

Nanostores: Evolving to a better business in Lima, Peru

Choquehuanca A.¹, Espejo L.¹, Moyano M.² and Vilches F. ¹

1: Faculty of Engineering, Universidad del Pacifico, Peru

2: Faculty of Economics, Universidad del Pacifico, Peru

Abstract

In Peru, the traditional channel is the predominant one with a 70% market share compared to the modern channel that only has a 30%; however, the modern sector has been growing in recent years (BBVA, 2018). Thus, the present work aims to generate value proposals that take into account the internal and external threats that the nanostores face in order to face them in a better way and achieve a solid position against other sales channels. Our data derives from methods such as the demand panel and interviews with shopkeepers, as well as surveys made on buying habits and preferences. It was concluded that the service provided by the nanostores must be based on its main advantage: direct and close treatment with the client. However, the main recommendations are associated with the modernization not only of the accepted means of payment, but also of the appearance both outside and inside the store, cleaning of the premises and layout of the products.

Keywords: Retail, nanostores, demand panel, value.

1. Introduction

The neighborhood stores, far from losing validity, have become the main competitor of the large supermarket chains (Londoño-Aldana & Navas-Ríos, 2011). In fact, when we asked a group of 24 people if they considered nanostores would survive against the competition of supermarkets and convenience stores, 75% said they would. This result is directly reflected in the context of retail trade in Peru, where the participation of the traditional channel remains predominant compared to the modern one. This modern channel one is conformed by supermarkets, department stores, home improvement stores, pharmacy chains, convenience stores and cinemas. While, in the traditional markets, nanostores, pharmacies, small hardware stores, street vendors, among others (BBVA, 2018). In addition, it should be noted that domestic trade or retail; that is, the sale of goods and services in small quantities directly to the final consumer (Katta Rama & Ratna Manikyam, 2013), is one of the most dynamic subsectors of the Peruvian economy, which is seen in the average 5.3% share in GDP during the years 2014-2018 (PRODUCE, 2019).

This research focuses on the traditional channel, specifically a popular one known as "bodega". This type of business, also called by other researchers as "nanostores", has as its main feature the fact that they are stores of very small size and family owned and operated businesses (Blanco & Fransoo, 2013). According to data from the Asociación de Bodegueros del Perú, it is estimated that only in Lima, the capital, there are about 113,000 formal nanostores and that nationally this figure increases to 414,000 (PQS, 2019). These large numbers show that Peruvians traditionally tend to buy in the businesses that are close to their home (Ramírez, 2013), thus describing some loyalty to this store format by the consumer. In addition, nanostores in Peru have a cash flow of approximately \$12 million a day and \$4,411 million a year, which doubles the number of supermarkets of around \$2,2 million (Cabanillas, 2013).

However, some bodegas perceive strong competition from supermarkets and convenience stores; That is why, the objective of this research is to generate value proposals for a solid positioning of the nanostores, and that they not only relate to the offer of their products, but also take into account the variables that should be empowered to better deal with internal and external threats like the lack of modernization, comfort, access, prices, insecurity, among others. This through the analysis of the demand and the impact it has on the nanostores, as well as the recognition of the main buying habits of the customers.

Afterwards, the methods and procedures used like interviews to the shopkeepers, the demand panel, a comparison of prices of products by district, and a survey about consumer preferences and habits in relation to their points of purchase will be presented. Also, the results obtained will be detailed, highlighting the consumers' preferences for visiting stores that are close to their homes and that can be reach by foot, as well as recommendations related to better customer service, preserving clean premises and accepting modern payment methods. Lastly, it will be presented the conclusions and appendices of the investigation.

2. Literature review

Firstly, according to the Ley General de Bodegueros del Perú, bodega is defined as the business dedicated to the retail sale of essential products, predominantly food and beverages, preferably destined to meet the daily requirements of households (Congreso de la República del Perú, 2018). This definition is complemented by the idea of an independent business whose client is served by the owner, a family member or a seller, usually located behind a counter, which shows, selects, serves or prepares the products that it sells to the client (Vigaray, 2000). Additionally, there are different sizes of these businesses: some could be characterized as mini-stores, with 15-40 square meters of store surface (similar to convenience stores in organized retail). However, the majority are much smaller and have less than 15 square meters of store, or maybe they have no stores, except a street cart. All these store formats are denoted as nanostores (Blanco & Fransoo, 2013). Thus, through the aforementioned references, the distinctive features of the nanostores are recognized, mainly characterized by their counter service with a direct relationship between seller and customer.

Secondly, there are around 113 thousand nanostores in Metropolitan Lima, and 414 thousand units nationwide. In Metropolitan Lima, the largest number of these businesses are concentrated in North Lima (43.1%) and South Lima (21.7%). While Lima East accounts for 20.8%, Downtown Lima for 8.3% and Lima Center Downtown for 6.1% (Asociación de Bodegueros del Perú, 2018). Moreover, the same report revealed that 41% of the shopkeepers indicated that the reason that led them to establish a nanostore was a shortage of work, 24% said they knew the business and had the necessary resources to start and 19% referred that is a family business. Finally, according to this study, 68.7% of the nanostores are located inside the homes and 29.3% in a different location. In 60.3% of cases it is a local and 38% is rented. Besides, in Peru, the traditional channel is the predominant one with a 70% market share compared to the modern channel that only has 30%; however, the modern sector has been growing constantly in recent years (BBVA, 2018). In that sense, we note the strong participation of the traditional channel in Peruvian domestic trade. However, as the study carried out by BBVA states, the participation of the modern channel is increasing, which also implies a challenge for its competitors.

Thirdly, the changes that occur in external forces (economic, demographic, technological and competitive) translate into changes in the consumer demand for both industrial and consumer products and services (David, 2003); in that sense, the strategies that the nanostores acquire should be in relation to these external forces. In fact, several shopkeepers have had to close or convert their businesses with the arrival of a supermarket in their area, but many have also survived market changes thanks to the fact that large companies in other areas, such as telephone companies and banks have offered them new alternatives and ways to stay in the mass consumption business (Rentería, 2017). Within that framework, some of the challenges that bodegas face, either directly or indirectly, are related to: transport logistics, malnutrition and obesity, consumer behavior and marketing strategy.

Regarding transport logistics, the most important factor that motivates the commercialization of fresh fruits and vegetables through nanostores is demand, but demand is subject to a set of cultural and logistical restrictions that make the product supply chain very inefficient. Therefore, merchants prefer to sell processed foods and mass consumption goods because they don't expire and are part of more efficient supply chains that reach nanostores (Aránguiz R., and others, 2018). Nevertheless, in the case of the logistics of a busy area of Lima such as the Lince district can be improved by creating spaces that help order and product distribution, as well as the implementation of a night delivery policy in order to reduce traffic in the city during the day (Castillo, Goicochea, Chong, & Rodríguez, 2019).

Then, malnutrition and obesity are topics that have become very relevant health problems for humanity. Regions with major socio-economic challenges, such as emerging economies, face the greatest difficulties in overcoming all types of malnutrition and eradicating so-called food deserts. Nanostores have the potential to overcome food insecurity and the effects related to malnutrition in emerging markets by providing a select variety of nutritious foods at affordable prices (Mejía-Argueta et al., 2019).

On the other hand, what is increasingly relevant for the consumer, is the possibility of being able to do everything in one place, attended by a specialist who advises them and with a difference in the consumer service, as well as the search for quality- price, offers and promotions (Álvarez, 2018). The purchasing decisions of consumers in emerging economies are driven by the desire to minimize the total purchase cost. However, there are also "nuisance factors" such as finding child care or dealing with the demands of children while they are in the store, logistical limitations to take purchases home and the time spent commuting (D'Andrea, Ring, Lopez-German, & Stengel, 2006).

Eventually, a brand has also become the representation of the overall customer experience that a company offers to its customers. The four P's marketing combination: price, product, promotion and place; must be redefined as the four C's: consumer, cost, convenience and communication (Kotler, Kartajaya, and Setiawan, 2017). Likewise, the improvement of the service consists in the benefit of the consumer experience; in fact, the factors that influence the choice of the place of purchase are: promotions, prices, parking facilities, good location, flexible business hours, access to telephone and Internet, delivery options (Zameer & Mukherjee, 2011). However, a part of consumers will be attracted to large supermarkets, but in general, these large chain formats lack a key element: the emotional proximity and the feeling of community that arises as a result of personal relationships with merchants or the store staff (D'Andrea, Ring, Lopez-Aleman and Stengel, 2006). This advantage should be taken by the shopkeepers to strengthen their sales system.

3. Methods and procedures

This research work had an approximate duration of five months, starting this in August 2019 and ending in December of the same year. The field work was carried out in August 2019 in the districts of Surco, San Isidro, San Borja and Jesus Maria of Metropolitan Lima. In order to make the study more practical, a convenience directed sampling was performed, which is not representative since we visited those nanostores that were geographically close to the homes of each member. At this stage, small interviews to the shopkeepers were also carried out with the purpose of knowing from a direct source data related to the age of the stores, the products with the highest turnover, their supply system, opening hours and if they had a warehouse space or not.

Then, a demand panel was held throughout the month of October. In this panel the purchases of each members' home were recorded taking into account the category of the products, the quantity, the travel time to the store, the time in the establishment, payment method and means of transport; in order to know the buying behavior of each of the members according to their district of residence.

Next, in order to contrast the supply of the nanostore with the demand of each of the members' homes, it was decided to carry out an experiment which consisted in the elaboration of a typical Peruvian dish: Arroz con Pollo. Thus, a standard recipe was formulated for four people (See Appendix 3) to compare the total cost of the ingredients in the respective districts and at the same time evaluate whether the nanostore satisfied the demand by having all the required inputs.

Finally, a survey was carried out in which 24 people participated, they were consulted information about the purchase channels that they frequented regularly according to their district of residence (See Appendix 4) in order to contrast the information obtained through the demand panel.

4. Experimental/numerical setting

The investigation was carried out in 3 out of the 50 districts of Metropolitan Lima: Jesús María, Santiago de Surco and San Borja. In the case of Jesús María, the area between Jirón Huáscar and the Universidad del Pacífico was covered. In the case of Santiago de Surco, where two of our members reside, we decided to denote Surco 1 and Surco 2 to make the corresponding distinction. Surco 1 includes the area near the district of La Molina while Surco 2 corresponds to the area near Avenida Ayacucho. In addition, it should be noted that in the area of Surco 1 there are no nearby nanostores, unless commuting for approximately 15 minutes to the convenience store "Repshop". Finally, in the case of San Borja, the perimeter was covered between the Torres de Limatambo and the Real Plaza Primavera.

5. Results and Discussion

First, based on personal experience with each selected nanostore, each member identified that the strengths of this type of business lie in a friendly treatment, a long schedule of attention and the option of giving credit to some clients or even the service of delivery in some cases; complemented with the opportunity to be located in strategic points near universities, schools, main avenues or within housing complexes. However, the weaknesses found were related to the limited storage space of the store, the lack of hygiene in the packaging of the products and the distrustful treatment if the customer doesn't frequent the bodega. In addition, shopkeepers are vulnerable to competition with other nearby nanostores, or better promotions than supermarkets or convenience stores can offer, and in some cases high rental costs. Through interviews with the sellers we were able to collect some data about their operations. For example, many of them make payment to their suppliers in cash. Then, in relation to customer service, the owner of "Manuel Arica" nanostore of Surco 2 said that she always seeks to provide a friendly treatment to his clients: "for me it is very important to talk with my clients, because that way I can know what are they looking for" (Palomino, 2019). However, we also noticed certain difficulties related to the limited storage space: "all the

merchandise we have is in the bodega, I don't have a warehouse because it would be an extra cost and I already pay rent" (Valencia, 2019). Also, the shopkeepers of the four businesses said that the products with the highest turnover are soft drinks. Anyways, milk and sweets also show a lot of rotation in the district of Jesus Maria; in Surco 1, alcoholic beverages, chocolates and cigars; in Surco 2, bread, cheese and butter and in the district of San Borja, snacks, chocolates and bottled water.

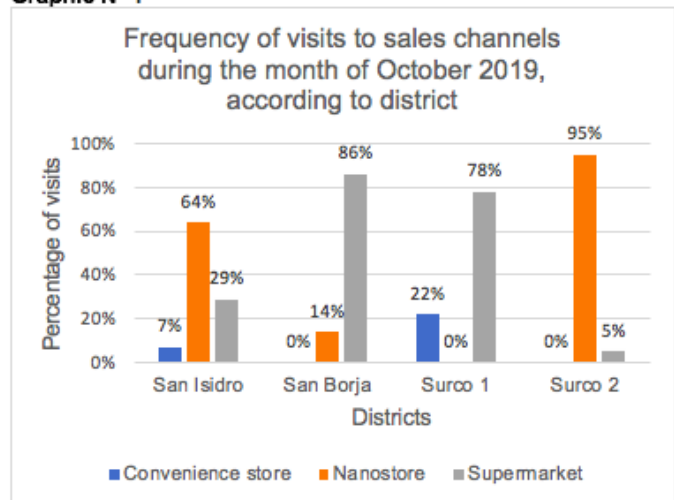
Secondly, from the demand panel made during the whole month of October 2019, according to the consumption of the members' homes, the home from Surco 2 and San Isidro district are the ones that most visited a nanostore with 95% and 64% respectively. While, the families from the district of San Borja and Surco 1 went more frequently to the supermarket with 86% and 78% respectively. However, the one in Surco 1 didn't register any visits to the nanostore, since there are no nearby stores in its area of residence and it is necessary to travel by car for approximately 15 minutes to reach the Repshop convenience store. In addition, there were no visits to convenience stores in the home of the San Borja district since they are located at a greater walking distance than the supermarket. Likewise, it was recognized that in the four districts: Surco 2, Surco 1, San Borja and San Isidro, the most consumed product category is that of vegetables with 21%, 23%, 20% and 28% respectively. The second most consumed in three of the districts is the fruit category with 23%, 20%, 16% respectively. However, the least consumed is the category of cereals, which didn't count any record in the month of October in the case of Surco 2 and then 7%, 4% and 3% respectively.

Furthermore, in the four districts, the most consumed categories are vegetables (23%), fruits (17%), dairy products (10%), meat (9%) and cereals (4%). In this block chart, categories with very low records such as condiments, cleaning supplies, pasta, canned food, treats were excepted. In that regard, only those most frequently purchased during the month evaluated were taken into account for the graphic.

Moreover, regarding to the variables: travel time, time in the establishment, means of transport and means of payment also included in the demand panel, it was obtained that on average the family from Surco 1 has a commute time of 15 minutes by car, while in the cases of Surco 2 and San Borja the travel time is shorter, 8 and 5 minutes respectively and is done on foot. Nevertheless, it is important to announce that, in the case of San Isidro, the nanostore provides a delivery service, therefore, these variables were not recorded; also, the payment is made at the end of the month for everything consumed.

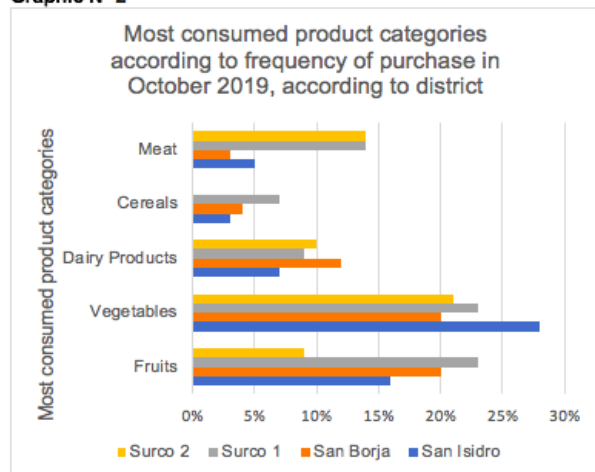
Thirdly, according to our typical Peruvian dish index: Arroz con Pollo, between the districts of Surco 1, San Borja and Jesús María, the nanostore has lower prices than the supermarkets. We note that the average

Graphic N° 1



Source: own elaboration based on the demand panel

Graphic N° 2



Source: own elaboration based on the demand panel.

Table N° 1

District	Surco 1	Surco 2	San Borja	San Isidro
Most visited sales channel	Supermarket	Nanostore	Supermarket	Nanostore
Travel time	15 minutes	8 minutes	5 minutes	-
Time in the establishment	1 hour	15 minutes	25 minutes	-
Conveyance	By car	By foot	By foot	Delivery
Payment method	Credit card	Cash	Debit and cash card	Credit until the end of the month

Source: own elaboration based on the demand panel.

total cost between the three districts is S / . 21.90 with a standard deviation of S / . 0.96. The table N° 2 shows approximations of the total cost in dollars with an exchange rate of S/. 3.35. However, among the three districts, the one with the highest total cost of ingredients is Surco 1, this, as we mentioned earlier is because there are no nearby nanostores in this area, so the member went by car to the nearest supermarket.

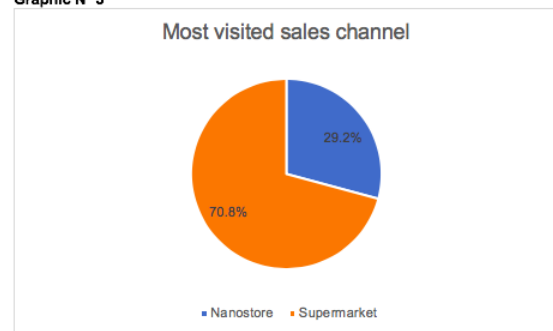
	Surco 1	San Borja	Jesús María
Sales channel	Supermarket	Supermarket	Nanostore
Total cost in soles	S/. 23.90	S/. 21.30	S/. 20.50
Total cost in dollars	\$ 7.13	\$ 6.36	\$ 6.12

Source: own elaboration based on the total cost of ingredients for typical Peruvian dish.

Nevertheless, the nanostore from Jesus Maria presents lower costs compared to the other districts, where the purchase was done at the supermarket (See list of ingredients in Appendix N° 3). Likewise, the demand was satisfied since all the required products were found in all three cases.

Moreover, regarding the answers obtained from the "Sales channels" form (See Annex N° 4), it was obtained that the majority of participants were from the districts: Surco in first place; secondly, San Borja and, thirdly, Jesús María and La Molina. Of all respondents, 70.8% go more frequently to the supermarket while 29.2% go to the nanostores. Also, of the 24 participants, 45.8% visit their preferred sales channel, whether traditional or modern once a week, 37.5%, 2 times a week and 16.7% more than 3 times a week. However, it should be noted that in the majority of cases where they attend more than 3 times per week, their sales channel corresponds to a nanostore; while those who go 1 time to their point of purchase correspond mostly to the supermarket. On the other hand, the days on which they generally make their purchases are usually on Saturdays and Sundays; while the least frequent days are Tuesdays, Wednesdays and Thursdays.

Graphic N° 3



Source: Form made to 24 people (See Appendix N° 4)

On the other hand, 62.5% of respondents say that they commute to their preferred sales channel by foot; thus, most of them also agree that it takes them 5 to less than 15 minutes to reach their destination. In addition, those who use cars as a mean of transport take 15 - 30 minutes to reach their destination. Still, there are also those who go by car and take 5 - 15 minutes since they buy several products and cannot load many packages without a car. It should also be noted that none of the participants in the survey take more than 30 minutes to travel to their point of purchase.

Taking into account the categories of most consumed products resulting from the demand panel, it coincides with the results of the survey in which the most consumed category in the first place is vegetables with 33.3%. However, unlike the demand panel, the second most consumed category resulting from the poll is dairy with 29.2%, followed by fruit with 25%, meat with 8.3% and cereals with 4.2%.

While the consumer can take into account factors such as price and offers, good customer service, and quality products, according to the results of the form, the main reason why they go to their preferred sales channel, whether this is traditional or modern, it is because of the proximity to their home. In that sense, the observed match the approach of D'Andrea, Ring, Lopez-Aleman, & Stengel, since considering the fact of commuting is a nuisance factor, the nanostore has a competitive advantage for being located inside residential complexes, urbanizations or near main avenues or institutions.

Finally, it was also asked what factors the nanostores should take into account to improve their sales, among the responses obtained, the modernization of payment methods stands out; for example, accept Yape or Tunki (mobile payment services), and also improving the aspect both outside and inside the store, cleaning the premises and layout of the products.

6. Conclusions and future research

The present study provided an empirical knowledge of the buying habits of four homes from the districts of San Isidro, San Borja and Surco. When analyzing all the data collected, we note the strong relevance of nanostores especially for the cases of San Isidro and Surco 2, where the members and their families did more than a 60% of their purchases approximately. This confirms the still preference of this kind of stores despite the modern ones. Thus, what caught our attention the most was the delivery service offered by one of the selected nanostores, which can be a future research opportunity because this service means a

decrease in nuisance factors at the time of purchase. Nevertheless, in the case of Surco 1, San Borja and the 70.8% of people who fulfilled the survey, the most visited kind of store were supermarkets, even though the total cost is sometimes more expensive than at nanostores. The main reasons of this behavior are due to the different payment methods that are accepted, or due to that families shopped weekly and not daily or there wasn't a nearby nanostore. However, for the nanostore, the improvement of internal factors is essential to create a significant shopping experience for the customer. Thus, the improvement of the sales of the nanostores, as well as their better positioning in front of other channels must be directly related to strategies that seek to reduce the nuisance factors like the ones mentioned before. In that sense, the consumers' preference for visiting stores close to their home and transport by foot stands out. Other recommendations are related to providing a better customer service, preserving a clean place and accepting modern payment methods such as Visa or mobile payment services. Thereby, future research should take into account a further evaluation of the home's demand of products in districts with a lower socioeconomic level, as well as, continue to carry out the demand panel for more months with the objective of getting to know the consumer's behavior month by month considering the seasonality of products, this, with a probabilistic study that later allows to make inferences of the population.

References

Alva, A. (September 13, 2019). Interview 2, appendix N° 2: interview with shopkeepers - San Borja. (M. Moyano, Interviewer).

Alvarez, J. (June 11, 2018) El Shopper peruano: Compra aquí y allá. Retrieved from <https://www.ipsos.com/es-pe/el-shopper-peruano-compra-aqui-y-alla>.

Aránguiz R., Castillo J.C., Chong M., Cucho C., Mejía-Argueta C., Mejía G. & Pereda, M.C. (2018). Operations and logistics for food security in vulnerable neighborhoods of Latin American countries.

BBVA. (2018). *Perú Situación retail moderno 2018*. Lima: BBVA research.

Blanco, E. E., Fransoo, J.C., & Blanco, E.E. (2013). *Reaching 50 million nanostores: retail distribution in emerging megacities*. (Technische Universiteit Eindhoven, BETA publicatie: working papers, (2013), 11 pp.) Technische Universiteit Eindhoven.

Cabanillas, A. (April 3, 2013). *Perú21*. Retrieved from <https://peru21.pe/economia/facturacion-bodegas-crece-pese-supermercados-2124771/>

Castillo, J. C., Goicochea, E., Chong, M., & Rodriguez, M. (July 17, 2019). Inmegacity characterization: trends and realities. *Management Research: Journal of the Iberoamerican Academy of Management*, 17, 2, 187-204.

Congreso de la República del Perú. (December 4, 2018). *El Peruano - Diario Oficial del Bicentenario*. Retrieved from El Peruano: <https://busquedas.elperuano.pe/normaslegales/ley-general-de-bodegueros-ley-n-30877-1719966-1/>

D'Andrea, G., Lopez-Aleman, B., & Stengel, A. (September 01, 2006). Why small retailers endure in Latin America. *International Journal of Retail & Distribution Management*, 34, 9, 661-673.

D'Andrea, G., Ring, L. J., Lopez, A. B., & Stengel, A. (September 01, 2006). Breaking the myths on emerging consumers in retailing. *International Journal of Retail & Distribution Management*, 34, 9, 674-687.

David, F. R., David, F. R., & Jasso, D. B. E. M. (2017). *Conceptos de administración estratégica*. Ciudad de México: Pearson Educación.

Díaz, A. (September 13, 2019). Interview 5, appendix N° 2: interview with shopkeepers- San Borja. (M. Moyano, interviewer).

Ghosh, P., Tripathi, V., & Kumar, A. (January 31, 2010). Customer expectations of store attributes: A study of organized retail outlets in India. *Journal of Retail & Leisure Property*, 9, 1, 75-87.

Indecopi. (2018). *Indecopi*. Retrieved from Dirección de la Autoridad Nacional de Protección del Consumidor:
<http://repositorio.indecopi.gob.pe/bitstream/handle/11724/6407/NP%20180906%20Indecopi%20firma%20convenio%20y%20lanza%20manual%20del%20bodeguero.pdf?sequence=5&isAllowed=y>

Ipsos. (2014). *Perfil de la bodega y bodegueros*. Retrieved from Ipsos: Investigaciones de mercado:
<https://www.ipsos.com/sites/default/files/publication/2014-08/Perfil%20de%20la%20Bodega%20y%20el%20Bodeguero%202014.pdf>

Juan, V. M. D. (2000). *Distribución comercial: comercialización y retailing*. Alicante: Librería Compás.

Kotler, P., & Armstrong, G. (2017). *Marketing*.

Londoño-Aldana, E., & Navas-Ríos, M. E. (June 01, 2011). Comercio tradicional de productos de gran consumo en Colombia: Movilidad del consumidor. *Orinoquia*, 15, 1, 103-111.

Mejía-Argueta, C., Benitez-Perez, V., Salinas-Benitez, S., Brives, O., Fransoo, J. C., & Salinas-Navarro, D. (2019). The importance of nanostore logistics in combating undernourishment and obesity.

Palomino, D. (September 14, 2019). Interview 1, appendix N° 2: interview with shopkeepers - Surco. (F. Vilches, Interviewer).

Peruinforma. (March 9, 2018). ABP: En el Perú más del 60% de las bodegas son conducidas por mujeres. Retrieved from <http://www.peruinforma.com/abp-peru-mas-del-60-las-bodegas-conducidas-mujeres/>.

PRODUCE. (2019). *Boletín de comercio interno: grandes almacenes, supermercados y tiendas especializadas*. Lima: Ministerio de la Producción.

Rama, M. R. K., & Ratna, M. K. (May 23, 2013). Customers' Opinion on Small Scale Retail Stores: A Case Study. *Indian Journal of Marketing*, 43, 5, 5.

Ramirez, N. (2013). Gestion.pe: Culturalmente, los peruanos somos muy pegados al consumo en las bodegas. Retrieved from Gestion: <https://gestion.pe/economia/empresas/culturalmente-peruanos-pegados-consumo-bodegas-52998-noticia/>

Rentería, M. (June 7, 2017). Ipsos. Retrieved from Innovación y Conocimiento: Consumidor & Cliente:
<https://www.ipsos.com/es-pe/la-unica-constante-es-el-cambio>

Valencia, F. (September 13, 2019). Interview 6, appendix N° 2: interview with shopkeepers - San Borja. (M. Moyano, Interviewer).

Zameer, A., & Mukherjee, D. (2011). Food and Grocery Retail: Patronage Behavior of Indian Urban Consumers.

Appendices

Appendix N° 1 – Names and location of the chosen nanostores or convenience stores

	Jesús María	Surco 1*	Surco 2	San Borja
Nanostore's/ Convenience store's name	Bodega "MI JEANFRANCO"	Convenience store "Repshop"	Bodega "Manuel Arica"	Bodega "Kemito"

*In this district, no warehouses were found near the place of residence.

Appendix Nº 2 – Guide for interview with shopkeepers

Objective: know some basic data about the operations of the nanostore from a direct source, in addition to characterizing both the interior (supply and distribution of products) and the exterior of the premises (nearby businesses, avenues, among others).

Questions:

- 1.- How long have you had your business?
- 2.- What are the products with the highest turnover?
- 3.- Where and how do you buy your products?
- 4.- Do you have a warehouse?
- 5.- Do you offer any type of credit to your customers?

Appendix Nº 3 – Recipe for typical Peruvian dish: Arroz con Pollo (for 4 people)

Ingredients:

- | | |
|----------------------|--------------------|
| - 4 chicken legs. | - 1 pepper |
| - 750 grams of rice. | - 1 corn |
| - 1 coriander tied. | - 1 onion |
| - 300 gr pea. | - 1 head of garlic |
| - 2 carrots. | - Oil |
| - 3 yellow peppers. | |

Appendix Nº 4 – Sales Channel Form

Objective: get to know the buying experience of other consumers and contrast it with that obtained in the demand panel.

Questions:

- 1.- District of residence
- 2.- What sales channel do you or your family visit most frequently?
- 3.- How often do you visit that sales channel?
- 4.- What day (s) do you usually make your purchases?
- 5.- How do you get to your preferred sales channel?
- 6.- How long does it take to reach your point of purchase?
- 7.- What category of products do you consume in greater quantity?
- 8.- Why do you go to this sales channel?

About the nanostores

- 1.- Do you regularly visit any nanostore?
- 2.- Why do you visit the nanostore or why not?
- 3.- Do you think nanostores will survive against the competition of supermarkets and convenience stores?