, and the increased time allowed students to ask questions from the instructors. The students felt that, despite a few misunderstandings, the play suffered amazingly little from the live online environment and they were able to interact with their peers and create the intended dynamic even under this severe constraint.

Because of emergency travel arrangements at the start of the pandemic, two student groups missed the live event. To allow their evaluation, we offered them an opportunity to conduct the game in an asynchronous environment, in which the two groups only needed live interaction during the negotiation phase. Based on the small sample, it is impossible to conclude whether the same learning was achieved, but the experiment suggests that the play could potentially be converted also to asynchronous online learning.

6. Concluding Remarks

Value-based pricing is a complex topic essential for any revenue management education that goes beyond the basics. However, as research demonstrates (Van der Rest et al. 2018, Raja et al. 2020), it is difficult for the industry to understand and apply correctly. To bridge the gap between value-based pricing theory and practice, we developed a role play that introduces students to the complexities of pricing in an engaging manner that challenges them to cocreate their own learning experience. After three student cohorts of testing, we are confident of the value the play can bring to both classroom and online learning.

If you decide to use this game in class, we would be grateful for feedback from both student and instructor perspectives. Comments, even short ones, can reveal new insights and help us improve ourselves as educators so that we can offer a better learning experience to our students. Thank you!

Acknowledgments

The authors thank the cohorts of Institut Paul Bocuse/emLyon Business School master's in international hospitality management students, particularly for their openmindedness and commitment in the extremely challenging pedagogical situation created by COVID-19.

References

Abrate G, Viglia G (2016) Strategic and tactical price decisions in hotel revenue management. *Tourism Management* 55:123–132.

Anderson CK, Kimes S, Carroll B (2009) Teaching revenue management at the Cornell University School of Hotel Administration. *INFORMS Trans. Ed.* 9(3):109–116.

Avlonitis GJ, Indounas KA (2006) Pricing practices of service organizations. *J. Service Marketing* 20(5):346–356.

Beldona S, Miller B, Francis T, Kher HV (2015) Commoditization in the U.S. lodging industry: Industry and customer perspectives. *Cornell Hospitality Quart.* 56(3):298–308.

Cole R, Snider B (2020) Game—Rolling the dice on global supply chain sustainability: A total cost of ownership simulation. *INFORMS Trans. Ed.* 20(3):165–176.

Cross RG, Higbie JA, Cross DQ (2009) Revenue management's renaissance: A rebirth of the art and science of profitable revenue generation. *Cornell Hospitality Quart.* 50(1):56–81.

Dutta S, Zbaracki MJ, Bergen M (2003) Pricing process as a capability: A resource-based perspective. *Strategic Management J.* 24(7):615–630.

Enz CA, Canina L, Rest JPIVD (2016) Hotel strategic pricing in Europe: A 10-year exploration of competition. *Internat. J. Revenue Management* 9(2/3):92–107.

Gibbs G (2013) *Learning by Doing* (Oxford Brookes University, Oxford, UK).

Hallberg NL (2017) The micro-foundations of pricing strategy in industrial markets: A case study in the European packaging industry. *J. Bus. Res.* 76:179–188.

Hinterhuber A (2008) Customer value based pricing strategies: Why companies resist. *J. Bus. Strategy* 29(4):41–50.

Hinterhuber A (2017) Value quantification capabilities in industrial markets. *J. Bus. Res.* 76:163–178.

Hinterhuber A, Liozu SM (2017) The micro-foundations of pricing. *J. Bus. Res.* 76:159–162.

Hofstetter R, Miller KM, Krohmer H, Zhang ZJ (2021) A de-biased direct question approach to measuring consumers' willingness to pay. *Internat. J. Res. Marketing* 38(1):70–84.

Ingenbleek P (2007) Value informed pricing in its organizational context: Literature review, conceptual framework, and directions for future research. *J. Production Brand Management* 16(7): 441–458.

Jaureguiberry F, Tappata M (2015) Game—The hotel game: Pricing simulations with opaque and transparent channels. *INFORMS Trans. Ed.* 16(1):24–38.

Kienzler M (2017) Does managerial personality influence pricing practices under uncertainty? *J. Production Brand Management* 26(7):771–784.

Kienzler M (2018) Value-based pricing and cognitive biases: An overview for business markets. *Indust. Marketing Management* 68:86–94.

Liozu SM, Hinterhuber A (2013) Pricing orientation, pricing capabilities, and firm performance. *Management Decision* 51(3):594–614.

Liozu SM, Hinterhuber A, Boland R, Perelli S (2012) The conceptualization of value-based pricing in industrial firms. *J. Revenue Pricing Management* 11(1):12–34.

Monroe KB (1990) *Pricing: Making Profitable Decisions* (McGraw-Hill Book Company, New York).

Moorthy S, Ratchford BT, Talukdar D (1997) Consumer information search revisited: Theory and empirical analysis. *J. Consumer Res.* 23(4):263–277.

National Research Council (2011) Assessing 21st century skills: Summary of a workshop (Washington, DC).

Organisation for Economic Co-operation and Development (2014) Competency framework. Technical report. Accessed April 15, 2020, https://www.oecd.org/careers/competency_framework_en.pdf.

Raja JZ, Frandsen T, Kowalkowski C, Jarmatz M (2020) Learning to discover value: Value-based pricing and selling capabilities for services and solutions. *J. Bus. Res.* 114:142–159.

Sánchez-Fernández R, Iniesta-Bonillo MÁ (2007) The concept of perceived value: A systematic review of the research. *Marketing Theory* 7(4):427–451.

Schlissel MR, Chasin J (1991) Pricing of services: An interdisciplinary review. *Service Industries J.* 11(3):271–286.

Shugan SM, Xie J (2004) Advance selling for services. *California Management Rev.* 46(3):37–54.

Smith Travel Research (2020) SHARE center. Accessed July 7, 2020, https://str.com/training/academic-resources/share-center.

Sweeney JC, Soutar GN (2001) Consumer perceived value: The development of a multiple item scale. *J. Retailing* 77(2):203–220.

Töytäri P, Keränen J, Rajala R (2017) Barriers to implementing value-based pricing in industrial markets: A micro-foundations perspective. *J. Bus. Res.* 76:237–246.

Van der Rest JP, Roper A, Wang XL (2018) Why is a change of company pricing policy so hard to implement? *Internat. J. Hospitality Management* 69:30–40.

Walsh G, Shiu E, Hassan LM (2014) Replicating, validating, and reducing the length of the consumer perceived value scale. *J. Bus. Res.* 67(3):260–267.

Wang T, Venkatesh R, Chatterjee R (2007) Reservation price as a range: An incentive-compatible measurement approach. *J. Marketing Res.* 44(2):200–213.