

# The Kano Model: Must-be vs. Attractive Requirements

---

**Franušić, Kristina**

**Undergraduate thesis / Završni rad**

**2015**

*Degree Grantor / Ustanova koja je dodijelila akademski / stručni stupanj:* **RIT Croatia / RIT Croatia**

*Permanent link / Trajna poveznica:* <https://um.nsk.hr/um:nbn:hr:229:325888>

*Rights / Prava:* [In copyright](#)/[Zaštićeno autorskim pravom.](#)

*Download date / Datum preuzimanja:* **2024-06-15**



image not found or type unknown

*Repository / Repozitorij:*

[RIT Croatia Digital repository - Rochester Institute of Technology](#)



image not found or type unknown

The Kano Model: Must-be vs. Attractive Requirements

Kristina Franušić

RIT Croatia

## THE KANO MODEL

### Abstract

The study aimed at finding if Dr. Kano model can be used as an effective tool in measuring customer satisfaction, and how useful it can be for service providers. The basics of this model state the differences between must-be and attractive requirements. The research proved that quality assurance is the focus of service providers that want to establish themselves on a competitive advantage, compared to others; and gives evidence for why it is good to be proactive in the market.

### Keywords:

Kano model, Kano survey, attractive requirements, quality assurance, proactive, voice of the customer, customer satisfaction, service providers etc.

## THE KANO MODEL

### Introduction

Sometimes what customers may think is important, regarding the characteristics of the products or services may not be the same what service providers think and what they focus on. Most service providers (SPs) use a traditional approach years after years, and that is the direct method, where they conduct customer satisfaction surveys. That kind of approach has its limits and its findings may not always result in what customers really want. Moreover, when applied to more complex products it does not work, or with overall service and it gives a picture of only one point in time (Does your customer ...2014).

Torres et al (2013) found out the reason why hotels are using satisfactions surveys and what they are doing with customer feedback. The problem is that service providers focus mostly on negative feedback, which is the whole purpose of it, and then they try to find out service recovery approaches and how to improve service quality. Does it have to go in that order, why to examine failures later, when it may be possible not to have them at all? Why control quality when service providers can assure quality? It does not have to work in that order, but hotels have gotten used to it, and work in that way.

Torres et al (2013) also pointed out that if service providers already use customer satisfaction survey when service is delivered, they are doing it wrong. Instead of focusing only on what to do when service experience is not going as planned, they should focus more on what happens when service is extraordinary. When customers are truly amazed, and when they experience service beyond their expectations they will definitely show their delight. And of course there is difference between satisfaction and delight.

## THE KANO MODEL

After there has been failure and damage has been done, the most common thought of SPs is how to fix that failure, which is logical. However, thinking in the long term, what could have been done to prevent the failure? The whole purpose of selling process is not to sell nor to offer, but to satisfy customers' needs (Matzler et al., 1998). Again, SPs may be aware of that, but they are doing something wrong. They are using qualitative and quantitative research methods which help them to come to some results. It is true that it gives them certain percentages regarding how satisfied customers are with certain feature, which is good, but what if that is not enough?

Customer satisfaction is a customer's perception of service or product performance, regarding his or her expectations (Torres et al 2013). For SPs it is crucial to find the needs and wants of customers. Satisfaction is achieved when expectations are fulfilled, but there is also the case of going beyond satisfaction and exceeding expectation, which will be later explained in paper.

If performance of service is lower than expected, customers will be dissatisfied; if it is as expected customers will be satisfied and if performance is even beyond expectations, it will boost customer satisfaction as well (Kotler, 2001). As customers' expectations are fulfilled, satisfaction increased. The goal of all service providers is high customer satisfaction, because that is the only way customer will come back, buy another product, become loyal, spread the word of mouth etc. And challenge becomes how to achieve satisfaction. Customers give an opportunity to SPs to serve and satisfy them, and both should work together. SPs have opportunity to discover the needs and want of customers.

It is not the right approach to just hope for the good results and control them through a system of complains, proposals, surveys etc. Rather than being reactive, SPs should be proactive.

## THE KANO MODEL

Proactive selling techniques ensure SPs that the process of selling is going in the desired way, just as planned. There are many proactive tools which SPs can use any time during the sale and before in order to maintain control over the whole process of a sale (Miller, 2003). A lot of companies are oriented exclusively to the reactive approach, which is wrong, because the proactive increases the value for customers, and this is the most reliable approach to data collection. The first step of proactive selling concentrate on: preparing, doing the action plan, bringing possible ideas and tools that can be used and then examining the expected results. Then there should be practice and thinking ahead about what can be useful for SPs of certain service, how to implement the process. They should know exactly what the need is, and how to satisfy that certain need. Proactive selling is not the way SPs sell, nor those are strategies; they are tactics SPs must master before the sales process, because it can change sales behavior on very effective way (Miller, 2003).

What does service quality really mean and what are the right strategies for meeting expectations of customers? Zeithaml et al. (1990) discussed how much SPs should invest in quality service, in order to have the best return of investment. And they realized there are two very important categories, and that is attracting new customers and satisfying the existing ones. Attracting new customers is connected with advertising, but it does not guarantee results; the most important is finding the right strategy. Satisfying the existing customers can help service providers evaluate financial impact of service quality. It is always better and profitable to spend market resources on keeping existing customers rather than attracting new ones. However, if a company loses existing customers, other customers must replace them, and that is very expensive. For a certain period of time, there is no profit to a company, because of the costs

## THE KANO MODEL

associated with sales and promotion that the company has spent. That is why it is important to invest in service quality, and assure it, rather than control it. (Zeithaml et al., 1996)

Homburg et al. (2005) discussed the relationship between customer satisfaction and their willingness to pay more for certain product or service and how satisfaction affects willingness. It is true that customer satisfaction can lead to a better customer loyalty and positive word of mouth, but the question is, are satisfied customers willing to pay more to get certain service. In this case Homburg et al. (2005) had in mind customer satisfaction regarding the performance of the service, if it meets their expectations regarding the quality, not the price of a product or service, and the willingness to pay means what maximum amount of money are customers willing to spend on certain service or product. Homburg et al. (2005) found out that there is positive and strong relationship between customer satisfaction and their willingness to pay. Satisfied customers, who receive high quality services feel better because of that and therefore are willing to pay more. They also suggest that based on customer satisfaction, a company i.e. should think about pricing strategies, which means companies could easily charge a higher price for service or products that customers are highly satisfied with.

Bardecki et al. (2004) state that customers are no longer ready to give up their priorities and wants in order to achieve lower price for product or service. Furthermore customers exactly know what they want and are what they look for; they are willing to pay more for customized product or service. Accordingly, customers will recognize greater value if a service or product is customized. After all, that service or product exactly meets all their wants, needs and desires. If a product is highly customized, it will lead to a higher customer satisfaction. Customers are willing to wait more for their customized product, as well as be part of designing it, and most important Bardecki et al. (2004) found out that majority of their respondents are willing to pay more for it.

## THE KANO MODEL

When talking about being ready for mass customization it is not all about willingness to pay more, that idea is partly supported (Bardecki et al., 2004). Being ready for mass customization means that customers are aware of paying for product's features they do not need, and therefore they are willing to cooperate and express what they exactly need. Companies should use mass customization in order to gain competitive advantage.

The majority of services cannot be measured, calculated or tested before a process of sale in order to ensure their quality. That is why employees play an important role in the process of selling. In some services, quality is visible at the moment of its delivery, at direct contact of SP and the customer. That is why sometimes quality of service depends on performance of employees. The main issue for SPs should be how to achieve quality service, in order to reduce costs, increase market share and profit (Zeithaml et al. 1988). Zeithaml et al. discussed gaps in service quality, and the most important gap is between customer expectations, and what management thinks customer expectations are. SPs cannot always exactly know which characteristics certain service must have in order to meet customer expectations, and fulfill their needs. Actually was discussed is which levels of performance and which characteristics of service are necessary in order to provide high quality service.

It is not necessarily true that customers do not know what they want, and that they have to be convinced or told. Dr. Kano (1984) wanted to improve customer satisfaction by his two-dimensional effective instrument, which he used to analyze the requirements of the customers. He believed it is possible and achievable with his powerful method to classify customer requirements. The result of his effective instrument is a comparison between customer satisfaction and performance of product; what effect do the features of service or product have



## THE KANO MODEL

on customer satisfaction? Satisfaction varies from total dissatisfaction to total satisfaction, while performance goes from service provider didn't do it at all to he or she did it very well.

Expected needs or *must-be* requirements are the most important, because without them the customer will be dissatisfied, but it does not mean that with them the customer will necessarily be satisfied. Those are simply basic criteria of a product or services which do not need mention. Fulfilling them is an obligation for service providers and it does not lead to a higher point on satisfaction line (Kano, 1984). Without *must-be* requirements which are taken for granted, there is high possibility of losing customers.

*One-dimensional* requirements, better known as customer wants are the reason why a service provider is still on the market. Those requirements are the voice of customers. Wants are required by a customer, which means if there is an absence of them it will lead to dissatisfaction and vice versa. So it can increase customer satisfaction, and they are measurable and specified (Kano, 1984).

Customers should not be able to imagine nor expect *attractive* requirements, but at one point in time when they actually experience those wow effects customers should be thrilled. Without those requirements no one will end up dissatisfied, but if service providers decide to provide them, customers' level of satisfaction will suddenly increase (Kano, 1984)

There are also *indifferent* requirements, for which customers do not care. A customer is simply indifferent about certain feature. *Reverse* requirements are those customers would rather not have. For example, if there is certain feature, it will lead to dissatisfaction, and if there is not, customers will be satisfied, actually they expect the reverse. One more category of customer requirement developed by Dr. Kano (1984) is *questionable* requirement, those are wrong

## THE KANO MODEL

answers, probably misunderstood questions, or answered wrong by accident, because in that manner they are impossible to have.

The main factors when developing products or services are understanding customer needs; after it, the important factor is how to deal with customer satisfaction (Xu et al., 2009). Lieberman (2008) pointed out how the Kano model is related with customer value management. It can lead company on the right path. Not just company, but each product or service can be tested through Dr. Kano's precise analysis. It makes clear under which a category product or service falls, as well as predict how they will vary with time. The Kano model can easily help companies to exactly know which requirements they must fulfill; with which requirements they should compete with; and which requirements can quickly increase the level of customer satisfaction (Shakin et al., 2011). The main goal of SPs is to achieve their visions and to create an ideal environment, where customers will be highly satisfied. An ideal environment must be proactive, communicative, understanding, caring, innovative and profitable (Parke, 2012).

Service quality can be measured by the degree a service meets, or goes beyond customer expectations and requirements; Zeithaml et al. (1990) mentioned two levels of expectations, similar to *must-be*, *one-dimensional* and *attractive* (Kano, 1984), and those are *desired service* and *adequate service*. *Desired service* is what customers expect and hope to receive; it is essential for SPs to deliver it. While *adequate service*, SPs will deliver, and hope that customers will accept it; it may or may not meet customer needs. Between *desired service*, as the upper line, and *adequate service*, as the lower line, there is a *zone of tolerance*, and for SPs it means a zone where there is a possibility of meeting customers' expectations. Zeithaml et al. (1996) stress that even if SPs are operating within a *zone of tolerance* and have a competitive advantage, they should constantly improve their service. Dr. Kano (1984) said that *attractive* requirements can

## THE KANO MODEL

help SPs to improve their service continuously. SPs should offer customers something they not even imagine, in order to surprise them, but not the same wow effect each time. It is not enough to exceed adequate service, but to exceed *desired service* (Zeithamn et al. 1990)

### Methods

The purpose of this research paper was to find out what customers want and to examine customer satisfaction level on the example of one restaurant in Dubrovnik. The restaurant was new in Dubrovnik, its appearance and offering is different from others and it is unique. They added a new dimension to the restaurant industry. Everything is carefully planned, with all details carefully chosen. They offer brunches, a la carte menu, pizzas and dishes from the grill, in a pleasant atmosphere. They were surveyed to see how customers feel about them due to their uniqueness and being new on the market.

Research was done in order to find the comparison between satisfaction of customers and performance of product. It is a specific research, using Dr. Kano's model to find different customer requirements of restaurant service. The questionnaire (Figure 12, Appendix B) that was developed by Dr. Kano (1984) was used because it measures six different customer requirements: *must-be*, *one-dimensional*, *attractive*, *reverse*, *indifferent* and *questionable*. The purpose of the project was to exactly find out the categories Dr. Kano used in his model. How satisfied customers are regarding the characteristics of service and products in that restaurant, and what customers find as most attractive, without which they would be dissatisfied.

Participants of this research were people between the ages of 18 and 60; those were the people who went to the specific restaurant, not taking in account how frequently. Questions were

## THE KANO MODEL

made regarding restaurant industry, using Dr. Kano model. There were 18 questions, using Dr. Kano's two dimensional effective approaches. Two dimensional approach means that each question was asked twice but in a different way, functional and dysfunctional. For each feature of the restaurant there was functional question-positive one "how would you feel" if certain feature is present in service, and then dysfunctional-negative one "how would you feel" if there is an absence of that same feature.

Questions were made on a model of Jack steak house (Lieberman, 2008). Open source method was used; an online link was posted on the official Facebook page of surveyed restaurant (Figure 1, Appendix B). The main purpose of primary research was to examine if customers know exactly what they need or they need to be convinced, are they willing to pay more, and are they ready for customization as well as how service providers should find what customer expectations are and how to satisfy them.

### Results:

The aim of the study was to apply Dr. Kano's model to measure customer satisfaction of a restaurant in the city of Dubrovnik, Croatia. The customers were reached via social media network (Facebook) and the researcher collected a total of 271 replies. Out of 271 responses 17 were invalid because they were incomplete. The data collected was analyzed in order to find Dr. Kano's (1984) customer requirements: *attractive, must-be, one-dimensional, indifferent, reversed* and *questionable*. Out of 9 attributes of a service in the analyzed and surveyed restaurant, two attributes were found to be attractive. There were no attributes which could be classified into indifferent and questionable. A majority of the restaurant attributes were one-dimensional.

## THE KANO MODEL

Questions and answers were analyzed two by two, because of functional and dysfunctional way of asking the same question. They were compared to each other and results were measured and analyzed based on Kano's evaluation table (Figure 2, Appendix A) in order to find out under which customer requirements fits certain attribute of the restaurant the best. Respondents were from 18 to 60 years old. Based on the interview and discussion with the manager (Figure 13, Appendix B) of the restaurant about their target groups, respondents were divided into three groups. The manager categorized first group as "college generation", and they were from 18 to 25. The other target group of their restaurant, he called "young managers", customers from 26 to 33. And those two groups are the most common guests in the restaurant. The third group he called "more experienced", people from 34 to 60. In the first group there were 131 people, in the second group there were 68 people, and in the third one there were 56 people.

On the functional question: "How would you feel if the food is served hot and fresh?" and its opposite, dysfunctional one: "How would you feel if the food is not served hot and fresh?" 52, 67% of the first group perceived it as one-dimensional requirement; while second group think it is must-be requirement (51, 47%). The third group thinks it is one-dimensional requirement as well (51, 78%). (Figure 3, Appendix A)

On the functional question: "How would you feel if there is enough food on the plate?" and its dysfunctional "How would you feel if there is very small portion of the food on the plate?" all groups perceived it as one-dimensional requirement, first group with 45%, second group with 35,29%, and third one with 44,64%. (Figure 4, Appendix A)

On the functional question "How would you feel If the interior is clean and neat?" and dysfunctional "How would you feel If the interior is not clean and neat?" all groups found this to

## THE KANO MODEL

be one-dimensional requirement (76, 33% of people from the first group, 70, 58% of second group and 67, 85% of third group.) (Figure 5, Appendix A)

On the question “How would you feel if the food is served rapidly?” and “How would you feel if the food is not served rapidly?” the groups answer differently. 32, 82% of the first group perceived this as must-be requirement, which is the majority; while the second group (32, 35%) perceived this as one-dimensional requirement, as well as the third group (30, 57%). (Figure 6, Appendix A)

On the question “How would you feel if the ambience in the restaurant is great?” and “How would you feel if the ambience in the restaurant is not great” all groups found this to be attractive, the first group with 57, 25%, the second group with 54, 41% and the third group with 48, 21%. (Figure 7, Appendix A)

First group (69, 46%), second group (58, 82%) and third (62, 5%) feel that the question: “How would you feel if the manager personally thanked you?” when compared with “How would you feel if the manager don’t personally thanked you?” i.e. requirement is the attractive one. (Figure 8, Appendix A)

On the functional question “How would you feel if you are greeted warmly at the door by hostess or waiter?” and dysfunctional “How would you feel if you are not greeted warmly at the door by hostess or waiter?” the first group found this to be one-dimensional requirement (38, 16%); while the second group found this to be must-be requirement (41, 17%); for the third group it is equally one-dimensional (39, 28%) and must-be (39, 28%). (Figure 9, Appendix A)

“How would you feel if a waiter checked to see if your meal/drink are satisfactory?” and “How would you feel if a waiter did not check to see if your meal/drink are satisfactory?” first

## THE KANO MODEL

group found this to be reverse requirement (28, 24%) and second group as well (32, 35%). Third group founds this to be attractive (23, 21%). (Figure 10, Appendix A)

On the functional question “How would you feel if the weekly offer of brunches is diverse?” and dysfunctional “How would you feel if the weekly offer is not diverse?” all groups found it as one-dimensional requirement, the first group with 58, 40%, the second group with 48, 50% and the third group with 43, 65%. (Figure 11, Appendix A)

## Discussion

This is the first that somebody has attempted to use this type of a questionnaire in Dubrovnik, Croatia, so the hypothesis was to test the validity of the questionnaire; to test if Dr. Kano’s model can be used in the future. The main focus of the research was not the surveyed restaurant; it was just used as an example to test what happens if service providers decide to use an academic approach, and how helpful it could be for them. The whole purpose of the research was to find out if there is going to be some valid information after some different kind of approach, after Dr. Kano’s analysis. And yes, it was proved that it was a very clear, helpful and useful tool.

Results which were found are important for all service providers who would like to improve their offer, assure the quality and avoid failures. In order to find out what customers really want, and what are must-be requirements and which are the attractive ones, Kano model is a desirable tool. After using Dr. Kano’s effective tool, service providers could provide some new attractive attributes to thrill their customers once more and then again, because that is the only way how to stay on the market, retain or attract new customers.

## THE KANO MODEL

Because Dr. Kano model is specific it increases the value of results. In this case results are specific for the surveyed restaurant. But, results like this can be specific for any other service of product, to exactly know what requirements current customers find as a very important, without which features of product or service they would be dissatisfied, as well as what delighted them. Kano's six requirements: *attractive*, *must-be*, *one-dimensional*, *indifferent*, *reversed* and *questionable* are and should be important for everyone who wants to succeed in business and improve quality of products or services. Service providers with their own results, after using Dr. Kano model would exactly know what they could change, and what features they should not change at all.

Regarding the surveyed restaurant, majority of the answers were one-dimensional, which means if they are absent customers will be dissatisfied. They are also known as wants, even here it sounds logical to be must-be requirements. It could be because of the culture within Dubrovnik area and the fact that people have lower expectations, and mostly answered questions with "I can tolerate it", even they should know exactly what they prefer to have. Since the scope of this research was not to examine cultural factors, the suggestion for further research is needed.

Results, regarding the surveyed restaurant are important because service providers could easily avoid failure and improve quality after it. They can learn a lot about their customers, how to satisfy them in the best possible way, which offers service providers should continue and which ones to change or discontinue or to invent something new.

Regarding the food and if it should or not should be fresh and hot while served, "college generation" and "more experienced" people consider it as one-dimensional requirement, which results in satisfaction when fulfilled. But "young managers" consider it as must-be requirement,



## THE KANO MODEL

because they take it for granted, it is how it should be, it must be hot and fresh, and they are dissatisfied when it is not hot and fresh. Second group, “young managers” seems to know what they want and how service should be delivered, while “college generation” and “more experienced” did not seriously perceive this feature.

If there is enough food on the plate, if interior is clean and neat and if the weekly offer of brunches is diverse, all groups found as one-dimensional requirement, which means they do take it for granted, or consider it something that must be there. This means that there was enough food and interior was clean, therefore they were happy and satisfied, on the contrary, it would lead to dissatisfaction.

Maybe the most important findings for service providers are attractive requirements. Ambience in the restaurant and manager’s personal “thank you” are attractive requirements for all groups. For service providers of surveyed restaurant it means when those features of service are not fulfilled, customers will not be dissatisfied. Those are well known wow effects, which can only increase customer satisfaction. With these features service providers gain a competitive advantage. When talking with the manager of surveyed restaurant, before results of the research were known, what he believed is their biggest strength is the huge number of employees. He was sure that wow effects are present just because of that. Employees are his biggest assets and they deliver quality. The thing is that there could not always be the same attractive requirements, actually they can keep these two, but always add something new. They change with time, which means at this point in time ambience and manager’s personal thanks are perceived as attractive, but people will get used to them and one day, in the very near future, those will become one dimensional, or even must-be, which leads to the point that in order to have a competitive

## THE KANO MODEL

advantage and earn profit service providers should change attractive requirements with time. It is all about surprising customers and making them enthusiastic.

For “more experienced” group, if a waiter checked to see if their meal or drink was satisfactory, it is attractive requirement as well. Maybe they are not used to it, because for other groups it is reverse requirement, which means they would rather not have it. The biggest difference between groups and what they perceive is visible here. That is the main reason why service providers should make segmentation on their market, of their customers. Not each group wants to be treated the same nor want the same things, and service providers should not deliver the same service to each group. Training of employees is very important, because in that way they become familiar with segments, therefore they deliver service with higher value. For employees, it is not always desirable to approach each situation with the smile, it is important to identify the needs of the particular group. So, different approaches are needed for different target groups, therefore additional training as well.

For “college generation” food must-be served rapidly, this is the only requirement they perceive as must-be fulfilled. It could be they are in a hurry, want food to be delivered quickly etc., it is the way it must be, and otherwise they will be dissatisfied. While “young managers” and “more experienced” groups found this to be one-dimensional requirement. Each person is different, therefore and those groups are as well. Does this prove that customers know what they want, or are they just waiting to see what happens? They are reserved, and they wait to see what they will get and then perceive it in their own way. Finding the answers to these questions was beyond the scope of this research.

## THE KANO MODEL

If “college generation” is greeted warmly at the door by hostess or waiter they would be satisfied, which means it is one-dimensional requirement for them, while “young managers” would take it for granted, that is how it should be always, and if it is not, it will lead to dissatisfaction for them, which means it is must-be requirement for them.

Results show that there are many one-dimensional requirements, which means there is high customer satisfaction. The price customers are willing to pay depends on those features; therefore it is important to know each requirement regarding each target group. If service providers want to control quality they would use traditional approaches which are traditional questionnaire. However, if they want to assure quality, gain a competitive advantage and be proactive rather than reactive, then the traditional questionnaire will not be helpful; the only way is switching to quality assurance. Accordingly, for quality assurance Dr. Kano’s model is much better tool than a traditional questionnaire. Those results are evidence that customers actually know what they want, they do not necessarily need to be convinced; however they will not say it, which is the reason why it should be used specific approach or tool to find that out. If service providers clearly understand their own results, it could give them a strong picture of how not to have failures at all. After using this effective tool they should exactly know their next steps, and their market position.

## THE KANO MODEL

## References

Bardecki, A., & Whitelock, J. (2004). How "ready" are customers for mass customization? An exploratory investigation. *European Journal of Marketing*, 38(11/12), 1396-1416.

Does your customer really want what you offer them? Assessing customer value in business-to-business markets. (2014). *Strategic Direction*, 30(6), 2014, 17-19. doi:10.1108/SD-04-2014-0043

Homburg C., Koschate N., & Hoyer W.D. (2005). Do satisfied customers really pay more? A study of the relationship between customer satisfaction and willingness to pay. *Journal of Marketing*, 69(2), 84-96.

Kano, N., Nobuhiku S., Fumio T., & Shinichi T. (1984, April). Attractive quality and must-be quality. *Journal of the Japanese Society for Quality Control*, 14 (2), 39–48. [ISSN 0386-8230](#)

Kotler, P. & Armstrong, G. (2001). Principles of marketing, Volume1 Issue 8, Erlangga.  
Jakarta

Lieberman, M. D. (2008) Adding value to CSM: The Kano model, Customer Satisfaction.

*World Advertising Research Center*. Retrieved from:

<http://www.uta.edu/faculty/richarme/MARK%205328/The%20Kano%20Model%20-%20Michael%20D.%20Lieberman.pdf>

Matzler, K. & Hinterhuber, H.H. (1998). How to make product development project more successful by integrating Kano's model of customer satisfaction into quality function deployment. *Technovation*, 18(1), 25-37.

Miller, W. I. (2003). *Proactive selling: Control the process, win the sale*. New York:

## THE KANO MODEL

AMACOM. Retrieved from:

[https://books.google.hr/books?id=ZTbfw0jfn0YC&pg=PA236&lpg=PA236&dq=Miller+Proactive+selling:+Control+the+process,+win+the+sale+journal&source=bl&ots=OoEaY\\_5pkY&sig=Frs856OicT8eroXgoXB4conJGKo&hl=en&sa=X&ei=11tUVfTqBoqusAGI\\_YGoBA&ved=0CDEQ6AEwAw#v=onepage&q=Miller%20Proactive%20selling%3A%20Control%20the%20process%2C%20win%20the%20sale%20journal&f=false](https://books.google.hr/books?id=ZTbfw0jfn0YC&pg=PA236&lpg=PA236&dq=Miller+Proactive+selling:+Control+the+process,+win+the+sale+journal&source=bl&ots=OoEaY_5pkY&sig=Frs856OicT8eroXgoXB4conJGKo&hl=en&sa=X&ei=11tUVfTqBoqusAGI_YGoBA&ved=0CDEQ6AEwAw#v=onepage&q=Miller%20Proactive%20selling%3A%20Control%20the%20process%2C%20win%20the%20sale%20journal&f=false)

Parke, J. (2012, October). Managing Customer Expectations. Retrieved from:

<http://www.appliedclinicaltrials.com/managing-customer-expectations>

Shakin, A. & Nekuie, N. (2011). Development of the Kano model. *The Asian Journal on Quality*, 12(2), 176-188.

Torres, E. N., & Kline, S. (2013). From customer satisfaction to customer delight.

*International Journal of Contemporary Hospitality Management*, 25(5), 642-659.  
doi:10.1108/IJCHM-Dec-2011-0228

Zeithaml V.A., Berry LL, & Parasurman A. (1996). The behavioral consequences of service quality. *Journal of Marketing*, 60(2), 31-46.

Zeithaml, V. A. (1988). Communication and control processes in the delivery of service quality. *Journal of Marketing*, 52(2), 35-48.

Zeithaml, V. A., Parasurman, A., & Berry, L. L. (1990). Delivering quality service: Balancing customer perceptions and expectations. New York; London: Free Press

Xu, Q., Jiao, R.J., Yang, X., Helander, M., (2009). An analytical Kano model for Customer need analysis. *Design studies*, 30, 87-110.

## THE KANO MODEL

## Appendix A

<i>Dysfunctional</i>					
CUSTOMER REQUIREMENT	Like	Expect it	Neutral	Tolerate it	Dislike
<i>Functional</i>					
Like	Q	A	A	A	O
Expect it	R	I	I	I	M
Neutral	R	I	I	I	M
Tolerate it	R	I	I	I	M
Dislike	R	R	R	R	Q

A- Attractive requirement

R- Reverse requirement

M- Must-be requirement

I- Indifferent requirement

O- One-dimensional requirement

Q- Questionable requirement

Figure 2 shows six different customer requirements, based on The Kano evaluation table.

## THE KANO MODEL

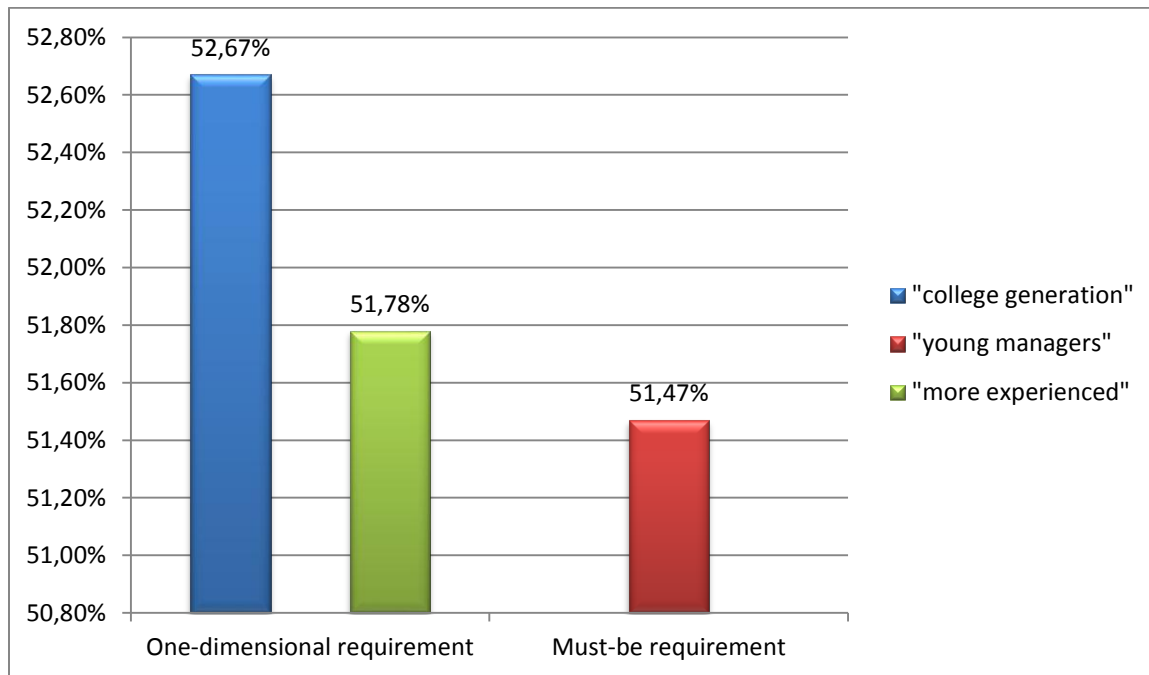


Figure 3 shows which group has the highest percentage of which requirement, based on: if the food is served hot and fresh in the restaurant.

## THE KANO MODEL

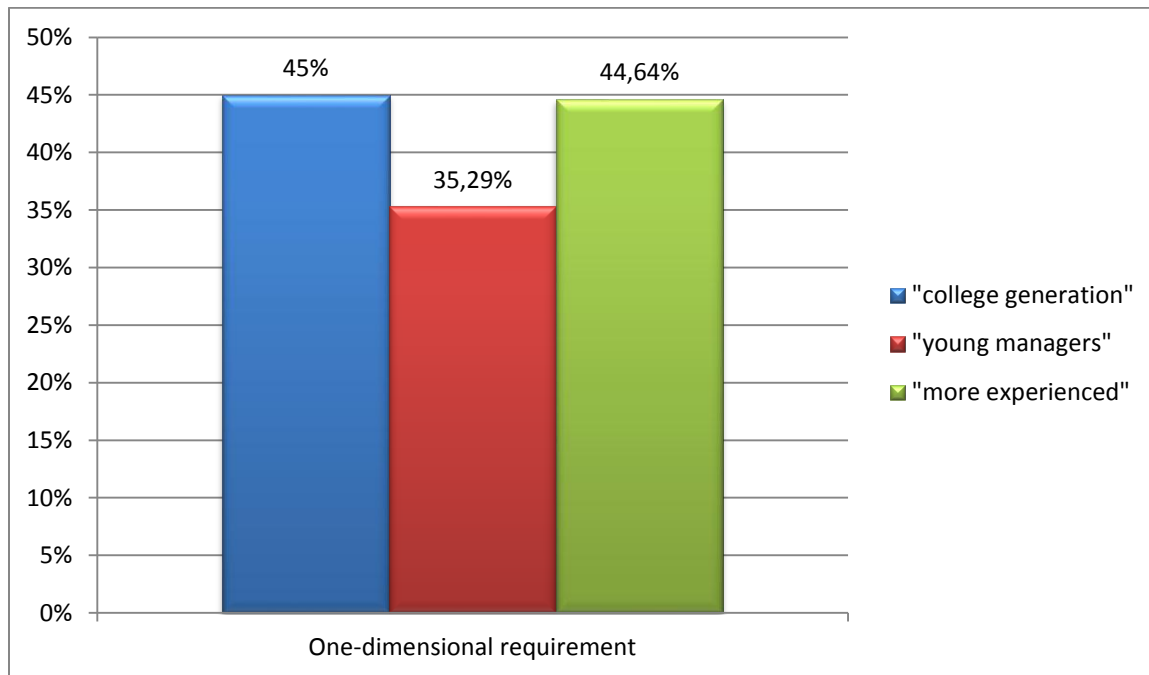


Figure 4 shows which group has the highest percentage of which requirement, based on the restaurant feature - if there is enough food on the plate.



## THE KANO MODEL

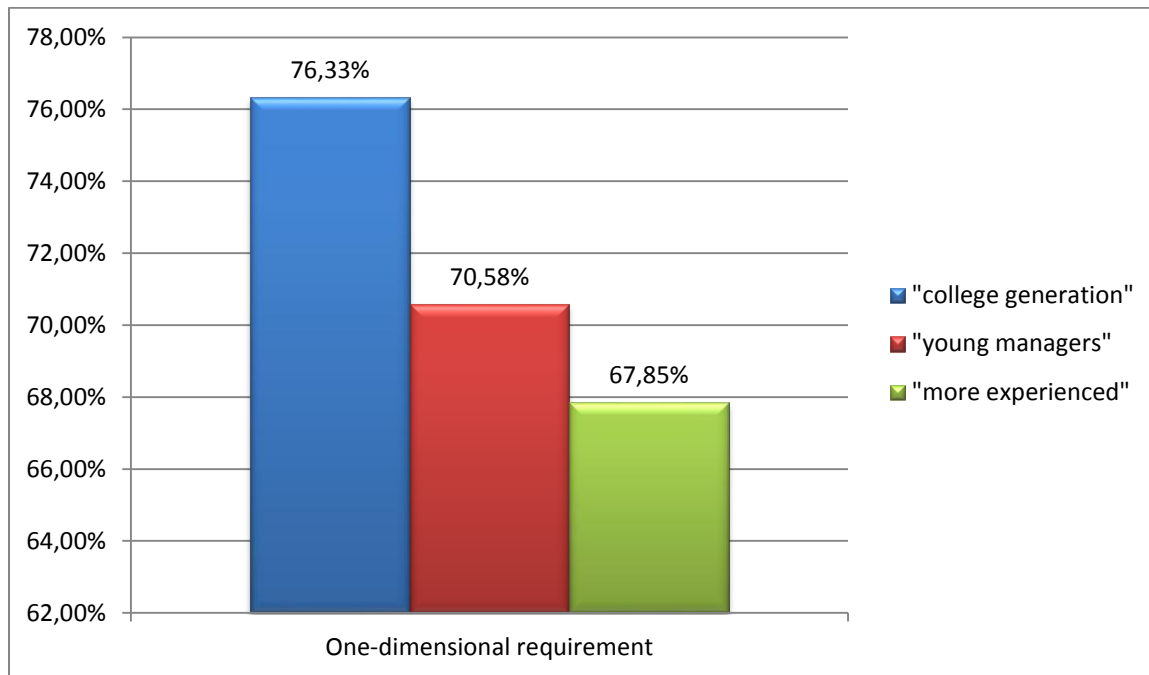


Figure 5 shows which group has the highest percentage of which requirement, based on the restaurant feature: if the interior is clean and neat.

## THE KANO MODEL

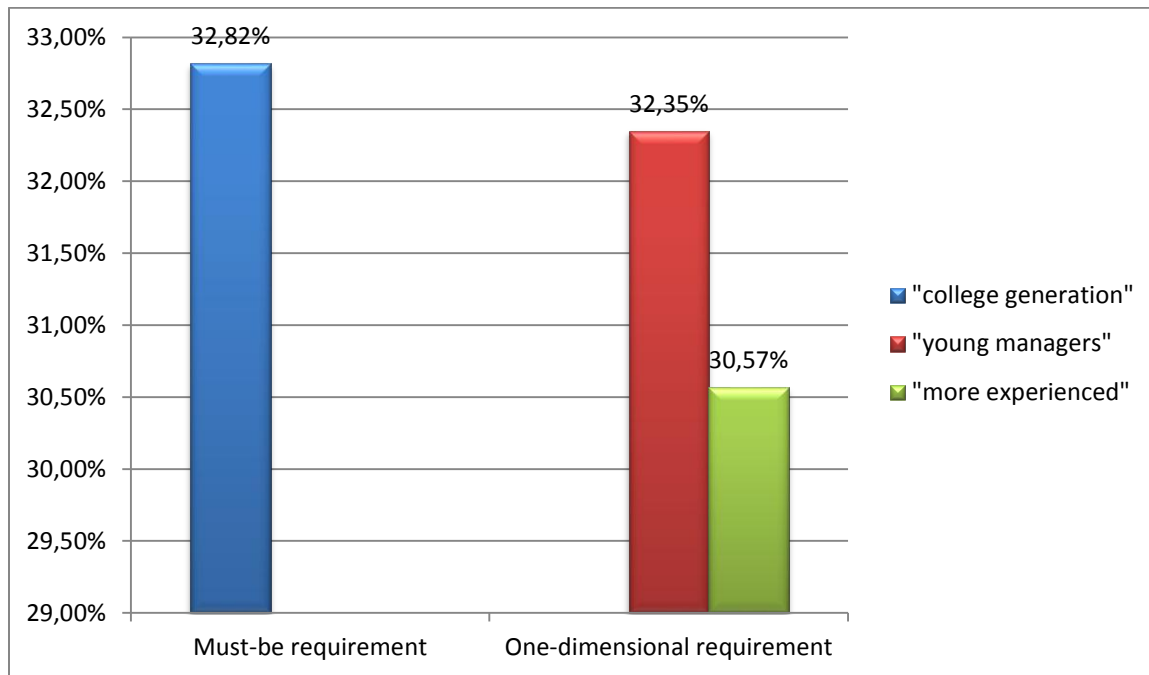
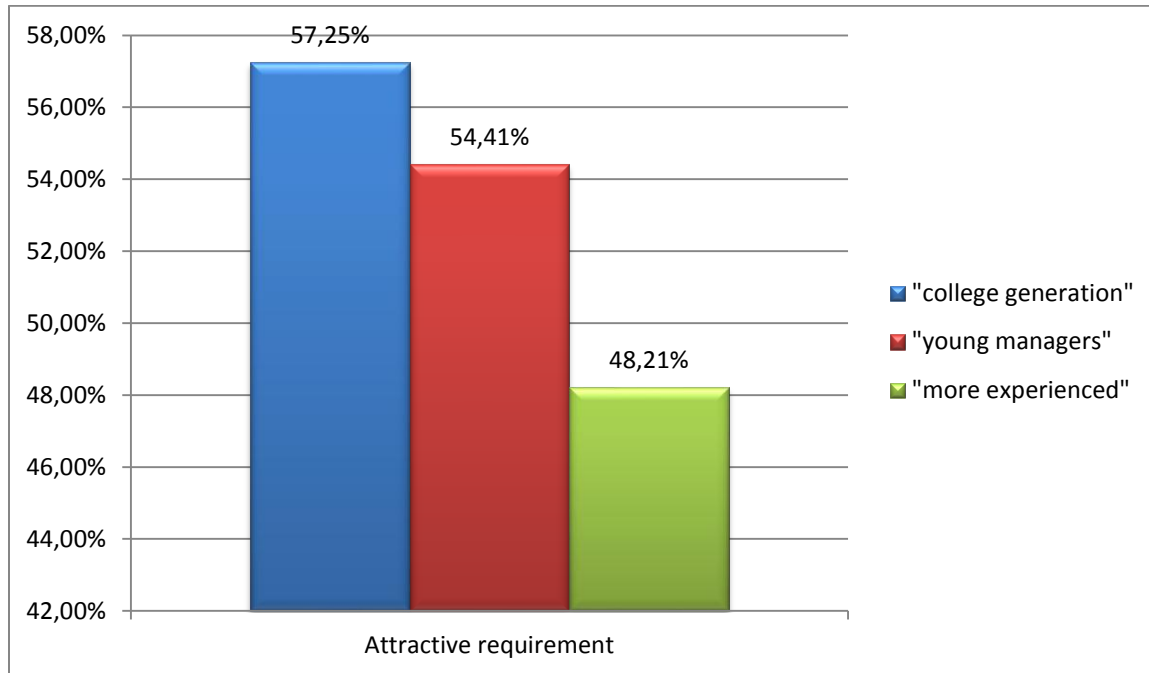


Figure 6 shows which group has the highest percentage of which requirement, based on the restaurant feature: if the food is served rapidly.

## THE KANO MODEL



**Figure 7** shows which group has the highest percentage of which requirement, based on the restaurant feature: if the ambience in the restaurant is great.

## THE KANO MODEL

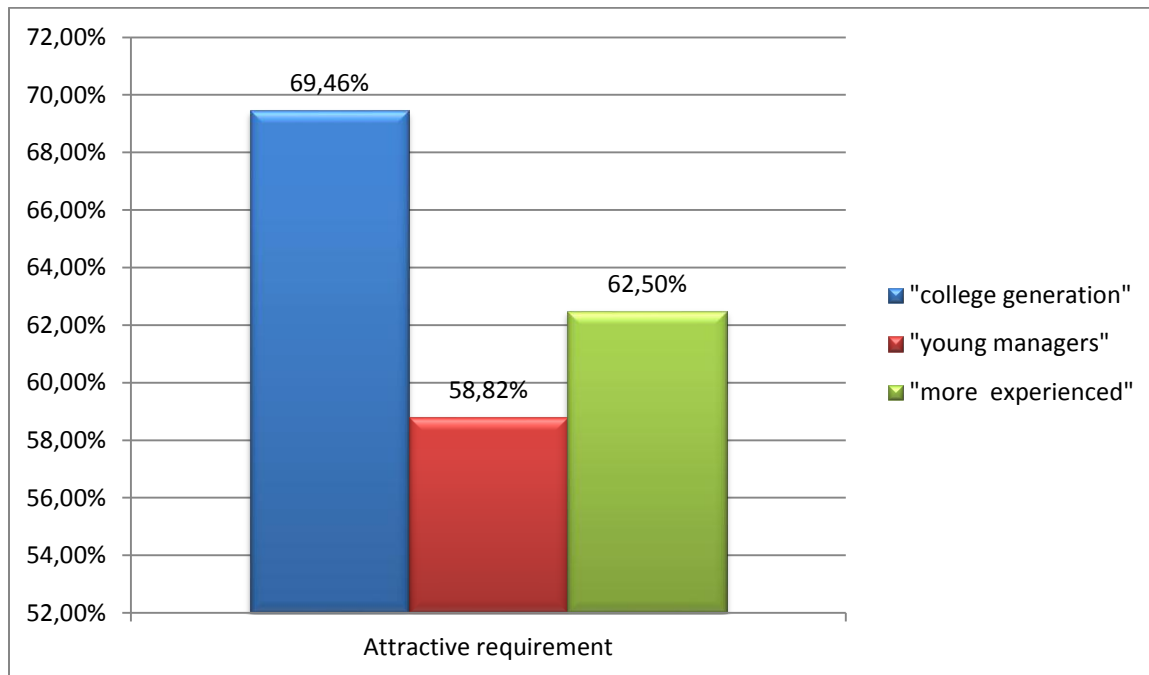


Figure 8 shows which group has the highest percentage of which requirement, based on the restaurant feature: if a manager personally thank you.

## THE KANO MODEL

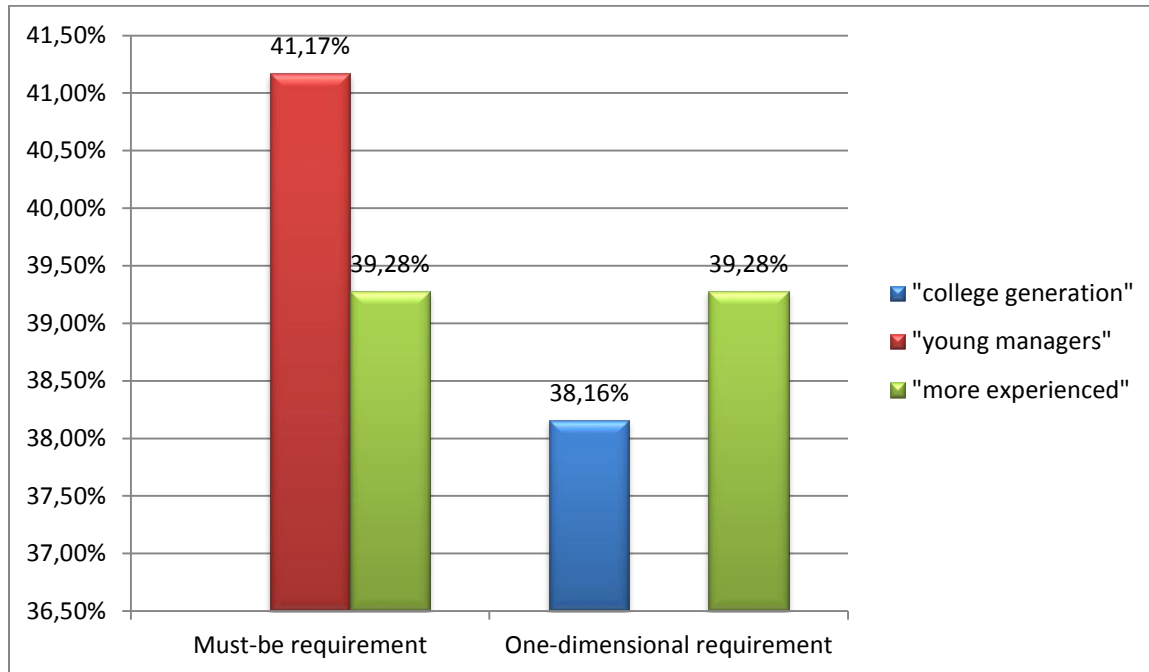


Figure 9 shows which group has the highest percentage of which requirement, based on the restaurant feature: if you are greeted warmly at the door by hostess or waiter.

## THE KANO MODEL

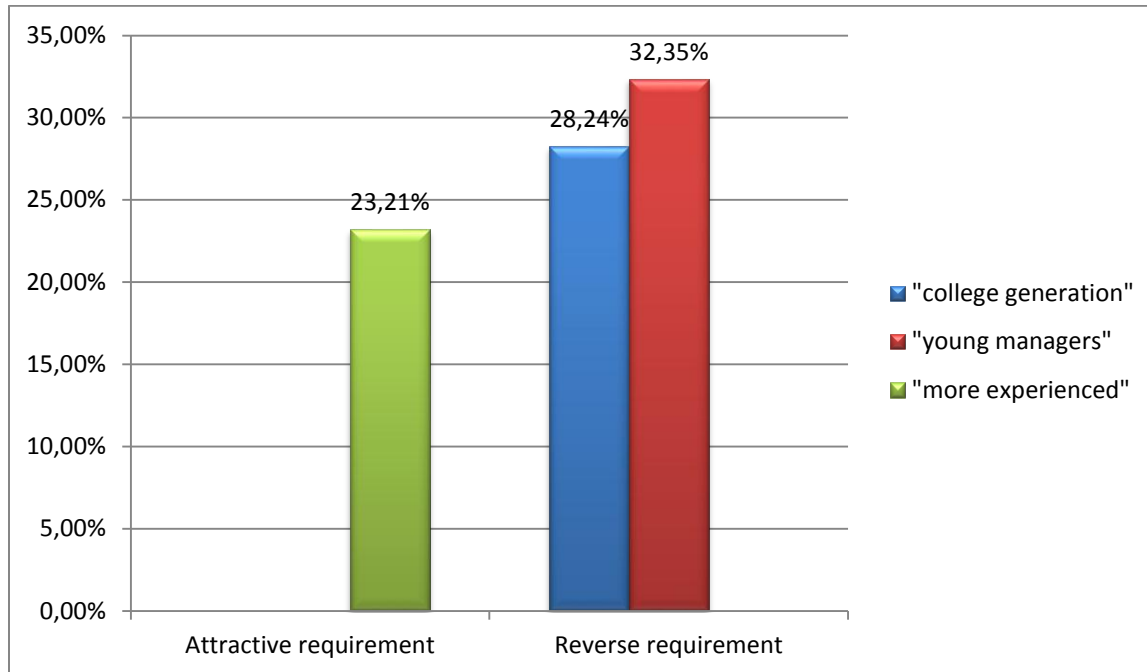


Figure 10 shows which group has the highest percentage of which requirement, based on the restaurant feature: if a waiter checked to see if your meal or drink is satisfactory.

## THE KANO MODEL

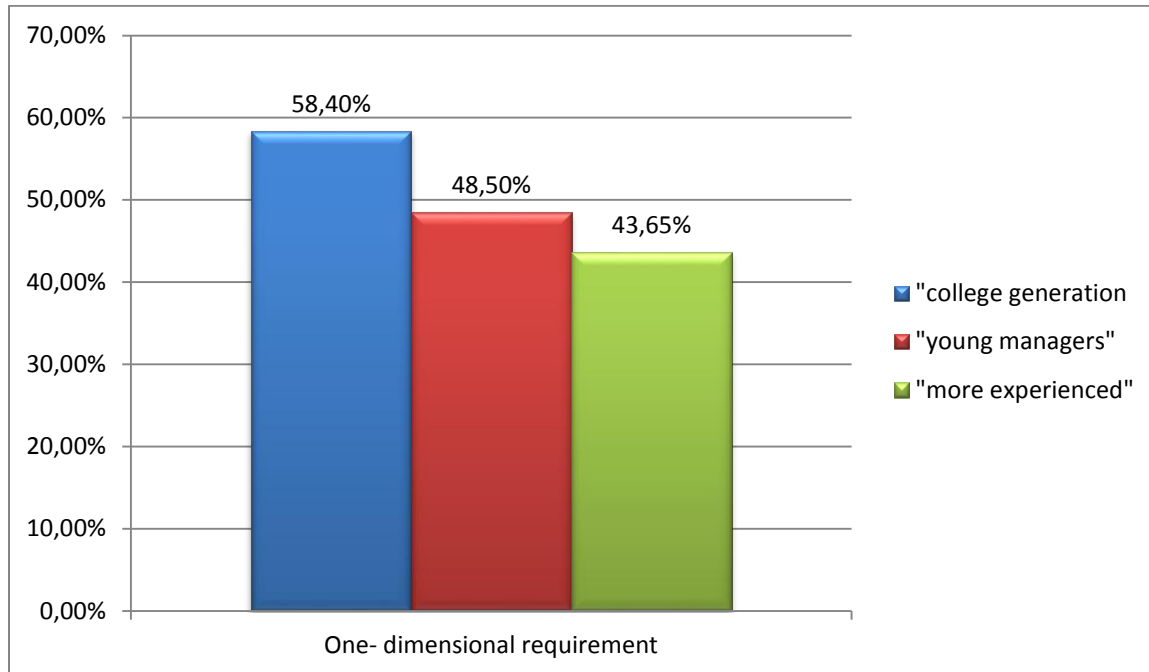


Figure 11 shows which group has the highest percentage of which requirement, based on the restaurant feature: if the weekly offer of brunches is diverse.

## THE KANO MODEL

## Appendix B



Figure 1 shows screenshot of the open source method, which was used.



## THE KANO MODEL

<b>No.</b>	<b>Q: How would you feel:</b>	<b>Answers (select with a X one choice only)</b>
1	If the food is served hot and fresh?	<input type="checkbox"/> 1. I like it <input type="checkbox"/> 2. I expect it <input type="checkbox"/> 3. I'm neutral <input type="checkbox"/> 4. I can tolerate it <input type="checkbox"/> 5. I dislike it
<b>No.</b>	<b>Q: How would you feel:</b>	<b>Answers (select with a X one choice only)</b>
2	If the interior is not clean and neat?	<input type="checkbox"/> 1. I like it <input type="checkbox"/> 2. I expect it <input type="checkbox"/> 3. I'm neutral <input type="checkbox"/> 4. I can tolerate it <input type="checkbox"/> 5. I dislike it
<b>No.</b>	<b>Q: How would you feel:</b>	<b>Answers (select with a X one choice only)</b>
3	If a manager personally thank you while leaving the restaurant?	<input type="checkbox"/> 1. I like it <input type="checkbox"/> 2. I expect it <input type="checkbox"/> 3. I'm neutral <input type="checkbox"/> 4. I can tolerate it <input type="checkbox"/> 5. I dislike it
<b>No.</b>	<b>Q: How would you feel:</b>	<b>Answers (select with a X one choice only)</b>
4	If you are greeted warmly at the door by a hostess or a waiter?	<input type="checkbox"/> 1. I like it <input type="checkbox"/> 2. I expect it <input type="checkbox"/> 3. I'm neutral <input type="checkbox"/> 4. I can tolerate it <input type="checkbox"/> 5. I dislike it
<b>No.</b>	<b>Q: How would you feel:</b>	<b>Answers (select with a X one choice only)</b>
5	If it is served very small portion of the food on the plate?	<input type="checkbox"/> 1. I like it <input type="checkbox"/> 2. I expect it <input type="checkbox"/> 3. I'm neutral <input type="checkbox"/> 4. I can tolerate it <input type="checkbox"/> 5. I dislike it
<b>No.</b>	<b>Q: How would you feel:</b>	<b>Answers (select with a X one choice only)</b>
6	If the atmosphere in the restaurant is not great?	<input type="checkbox"/> 1. I like it <input type="checkbox"/> 2. I expect it <input type="checkbox"/> 3. I'm neutral <input type="checkbox"/> 4. I can tolerate it <input type="checkbox"/> 5. I dislike it

## THE KANO MODEL

No.	Q: How would you feel:	Answers (select with a X one choice only)
7	If the food is served rapidly?	<input type="checkbox"/> 1. I like it <input type="checkbox"/> 2. I expect it <input type="checkbox"/> 3. I'm neutral <input type="checkbox"/> 4. I can tolerate it <input type="checkbox"/> 5. I dislike it
No.	Q: How would you feel:	Answers (select with a X one choice only)
8	If the food is not served hot and fresh?	<input type="checkbox"/> 1. I like it <input type="checkbox"/> 2. I expect it <input type="checkbox"/> 3. I'm neutral <input type="checkbox"/> 4. I can tolerate it <input type="checkbox"/> 5. I dislike it
No.	Q: How would you feel:	Answers (select with a X one choice only)
9	If no one of employees greet you at the door?	<input type="checkbox"/> 1. I like it <input type="checkbox"/> 2. I expect it <input type="checkbox"/> 3. I'm neutral <input type="checkbox"/> 4. I can tolerate it <input type="checkbox"/> 5. I dislike it
No.	Q: How would you feel:	Answers (select with a X one choice only)
10	If a manager do not personally thank you while leaving the restaurant?	<input type="checkbox"/> 1. I like it <input type="checkbox"/> 2. I expect it <input type="checkbox"/> 3. I'm neutral <input type="checkbox"/> 4. I can tolerate it <input type="checkbox"/> 5. I dislike it
No.	Q: How would you feel:	Answers (select with a X one choice only)
11	If waiter did not check to see if your meal\drink were satisfactory?	<input type="checkbox"/> 1. I like it <input type="checkbox"/> 2. I expect it <input type="checkbox"/> 3. I'm neutral <input type="checkbox"/> 4. I can tolerate it <input type="checkbox"/> 5. I dislike it
No.	Q: How would you feel:	Answers (select with a X one choice only)
12	If the atmosphere in the restaurant is great?	<input type="checkbox"/> 1. I like it <input type="checkbox"/> 2. I expect it <input type="checkbox"/> 3. I'm neutral <input type="checkbox"/> 4. I can tolerate it <input type="checkbox"/> 5. I dislike it

## THE KANO MODEL

No.	Q: How would you feel:	Answers (select with a X one choice only)
13	If the interior is clean and neat?	<input type="checkbox"/> 1. I like it <input type="checkbox"/> 2. I expect it <input type="checkbox"/> 3. I'm neutral <input type="checkbox"/> 4. I can tolerate it <input type="checkbox"/> 5. I dislike it
No.	Q: How would you feel:	Answers (select with a X one choice only)
14	If the meal you order is not server quickly?	<input type="checkbox"/> 1. I like it <input type="checkbox"/> 2. I expect it <input type="checkbox"/> 3. I'm neutral <input type="checkbox"/> 4. I can tolerate it <input type="checkbox"/> 5. I dislike it
No.	Q: How would you feel:	Answers (select with a X one choice only)
15	If the weekly offer of brunches is not diverse?	<input type="checkbox"/> 1. I like it <input type="checkbox"/> 2. I expect it <input type="checkbox"/> 3. I'm neutral <input type="checkbox"/> 4. I can tolerate it <input type="checkbox"/> 5. I dislike it
No.	Q: How would you feel:	Answers (select with a X one choice only)
16	If there is enough food on the plate?	<input type="checkbox"/> 1. I like it <input type="checkbox"/> 2. I expect it <input type="checkbox"/> 3. I'm neutral <input type="checkbox"/> 4. I can tolerate it <input type="checkbox"/> 5. I dislike it
No.	Q: How would you feel:	Answers (select with a X one choice only)
17	If a waiter checked is your drink/meal is satisfactory?	<input type="checkbox"/> 1. I like it <input type="checkbox"/> 2. I expect it <input type="checkbox"/> 3. I'm neutral <input type="checkbox"/> 4. I can tolerate it <input type="checkbox"/> 5. I dislike it
No.	Q: How would you feel:	Answers (select with a X one choice only)
18	If weekly offer of brunches is diverse?	<input type="checkbox"/> 1. I like it <input type="checkbox"/> 2. I expect it <input type="checkbox"/> 3. I'm neutral <input type="checkbox"/> 4. I can tolerate it <input type="checkbox"/> 5. I dislike it

Figure 12 shows translated questionnaire, because the original was on Croatian.

**ROCHESTER INSTITUTE OF TECHNOLOGY CROATIA**

Dubrovnik, Don Frana Bulića 6, 20 000 Dubrovnik, Croatia, T. +385 (0) 20 433 000, F. +385 (0) 20 433 001  
Zagreb, Damira Tomljanovića Gavrana 15, 10 000 Zagreb, Croatia, T. +385 (0) 1 643 9100, F. +385 (0) 1 643 9103  
OIB: 24958681731, MB: 01307908, SG Splitska banka d.d., IBAN: HR6123300031100206749  
ritcroatia@croatia.rit.edu - www.croatia.rit.edu

## CONSENT FORM

I, MARIO PEJIC (print full name), representative of Mezzanave Restaurant in Dubrovnik, hereby give my permission for Ms. Kristina Franušić to conduct a survey of customers on the premises of the restaurant for the purposes of her research paper in the Senior Project course at RIT Croatia.

  
\_\_\_\_\_ (signature)

24.04'15  
\_\_\_\_\_ (date)



Figure 13 shows permission of a manager to test the Kano model on surveyed restaurant