

Management Theory and Studies for Rural Business and Infrastructure Development eISSN 2345-0355. 2022. Vol. 44. No. 4: 421-434 Article DOI: https://doi.org/10.15544/mts.2022.42

# THE POSSIBILITIES OF USING PROJECTIVE PLANNING IN CREATING AND PRESENTING VALUE TO THE CONSUMER IN THE CATERING SECTOR

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#### **Abstract**

Seeking out value deals is becoming a daily routine for today's consumers. Thus, creating and delivering value is now one of the most crucial elements necessary for organizations to survive in the market. The creation of service value for the user is characterized by specificity due to the intangibility of the service itself, inseparable from its provider. Consumers are seeking autonomous experiences, and organizations must increasingly focus on meeting such expectations. Projection planning technologies can be applied in the catering sector to create an autonomous consumer experience and increase its value. The purpose of the article examining the possibilities of using projection planning in creating and presenting value to the consumer in the catering sector is to determine which methods of presenting projection planning technology would create the greatest value. The analysis of the scientific literature enables the identification of the prospects of projection planning technology in the catering sector, and the results of the conducted quantitative survey aid determining which elements of projection planning technology are the most important to Lithuanian restaurant customers.

Keywords: consumer value, data analysis, restaurants, survey, innovations.

JEL Codes: C19, C83, D11, L83, 039.

#### Introduction

Finding great deals is the order of the day for today's consumers. This makes it more important than ever to offer valuable products to be able to compete in the market. According to Wang (2010), user value (or received user value) is expressed as a comparison ratio, that is, something that the user gives in exchange for owning a certain product. Other authors (Yang, Peterson, 2004; Wang, 2010) unanimously agree that customers are not inclined to change suppliers if the value they receive and satisfaction with the product is not lower than the average in the market. Notably, the value perception of the user is subjective, and changes over time (Homburg, Giering, 2001). Thus,

business strategies must forecast user engagement generation strategies. Consumer engagement increases satisfaction. satisfaction is an essential condition for loyalty (Spiteri, Dion, 2004). Consumer loyalty is determined by organizational image, product quality, and persistence (or frequency) (Wang, 2010). In addition, according to Yuksel et al. (2010), a special desire can develop from the symbolic meaning of the product, which is determined by satisfaction with products, cognitive loyalty, place or product identity, residual feelings or memories, distinctiveness and uniqueness of the place or product. A business that can identify these areas and use

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them as separate tools is likely to achieve greater customer loyalty. These measures increase attachment to the organization (Martins et al., 2015). Such attachment can become a competitive advantage that enables organizations to become stronger market participants or enter the market more easily.

Products provided in the service sector are not physically tangible, so the value perceived by consumers depends on specific aspects. According to Winkler and Dosoudil (2015), the value provided by the service sector to the consumer is based on the ability to satisfy the consumer's needs. It is associated with relationships and experience, system integration, process supervision, the significance of service, attitude, and ideology. The value of a service is determined by its recipient; hence, it is associated with subjectivity (Idris, 2013; Sun, 2017; Ranjan, Read, 2016; Teboul, 2006; Boksberger, Melsen, 2011; Winkler, Dosoudil, 2015). Therefore, it is essential to involve the user in the service development process. The catering sector is one of the subsystems of the service industry. The maximum value created by catering companies for the consumer is determined by the type and exclusivity of the establishment, quality of service provided, its image, recommendations, inclusion in guides, and other factors. Further, decorations, lighting, and innovation are a crucial consideration in increasing value to the consumer. Augmented reality, and projection planning technology can also be useful tools. Projection planning refers to the methods and technologies that combined allow the display of images on surfaces that are adapted to shapes or textures. Thus, the effects of lighting can be incorporated into the consumer's decision-making process (Duarte et al., 2016; Obeidat, Obeidat, 2015). Notably, no research on the use of projection planning technology in catering establishments has been conducted in Lithuania. Thus, the scientific problem can be formulated as follows: what methods of presenting projection planning technology would create the greatest value?

The *aim* of the article is to determine which methods of presenting projection planning technology would create the greatest value by conducting a quantitative survey of restaurant customers.

The subject of research is the use of projection planning technology in restaurants. The objective of research is the possibility of using projection planning technologies in restaurants.

Research methods: a quantitative survey conducted in April 2022 between the 2<sup>nd</sup> and the 26<sup>th</sup>. The questionnaire, consisting of fifteen questions, was placed in Google Forms, and was publicly accessible. The participants of the quantitative survey were people over 18 years of age visit the restaurant at least once every six months. Respondents were asked questions to determine which methods of projection planning technology presentation would create the greatest value. The research sample was calculated according to Paniotto's formula and allowed for a 5 percent error, by interviewing 394 respondents. A total of 920 respondents participated in the study. The data was analysed using the SPSS (Statistical Package for Social Sciences) software and MS Excel program. Results were submitted in a summarized form.

Research *results*: the quantitative survey results demonstrated that Lithuanian restaurant customers would visit restaurants where projection planning technologies were in place. Projection planning service in a restaurant should: be illuminated around the interior (the most acceptable variant); create performances from animations; take place between orders; not be performed during service or the meal; not include the projection planning advertising form; include the exterior and specific items of the restaurant to execute general animations. Based on research results and following these principles restaurants could attract an additional 34.2 percent of customers.

The results of the study, which reflect the methods of presenting projection planning technology which affect the value perceived by users, have both theoretical and practical



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significance. The research results can be used in making strategic decisions regarding the forms and elements of projection planning technology to use in restaurants to increase consumer perceived value. The research can be expanded by including the opinions of restaurant managers on the possibilities of using projection planning technologies.

# Theoretical Provisions of the Use of Projection Planning Technologies in Creating and Presenting Value to Consumers in the Catering Sector

Finding great deals is the order of the day for today's consumers. This makes it more important than ever to have valuable products that can compete in the market. According to Wang (2010), user value (or received user value) is expressed as a comparison ratio, that is, something that the user gives in exchange for owning a certain product. The ratio of this exchange is determined by what price the customer is willing to pay to receive the corresponding value. Johnson emphasizes that the value-price comparison ratio must be increased to such an extent that to have a long-term relationship is financially beneficial for both the business and the consumer.

Jain, and Singh (2002) found in their study that high price-sensitive customers (i.e., those with very low long-term customer value) are "attracted" only if the organization starts using more funds to attract those customers. Gloy et al. (1997) argue that this is the reason it is crucial to determine the lifetime value of the user. The marketing strategy needs to be adjusted according to the determined value. Arguably, acquisition cost correlates with long-term customer value. If the long-term value of the user is high, then the cost of attracting him is low. This means that focusing on user retention can reduce the cost of acquiring them. According to Jain, and Singh (2002), customer retention consists of retention cost; cost

sensitivity of user retention; how much money is spent on consumer retention advertising. It is necessary to emphasize that if from the beginning more investment is made in the creation of the loyalty program and its communication, greater consumer loyalty can be expected. Otherwise, marketing strategies that focus on customer acquisition may not be profitable because customers will not be loyal and significant expenditure will be required for the organization to be able attract them. In addition, as the business focuses on user retention and communication of such system, additional benefits can be expected. These benefits can be manifested in the loyalty of users to the organization, and later in the manifestation of the "snowball" principle, when each user will encourage the emergence and participation of new users.

Different authors (Yang, Peterson, 2004; Wang, 2010) unanimously agree that customers are not inclined to change suppliers if the value they receive and satisfaction with the product is not lower than the average in the market. If switching costs are low, then this reduces loyalty. Gallarza et al. (2011) presented a model that demonstrates that customer loyalty and quality received by customers have more variables such as satisfaction, and price incurred. Therefore, to achieve better indicators, the business should assess accordingly which areas need more resources allocated to. If the desired outcome is greater customer loyalty, then it is necessary to increase the quality and received value, change the price of the product and strive for greater customer satisfaction. Received value and loyalty achieve synergy, but the most effective way to achieve customer loyalty would be to achieve better customer satisfaction and increase received value (Yang, Peterson, 2004).

It is necessary to emphasize that the value received by the user is subjective, and it changes over time (Homburg, Giering, 2001). Thus, businesses must strategically forecast user engagement seeking strategies. Consumer

involvement increases satisfaction. and satisfaction is an essential condition for loyalty (Spiteri, Dion, 2004). Consumer loyalty is influenced by organizational image, product quality, and persistence (or frequency) (Wang, 2010). In addition, according to Yuksel et al. (2010), a special desire can develop only from a symbolic meaning of the product, which is influenced by: satisfaction with products, cognitive loyalty; place or product identity; residual feelings or memories; distinctiveness and exclusivity of the place or product. A business that can identify these areas and uses them as separate tools is likely to have greater customer loyalty. These measures increase attachment to the organization (Martins et al., 2015). Such attachment can become competitive advantage that will enable a business to become a stronger market participant market enter the more Subconsciously, customers will already have an attachment to the organization, even without being its customers. In addition, other research (Lehman et al., 2019; Feng, Mueller, 2018; Carroll, Kovacs, 2021) emphasizes authenticity, which is also associated with value delivery in many areas. It must be emphasized that it is still not fully known why individuals and audiences differ in their interest, receptivity, and response to potentially authentic items and services.

According to Buttle, and Burton (2002), users' relationship with the organization depends on familiarity, trust, and responsibility. Notably, in the services sector, customer trust in the organization is particularly important and has a significant impact on loyalty. Therefore, organizations should have user recovery strategies and tactics in place. It is also important

for the company to assess the value and price of its product to the customer, which affects loyalty. Markedly, consumer loyalty consists of many factors, which are often subjective. Thus, consumer loyalty is, arguably, interconnected with individual characteristics. According to Homburg, and Giering (2001), there is a direct correlation between consumer loyalty, age, and income. Therefore, demographic data research and analysis can aid product marketing based on consumer characteristics, and to enable an organization to dominate a larger share of the market. During an economic recession, it is essential for organizations to strengthen their position in the market by identifying and utilizing innovative solutions, which can effectively aid accomplishing their set targets. Determining the potential budget for innovation involves subtracting the customer retention and acquisition costs from the value received by the user over the life cycle of the product.

The service sector, including the catering sector as one of the components of the service sector, is distinguished from other sectors by the specificity of its product. Products provided in the service sector are not physically tangible, so the value perceived by consumers has specific aspects. According to Winkler and Dosoudil (2015), the value to the consumer provided by the service sector is cantered on satisfying consumer needs. However, these needs are often not defined by technical (or physical) characteristics. There is no single common definition of the value of services to the user. Table 1 summarizes the definitions of service value for the user determined by the analysed author literature.



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#### Table 1. Definitions of customer value of services

| Definition of consumer perceived value                                                       | Author(s)                |
|----------------------------------------------------------------------------------------------|--------------------------|
| To create value for the consumer, companies must innovatively combine the right strategies   | Idris (2013)             |
| with good practices. This must be done with existing products that can meet the needs of     |                          |
| key customers.                                                                               |                          |
| The value of services to the user is the totality of relationships and experiences.          | Srun (2017)              |
| The value of services is always determined by who receives them.                             | Ranjan, Read (2016)      |
| Consumer value is an outcome that measures the willingness to pay the relevant costs.        | Teboul (2006)            |
| Systems integration, operations maintenance and service, service delivery processes, and     | Ashton et al. (2010)     |
| end-user acquisition are required for the products created to become valuable services.      |                          |
| Consumer values are attitudes, ideologies, beliefs, and rationales.                          | Boksberger, Melsen       |
|                                                                                              | (2011)                   |
| The dynamic sector of services involves the customer in the service provision process. Thus, | Winkler, Dosoudil (2015) |
| creating a common value for both internal and external users using common resources.         |                          |

<sup>\*</sup>Source: Compiled by authors.

Table 1 demonstrates that the value of services to the user is associated with relationships and experience, system integration, process maintenance, the significance of service, attitude, and ideology. The value of services is largely determined by the recipient, so it is subjective. It is essential to involve the user in the service development process.

The catering sector is one of the subsystems of the service sector. Catering companies operate in public places (e.g., hotels, and shopping centres). Various groups of catering companies are distinguishable, including fast food joints, coffee shops, pizzerias, bars, canteens, restaurants. Customer service also varies. In some establishments, customers are served by waiters or sales assistants, in others, the activity is based on self-service or delivery to homes, offices, or other locations.

Public catering is predominantly located in cities or near locations that attract large flows of people. There are fewer catering establishments in small towns. Caterers specialize in cuisines, customer income levels, dietary needs, service, and environment. To aid attracting more customers, catering companies often organize various festivals and events. However, the number of customers a company can attract is

finite due to the physical limitations of employee capabilities and space.

Restaurants are high-end catering companies that offer a more luxurious experience than other types of catering companies.

Restaurant customers are offered a particularly wide range of dishes, drinks, and services. Additional restaurant services including events, banquets, buffets, birthdays, weddings, and other celebrations are also offered to customers. In most cases, the environment of the restaurant is characterized by luxurious space, special furniture, original design, and abundant artistic decor and decorations. Restaurants can operate both as independent enterprises and as joint complexes for customers.

By reducing portions, restaurants increase the customer's perceived value of the product (Ge et al., 2018), which is associated with aesthetic presentation, quality, and product freshness. Since the customer evaluation of their restaurant experience is subjective, it is not possible to assess specifically why the customer does not like the food. However, other components that have a direct relationship to the customer's perceived value can be measured and utilized. These components are freshness, reduction of the processing time of the product,

aesthetic appearance, unique flavours, and combinations of textures. If these resources are employed, it can be expected that reducing portion sizes will not result in a decrease of the customer's evaluation of the restaurant.

In restaurants the quality of components - service, food and environment are important. However, according to research conducted by Ryu et al. (2012), the image of a restaurant is one of the main determinants of the value assigned. Crucially, the research study determines that the image of a restaurant does not have a significant impact on customer satisfaction. If the image of a restaurant is positive and the restaurant employs various image-building tools, its customers will likely perceive the value received as higher than it is, but this will not increase customer satisfaction. Therefore, image formation in the restaurant, arguably, provides a sense of prestige (the customer is happy to use it, but will not be a loval customer), which creates added value. Overall corporate image increases product demand (independent of the product image) by up to 20 percent (Ashton et al., 2010). Therefore, a restaurant needs to create a company image formation plan in parallel with customer satisfaction measures. Greater loyalty and better results can only be achieved by utilizing both.

Balazs et al. (2014) conducted a research study that assessed 1.2 million reviews from 252 thousand different customers among restaurants and confirmed that thousand authenticity creates greater added value independently of what value the restaurant provides and whether it is universal. The research examined various attempts to control the value provided by restaurants. In each case the results demonstrated that authenticity creates higher added value. The greatest added value resulting from authenticity was exhibited by restaurants that are: independent, family oriented or specialize in one category. Further, authenticity enhances all three main dimensions of a restaurant (service, food, and environment) (Ryu et al., 2012). Authenticity was found to be the least beneficial to restaurants that are: chaintype, non-family oriented, or specialize in various categories.

Based on the results of the research study, it can be argued that to maximize the benefits of authenticity restaurants must create a corporate image that is either independent, family oriented, or specializing in one category. In addition, depending on the type of restaurant, according to Ha and Jang (2012), the factors that influence consumers' value perception also differ:

- Fast food the value to fast food restaurant customers is determined by food and convenience.
- Casual, informal the value to customers of casual, informal restaurants is determined by quality and emotions.
- High etiquette and culture the value of high etiquette and culture-oriented restaurants to customers is new or profound experiences (which cannot be replicated anywhere else).

If restaurants fail to consistently deliver the essential quality of their group, then customers are lost (Ryu et al., 2012). Moreover, feedback from close people is much more persuasive than other forms of information (Martin et al., 2015). Customers are much more interested in negative reviews than positive ones. Such customers want to evaluate the worst possible experience and then evaluate the potential risk of receiving the product. If the risk is high, customers will choose a safer and even lower-value product. In restaurant marketing, it is evident that company image has a significant influence on company loyalty (Šeric et al., 2014). Companies must try to create a brand image for their organization. An organization's image is a coded message that customers recognize when they encounter an organization (Ryu et al, 2008). Therefore, if the target customer belongs to the business customer segment, then it is necessary to create a brand image that appeals to them. Also, the services provided must be of greater value to those customers or increase customer satisfaction in one form or another. This results in a more loyal customer base that will share positive



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recommendations and help generate the highest possible value and satisfaction with the product. Ashton et al. (2010) found that 20 percent of people are more inclined to buy because of a company's brand image. Also, the author demonstrated that the main factors determining the likelihood and evaluation of a visit to a restaurant are the restaurant's image and nonmonetary exchange. Brand image also has a direct correlation with customer loyalty (Šeric et al., 2014). Arguably, according to research conducted by the author, restaurants benefit from investing in creating their image because a positive image encourages purchases as well as increases customer loyalty.

According to Line and Runyan (2012), restaurant marketing research usually centres on marketing functions or the existing environment. While analysing marketing functions and environment is important, future-oriented research is equally significant. A basic analysis of social platforms can assist in modelling preliminary scenarios of upcoming situations or problem resolution (Kim, Law. Forecasting and predicting possible scenarios can allow for a more effective assessment of situations or emerging problems and assist in faster decision-making. Hsu, Jang (2008) research on restaurant marketing value creation demonstrates that there is a direct correlation between restaurant value creation and marketing tools: marketing tools that focus on product presentation, differentiation, and positioning create some of the most significant value for restaurants. From the customer's perspective, there is little or no difference between, for example, a dozen pizza restaurants within 50 km of their location suggested on search platforms, unless the restaurants used additional funds for sponsorship. The use of sponsorships enables restaurants to attract a larger share of consumers. Therefore, sponsorships that introduce products. distinguish them from competitors, highlight the company's positioning among competitors can attract a larger share of customers in that market.

To locate restaurants, customers may rely not only on information received on social platforms but also on the recommendations of the platform guides. Christel (2013) researched and considered the influence of guides on choosing a restaurant. The Michelin guide was identified as the most influential in the field of gastronomy, while local guides were slightly less influential. Depending on the region where the restaurant is located, local guides and regional guides share second place in terms of their influence in choosing a restaurant. Travel and restaurant guides can increase prominence of some restaurant chefs, and increase the awareness of the business, the region, and the concept of that restaurant. According to The Sun (2017), a 3-star Michelin restaurant will create a gastronomic journey that is no longer about price but about the experience. Achieving Michelin stars signifies that the restaurant's responsibility shifts from feeding and providing a place to socialize to educating customers on new experiences. As a result, as soon as businesses are mentioned or recognized in specialized publications, their pricing and investments in the business automatically change. Guides invest a lot in research, advertising, and building their image. By working closely or as precisely as possible with the guides, restaurants can firmly secure a customer base and present itself in a way that is most appealing in guide-type portals or search platforms. Guides, both biased and impartial, can become strategic partners of organizations, and aid restaurants in shaping a unique image that is authentic and can help restaurants achieve their goals. Guides can help showcase all services provided by the restaurants in detail and predict the scenarios that the customers will pursue. Those scenarios should not separate the restaurant from its specific group, and the restaurant should provide precisely such services and such quality as is typical for this type of restaurant. Also, the restaurant should offer products that allow serving customers from various social groups. Customers from various social groups will seek the feeling of prestige and luxury that the restaurant can provide. Therefore, this approach can be used particularly effectively to accumulate good reviews and to establish customer desire to visit and visit more often. Consequently, it can be argued that the use and application of marketing and research strategies in restaurants will enable the restaurants to effectively plan.

Warden (2012) distinguishes three areas in restaurants that are associated with quality presentation: decorations (stimulates, evokes feelings; complements, creates an appropriate environment), colours (encourages consumption through menu stylistics, essential products or accent lighting), and lighting (creates a sense of comfort and intimacy). Meanwhile, Ryu et al. (2012) emphasize that service is also important. According to Ryu et al. (2008), restaurant customers' satisfaction with food and service is not the main reason that encourages more frequent use of services. Consumption is encouraged through perceived value and restaurant image. Research study conducted by Duarte et al. (2016) demonstrates that customers single out decorations, interior, furniture style, lighting, and music as some of the most important criteria for choosing restaurants, which are not attributed to service or food. Therefore, when considering the success of a restaurant, it is essential to evaluate all determinants such as location, waiting time, decorations and interior, food quality, price, and cleanliness. Consequently, to increase consumer attention must be paid to value more decorations. lighting, innovation. and Augmented reality, and projection planning technology can be used to increase consumer value, as well.

26 percent of market researchers claim that artificial reality (AR) technology will be among the most popular tools in the future (Feng, Mueller, 2018). This technology engages and creates new and unprecedented feelings. Age

groups do not affect consumption. As a result, advertising, and showcasing products that are created based on AR can bring a very large competitive advantage in a period of growing popularity. Artwork in restaurants should complement the service or production environment (Teboul, 2006). Consequently, a traditional service that has many competitors could be transformed into a unique and unrivalled service. Such service could employ various approaches and means to complement each other to achieve the desired results.

Projection planning technology is not new. On a global scale, the technology became functional and its price more acceptable to the user fourteen years ago resulting in a diverse application. Projection planning technology tools are in use in Lithuania for product presentations, city celebrations, theatres, and other stage performances. Projection planning creates a sense of wonder that draws people to animations. Manifestations of technology will be more frequent in the future, as the process becomes less time- and fundingintensive. For marketers, this signifies that there will be another tool available in addition to the already existing assortment (Feng, Mueller, 2018).

Projection planning refers to the methods and technologies that together allow the display of images on surfaces that are adapted to shapes or textures. Projection planning is the third of the four paradigms of artificial reality (Feng, Mueller, 2018). This paradigm is called "geolayer" and is associated with surfaces and location. Hence, the entire action is built around the user. Wang et al. (2003) assert that pairing the former and the latter is effortless and only require the matching of textures and special natural elements (such as shadows, shades, and element angles). The modern sensor technology used today allows for an even faster process by instantly matching the elements automatically ("lightform").

Lighting in restaurants is crucial as it plays a significant role in shaping the environment. Specific lighting that is designed to help achieve



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particular goals can encourage customers to make decisions or increase the number purchases (Duarte et al., 2016). Appropriate lighting can help attract or divert attention. For example, if the goal is to attract attention, a dark environment and bright lighting should be used. If diverting attention away from a specific object or location is the desired outcome, no concentrated lighting should be used (Obeidat, Obeidat, 2015).

Trendy locations could also be created by applying projection planning technology, for example, by transforming a location into a museum-like area where specific projections are displayed. Further, guests of such locations could be included in the activities by being asked to participate. Projection planning technology attracts great interest (Feng, Mueller, 2018) because it is a product that is designed to invite and gather people to collective celebrations and places and can display projection planning animations to large groups of people at once. As technology improves, the implementation of this technology becomes easier and more accessible. A good example is the Alchemist 2.0 restaurant in Copenhagen, Denmark. The ceiling of the restaurant is an example of projection planning technology, while the operations of the establishment are designed to achieve harmony between all services.

Projection technology creates animations around users. Attendance of a certain location is the only required customer action they do not need to wear or download anything additional. Because the animation is taking place around the users, it is unanimously engaging and creates a sense of harmony. Consequently, user experience is new or stronger than previously encountered. The effects created by animations enhance engagement, enrich services and, most importantly, complement the service delivery environment. This environment can simulated and has great potential to do so. As a result, focused animations, projections, and lighting can encourage users to make decisions that are profitable for the organization.

preparation and running projection animations on surfaces are a quick process. Technologies, sensors, and connections are so advanced that all necessary preparations can be completed in a few hours. Essentially, the equipment must not annoy or dazzle the customers and must thoroughly complement the environment. The augmented environment works in partnership with the service provided. As a result of the animation and the additional service, users can get more involved in the process. The technology, considering adaptability and low market uptake, creates unique value in catering and organizations, and could provide exclusivity, high interest, and greater value to the entire service.

In conclusion, the service value creation is, arguably, inseparable from the perceived user value, and is often subjective. Consumers are increasingly looking for an authentic experience, so, the service sector, including representatives of the catering sector, must find new ways to create value to attract consumers, and retain them. Projection planning technologies could be one of the solutions.

# **Analysis of Quantitative Research** Results

To determine the awareness of projection planning technologies among restaurant customers and to distinguish methods of presenting the value-adding technology, in April 2022 between the 2<sup>nd</sup> and the 26<sup>th</sup> a quantitative survey was conducted. The participants of the quantitative survey were people over 18 years of age who visit the restaurant at least once every six months. Random sampling was used to conduct the quantitative study. This method was chosen because all units of the general set had the same chance of belonging to the sample of a particular study. The Pinot formula was used to calculate the sample. It was determined that to expand the results to the general population and maintain 5 percent sampling error it was required to survey 384 respondents. The collected data was analysed using the SPSS (Statistical Package for Social Sciences) software, which is convenient for processing the collected information, adapted to work with data, its analysis, establishing relationships, and the MS Excel program. Means and standard deviations were calculated for data expressed on an interval scale, and frequencies (percentages) were calculated for data expressed on an ordinal and nominal scale. The questionnaire consisted of 15 questions and the survey was placed in Google Forms. Respondents were questions to determine which delivery methods for projection planning technology would create the most value. 920 respondents participated in the study, of which 68.5 percent were women and 31.5 percent of men. The distribution according to the place of residence was as follows: Vilnius region - 72.3 percent, Kaunas region - 18.5 percent, Klaipėda region - 9.2 percent. 93 percent of respondents were working and receiving higher than average income (58.3 percent of all respondents). 80.7 percent of respondents were in the 22-37 age group. Therefore, the results of the study are considered representative.

Restaurant customers were asked to rank the forms of projection planning they would be comfortable seeing in a restaurant. Responses were classified in the following order: interior, object animations, exterior, stage performances, and advertising. Of the elements of service, food, and environment in a restaurant, projections are usually desired to be seen in the environment element. Also, most respondents desired to see animations while waiting for the order. Respondents were least familiar with the form of projection planning technology which focuses on specific items - 49.2 percent. This increasingly frequent presentations, and museums, where there are additional paintings or other works of art. The majority of customers are familiar with the form of exterior technology - 92.1%. On average, 10 percent of all respondents have not seen or are familiar with at least one form of the technology. Hence, the majority respondents are both practically and theoretically familiar with the technology and its forms.

Respondents were asked to rank the forms of projection planning technology based on their preferences on a five-point Likert scale from 1 to 5, where 5 is the least acceptable. The results are presented in Figure 1.



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Rank the types of projection planning technology you would like to see in a

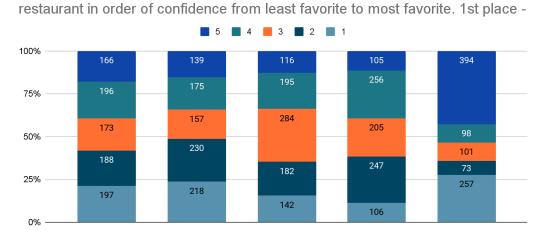


Figure 1. Distribution of types of projection planning technology ranked

As demonstrated in Figure 1, interior, exterior and performance animations in a restaurant are most acceptable to customers.

Respondents were also asked to indicate which forms of projection planning technology

they would like to combine into a common animation. Multiple answer choices were possible. The results are presented in Figure 2.

If you could, which forms of projection planning technology would you like to combine into a common animation? Mark only

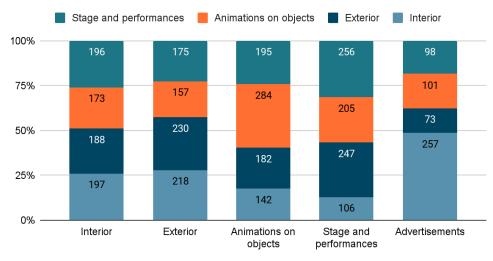


Figure 2. Grouping of projection planning technology forms ranked

As determined in Figure 2, respondents prefer a service that combines multiple forms of projection planning technologies.

87 percent of respondents prefer to see animation objects in the environment and between orders. Therefore, when orders are being taken, customers are being served, or enjoying food, customers would like to see projection planning animations. Subsequently, projection planning animations could complement the waiting of restaurant customers. The respondents were also asked to indicate how many times they would visit the restaurant if it offered an animation service, and if it was updated periodically. The distribution of answers was as follows: 39 percent would visit the restaurant once every three months, 26.8 percent - once a year, 24.3 percent - once a month, and 9.9 percent - more often than once a month.

A summary of the research results analysis demonstrates that customers would visit restaurants that use projection planning technologies. The projection planning service in the restaurant should:

- 1. Be illuminated around the interior (the most acceptable option).
  - 2. Create performances from animations.
  - 3. Take place between orders.
- 4. Not be performed during service or the meal.
- 5. Not include the projection planning advertising form.
- 6. Include the exterior and specific items of the restaurant to execute general animations.

According to the results of the study and following these principles, restaurants could attract an additional 34.2 percent of customers. However, to determine specific aspects of consumer value and possible benefits for restaurant owners, a more in-depth study is necessary, including a survey of restaurant managers.

# **Conclusions**

The value the user receives is subjective and changes over time. Subjectivity is particularly significant in assessing the value created by services for the user due to their specificity. The value of services to the user is often not tangible and cannot be separated from the person providing the services. Scientific

studies have found that service, food, image, environment, and other factors are important for restaurant visitors, including presentation: decorations, colours, and lighting. This is directly related to the possibilities of projection planning technologies. Projection technology creates animations around users, resulting in new or stronger experiences. The effects created by animations enhance enrich services engagement, and. importantly, complement the service delivery environment. This environment can simulated, and has very high capabilities focused animations, projections and lighting can encourage users to make decisions that are profitable for the organization. The preparation and running projection of animations on surfaces are a quick process. Technologies, sensors, and connections are so advanced that all necessary preparations can be completed in a few hours. Essentially, the equipment must not annoy or dazzle the customers and must thoroughly complement the environment. The augmented environment works synergistically with the service provided. As a result of the animation and the additional service, users can get more involved in the process. The technology, considering adaptability and low market uptake, can create a unique value proposition in catering and service organizations, and can create exclusivity, high interest, and greater value to the entire service.

The results of the conducted quantitative survey demonstrate that Lithuanian restaurant guests would visit restaurants that use projection planning technologies. Projection planning service in the restaurant should be illuminating around the interior (the most acceptable option), create performances from animations, take place between order, not be performed during service or the meal, not include the projection planning advertising form, include the exterior and specific items of the restaurant to execute general animations. According to the results of the study and following these principles, restaurants could attract an additional 34.2 percent of customers.



### Management Theory and Studies for Rural Business and Infrastructure Development

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#### References

Ashton, A. S., Scott, N., Solnet, D., Breakey, N. (2010). Hotel Restaurant Dining: The Relationship between Perceived Value and Intention to Purchase // *Tourism and Hospitality Research*. Vol. 10, No. 3: 206–218. https://doi.org/10.1057/thr.2010.5.

Balazs, K., Carroll, G. R., Lehman, D. W. (2014). Authenticity and Consumer Value Ratings: Empirical Tests from the Restaurant Domain // *Organization Science*. Vol. 25, No. 2: 458–478. http://doi.org/10.1287/orsc.2013.0843.

Boksberger, E. P., Melsen, L. (2011). Perceived Value: A Critical Examination of Definitions, Concepts and Measures for the Service Industry // *Journal of Services Marketing*. Vol. 25, No. 3: 229–240. http://dx.doi.org/10.1108/08876041111129209.

Buttle, F., Burton, J. (2002). Does Service Failure Influence Customer Loyalty? // *Journal of Consumer Behaviour*. Vol. 1: 217-227. https://doi.org/10.1002/cb.67.

Carroll, G. R., Kovács, B. (2021). Authenticity: Meanings, Targets, Audiences and Third Parties // Research in Organizational Behavior. Vol. 41. https://doi.org/10.1016/j.riob.2021.100149.

Christel, L. (2013). Taste Makers in the "Fine-dining" Restaurant Industry: The Attribution of Aesthetic and Economic Value by Gastronomic Guides // *Poetics*. Vol. 41, No. 4: 342–365. https://doi.org/10.1016/j.poetic.2013.05.003.

Duarte, A. A, Sakellarios, N., Jones, C., Cseh, L., Cooper, S. J. (2016). 'Value for Money' and the Restaurant Experience: A Case Study of Supply and Demand Stakeholders // *International Journal of Leisure and Tourism Marketing*. Vol. 5, No. 1: 44–65. http://doi.org/10.1504/ijltm.2016.077129.

Feng, Y, Mueller, B. (2018). The State of Augmented Reality Advertising around the Globe: A Multi-Cultural Content Analysis // *Journal of Promotion Management*. Vol. 25, No. 4: 453–475. https://doi.org/10.1080/10496491.2018.1448323.

Gallarza, M.G., Gil-Saura, I. and Holbrook, M.B. (2011). The Value of Value: Further Excursions on the Meaning and Role of Customer Value // *Journal of Consumer Behaviour*. Vol. 10: 179-191. https://doi.org/10.1002/cb.328.

Ge, L., Almanza, B., Behnke, C., Tang, C. H. (2018). Will Reduced Portion Size Compromise Restaurant Customer's Value Perception? // International Journal of Hospitality Management. Vol. 70: 130–138. https://doi.org/10.1016/j.ijhm.2017.10.026.

Gloy, B.A., Akridge, J.T. and Preckel, P.V. (1997). Customer Lifetime Value: An Application in the Rural Petroleum Market // Agribusiness. Vol. 13: 335-347. https://doi.org/10.1002/(SICI)1520-6297(199705/06)13:3<335::AID-AGR7>3.0.CO;2-1.

Ha, J., Jang, S. S. (2012). Consumer Dining Value: Does it Vary across Different Restaurant Segments? // Journal of Foodservice Business Research. Vol. 15, No. 2: 123–142. https://doi.org/10.1080/15378020.2012.677378.

Homburg, C., Giering, A. (2001). Personal Characteristics as Moderators of the Relationship between Customer Satisfaction and Loyalty—An Empirical Analysis // *Psychology & Marketing*. Vol. 18: 43-66. https://doi.org/10.1002/1520-6793(200101)18:1<43::AID-MAR3>3.0.CO;2-I.

Hsu, J. L., Jang, S. C. (2008). Advertising Expenditure, Intangible Value and Risk: A Study of Restaurant Companies //International Journal of Hospitality Management. Vol. 27, No. 2: 259-267. http://doi.org/10.1016/j.ijhm.2007.07.012

Idris, F. (2013). Applying the Concepts of Simplicity and Discipline for Creating Customers' Value in a Low Contact Services Company: An Exploratory Study // *Business Strategy Series*. Vol. 14, No. 5/6: 144-150. https://doi.org/10.1108/BSS-12-2011-0031.

Yang, Z., Peterson, R.T. (2004). Customer Perceived Value, Satisfaction, and Loyalty: The Role of Switching Costs // Psychology & Marketing. Vol. 21: 799–822. https://doi.org/10.1002/mar.20030.

Yuksel, A., Yuksel, F., Bilim, Y. (2010). Destination Attachment: Effects on Customer Satisfaction and Cognitive, Affective and Conative Loyalty  $/\!/$  Tourism Management. Vol. 31, No. 2: 274–284. https://doi.org/10.1016/j.tourman.2009.03.007.

Jain, D., Singh, S. S. (2002). Customer Lifetime Value Research in Marketing: A Review and Future Directions // *Journal of Interactive Marketing*. Vol. 16, No. 2: 34–46. https://doi.org/10.1002/dir.10032.

Kim, H. H., Law, R. (2015) Smartphones in Tourism and Hospitality Marketing: A Literature Review // *Journal of Travel & Tourism Marketing*. Vol. 32, No. 6:692–711. https://doi.org/10.1080/10548408.2014.943458.

Lehman, D. W., O'Connor, K., & Carroll, G. R. (2019). Acting on Authenticity: Individual Interpretations and Behavioral Responses // *Review of General Psychology*. Vol. 23, No. 1: 19–31. https://doi.org/10.1177/1089268019829470.

Line, N. D., Runyan, R. C. (2012). Hospitality Marketing Research: Recent Trends and Future Directions // International Journal of Hospitality Management. Vol. 31, No. 2: 477–488. https://doi.org/10.1016/j.ijhm.2011.07.006.

# Ernestas Juozauskas, Deimena Kiyak, Agnè Šneiderienė The Possibilities of Using Projective Planning in Creating and Presenting Value to The Consumer in The Catering Sector

- Martin, D., Rosenbaum, M., Ham, S. (2015). Marketing Tourism and Hospitality Products Worldwide: Introduction to the Special Issue // *Journal of Business Research*. Vol. 68, No. 9: 1819–1821. https://doi.org/10.1016/j.jbusres.2015.01.008.
- Martins, L.L., Rindova, V.P. and Greenbaum, B.E. (2015). A Cognitive Approach to Business Model Innovation // Strategic Entrepreneurship Journal, Vol. 9, No. 1: 99–117. https://doi.org/10.1002/sej.1191.
- Obeidat, I. M., Obeidat, S. (2015). The Impact of Lighting on Guests' Perception: Symbiosis between Hospitality and Sustainability in Interior Design // *QScience Proceedings, Qatar Green Building Conference 2015 The Vision*. Vol. 27. http://doi.org/10.5339/qproc.2015.qgbc.27.
- Ranjan, K.R., Read, S. (2016). Value Co-creation: Concept and Measurement // *Journal of the Academy of Marketing Science*. Vol. 44: 290–315. https://doi.org/10.1007/s11747-014-0397-2.
- Ryu, K., Han, H., Kim, T. H. (2008). The Relationships among Overall Quick-casual Restaurant Image, Perceived Value, Customer Satisfaction, and Behavioral Intentions // International Journal of Hospitality Management. Vol. 27, No. 3: 459–469. https://doi.org/10.1016/j.ijhm.2007.11.001.
- Ryu, K., Lee, H., Gon Kim, W. (2012). The Influence of the Quality of the Physical Environment, Food, and Service on Restaurant Image, Customer Perceived Value, Customer Satisfaction, and Behavioral Intentions // *International Journal of Contemporary Hospitality Management*. Vol. 24 No. 2: 200–223. https://doi.org/10.1108/09596111211206141.
- Spiteri, J. M., Dion, P. A. (2004). Customer Value, Overall Satisfaction, End-user Loyalty, and Market Performance in Detail Intensive Industries // *Industrial Marketing Management*. Vol. 33, No. 8: 675–687. https://doi.org/10.1016/j.indmarman.2004.03.005.
- Srun F. (2017). Luxury Selling: Lessons from the World of Luxury in Selling High Quality Goods and Services to High Value Clients. Houndmills, UK: Palgrave Macmillan.
- Šerić, M., Gil-Saura, I., Ruiz-Molina, M. E. (2014). How Can Integrated Marketing Communications and Advanced Technology Influence the Creation of Customer-based Brand Equity? Evidence from the Hospitality Industry // International Journal of Hospitality Management. Vol. 39: 144-156. https://doi.org/10.1016/j.ijhm.2014.02.008.
- Teboul, J. (2006). Service Is Front Stage: Positioning Services for Value Advantage. Houndmills, UK: Palgrave Macmillan.
- Wang, P., Zhang, M. M. Xin, J. H., Pan, Z. G., Shen, H. L. (2003). An Image-based Texture Mapping Technique for Apparel Products Exhibition and Interior Design // Displays. Vol. 24, No. 4-5: 179–186. https://doi.org/10.1016/j.displa.2004.01.004.
- Wang, C.Y. (2010). Service Quality, Perceived Value, Corporate Image, and Customer Loyalty in the Context of Varying Levels of Switching Costs // *Psychology & Marketing*. Vol. 27: 252–262. https://doi.org/10.1002/mar.20330.
- Wardono, P., Hibino, H., Koyama, S. (2012). Effects of Interior Colors, Lighting and Decors on Perceived Sociability, Emotion and on Related to Social Dining // *Procedia Social and Behavioral Sciences*. Vol. 38: 362–372. http://doi.org/10.1016/j.sbspro.2012.03.358.
- Winkler M., Dosoudil, V. (2011). On Formalization of the Concept of Value Proposition // *Service Science*. Vol. 3, No. 3. https://doi.org/10.1287/serv.3.3.194.