

# CUSTOMER EXPERIENCE ANALYSIS OF COSMETICS RETAIL STORE ON MILLENNIAL WOMEN

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## ABSTRACT

Nowadays, customer experience is one of the most powerful forces to increase customer satisfaction, customer loyalty, service quality, and company profit, especially for the cosmetics retail industry that is strongly influenced by the hedonic aspects. Therefore, this exploratory study aims to analyse plausible combinations of factors to reveal commonalities of online and offline customer experience with retail stores to support retailers in the alignment of the store system design with the promising profile of millennial women. The study uses a combination of several methods to conduct a comprehensive analysis, namely Eye Tracking (ET), Customer Journey Analysis (CJA), Retrospective Think Aloud (RTA), and In-Depth Interview (IDI). The analytical methods deliver qualitative and quantitative data to explore both positive and negative experiences from the customer point of view. The study reveals many possible factors that can bring positive or negative customer experience from a cosmetics retail store. Based on the findings, the design recommendations for offline and online cosmetics retail stores (physical, interface, and service systems) were made to help cosmetics retailers produce a positive customer experience. This paper provides two research contributions to the field of service experience. First, the study uses an original combination of four methods that have never been used to explore the experience comprehensively. The combination can increase the depth of this exploratory study in understanding the complexity of all customer experience dimensions. Therefore, this study brings a fresh perspective on the development of the method that can be used by many researchers in a similar area. Second, this study fills the existing gap in that area of exploratory research on customer experience in the cosmetics retail sector. This study could help many cosmetics offline or online retailers to improve their store system to bring a positive customer experience to millennial women as their biggest customer segment. This study could also inform the system design for new “players” in the cosmetics retail industry with valuable guidelines for a positive shopping experience at their store.

## KEY WORDS

**customer experience, cosmetics, millennial women, retail, eye tracking, customer journey analysis, retrospective think aloud, in-depth interview**

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## INTRODUCTION

Under tight competition, which is particular to many business sectors, customer experience is one of the main differentiators to attract customers and excel from the competitors (Bustamante & Rubio, 2017).

The customer experience (CX) plays an essential role in influencing customers while interacting with products or services offered because the impact of CX can affect almost all aspects of human life. Customer experience strongly correlates with customer satisfac-

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tion, customer loyalty, service quality, purchase intention, and sales of the company (Koetz, 2019). This has made many companies in various sectors concerned about bringing a positive experience for their customers.

Customer experience is mostly formed in the retail industry, where there is an intensive interaction between the end-customers and the products or services. The retail industry with a B2C business model has the most interaction with the end customers to transact product or service. As the retailer always has intense interaction with their customers, understanding customer experience and behaviour should be crucial for them (Puccinelli et al., 2009). To correctly identify and deliver a positive customer experience, it is important to understand all human factors related to their shopping behaviour (Reason et al., 2016). For instance, shopping motivation must be understood (Arnold & Reynold, 2003) as well as goals or desires when buying (Ratneshwar et al., 2000), etc. This understanding makes it easier to design retail aimed at a positive experience.

Nowadays, the retail industry has two common types of business model, i.e., an offline store and an online store (e-commerce). These types of retail stores could have the same business goals yet different routes to the market. Different ways to interact with customers exist for both types of stores, so customers should be treated using different patterns. Thus, customer behaviour should be understood, and customer experience developed differently for each store type. Based on the timeframe, customer experience in all retail environments has three phases, i.e., prepurchase, purchase, and post-purchase (Lemon & Verhoef, 2016). Despite similar customer experience phases, activities and interactions that occur during each phase may differ. Therefore, this research aims to compare how to enhance positive customer experience between offline and online retail stores to gain more knowledge on better treatment of customers.

As a powerful driving force in the retail industry, customer experience could be a great differentiator in many sectors that are affected by hedonic aspects, such as buying experience, emotion, or pleurability (Bascur & Rusu, 2020). Customer experience is one of the main differentiating strategies in the cosmetics industry to increase economic value (Nagasawa & Kizu, 2015). The cosmetics industry is an industrial sector that is significantly affected by some hedonic aspects like brand loyalty (Nezakati et al., 2013), pleasure, emotion (Apaolaza-Ibáñez et al., 2011), satisfaction (Upamannyu & Bhakar, 2014; Alkhamis, 2018;

Kuntonbutr & Sangperm, 2019), and many more. Cosmetics customers usually buy their cosmetic products from offline or online retail stores. Positive customer experience plays an important role in choosing the wanted retail store. Some research is available about customer experience in retail environments or hedonic aspects in cosmetic products, but no research explores how to enhance the positive customer experience in a cosmetics retail store. Therefore, this research explores this gap to help cosmetics retailers to develop the right differentiator for their stores. It focused on the cosmetics sectors instead of making a more general exploration as every sector has typical customer behaviours and characteristics.

Since customer experience is highly affected by typical human behaviours, the research focused on millennial women or generation Y (Gen Y) who were born between 1981 and 1999 (Lancaster & Stillman, 2002). This generation was selected for research because of four main reasons related to their characteristics. First, the millennial generation is the largest consumer population in the world (Moreno et al., 2017). Second, even though men are getting interested in using cosmetic products, women remain the main consumer group (Ramshida & Manikandan, 2014). Third, the majority of millennial women are still in their productive age (Smith & Nichols, 2015), so they tend to choose, buy, purchase, and consume cosmetic products. Fourth, since the research aims to compare the experience between offline and online stores, most of them have good adaptability to the technology required for online stores (digital natives). Consequently, the research targeted millennial women.

This research explores factors related to customer experience dimensions that can enhance the positive customer experience for millennial women in cosmetics retail stores. This research also explains the difference in relevant CX factors between offline, aiming to contribute to knowledge about how to build cosmetics retail stores that would bring positive customer experience.

## 1. LITERATURE REVIEW

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Customer Experience (CX) is a multidimensional construct of what customers think and feel about products, systems, or services related to business (Bascur & Rusu, 2020). The construct consists of cognitive, emotional, behavioural, sensorial, and social dimensions (Lemon & Verhoef, 2016). Positive customer experience is proven to increase customer satis-

faction (Lemon & Verhoef, 2016; Suzuki, Gemba & Aoyama, 2019; Almohaimmed, 2020) and customer loyalty (Kim & Choi, 2013). For business owners, a positive customer experience can also be a powerful driving force to improve sales (Bustamante & Rubio, 2017), profit (Donoghue, 2002), service quality (Salehi et al., 2013), and purchase intention (Nasermoadeli et al., 2013). Considering the importance of customer experience, possible ways should be explored to enhance the positive customer experience as a powerful competitive differentiator for a business, product, or service. Customer experience is a complex construct that requires comprehensive analysis. Therefore, several methods were combined to explore all dimensions of CX. The analysis methods used in this research and their relationship with customer experience dimensions are given in Fig. 1.

Eye-Tracking (ET) is a powerful methodology to record and measure human eye movements to understand visual attention in real-time (Schall & Bergstrom, 2014). Eye-Tracking has been used for many fields of research, such as human cognitive factors (Schall & Bergstrom, 2014), human experience (Elbabour et al., 2017), consumer behaviour (Rosa, 2015), product or service usability (Pernice & Nielsen, 2009), neuromarketing (Santos et al., 2015), sensory experience (Cowen-Elstner, 2017), emotion recognition (Schurgin et al., 2014) and detection (Alshehri & Alghowinem, 2013), and many more. Eye-Tracking can measure three main visual attributes of human eyes, i.e., location, duration, and movement, permitting to examine natural human behaviour based on their visual attributes. Eye-Tracking can provide many insights into what makes a customer interested, how the customer pays attention to something, and what phenomenon-causing experience can occur at stores. This research used an Eye-Tracking method for natural and objective exploration of cognitive, emotional,

behavioural, and sensorial dimensions of customer experience. Besides, some Eye-Tracking findings were used as basic insights to use the RTA method. Since participants should move actively in retail stores when their eye movements are captured, a wearable eye tracker (Tobii Pro Glasses 2) was used in this research. This eye tracker is an Eye-Tracking tool in the form of glasses, which allows participants to move freely when wearing it. The eye-tracking method provides a lot of data that can be analysed both qualitatively and quantitatively. Some of the qualitative data from eye-tracking were gaze replay, gaze plot, and heat maps, whereas some of the quantitative data from eye-tracking were time spent, number or duration of fixation, number or duration of visit, time to first fixation, pupil dilation, and many more.

Think Aloud (TA) is a method in the form of protocols used by a researcher to help participants to verbalise their thoughts working on a given task (Van Den Haak et al., 2003). This is a powerful protocol that allows understanding what participants think or feel at the time when an event occurs. There are two types of TA procedures, i.e., Concurrent Think Aloud (CTA) and Retrospective Think Aloud (RTA). CTA is a type of TA where participants verbalise thoughts during a task, whereas RTA is a type of TA where participants verbalise thoughts right after the tasks. Although there is no significant difference between CTA and RTA results (Van den Haak et al., 2003), participants tend to have better performance and more thoughts using RTA (Van den Haak et al., 2004). Therefore, this research used RTA to capture customer thoughts associated with their experience. RTA was used to explore customer experience based on the gaze replay from each participant.

The customer experience construct consists of natural customer responses and reactions to environmental stimuli along the customer journey (Becker

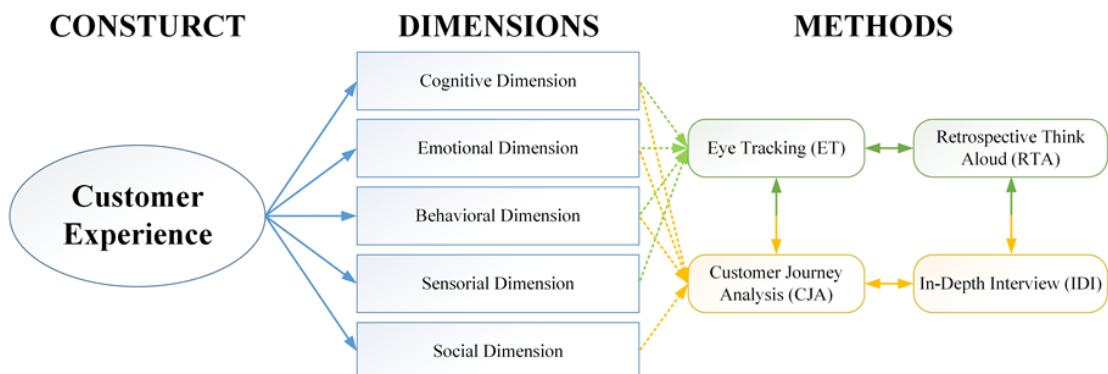


Fig. 1. Analysis methods and their relationship with CX dimensions

& Jaakkola, 2020). This research also used Customer Journey Analysis (CJA) to capture the experience of the customer in detail for every journey. CJA has been used for some service research, such as customer experience (Addis, 2016; Alawad et al., 2018), service quality (Halvorsrud et al., 2016), service design (Alves et al., 2012), etc. In the context of retail customer experience, the process of customer journey flows iteratively from the prepurchase phase to the purchase phase to the post-purchase phase (Lemon & Verhoef, 2016). During each phase, customers could interact with one or many touchpoints (i.e., anything that interacts with the customer) to achieve their goals for every step at retail stores. CJA aims to systematically explore the experience in every step and touchpoints of the customer journey. The customer journey map was used as a CJA tool for mapping the customer journey for all processes (Følstad & Kvale, 2018). There is some information for every process from the customer journey map, such as customer goals, customer expectations, process names, touchpoints, thinks and feels, and customer experience. This research used CJA for the exploration of cognitive, emotional, behavioural, and social dimensions of customer experience.

In-Depth Interview (IDI) is an intensive interview to explore participant's perspectives on particular subjects (Brounéus, 2014). In qualitative research, IDI is an effective tool to gather ideas, thoughts, or perceptions (Bolderston, 2012). IDI allows to explore and reflect on the experience of the participants qualitatively (Kormelink, 2020). This research used IDI for an in-depth qualitative analysis of a customer experience for every customer journey.

## 2. RESEARCH METHODS

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This research was conducted to elucidate the real customer experience from cosmetics retail stores. To achieve these goals, extensive research involved three offline cosmetics retail stores and three online cosmetics retail stores in Indonesia, which specifically offer a selection of cosmetic brands (i.e., are not affiliated with certain brands) and target millennial women as their primary market. All selected stores had been operating for more than three years and widely known to eliminate a "new store" effect. The offline stores were "self-service", allowing customers to shop for any items wanted. This type of offline cosmetics retail stores is predominant in Indonesia. The chosen online stores only sold cosmetic products from a selection of

brands. The stores had to have a unique name, location, and ownership to ensure their independence. Qualitative and quantitative data were taken from customer samples to explore the right experience from the customer perspective. Based on Fig. 1, this research used a systematic combination of methods to analyse all dimensions of customer experience based on the point of view of an actual customer.

All research participants were millennial women (aged 19 – 38) who had the intention to shop for cosmetic products and already had a shopping list. The research expected all participants to engage in natural shopping behaviour in a retail store, without any control over participant actions during their shopping experience. Thus, research participants were recruited in front of each offline store right before they entered it. For online stores, an announcement was disseminated on social media platforms to find participants who wanted to buy cosmetic products from the selected online stores. Based on research, the sample size of 12 to 50 participants is considered adequate for qualitative behavioural research (Sworin, 2012; Boddy, 2016). This research had thirty-six participants (18 offline store participants and 18 online store participants). Every participant received a USD 10 voucher for taking part. Informed consent was received to use the eye tracker while shopping. Despite the attempt to convince potential participants to use the eye tracker, many customers refused participation on these grounds.

The research looked for participants who wanted to shop for cosmetic products at each store location. They were asked to put on the wearable eye tracker before entering the store. The participants shopped as they liked as the research did not intervene in the shopping process aiming to get a natural experience. The data gathering procedure for each participant is given in Fig. 2.

In the pre-interview phase, the participants were checked against the research criteria, and their pre-purchase experience was explored. Then, the wearable eye tracker was attached, and participants were asked to shop as they wanted. They were allowed to shop as long as they wanted and to change their shopping list if needed. During the shopping phase, the customer journey map was made. Once the shopping was done, eye movement videos were watched asking to explain the think and feel from one event to another. This RTA phase helped to explore the purchase experience in detail based on an eye-tracker video. The last phase conducted an In-Depth Interview to explore the overall experience from the prepurchase to the post-pur-

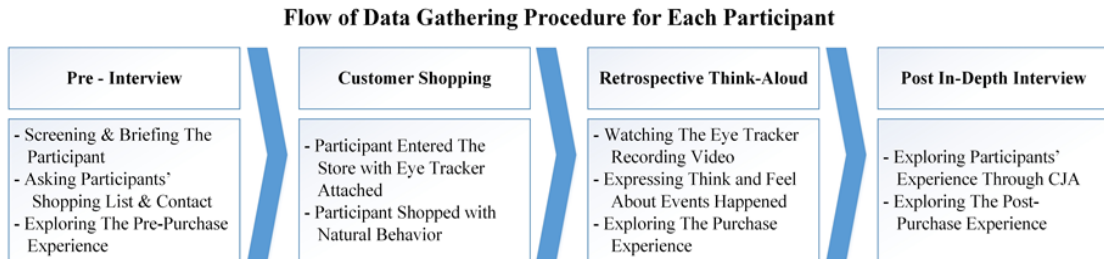


Fig. 2. Data gathering procedure for each participant

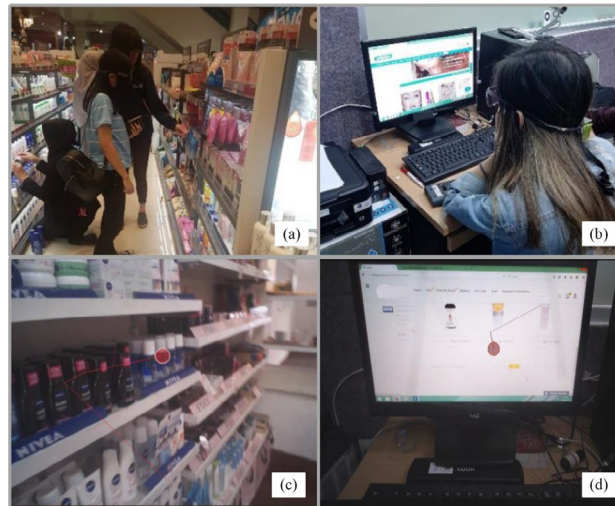


Fig. 3. Data gathering process: (a) an offline store; (b) an online store; (c) eye movement in an offline store; (d) eye movement in an online store

chase based on the created customer journey map. These four phases were iterated for each participant from each cosmetics retail store.

The data gathering process for offline stores was held in the cosmetics store where the shopping took place, whereas online store data gathering was held in the place where the customer usually used their device for shopping (e.g., at home, school etc.). This field study aimed to capture the real and natural experience. The examples of the data gathering process can be seen in Fig. 3.

Before conducting the data collection, the pilot study was made to ensure that the data gathering procedure and the result would meet expectations. The pilot study was made using the real data gathering process. The pilot study was conducted with four participants (two for an offline store and two for an online store). The pilot study demonstrated that all procedures and results were good. However, the pilot study helped to eliminate participants with eyeglasses because the eye tracker could not be used in such cases, and it was especially difficult to calibrate the eye movement of participants with cylindrical lenses.

This research used both qualitative and quantitative approaches to analyse customer experience from offline and online cosmetics retail stores. The qualitative data analysis used eye-tracking data (gaze replays and gaze plot) and customer journey maps as a basis for an in-depth exploration of the customer experience using RTA and IDI.

The quantitative data analysis used the time spent for every event captured by the eye tracker and compared the findings with the experience gained by the customers. The analysis was used to map factors that caused either a positive or a negative shopping experience.

### 3. RESEARCH RESULTS

This research used three kinds of eye-tracking data for customer experience, i.e., the gaze replay, the gaze plot, and time spent. The eye-tracking method was used to explore the purchase phase of the customer experience from the moment participants entered the store until the moment they left.

Gaze replay is a video recording from the eye tracker, which shows a real-time eye movement in the form of red dots for fixation and red line for saccades. Before entering the store, the eye tracker was attached to the participant's head to record real-time eye movements. During the purchase phase, the eye tracker recorded the user's eye movements, and the information heard. The gaze replay helped to explore all moments in the purchase phase of the customer journey in the cosmetics retail store. The gaze replay was used as the basis for conducting the Retrospective Think Aloud (RTA). For each participant, the RTA was conducted right after the participant finished shopping. The participants watched their gaze replay and expressed their think and feel about everything that happened during the shopping process. The

combination of gaze replay and RTA helped to explore the customer experience in detail based on their cognitive (what they decided), behaviour (what they did), emotional (what they felt), and sensory (what they saw and heard) aspects.

A gaze plot is a map that contains a gaze sequence consisting of fixations and saccades of human eye movement from time to time during the data collection. This map was used to scrutinise some behaviours and sensory phenomena about the purchase experience in the cosmetics retail stores. This research found customer product searching patterns and items that attracted consumer attention. An example of the gaze plot data in this research is given in Fig. 4.

The third kind of data is the customer time spent on each activity while shopping (during the purchase



Fig. 4. Example of gaze plot data — a searching pattern of a customer

phase). The time-spent data was received from the eye tracker recording during the participant's purchase journey. This data was used to explore the customer experience related to cognitive and behaviour dimensions, especially how the customers spent their time in the cosmetics retail stores. Since data was collected at many offline stores, the selected stores had a similar floor area (80 – 120 sq. m) and a similar number of cashier queue lines (1 – 2 lines) to avoid the effect of store area differences that is related to the time-spent data. In addition, all participants had to have a shopping list indicative of their intention to purchase something from the store. The time-spent data for both offline and online cosmetics retail stores are given in Table 1.

The CJA used the Customer Journey Map (CJM) to systematically visualise and explore the experience by each step from the prepurchase phase until the post-purchase phase. Some information is provided in CJM for every journey of each customer, such as process names, customer goals, customer expectations, process flows, touchpoints, experience visualisation, customer's think and feel, negative experience, and positive experience.

Tab. 1. Time-spent data

OFFLINE STORE						
No	PURCHASE PHASE JOURNEY	TIME SPENT (SEC)				
		AVERAGE	%	STD DEV	MIN	MAX
1.	Entering the cosmetics store	38.57	3.13	10.80	15.04	76.75
2.	Exploring the products in the store	589.45	47.80	576.20	215.36	1339.07
3.	Finding some product information	202.37	16.41	80.76	57.23	237.42
4.	Exploring product testers	127.00	10.30	12.54	35.08	167.78
5.	Interacting with the shop assistants	67.85	5.50	19.00	0.00	98.38
6.	Entering the cashier's queue	94.00	7.62	63.22	0.00	184.90
7.	Making a transaction	88.45	7.17	41.32	32.77	147.21
8.	Leaving the cosmetics store	25.55	2.07	12.01	9.71	37.56
Total purchase phase		1233.24	100	942.64	421.29	2398.50
ONLINE STORE						
No	PURCHASE PHASE JOURNEY	TIME SPENT (SEC)				
		AVERAGE	%	STD DEV	MIN	MAX
1.	Opening the online store apps	24.52	0.87	16.67	6.87	46.53
2.	Exploring the store's interface	1397.68	49.80	529.23	259.63	2,205.57
3.	Exploring related information	472.56	16.84	324.13	145.30	777.47
4.	Comparing products with other stores	292.66	10.43	240.03	0.00	487.21
5a.	Registering account (for first-time user)	237.32	8.46	56.28	148.93	334.54
5b.	Log in (if already have an account)	26.10	0.93	24.01	6.26	38.63
6.	Filling the shopping cart & transaction	287.44	10.24	136.93	100.05	481.25
7.	Checking the purchase order tracking	68.40	2.44	19.81	32.26	81.47
Total purchase phase		2806.68	100	1231.14	896.93	3250.89

Generally, the customer experience is significantly affected by the conformity between customer goals, customer expectations, and the reality that happened on any touchpoints in the process. The information from the CJM can be used to analyse the participant experience systematically.

Information was collected during the gaze replay video observation, the results of Retrospective Think Aloud (RTA), and the results of the In-Depth Interview (IDI), and presented in CJM. Customer characteristics were used to create eight personas (four for customers of an offline store and four for customers of an online store) to better understand the behaviour of participants. Personas were not created for each participant because of the similar characteristics of some research participants. Then, CJMs were created for every persona from each store to explore their experience. All CJMs were used to synthesise all relevant data to gather all customer experience and its design factors. The examples of CJMs from offline and online store participants are given in Figs. 5 and 6.

In many stores, the products are grouped based on the cosmetics brand. This arrangement makes it difficult to compare products by their type. Therefore,

	PREPURCHASE		PURCHASE				POSTPURCHASE			
	1. Intending to visit	2. Entering the store	3. Exploring products	4. Finding info	5. Exploring testers	6. Interact with keepers	7. Entering the cashier	8. Making transaction	9. Leaving the store	10. Consuming products
Consumer goals	Going to the cosmetics retail store location to shop for some products on the shopping list and look for interesting products.	Accessing the store where the customer will shop.	1. Finding the products needed based on the shopping list. 2. Finding interesting products with interesting promotions.	1. Obtaining all information to ensure that the products match the needs. 2. Comparing one product with other products to get the best product to purchase.	Ensuring customer expectation with the product specifications (color, texture, odor, etc).	Finding out the information needed but not listed on the product or the price tag. (for example: best-seller, Rems, promotion validation, etc)	Waiting and preparing for the transaction process.	Purchasing all selected products.	Leaving the cosmetics store after completing a transaction.	Consuming the purchased products with the appropriate expectations.
Consumer expectations	1. Products on the shopping list are available at the store. 2. There is a promotion. 3. The store is not full and crowded. 4. The customer can get cheaper prices from other stores	1. The customer is warmly welcomed. 2. The store is cool, bright, and fragrant.	1. The customer Finds the desired product comfortably and easily. 2. The customer Gets a promo for the product he/she wants to buy	The customer gets complete information from the product, the price tag, or other facilities at the store.	The customer gets conclusions about the suitability of the product with the needs and desires.	1. The customer gets a friendly service. 2. The shopkeepers have enough knowledge about cosmetics and good explanations. 3. The shopkeepers have a good and proper looking.	1. There is no queue or the queue is not long. 2. The queuing system is not boring.	1. Complete payment method options. 2. Fast, friendly, and informative cashier services. 3. The customer gets more promotions when paying at the cashier desk.	1. The purchased products are not disappointing. 2. The purchased products are genuine.	1. The purchased products are as expected when used. 2. The quality and price of the purchased products are worth it so that they will come back to the store later on.
Process	Linear →	Linear →	Ongoing, Non Linear	Ongoing, Non Linear	Ongoing, Non Linear	Non Linear Time-Based	Non Linear Time-Based	Linear →	Linear →	Linear →
Touchpoints	Shopping List, Smartphone	Shopping cart, Entrance Area	Product Rack, Product, Price Tag, Poster / Other Promotion, Display Information, Shopping Cart, Mirror, Smartphone, Shopping List	Product Rack, Product, Price Tag, Smartphone, Shopping List	Product Tester, Product / Tester Rack, Mirror, Smartphone	Shopkeepers, Product, Product / Tester Rack, Mirror	Cashier Queuing Line, Product Rack, Promotion Rack at Cashier Area	Cashier, EDC Machine, Smartphone, Purse, Promotion Rack at Cashier Area	Exit Area, Shopkeeper	Purchased product, Mirror, Smartphone, Friend / Family to interact
Experience										
Think & feel (Free-text Representative Statements)	"The store that I will visit has a good reputation and there will be some promos." "I usually go to cosmetics stores to try new things. I prefer to buy old items in an online store because it's relatively cheaper and easier." "I usually go to an offline store if I just go to the mall. I rarely come to certain cosmetics stores on purpose."	"The store is quite comfortable, there are some air conditioners and I was warmly welcomed when entering the store." "When entering the store, it feels like I want to buy everything, all items were very interesting." "It's a shame that the store isn't bright enough, even though bright lighting is needed to make cosmetic products more attractive when used."	"I love to look around here to choose (cosmetic products). For women, it seems that just buying what is on the shopping list is not enough, we like to explore other interesting items." "The more promos, the more comfortable inside the store. Sometimes I come to a cosmetics store without any shopping list, so I only buy if there is a promo, if it's not there then it won't be bought just look around." "While in the offline store, I usually try some new items. I can buy products that I normally use in the online stores."	"Price tags are sometimes unclear and promos are invisible, so you have to ask the shopkeepers or suddenly find out when paying." "The arrangement of the racks is sometimes not neat and I don't understand why they are arranged like that. If I were the manager, I would've changed it so that people would be easy to find the products." "Information about the product from the store is sometimes clear and sometimes not. There are no serious problems regarding how to find information, if it is unclear we can look at our smartphone to find out more information."	"The tester can be a great differentiator in offline stores. Stores that have many testers are usually sell expensive products." "A tester placed in a product rack often makes us unaware that there is a tester. If a tester is attached to the product shelf, we often don't realize that there is a tester (Especially for products whose packaging isn't transparent)." "The offline stores that have a lot of testers have a very high attraction compared to other stores."	"In the cosmetics store, the paths are usually very narrow. Sometimes the shopkeepers who gather in one place interfere with my shopping convenience. Sometimes they still talk to each other when I want to pass them." "I am very upset with the shopkeepers who don't know when asked about a product or promotion, why would they work in a cosmetics store if they don't understand cosmetics." "I feel annoyed if the shopkeeper follows me while looking around so I'm not free to try and see the price."	"Queuing is boring for me. Sometimes if the queue is long I better go to another store, except if the price at the store is much cheaper." "I sometimes get annoyed if the store doesn't open all the cashiers when it's busy. For example in a store, there are 3 cash register machines, but only 1 is available for purchasing." "The store will be more fun if there is something that can make us comfortable while we queue up. However, even better if there is no queue."	"I was unable to pay using one of the fintech brands * and then had to deal at least 100 thousand to use a credit card." "The cashier was quite friendly and mastered her job well. As a cashier, the important thing is that they are nimble, fast, and friendly." "Sometimes I just get some info about promotions when I arrive at the cashier, so I have to go back again to choose items and have to queue again afterward. Even though I like to look at the products, it feels annoying if new information is given at the end of the process."	"Leaving the store with pleasure when getting a product or promo that exceeds our expectations when entering here." "Great, I didn't know that I had already been in almost 30 minutes, even though the plan was to be just a moment." "I left the shop without feeling anything, I just can't wait to try the new product that has been purchased." "Almost all products were in line with my expectations, but there was 1 lipstick that I tried while there but the color is quite different when I try it at home, so it's a bit regretful to buy this one." "This store is still incomplete than my previous subscription store, in the future I will return to my old store."	"The purchased products are under my expectations. I bought a new product that was also good. Because I already knew that it was good, next time I would buy it at the online store, cheaper and easier." "I tried while there but the color is quite different when I try it at home, so it's a bit regretful to buy this one." "This store is still incomplete than my previous subscription store, in the future I will return to my old store."
Negative Experience	Many customers come to the offline store only when looking for new products and want to try them. They prefer to shop at the online store for items they no longer need to try.	Dim lighting in the store (not bright enough) makes the eye's perception of color different from the truth and makes the shop look unappealing.	-Some products do not have a price tag and some price tags are misplaced. -Different types of goods that are piled on the same shelf cause difficulties in finding the intended product. -In some cases, the placement of some products is not neat so that it is difficult to find the product that I want.	-Some price tags are unclear and misplaced. -Some price tags are not updated by the store so the price can be different at the billing. -There is no categorical information on the store area so that to find a product, customer need to look around the store to find the area they want to explore.	-The tester that runs out on the display shelf disappoints the customer and dispels the initial interest of the customer because the tester determines the purchase decision of cosmetic products, especially for new products or variants. -Not all products have a tester so that customers are less interested.	-The shopkeeper often gets in the way and talks with other shopkeepers. -The shopkeepers do not understand the product or the information related to the product. -The shopkeepers are less friendly and less clear in explaining something. -The shopkeepers follow the customers so that it disrupts the privacy and comfort.	-The process of queuing at the cashier makes customers tend to get bored. -The small number of cashiers tends to disappoint customers. -Some information about new products or promotions appearing in the cashier area, so that the customers have to go back to their previous activities which they did not expect that to happen.	-Inflexible payment methods (cannot use e-money or fintech applications) make the customers disappointed. -Some information about new products or promotions appearing in the cashier area, so that the customers have to go back to their previous activities which they did not expect that to happen.	-The incompatibility of the actual purchased product with the product that was tried in the store resulted in huge disappointment for customers. -Choosing products that are not in accordance with customer's expectations when in the store is very disappointing for them because there is no refund or exchange of goods that are permitted after purchase.	
Positive Experience	Information about store promotions makes me more excited when heading to the store.	-Arrivals welcomed by shopkeeper are more comforting. -A lively store atmosphere with best music makes me very excited when shopping -The cool atmosphere of the store (air-conditioned) makes me comfortable and guarantees the product quality because it is placed in the right temperatures.	The promotion, attractive packaging, strategic location, and well-known brand are some of the main reasons that people interested in approaching a product.	-Some product information displayed on the product packaging is good enough -There is additional information besides the prices and the discounts that help us such as monthly best-seller products, customer favorite products, promotional information, etc.	-Product tester makes the customers feel interested and curious to try. -The tester is also one of the main differentiator between offline and online cosmetics stores. -Many customers who have tried the tester on the display then feel interested in buying a product afterward.	The existence of the shopkeepers makes it easy to find some information that isn't provided by product packaging or price tags. -The shopkeepers make it easy to find some information that isn't provided by product packaging or price tags.	Promotional product display around the cashier's desk is better to attract the attention of customers so that waiting at the cashier is not boring. In addition, the display can increase impulse buying intention that benefits the store.	-Fast cashier services make customers feel satisfied with the cosmetics store. -Friendly cashier staff is an added value for customers to increase the repurchase intention at the store.	-If customers feel their long shopping time doesn't feel boring, then the customers create a high shopping process so that they forget the time. -If customers get a product or price that exceeds the initial expectations of them, it will cause pleasure when leaving the store.	Shopping processes and purchased products that satisfy the customers create a high repurchase intentions for them.

Fig. 5. Customer journey mapping example for an offline cosmetics retail store



	PREPURCHASE	PURCHASE	POSTPURCHASE									
	1. Intending to visit.	2. Opening store apps	3. Exploring interface	4. Explore related info	5. Compare whether stores	6. Log in/Register account	7. Filling cart & contract	8. Check PD tracking	9. Leaving the apps	10. Waiting for merchandise	11. Receiving merchandise	
Consumer goals	1. Buying and browsing for cosmetic products. 2. Just looking for interesting promotions.	Entering the intended online store to browse cosmetic products and other relevant information.	1. Finding the products wanted or needed. 2. Finding the interesting promotions (although there's no plan to buy the product). 3. Digging more information.	1. Ensuring that the specifications (color, price, etc.) of the product observed are in accordance with the expectation. 2. Digging more information.	Comparing products based on specifications, availability, or prices from various accessible and trusted stores.	Log in to the own store account on the website / mobile apps so we can purchase from the products needed. 2. Making a payment for selected products in the shopping cart.	1. Filling the shopping cart based on the shopping list or the products needed. 2. Monitoring the progress of shipping goods that have been purchased.	1. Ensuring that the transaction made has been recorded well. 2. Monitoring the progress of shipping goods that have been purchased.	Continuing other activities after completing the transaction at the online store.	Receiving the items that match the purchased order list in good condition.	Consuming the purchased products with the appropriate expectations when choosing the products.	
Consumer expectations	1. Purchasing cosmetic products for daily necessities 2. Finding cosmetic product promotions that are worth to buy 3. Discovering new and interesting cosmetic products.	1. Many promotions on the main page and there are some interesting "flash-sale" items. 2. Good website / mobile apps usability.	1. Finding the products desired and getting easily. 2. Getting a worth promo for the product wanted. 3. Good website / mobile apps usability.	1. Finding complete and relevant information from the store applications as well as various pages outside the store application. 2. Good website / mobile apps usability.	Getting products with the best specification, availability, and price from the selected store.	Getting products with the best specification, availability, and price from the selected store.	1. Complete payment method alternatives. 2. Easy and fast transaction process. 3. Good website / apps usability. 4. Some additional promos from the payment process.	1. A real-time tracking system that is informative and accurate. 2. Accessible store's customer service. 3. Good website / mobile apps usability.	1. Making the right purchasing decision. (the right product, the right price, and the right timing). 2. The purchased goods can immediately arrive at the customer location.	1. The purchased goods arrived at the promised time. 2. The purchased goods arrived in accordance with the initial expectations and specifications	1. The purchased products are as expected when used. 2. Worth quality and price to customers will come back to the store later on (repurchase intention).	
Process	Linear →	Linear →	Ongoing Non-Linear	Ongoing Non-Linear	Ongoing Non-Linear	Non-Linear Time-Based	Non-Linear Time-Based	Ongoing Non-Linear	Linear →	Linear →	Non-Linear Time-Based	
Touchpoints	Website / Apps from Computer / Mobile	Website / Apps from Computer / Mobile	Website / Apps from Computer / Mobile	Website / Apps from Computer / Mobile	Website / Apps from Computer / Mobile	Website / Apps from Computer / Mobile	Website / Apps from Computer / Mobile	Website / Apps from Computer / Mobile	Website / Apps from Computer / Mobile	Expedition, Purchased Product, Package	Purchased Product, Order Package	
Experience												
Think & feel (Three Most Representative Statements)	"I want to buy cosmetics today because I always buy a new one before the old stock runs out." "I want to buy makeup stuff while looking around too. At the end of this month, there are many good promos and flash sales from this store." "During this time, I always buy cosmetics online because it is easier and relatively cheaper. However, I only buy cosmetics from online stores for products that I've used before. For a new product, I usually try the tester on the offline store first."	"I usually use websites on my PC because it's easier to open up new tabs. I open a new tab to look at other stores or while watching videos from beauty vlogger." "Sometimes I also use a mobile phone because it's more convenient than a website. The display on mobile apps is also more pleasing to the eye and has more features than the website." "Online shopping is more convenient because it can be done while relaxing at home, no shopping is more comfortable. We also can delay the purchase if we're hesitant to buy something."	"The arrangement of the menu is easy to see. The way to search for products is also easy to use." "When shopping online, the store will keep us as long as possible inside the apps. We are directed to continue scrolling and exploring more so we intend to add more from other pages, youtube videos, people around, etc. Maybe this is also an additional reason why online shopping is more fun and easier than going to a physical store." "So far, there's no problem with product information in the store, but the absence of a product tester makes it difficult for us to taste or try out the cosmetics."	"Related information about the product is quite easy to get. Sometimes I get the information from my friends and the beauty vlogger videos, so the information can be obtained everywhere, such as from other pages, youtube videos, people around, etc. Maybe this is also an additional reason why online shopping is more fun and easier than going to a physical store." "So far, there's no problem with product information in the store, but the absence of a product tester makes it difficult for us to taste or try out the cosmetics."	"When shopping about the product is quite easy to get. Sometimes I get the information from my friends and the beauty vlogger videos, so the information can be obtained everywhere, such as from other pages, youtube videos, people around, etc. Maybe this is also an additional reason why online shopping is more fun and easier than going to a physical store." "So far, there's no problem with product information in the store, but the absence of a product tester makes it difficult for us to taste or try out the cosmetics."	"When shopping about the product is quite easy to get. Sometimes I get the information from my friends and the beauty vlogger videos, so the information can be obtained everywhere, such as from other pages, youtube videos, people around, etc. Maybe this is also an additional reason why online shopping is more fun and easier than going to a physical store." "So far, there's no problem with product information in the store, but the absence of a product tester makes it difficult for us to taste or try out the cosmetics."	"If you want to buy from a new store, sometimes you think about it, you have to register again, create a new account. It's complicated." "If we have already bought from one store, there is no need to re-login and input our data again because it takes time." "If possible, we don't need to register our data from the beginning, we can use similar data from our email or social media. It will reduce the time for unnecessary inputs."	"After putting the item in the basket, I stay there until we delete it or finish the transaction, so we can postpone the purchase if we are still unsure." "The transaction is good because you can use credit cards, e-money, or m-banking. If you just can use a transfer or cash, it will be very complicated, like in the old days." "In the online store, we don't need to queue like in the offline store. It also provides a direct and fast transaction process. I don't mind if there is delivery time, as long as it's clear how long it will take."	"After completing the transaction, I usually check in my shopping section to see whether my order has been recorded well and see your purchased order status." "This order tracking makes me feel more comfortable and more confident that I have not been cheated, my goods will definitely come in time." "It's disappointing if the order tracking isn't accurate, or the status doesn't change, or the unreachable Customer Service."	"Because I bought things that I usually buy, nothing special." "I can't wait for the goods to arrive. Hopefully, it'll arrive on time." "Hopefully, the goods whether it is suitable or not, check the expiry date, and check the authenticity. If there is a problem, I will immediately complain about it, but so far, I almost never have any problem as long as I buy at the trusted stores." "Sometimes the goods are good enough but the delivery packaging is bad, for example, I bought skincare that use glass packaging but it didn't use bubble wrap when sent. It's dangerous because it can be broken on the way."	"The arrival of the purchased order from an online store is the most exciting period for people." "After the order is received, I immediately check whether it is suitable or not, check the expiry date, and check the authenticity. If there is a problem, I will immediately complain about it, but so far, I almost never have any problem as long as I buy at the trusted stores." "Sometimes the goods are good enough but the delivery packaging is bad, for example, I bought skincare that use glass packaging but it didn't use bubble wrap when sent. It's dangerous because it can be broken on the way."	"I already know that this store can be trusted and people have a good review of this store, so I'm pretty sure that the quality of this store is good and genuine." "Because I want to buy things that I used to buy, I already know the quality, it's good when I use it, there's no problem." "This time, I first bought a new item from an online store, I had never used it before. But, thank God I'm satisfied, the item is in accordance with my review from YouTube and influencers that I usually watch."
Negative Experience	For new products, customers still do not trust online stores because of the inability to try, such as a tester in an offline store. The suitability of a cosmetic product with the human body becomes vital, because even expensive cosmetics may not be suitable for everyone's body.	- Mobile Apps display is more difficult to use when we want to open multiple tabs to compare prices to purchase something, especially for new products. The absence of a tester can be slightly replaced by testimonials, reviews, or videos from influencers or beauty vloggers, although it still cannot be completely replaced. - Expensive shipping costs affect respondents' purchase decisions, even though they are already interested in the product.	- The absence of a tester greatly influences the customer's decision and perception to purchase something, especially for new products. The absence of a tester can be slightly replaced by testimonials, reviews, or videos from influencers or beauty vloggers, although it still cannot be completely replaced. - Expensive shipping costs affect respondents' purchase decisions, even though they are already interested in the product.	- The information that appears at the intended online retail store is often incomplete, so the customers tend to look for more information from other sources or stores, which makes the tendency of customers to leave the store and buy the cosmetics at another store. Customer loyalty to one specific online store is not good. - Without a product tester, information is limited to the sense of sight and hearing.	- The loyalty of the customer to one store becomes less because they can freely compare many stores that can provide more information from other sources or stores. Sometimes, too many store choices confuse the consumers, thus making their purchasing decisions longer and more complicated. - Millennial women grow with good technology adaptation. Because they understand, they feel more insecure to create many new accounts because their data would spread everywhere. - The process of inputting the same data repeatedly on the same apps/web makes them feel annoyed.	- The customers are annoyed with the data filling when registering because it's time-consuming. - The customers like to compare products from various stores, but aren't happy to have many accounts. They hate to input their data and remember many passwords. - Millennial women grow with good technology adaptation. Because they understand, they feel more insecure to create many new accounts because their data would spread everywhere. - The process of inputting the same data repeatedly on the same apps/web makes them feel annoyed.	There are several stores that make the transaction process troublesome and time-consuming, thus making the customers disappointed. They do not mind if they should spend a long time to look around the goods, but they are disappointed when spending a long time to make transactions or payments.	- There are several stores that make the transaction process troublesome and time-consuming, thus making the customers disappointed. They do not mind if they should spend a long time to look around the goods, but they are disappointed when spending a long time to make transactions or payments. - Online stores that do not have an order tracking system will increase the distrust of the customer.	-	- There are several things that are very disappointing for consumers when receiving goods from cosmetics online stores: 1. Items do not match with the order. 2. Items that are almost / have expired. 3. Bad delivery packaging. 4. Orders arrive late than estimated time in the order tracking system. - When the customers make a claim that their goods ordered are received in damaged condition, the cosmetics store and the third-party delivery courier blame each other.	-	-
Positive Experience	- Shopping cosmetics online indirectly increase customer happiness (new kind of refreshings). - Customers like a common perception that online cosmetics stores are cheaper, easier, more complete, and unique items that do not exist in the offline store, especially for imported products. - Online stores are the choice for more than 75% of millennial women customers who want to buy cosmetics for their daily use.	- Mobile Apps are easier to open because there is no need to type the name of the store as on the website. - Customers like the good-looking online store and the store with complete shopping features (like flash-sale, various promotions, various programs, etc.). - The flexibility of the online shop experience is a distinct advantage for most customers. For example we can shop anywhere at any time, we can freely compare the product in one store with other stores very easily, and we can delay the shipping process and make it book-easily. - Website store version advantages: larger display, the ability to open several stores.	- Consumers feel that the appearance of online stores in general is easy to understand and easy to use. There's no significant issue with the interface. - The process of finding items needed has become very easy and can be filtered based on many aspects (price, rating, discount, etc.). - Customers feel that the way online stores display the promo items and various promotions make them feel at ease to look around and tend to make them buy more products than they initially planned.	- Digging product and store information becomes wider and deeper (other stores, video reviews, testimonials, product reviews, etc.) when shopping online. Although the customers can find the same information when shopping at the offline store, they rarely do that because it is not as relaxed as shopping online at home. - Customers feel more comfortable digging the information while shopping online than asking the shopkeepers in offline stores. (there's a distrust with offline store shopkeepers)	- The flexibility to switch pages or stores when online shopping allows the customers to easily compare prices and completeness of goods. This experience satisfies them well. - Customers' trust in one product or store is strongly influenced by testimonials or reviews from previous store buyers and the reputation of the store itself. - Customers feel free to explore everything needed to make purchasing decisions when shopping at an online store.	- The customers are happy to eliminate the log in / register step because it's time-consuming. Some stores that can make transactions without making a new account make it easier for the customers. - The account can be integrated with email, mobile phone number, social media, etc. so it doesn't need to fill in a lot of data)	- Good payment flexibility is mandatory for online transactions to produce a positive experience. They become convinced and believe that their purchased orders will be sent according to the planned time. - Stores that are flexible in refunding or claiming goods are more preferred by the customers.	- A good order tracking system provides convenience and security for the customers. They become convinced and believe that their purchased orders will be sent according to the planned time. - Stores that are flexible in refunding or claiming goods are more preferred by the customers.	-	- Receiving goods from their purchased orders is a moment that makes the customers feel very excited. - Orders that arrive faster than the estimated delivery time in the order tracking system increase customer satisfaction and trust significantly.	- When all purchased items can be consumed well according to customer expectations, the online store will highly increase customer loyalty and repurchase intention.	

Fig. 6. Customer journey mapping example for an online cosmetics retail store

product-similarity based grouping is better for most customers than brand-similarity based grouping. It can help the customer to compare similar products and decide. Besides, the area information display is also a helpful tool for guiding the customer to the product they want. Information could be placed on many aisle intersections to guide the customers effectively. Some other factors affected the positive experience of the majority of customers while searching for products, including the availability and completeness of the product assortment, the relaxed atmosphere, and the attractive price or label.

The physical availability of a shop assistant is another main differentiator for offline cosmetics stores. The customer could ask for help and information needed from shop assistants. More than 75% of research participants using an offline store had interacted with shop assistants for at least one time during the purchase phase. They asked for information they failed to find on the display or the product, such as promotions, preferences, benefits etc. Therefore, shop assistants should have enough product knowledge and communication skills to bring a positive experience to the customer. However, shop assistants should not follow every single customer because it is consid-

ered annoying. Furthermore, shop assistants should avoid chatting among themselves in between the aisles as this was also annoying for customers.

Once the wanted products were selected, customers entered the cashier queue for the payment. On average, they needed more than one minute to wait in line. To prevent a dull experience, customer should be able to do something while waiting. For instance, promotional items or other exciting activities could be offered in the queue area to keep the customer busy.

Once the transaction is finished, a positive experience should be maintained until the customer feels satisfied with the purchased products. The post-purchase experience represents an important role in enhancing revisit and repurchase intentions. Besides maintaining the quality of all products, several things need to be considered by the offline store. Right after the transaction process, the customer interacts with the store packaging. The store packaging should be safe and attractive to make the customer feel that the store offers good quality and worth-while to revisit. After a while, the customer would open the package and use the products. The option to refund or return the product in the case of a store or supplier mistake would bring a more positive experience. These insights

Tab. 2. Customer experience findings for an offline cosmetics retail store

PHASE	CUSTOMER EXPERIENCE (+/-)	FACTORS FOUND
Prepurchase	1 engaged / unengaged	membership special treatment, special event (meet up, makeup training, give away, and more), company/brand reputation
	2 excited / unexcited	social media promotion, store location, past shopping experience in the store, new product alert
Purchase	1 convenient / inconvenient	product availability, product tester availability, completeness of information, arrangement of product placement, store area information display, payment method flexibility, self-service system, rack positioning and dimension
	2 comfortable / uncomfortable	presence of trained shop assistant, store and display lighting, tidy display, shopping cart availability and design, store temperature, store physical design concept, aisles width, self-service system, rack positioning and dimension
	3 enjoyable / unenjoyable	exciting music, store and display lighting, tidy display, cashier service and attitude, promotional product display on cashier area, shopping time spent
	4 interested / uninterested	store and display lighting, promotion variation and quantity, product availability, product tester availability, promotional product display on cashier area, price worthiness, rare or unique product presence
	5 satisfied / dissatisfied	price worthiness, product availability, product tester availability, completeness of information, arrangement of product placement, promotional product display on cashier area, cashier service and attitude, expired date suitability
Post-purchase	1 satisfied / dissatisfied	match between the purchased items and the expectation, refund and claim procedure, product guarantee
	2 happy / unhappy	price worthiness, repurchase promotion
	3 engaged / unengaged	repurchase promotion

are only some highlights of customer experience for offline cosmetics retail stores, while the summary is given in Table 2.

The technological development that can be easily adapted by millennial women provides grounds for the cosmetics online retail stores to thrive. Although the era of online cosmetics stores has not reached 15 years, all research participants had accessed at least one online cosmetics store, and 89% of them had shopped at an online store at least once a month. This shows an exceptional acceptance of online cosmetics stores. Based on their positive prepurchase perceptions, shopping at an online cosmetics store is easy, fast, cheap, providing a complete assortment of items, more promotions, unique items, besides, it is flexible and fun. Conversely, their negative prepurchase perceptions about shopping at an online cosmetics store were more cautious and related to fraud, being annoyed with long delivery lead time, afraid of a high shipping cost, and inability to test the product. 83% of participants intended to shop online to satisfy their daily cosmetic needs instead of finding new products they have never used. Product testing is one main reason for customer hesitancy to buy a new product. The majority of them had more shopping list items compared to offline participants. They said that they tended to buy more items from an online store because of shipping costs for each order and promotions. More than 50% of participants bought more items than initially intended on their shopping list.

Millennial women usually use a smartphone/tablet and a laptop/PC to access an online store, 72% of them prefer to use their smartphone/tablet. Some of the participants prefer to use smartphone/tablet because it is easy to use, easy to access, it has a better interface, and an autofill option of personal data like credit card data etc., while the rest prefer to use a laptop/PC because it is easy to open many tabs to compare many stores and it has a bigger screen. Compared with offline stores, the average time spent in an online store is much longer (46.8 minutes). This fact contradicts the perception that shopping online is faster. An online store interface encourages the customer to explore for as long as possible. Some features make the customer stay and explore longer, e.g., flash sales, thematic promotion, or personal suggestion based on user historical behaviour and purchase. Similarly to an offline store, some impulsive features should be used to encourage the customer to search and buy more.

The customers spent more than 30 minutes on average to find the products they wanted. However,

some customers explored more than one store to compare some products, so their loyalty to one online store was lower. They also tended to explore some information outside the store to replace the unavailability of a product tester, such as viewing a testimony from other customers, watching videos from beauty influencers etc. Although they could also find that kind of information at the offline store, the customers felt freer and more flexible to access the information from the virtual environment when shopping online. The ability to save historical data also helped the customers, e.g., to save personal data (address, card number etc.) to avoid repeating the data input process, saving the shopping cart, saving preferences data to make suggestions during the next visit, and saving more information.

Even though the customers did not mind a long time spent at the online store, they felt annoyed with the long registration process. The step should be minimised to either register or login to be more satisfactory. The positive experience from the transaction process for online store emerges from fast steps, simple rules, flexible payment methods, and safe procedures. The parcel tracking system also has an important task to ensure that the customers are informed of their purchased order real-time status. This feature must be easy to find, easy to use and provide complete and accurate information.

For the post-purchase experience, timely and safe arrival of orders is one main reason for their repurchase intention besides the quality of items. The expiry date or year should be clearly indicated on all purchased goods to increase customer trust. The option of returning or refunding the purchased order also increases customer trust in repurchasing. These insights reflect only some examples of customer experience for online cosmetics retail stores, while the summary is given in Table 3.

## 4. DISCUSSION OF THE RESULTS

Based on the analysis of offline cosmetics retail stores, recommendations were offered to improve the positive shopping experience. A store design represents the quality of sold goods. Millennial women have a positive experience (comfortable, enjoyable, fun) with cosmetics stores with many sensory attractions instead of typical retail design. For instance, a visually good-looking store with a trendy and modern concept, such as the Sephora design concept (CBinsight, 2021; Salpini, 2017), an attractive store

with scents that provide comfort or uplifting music. Millennial women also want full control in their shopping experience; hence, the preference of a self-service system. It should be remembered that shopping must be refreshing.

Store lighting and music have an important role in the sensorial experience while shopping, especially for cosmetics that have sensitive colour perception and mood. Ideal store lighting in a retail store can increase sales by 10% (Zumtobel, 2019). Moreover, bad lighting can blur the colour perception, hence disappointing the customer. The ideal lighting for

women in retail stores is at a horizontal light intensity of 500 – 800 lux with a white temperature around 3000 – 4000 K. Spotlights can be used to highlight a product and direct the customers by increasing the attention and interest in certain products. Stores should provide enjoyable music to raise the mood.

Good product arrangement improves convenience for customer in finding and getting wanted products. Different types of products should not be piled up and blocked by testers. Store aisles should have categorised display areas based on product similarity (e.g., mask area, skincare area etc.) to guide

Tab. 3. Customer experience findings for an online cosmetics retail store

PHASE	CX (+/-)	FACTORS FOUND
Prepurchase	1 convenient / inconvenient	apps platform availability and flexibility, interface usability and simplicity, low Internet data usage
	2 engaged / unengaged	special treatment for members, push notification, personalised apps, special event (holiday promo, give away etc.)
	3 excited / unexcited	social media promotion, interface usability and simplicity, past shopping experience, new product alert, delivery fee, delivery speed and punctuality
	4 safe / unsafe	store trust issues, past review and testimony, past shopping experience, company/brand reputation
Purchase	1 convenient / inconvenient	product availability, interface usability and simplicity, completeness of information, arrangement of features placement, payment method flexibility, store review (from a beauty influencer, advertisement, end more), page transition speed and efficiency, product matching feature
	2 comfortable / uncomfortable	interface usability and simplicity, page transition speed and efficiency, customer service availability and readiness, completeness of information, product matching feature, payment method, product searching flexibility, registration or login procedure
	3 enjoyable / unenjoyable	promotion variation and quantity, rare or unique product presence, impulsive features, fun features (game, video, and more), time spent shopping
	4 interested / uninterested	promotion variation and quantity, product availability, price worthiness, rare product presence, delivery fee
	5 satisfied / dissatisfied	price worthiness, product availability, completeness of information, arrangement of features, expired date suitability, registration or login procedure, colour match between the picture and the real product
	6 safe / unsafe	registration and login, payment method, order tracking, customer service availability and readiness, product guarantee
	7 engaged / unengaged	promotion variation and quantity, special treatment for members, store review (from a beauty influencer, advertisement etc.), product availability, past review and testimony, past shopping experience, price worthiness
Post-purchase	1 satisfied / dissatisfied	match between the purchased items and the expectation, expired date suitability, refund and claim procedure, product originality, order tracking, delivery speed and punctuality, product guarantee, colour match between the picture and the real product
	2 happy / unhappy	price worthiness, delivery speed & punctuality, unexpected bonus item, packaging design
	3 safe / unsafe	packaging safety, received product condition, expedition handling procedure, order tracking, customer service availability and readiness
	4 engaged / unengaged	repurchase promotion and notification, personalised greetings (thank you, happy birthday etc.)

a customer. Product placement grouping based on product similarity is preferred over brand similarity, making it easier to compare similar products. Also, racks should not be placed too low or too high and require the customer to bend down or reach up. Customers tend to ignore products displayed in the very bottom and top racks as this requires extra head movements.

Product and tester availability is one of the most important things for an offline store. An offline store has to benchmark many famous online stores because of the availability of its products. A product tester can bring a positive experience and help the customers see, feel, taste, match products to decide on their preferred choice. Besides, some features can be added to encourage the customers to continue exploring for as long as possible. An ergonomic shopping bag could be considered to help the customer to manage personal items while shopping. Besides the product tester, the main differentiator of the offline store is a shop assistant. A shop assistant acts as a support system to guide customers in achieving their goals. Therefore, shop assistants should be friendly, informative, knowledgeable, disciplined, and enjoyable. They should always be available to help but never follow the customers as this is considered annoying.

A simple and flexible payment system should be ensured. Cashless payment systems, such as credit cards, e-money, or fintech apps, should be provided to enhance customer transaction satisfaction. To prevent dull experience while queueing in the cashier lines, the customer could be kept positively busy. E.g., the cashier area could have promotion product displays, advertising screens or product testers etc.

Four other recommendations can be given about the marketing design. First, distinctive differentiators should be used to keep the store among the customer's preferences. Second, promotions should be varied more to motivate the customer to visit frequently. Third, the store should create the customer's key drivers (promotion, membership etc.) to encourage the revisit intention. Fourth, the store should consider establishing proper marketing mix strategies that consist of the best arrangement of the price, place, product, process, people, promotion, and physical evidence (Kotler et al., 2010; Bracíníková & Matušínková, 2017).

The analysis of online cosmetics retail stores produced some findings and recommendations to improve the positive shopping experience. Since the customer has some common beliefs about online stores, as mentioned in the findings section, the posi-

tive perception could be used as a strong point of the store against the negative. Most customers were afraid to buy a new product from an online store because of the inability to test it. Thus, a substitute for a product tester should be offered, such as a review from a beauty influencer, a virtual tester using augmented reality etc. The concept of apps personalised based on activity history can also be used to make the customer feel pampered, i.e., offering a typical product recommendation for a specific customer, a special promotion based on customer purchase performance etc.

Seven typical recommendations are offered for an online store apps interface, which can enhance the positive user experience. First, it is advisable to provide a quick-picker feature for buying regular products to accommodate repeated item purchase. Second, page changes should be minimised as much as possible, especially for pages that require a long reload. Third, it is recommended to increase the search flexibility to find the intended product to give the customer many options. Fourth, all promotions and featured products should be displayed on the main page to encourage the customer to explore for as long as possible. Fifth, distinctive differentiators should be used to put the store among the preferences of the customer. Sixth, the store should provide a suitable store interface for different devices (smartphone, PC etc.) as customers have their own device preference. Seventh, the store should remain relevant by providing personalised notifications to buy daily necessities or offering access to related information. Also, the store should have a simple, interesting, and ergonomic interface design.

The service system of the online store should be developed, considering seven issues. First, the online store should provide a real-time order tracking system that is easy to use and accurate, this way providing a sense of security. Second, account register and login processes should be easy, fast, and safe. If possible, the account data should be integrated with other apps like e-mail, social media, or other stores to cut repeated actions.

Third, the store should provide complete information about the product to compensate for the inability to test the product directly. Fourth, stores should facilitate live interactions with customer service using either a real human operator or a chatbot. Fifth, the store should consider simplifying the refund or claim processes to enhance the post-purchase experience. Sixth, the store should enhance the payment experience with flexible, fast, and easy payment methods. Seventh, it is recommended to persuade the custom-

ers using many buying suggestions to encourage them to buy something new.

Four other recommendations about the marketing system of online stores can be offered. First, the store should determine the key market differentiators and develop them to become the key preference (e.g., the most frequently suggested by many beauty influencers, the best product availability, the price leader etc.).

Second, it should be beneficial to utilise social media and beauty influencers to build positive perceptions and trust of millennial women who are closely attached to the virtual environment. Third, the store should vary the promotional contents to encourage the intention of customers to visit. Fourth, the store should establish marketing mix 7P strategies (Kotler

et al., 2010). And finally, to provide a better understanding of recommendations, Table 4 gives the comparison between them for offline and online cosmetics stores.

Based on the research processes and results, some advantages were found using the methodology. The methods were especially suitable for conducting customer experience exploratory research based on the customer's point of view.

Since the CX construct consists of five complex dimensions (cognitive, emotional, behavioural, sensorial, and social), these methods completed each other to explore all dimensions collectively. Moreover, the analysis used results in both qualitative and quantitative data to offer more insights and achieve the research goals.

Tab. 4. Comparison of the recommendations

ASPECTS	OFFLINE STORE	ONLINE STORE
Store design	<ul style="list-style-type: none"> <li>Store design with many sensory attractions</li> <li>Proper store lighting, music, and temperature</li> <li>Good product arrangement with categorisation display area based on product similarity</li> <li>Tidy display</li> <li>Ergonomic and attractive product display</li> <li>Ergonomic shopping bag</li> <li>Promotional product display on cashier area</li> <li>Strategic store location</li> <li>Price or quality leadership</li> </ul>	<ul style="list-style-type: none"> <li>Positive imagery and trust of the store</li> <li>Testimony or a positive review from beauty influencer</li> <li>Advanced store features to overcome the tester unavailability (virtual tester, etc.)</li> <li>Price or quality leadership</li> </ul>
Interface recommendation	-	<ul style="list-style-type: none"> <li>Simple, usable, attractive, and personalised apps interface</li> <li>Quick-picker feature for repeated order</li> <li>Minimised page changes, especially for pages that require a long reload</li> <li>Flexibility of ways to find the intended product</li> <li>Displaying all promotions and featured products on the main page</li> <li>Bring up the distinctive differentiators</li> <li>Suitable store interface for different devices used (laptop, smartphone, tablet, etc.)</li> <li>Personalised buying reminder and suggestion</li> <li>Provide real pictures of the goods sold</li> </ul>
Service system	<ul style="list-style-type: none"> <li>Customer relationship (promotion variation, membership, etc.)</li> <li>Product and tester availability</li> <li>Fully-trained and friendly shop assistant;</li> <li>Flexible, fast, and easy payment system</li> <li>Easy refund and claim procedure</li> <li>Complete information about the product or store</li> <li>Self-service store</li> </ul>	<ul style="list-style-type: none"> <li>Customer relationship (promotion variation, membership, etc.)</li> <li>Product availability</li> <li>Live interaction customer service with either a real human operator or a chatbot</li> <li>Flexible, fast, and easy payment system</li> <li>Easy refund and claim procedure</li> <li>Complete information about the product or store;</li> <li>Real-time purchased order tracking system</li> <li>Easy, fast, and safe account register and login process</li> <li>Shipping and packaging safety</li> </ul>

The methodology used in this research has some limitations. First, the obtained data is extremely diverse; thus, a researcher should have the required competence to draw conclusions accordingly. Second, the studied customer behaviour might be influenced by several biases, such as culture, economic condition, or previous confounding experience of the participants. Third, the data gathering process takes relatively long. Fourth, the factors found in this research have not been tested for statistical validity and reliability, which can be a subject for further study.

## CONCLUSIONS

The research explained in this article analyses the idea that customer experience is a powerful differentiating company strategy to influence customers, especially for industrial sectors affected by hedonic aspects, such as e buying experience, emotion, or pleurability. Customer experience research has become a popular issue during this decade. To date, the literature has shown some research about the detailed conception of customer experience and its impacts. However, this research offers an exploratory application of customer experience to support people and develop a positive customer experience for particular products/services/systems. The research raises important questions about how to explore customer experience factors and how to implement the customer experience for specific products/services/systems.

In previous research, customer experience positively influenced loyalty, repurchase intention, satisfaction, economic value etc. Based on the results of this research, customer experience showed a significant role on the customers of the cosmetics industry, which is greatly influenced by hedonic aspects. Since the extreme difference in characteristics could be a confounding factor in this research, millennial women were selected as participants being the largest market segment of the cosmetics industry. The customer experience of the cosmetics customers mostly emerged at the B2C cosmetics retailers with intense interaction between the customers and the cosmetic products/services/systems. The previous statement is in line with the findings regarding numerous customer experience factors that affect both offline and online cosmetics customers. The factors found in this research became the basis for making store design recommendations for cosmetics retailers.

The design recommendations of this research aim to support cosmetics retailers in developing their store

differentiation strategy in the cosmetics market. The recommendations are given to offline and online cosmetics stores based on differences in customer experience. The research proposed some design recommendations for cosmetics retailers that consist of store design, interface design, and service system design. Also, it compared customer experience between offline and online cosmetics stores to support the retailers considering the routes to take.

For further research, the focus should be placed on a confirmatory analysis regarding the customer experience factors explored in this research. The CX analysis methodology could also use more work to help manufacturers develop their product or packaging design, support the retailers to improve their store design etc. The research methodology would be a new way to help people explore how to enhance positive CX for many cases, even though each method has its advantages and disadvantages. For the research process, more participants should be involved in further research to strengthen the analysis even though the time needed to analyse each participant's data using this methodology is somewhat long and uncertain. Moreover, it is essential to segment the customer appropriately based on the specific intended market. Customer experience dimensions are closely related to individual characteristics and behavioural differences. Care should be taken in separating which experience resulted from product, store, previous feelings, or other confounding parties to avoid any bias.

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