St. Petersburg University

Graduate School of Management

Master in Management Program

#### **MASTER THESIS**

# CONSUMER BEHAVIOR IN SUBSCRIPTION SERVICES: A STUDY OF MOTIVATIONAL FACTORS IN MEAL DELIVERY SERVICES IN RUSSIA.

ПОВЕДЕНИЕ ПОТРЕБИТЕЛЕЙ В ПОДПИСОЧНЫХ УСЛУГАХ: ФАКТОРЫ МОТИВАЦИИ ПОТРЕБИТЕЛЕЙ НА ПОДПИСКУ ДОСТАВКИ ЕДЫ В РОССИИ.

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## ЗАЯВЛЕНИЕ О САМОСТОЯТЕЛЬНОМ ХАРАКТЕРЕ ВЫПУСКНОЙ КВАЛИФИКАЦИОННОЙ РАБОТЫ

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### **АННОТАЦИЯ**

Автор	Селиверстова Елена Алексеевна			
Название ВКР	Поведение потребителей в подписочных услугах: факторы			
	мотивации потребителей на подписку доставки еды в России			
Направление	Менеджмент			
подготовки				
Год	2024			
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Описание цели, задач и	Цель данного исследования заключается в выявлении и			
основных результатов	анализе факторов, влияющих на поведение потребителей в			
	отношении подписки на доставку еды. Практическая			
	направленность работы обусловлена разработкой			
	рекомендаций для маркетинговых отделов компаний,			
	предоставляющих услуги подписки на еду.			
	Факторы, рассматриваемые в исследовании, частично			
	заимствованы из теории запланированного поведения и			
	единой теории принятия и использования технологий. В			
	модель также были добавлены новые факторы, что сделало её			
	уникальной для анализа подписок.			
	В качестве статистических методов использовались			
	корреляционный и регрессионный анализы для определения			
	факторов, влияющих на намерение подписаться. Результаты			
	корреляционного анализа показали статистически значимую			
	зависимость между намерением подписаться и такими			
	факторами, как ожидаемая производительность, социальное			
	влияние, цена, ожидаемое усилие, персонализация и			
	сообщество. По результатам множественного регрессионного			
	анализа, статистически значимыми оказались совместное			
	влияние ожидаемой производительности, социального			
	влияния и цены на намерение подписаться.			
Ключевые слова	Поведение потребителя, бизнес-модель подписки, служба			
	доставки еды			

#### **ABSTRACT**

Master Student's Name	Elena A. Seliverstova			
Master Thesis Title	Consumer Behavior in Subscription Services: A Study of			
	Motivational Factors in Meal Delivery Services in Russia			
Main field of study	Management			
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Academic	Candidate of Economics Maria M. Smirnova			
Advisor's Name				
Description of the	The goal of this research is to identify and analyze the factors			
goal, tasks and	influencing consumer behavior towards subscribing to food			
main results	delivery services. The practical focus of the study is to develop			
	recommendations for the marketing departments of companies			
	providing food subscriptions.			
	The factors considered in the study are partially derived from the			
	Theory of Planned Behavior and the Unified Theory of			
	Acceptance and Use of Technology. Additionally, new factors			
	were included in the model, making it unique for analyzing			
	subscriptions.			
	Correlation and regression analyses were used as statistical			
	methods to determine the factors affecting the intention to			
	subscribe. The results of the correlation analysis showed a			
	statistically significant relationship between the intention to			
	subscribe and factors such as performance expectancy, social			
	influence, price value, effort expectancy, personalization, and			
	community. The multiple regression analysis revealed that the			
	combined influence of performance expectancy, social influence,			
	and price value on the intention to subscribe is statistically			
	significant.			
Keywords	Consumer behavior, subscription business model, meal delivery			
	service			

#### **Table of Contents**

INTRODUCTION	ε
CHAPTER 1. THEORETICAL PERSPECTIVES ON CONSUMER BEHAVIOR IN SUBSCRIPTION MODELS	٤
1.1 Consumer Behavior	8
1.1.1 Theories in Consumer Behavior	8
1.1.2 Barriers and motives to subscription	12
1.1.3 Role of demographic characteristic in behavior of people towards subscription	18
1.2. Subscription Economy	20
1.2.1 Subscription Business Model	20
1.2.2 Advantages and Disadvantages of Subscription Model for Customers	21
1.2.3 Advantages and Disadvantages of Subscription Model for Business	23
1.2.4 Membership Economy as is an evolution of the subscription model	24
1.3 Subscription Types	25
1.4 Food Subscriptions	29
Summary of Chapter 1	30
CHAPTER 2. FACTORS INFLUENCING CONSUMER BEHAVIOR IN SUBSCRIPTION: RESULTS OF EMPIR	
2.1 Methodology	
2.2 Data Analysis	
2.2.1 Descriptive Statistic	
2.2.2 Correlation Analysis	
2.2.3 Regression Analysis	
2.3 Discussion of Results	
2.4 Conclusion	
2.4.1 Theoretical Contribution.	
2.4.2 Managerial Relevance	
LIST OF REFERENCES	48
APPENDIX	
Questionnaire	
Descriptive Statistics	
•	65

#### INTRODUCTION

The subscription business model is as old as the first magazines or newspapers. The availability of technology has simplified access to and distribution of goods and services, which has made subscriptions possible in various industries. Today, our personal and professional lives are increasingly dominated by subscription services—from curated meal delivery kits to comprehensive cloud-based software solutions, and from on-demand entertainment to personalized fitness programs.

This wide adoption of subscription models signifies a deep-rooted change in consumer behavior. Today's consumers are drawn to the flexibility and personalization that subscriptions offer, preferring ongoing engagement with brands over one-time transactions. (Janzer, 2020) These preferences are driven by various factors, including the financial benefits, wide range of options and the appeal of receiving tailored offerings.

For businesses, the rise of subscription models presents a unique opportunity to build and maintain customer relationships over extended periods. Companies are no longer merely selling a product or service; they are offering an evolving experience that adapts to the changing needs and preferences of their customers. This approach not only enhances customer satisfaction but also fosters brand loyalty and improves customer lifetime value.

Understanding consumer motivations to subscribe is crucial for companies looking to capitalize on this trend. Each industry may see different driving factors, from cost-savings in utilities and entertainment to exclusivity and customization in luxury goods. By leveraging these insights, businesses can refine their offerings to better meet the expectations of their target markets, ensuring they remain competitive and relevant in a market increasingly oriented towards service-based models.

In our study we focus on subscription on meal delivery services. **The motivation** stems from the significant shift in consumer behavior and the substantial growth of subscription-based services across various industries. Also due to growth of the market of meal delivery services. On average, delivery now accounts for 24% of all orders in restaurants. Its contribution has increased 1.6 times from 2020 to 2022. (Data Insight, 2023) Moreover, food subscriptions, including groceries, accounted for 41% of global subscribers in 2022. A particularly popular category within food-related subscriptions is meal kits. (Statista Research Department, 2024)

The goal of this research is to identify and determine the degree of influence of primary motivational factors on subscription decisions that drive consumers to subscribe to meal delivery

services in Russia. Based on this analysis, the study aims to compile a list of recommendations on how to enhance marketing strategies and innovate subscription models.

**Research question**: What are the key motivational factors that influence consumer behavior towards subscribing to meal delivery services?

In order to achieve the goal and answer on the research question several objectives were formulated:

- To study the most recent and relevant researches in the area of subscription business models for creation of a list of factors affecting motivation to subscribe.
- To develop a structural research model of factors affecting motivation to subscribe in meal delivery services in Russia and develop hypothesis
- To collect primary data and test hypothesis
- To develop strategical recommendations for companies who subscription business model in order to enhance marketing strategies and innovate subscription models.

#### Research gap

To write the work, the author conducted a study of academic literature and modern websites dedicated to subscription businesses. Our research has uncovered that there are no existing studies, either in Russia or internationally, that specifically explore the factors motivating subscriptions to food delivery services. However, extensive research exists on various other types of subscription services globally. Retail subscription boxes, which deliver tangible goods in boxes much like food delivery services, are the closest analog. Unlike beauty boxes, which are delivered less frequently, food items typically arrive daily or every other day. This difference suggests unique motivations for food service subscribers. Despite these distinctions, the findings from retail subscription box studies can provide valuable insights as we develop our own research methodology.

## CHAPTER 1. THEORETICAL PERSPECTIVES ON CONSUMER BEHAVIOR IN SUBSCRIPTION MODELS

The goal of the first chapter is to establish a comprehensive understanding of consumer behavior and its relevance to subscription services, specifically within the context of meal delivery services in Russia. This includes defining key concepts such as consumer behavior, the subscription economy, and the membership economy, and exploring various theoretical models that explain consumer decision-making processes, such as the Theory of Planned Behavior and the Unified Theory of Acceptance and Use of Technology. Additionally, the chapter aims to identify current trends in subscription-based consumer behavior, outline the advantages and disadvantages of the subscription business model for both customers and businesses, and categorize different subscription types and pricing strategies. By setting this foundation, the chapter provides the necessary context for investigating the motivational factors influencing consumer behavior in meal delivery services in Russia, guiding the subsequent research and analysis.

#### 1.1 Consumer Behavior

#### 1.1.1 Theories in Consumer Behavior

The subject of *consumer behavior* research is the individual acting as a consumer in the acquisition, use or consumption and disposal of goods and services. (MacInnis and Folkes, 2010) The consumer, which is the first part of the term consumer behavior, is the human being in a particular role. We should highlight that the role of the consumer has broader and more complex meaning than a buyer or a customer. It also covers the period that comes before making a purchase, during which we could, for instance, find a product in the store or hear about it from other customers, grow interested in it, learn more about it, etc. (Blackwell et al., 2001; Solomon et al., 2013). Similarly, we remain consumers even after we've made a purchase—whether it's when we use, show off, dispose of, or complain about a product's poor performance.

Let's examine customer behavior over time in more detail. (Blackwell et al., 2001) The term "acquisition" describes any consumer action directed toward the purchase of a product, including gathering details about the product's features or weighing the pros and cons of various options. Additionally, it involves deciding on the payment mechanism, the actual purchase, and the distribution channel (e.g., buying in a store or online in a web shop). All consumer actions related to the usage of the product are included in the term "use" or "consumption". People can use products in different way, for example, elderly people use a mobile phone for calling, while young people use a phone for taking photos and playing games. When a product is considered outdated, it is discarded because it is worn out, too old, out of style, or has lost its worth or reputation. Customers can dispose of waste in a variety of ways. They can through the product away, recycle

it or sell it. Some retailers offer its customers the opportunity to sell products via its marketplace. Behavior is the second component of the term "consumer behavior." It can be presented as a stimulus-response model, or S-R model. (Kroeber-Riel and Gröppel-Klein, 2013, p. 3) An advertisement poster, for instance, could serve as a stimulus, and a customer's choice to purchase or not would be their response.

In order to understand behavior of consumers, why do they react in a certain way, we can apply different theories. One of them is The Theory of Planned Behavior (TPB). TBP is a psychological theory that connects beliefs and behavior. (Ajzen, 1985) The idea holds that an individual's behavioral intentions are shaped by three core components: attitude, subjective norms, and perceived behavioral control. (Figure 1)

Attitude is a belief that a certain behavior will lead to a specific outcome. According to the theory of planned behavior, when someone thinks positively about performing a specific behavior, it is similar to seeing the benefits of doing that behavior.

Subjective Norm is shaped by the perceived social pressure the beliefs of relevant others to perform or not perform the behavior.

Perceived Behavioral Control refers to the perceived ease or difficulty of performing the behavior and is assumed to reflect past experience as well as anticipated impediments and obstacles. The concept of perceived behavioral control is conceptually related to self-efficacy.

*Intention* is an indication of a person's readiness to perform a given behavior, and it is considered the immediate antecedent of behavior. Intention is determined by attitudes toward the behavior, subjective norms, and perceived behavioral control.

*Behavior* is the manifest action performed by an individual. According to TPB, if a person has a strong intention and perceives a high level of control over the behavior, they are more likely to perform the behavior.

The Unified Theory of Acceptance and Use of Technology (UTAUT) incorporates elements of the Theory of Planned Behavior (TPB), providing a more holistic explanation of user behavior. UTAUT model 2, an extension of the original UTAUT model, was developed by Venkatesh, Thong, and Xu in 2012. It enhances our understanding of consumer technology adoption by incorporating additional constructs and adapting to the context of consumer use. UTAUT model was created to explain user intentions to use an information system and their usage patterns afterward. The model incorporates seven core constructs: Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, Hedonic Motivation, Price Value, and

Habit. Additionally, it includes two dependent variables, similar to the previous theory, namely Behavioral Intention and Use Behavior. (Figure 2)

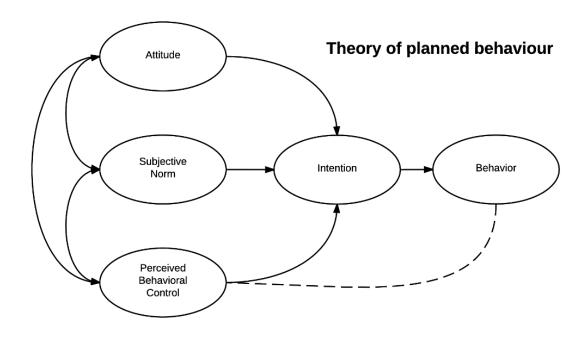


Figure 1. Theory of Planned behavior by Ajzen, 1985

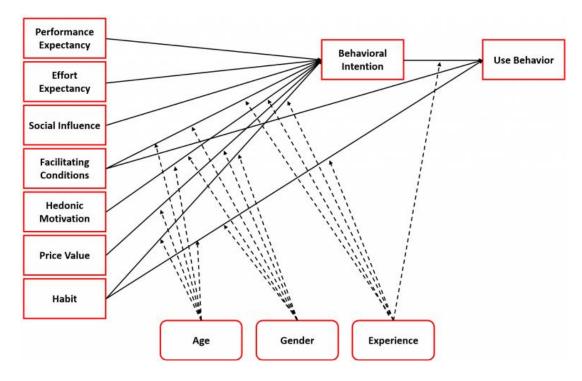


Figure 2. The Unified Theory of Acceptance and Use of Technology by Venkatesh et al., 2012.

The original UTAUT model includes four key constructs:

Performance Expectancy explains the degree to which an individual believes that using the system will help them to perform better in their job

Effort Expectancy describes how much effort users expect to put into using the system. If a technology is easy to use, it is more likely to be accepted and used by individuals.

Social Influence refers to how much a person believes that significant individuals (friends, family, or coworkers) think he or she ought to make use of the new system. It stands for the external societal influences to either utilize technology or not.

The construct of *Facilitating Conditions* reflects the degree to which an individual believes that their environment supports the use of the system. This includes aspects like resource availability and support from the organization in using the technology.

The Unified Theory of Acceptance and Use of Technology (UTAUT) has been expanded to include multiple new constructs that improve the model's prediction capacity and relevance to consumer technology usage. These additional constructs include:

Hedonic motivation is the term used to describe the enjoyment or fun that comes from utilizing technology. It emphasizes how people frequently acquire and employ technology for enjoyment in addition to practical or utilitarian goals. It has been demonstrated that hedonic motivation is a powerful predictor of technology use, particularly in situations when using technology is voluntary and can lead to pleasurable experiences.

*Price Value* is the concept that represents the trade-off between the technology's alleged advantages and its financial costs. It basically assesses the technology's perceived worth, while taking its cost into account. This is especially important when it comes to consumer decision-making, since cost plays a big role.

Habit describes how much people tend to carry out actions on autopilot as a result of learning. When it comes to using technology, a person's habit tells you how much of a part of their everyday life they use it. It is possible that a user will continue to use technology without conscious thought once they get into the habit of doing so.

Moreover, model includes demographic characteristics which are considered as moderating factors that can influence the strength and direction of the relationships between the core constructs (performance expectancy, effort expectancy, social influence, and facilitating conditions) and the outcomes (intention to use and actual usage). These demographic characteristics include:

*Gender:* There are wide variations in how gender affects the acceptance and use of technology. For men, performance expectancy, for instance, may be a better indicator of usage intention than it is for women.

Age: The way we view and use technology might change with age. It's possible that older users find technology more difficult to use than younger users, which may affect their effort expectancy and ultimately their usage intentions and behaviors.

*Experience* is the degree of familiarity a person has with the technology or related technologies. It might influence how they view technologies. Experienced users are probably going to expect better performance and less effort from their use.

In our research we will examine why user positively react to subscribe on food delivery service. We will apply Theory of Planned Behavior and The Unified Theory of Acceptance and Use of Technology Model 2.

#### 1.1.2 Barriers and motives to subscription

This section will examine customer behavior related to subscriptions, including what drives people to subscribe and what stops them from doing so. All findings are united in Table 1.

McKinsey's findings about **barriers** suggest that customers often drop retail subscription that fail to impress, whether it is due to subpar quality, disappointing variety, or not enough bang for their buck. Those who sign up for curated or access services are particularly quick to hit cancel if they do not feel like they are getting their money's worth, likely because these items are more of a nice-to-have than a need-to-have. Providers of these subscription services face the tricky task of getting the balance right between what they offer and what customers actually want. Too much of a good thing can be an issue—if people end up with more products than they need, or cannot adjust their orders based on their real-life use, they are out. At that point, they would rather just shop as needed, picking up items in person or through regular online shopping, instead of being locked into a subscription.

Recent studies in the retail subscription industry have uncovered several factors that prevent customers from staying engaged. In 2018, Tao and Xu in their study, identified two significant barriers: the lack of a social shopping experience and the difficulties customers anticipate when trying to cancel subscriptions. (Q. Tao, Y. Xu, 2018) Meanwhile, a 2020 study by Bischof and his team pointed out another major challenge—the risk of receiving products that do not align with subscribers' tastes. (Bischof et al, 2020) They suggested that free returns could help alleviate this concern. Also, they identified that subscriptions with Surprise Mechanisms are more appealing

when associated with longer delivery intervals rather than shorter ones, indicating that the timing of deliveries can influence subscriber satisfaction. Additionally, Chen and other researchers in 2018 found that poor product quality, dissatisfaction with the selection, and a lack of perceived value where key reasons why customers might end their subscriptions. (Chen et al, 2018) These findings highlight the complex issues subscription-based retailers face in maintaining customer loyalty.

Several numbers of research have been dedicated to finding **motivations** to subscribe. Majority of studies were conducted through survey. Reasons of consumers why they choose to subscribe to retail services were distinguished between utilitarian and hedonic motivations.

Utilitarian motives are primarily practical and functional in nature. For instance, Bhatt and Kim (2018) conducted semi-structured interviews in the U.S. fashion industry and found that convenience and value were significant factors. Studies by Ramkumar and Woo (2018) and Tao and Xu (2018a), also based in the U.S., defined the following utilitarian motives cost savings, convenience, a wide range of options, lack of sociality and economic benefits, perceived usefulness, convenience; correspondingly. (B. Ramkumar, H. Woo, 2018; Q. Tao, Y. Xu, 2018) Hsiao and Chen (2017) added that in the context of e-books in Taiwan, the quality of content, infrastructure, and price were critical utilitarian motives. (K.-L. Hsiao, C.-C. Chen, 2017)

Hedonic Motives are related to the sensory and emotional gratification consumers gain from subscribing. Bhatt and Kim (2018) pointed out adventure, self-gratification, excitement, and the opportunity for style experimentation in the fashion sector. Ramkumar and Woo (2018) identified a desire for unique products, the thrill of adventure, and gaining status as key hedonic drivers. Tao and Xu (2018b) found that consumer excitement and opportunities to try new styles were significant, while Bischof et al. (2020) highlighted the element of surprise in fashion and beauty subscriptions. (Q. Tao, Y. Xu, 2018; S.F. Bischof et al, 2020)

The limitation of these studies is the small number of respondents. Besides that, majority of them were conducted in the USA.

Another study with large number of participants (n = 1356) investigated reasons people subscribe to services. (Bray et al, 2021) The primary motives, according to a survey, are 'Convenience' and 'Ease of use', mentioned by 22.3% and 20.9% of respondents respectively. Convenience eliminates the need to remember to reorder frequently used products, automates the shopping process, and saves time. It is also valued for its dependability and reliability. Additional benefits include the ability to receive bulk deliveries, which reduce the physical effort of carrying heavy items. Ease of use covers straightforward sign-up procedures and simple cancellation

options, focusing more on the operational aspects of subscriptions than the concept itself. Particularly, the ability to pause a subscription holds significant importance for female shoppers, while those with higher incomes place a greater emphasis on convenience. Moreover, 'Value for money' is an important factor for 17.8% of those surveyed. This includes not only the financial benefit of lower prices but also perks like receiving samples of health and beauty products in subscription boxes, allowing customers to try before buying larger amounts. Subscriptions also facilitate budgeting by spreading out expenses and making monthly charges less noticeable. This aspect of value is consistently appealing across various types of subscription services and is particularly influential among younger consumers compared to older ones. 'Access to a wide variety of products' was cited by 16.2% of respondents as a compelling reason for subscribing to services. This motivation is particularly strong in the context of home entertainment subscriptions like Netflix, where the main appeal lies in the instant availability of a broad selection of programs. However, the desire for variety extends beyond entertainment, as respondents noted that subscriptions give them opportunities to try something new. Similarly, 16.1% of respondents expressed that their interest in subscription services was driven by a desire to stay current and discover new products. Many subscribers find that the element of surprise in receiving unexpected items adds excitement and gives them the feeling of receiving a gift.

While *value for money* was acknowledged as a driving factor for subscriptions, it simultaneously acted as a significant barrier, with 36.6% of survey participants expressing reservations. Common concerns included paying for underused services and receiving unwanted items within a subscription package. Additionally, respondents were wary of price hikes following promotional periods and the lack of clear communication regarding charges. *Commitment issues* were another significant hurdle, mentioned by 30.2% of respondents, who were concerned about being locked into long-term agreements and the complexities involved in modifying or terminating subscriptions. A notable 16% of participants preferred the autonomy of purchasing and discovering products on their own terms, steering clear of subscriptions for this reason. Moreover, 15.7% cited *perceived poor quality of products* or the subscription offerings themselves as a drawback, while 8.3% pointed out problems such as receiving excessive or incorrect products as reasons for their reluctance to subscribe.

Barata and Coelho used Unified Theory of Acceptance and Use of Technology 2 model for examining factors in music streaming services. (Venkatesh et al, 2012; Bray et al, 2021) They modified the model by adding additional factors such as Perceived Freemium-Premium Fit, Involvement and Interest, Personalization, Attitude toward Piracy. The results indicate that the variables which explain behavioral intention to buy a premium account are performance

expectancy, effort expectancy, hedonic motivation, price value, habit, perceived freemium-premium fit and attitude towards piracy. Furthermore, behavioral intention to recommend the use of these paid services is confirmed to be explained by personalization and the intention to buy.

Commercial survey with more than 5,000 US respondents identified insights regarded motivation to subscribe for different types of e-commerce subscription (replenishment, curation, and access). Replenishment Subscriptions are valued for saving time and money. The key consumer value of Curation Subscriptions is a surprise element and a discovery experience by providing items tailored to personal tastes and preferences in categories like apparel, beauty, and food. Access Subscriptions is valued by exclusivity, granting customers special privileges, such as discounts or members-only perks, primarily in the apparel and food sectors.

Moreover, the study has defined reasons to initiate, continue and cancel retail subscription of different types. Consumer inclination towards enrolling in subscription services, particularly those offering curation and access, is greatly influenced by word of mouth and positive online reviews. Those who subscribe to curation and access options are often pursuit something new. On the other hand, individuals who opt for replenishment subscriptions tend to be driven by economic benefits, such as discounts, and by a strong need for the product.

Subscribers to personalized boxes or exclusive clubs expect their services to get even more customized with time, it is what will keep them coming back. Subscribers to curated services look forward to unexpected delights and a sense that they are getting their money's worth. On the other hand, access subscribers emphasize convenience as a reason to subscribe, in addition to personalization, or those who opt for subscriptions to keep their supplies in check, the ease of use is their top priority, closely followed by getting a good deal and enjoying a customized experience.

Table 1. Motives and Barriers to subscribe

Study	Method	Context	Motives	Barriers	
Barata and	Survey	Music	Intention to buy are performance	re performance	
Coelho	(n=324)	streaming	expectancy, effort expectancy,		
(2021)	and	services	hedonic motivation, price value,		
	intervie		habit, perceived freemium-premium		
	ws		fit and attitude towards piracy.		
			Behavioral intention to recommend		
			is confirmed to be explained by		
			personalization and the intention to		
			buy.		

Bray et al.	Survey	Retail	Convenience, ease of use,	Value for
(2021)	with		dependability, reliability, value for	money,
	close		money, access to a to a wide variety	commitment,
	(quantita		of products, try something new.	perceived poor
	tive) and			quality
	open			
	(qualitati			
	ve)			
	question			
	s n =			
	1356			
Bhatt and	Semi-	Fashion	Utilitarian Motives: Convenience,	
Kim	structure		value	
(2018)	d		<b>Hedonic Motives:</b>	
	intervie		Adventure, self-gratification,	
	ws		excitement, surprise, style	
	(USA)		experimentation.	
Bischof et	Surveys	Fashion and	Surprise	
al. (2020)	(USA)	Beauty		
Hsiao and	Survey	e-books	Quality of content, infrastructure,	
Chen	(n = 202;		price, environmental concerns, habit.	
(2017)	Taiwan)			
Ramkumar	Survey	Fashion &	Utilitarian Motives: cost saving,	
and Woo	(n = 385;	Beauty	convenience, wide range,	
(2018)	USA)		information availability, lack of	
			sociality, personalization	
			Hedonic Motives: desire for unique	
			products, adventure/explore, status.	
Tao and	Survey	Fashion	Utilitarian Motives: perceived	
Xu	(n = 256;		usefulness, convenience, value for	
(2018a)	USA)		money; Hedonic Motives:	
			perceived enjoyment.	

Tao and	Focus	Fashion	Utilitarian Motives: convenience,	
Xu	groups		opportunity to better manage apparel	
(2018b)	(USA)		budget.	
			Hedonic Motives: consumer	
			excitement, opportunities to try new	
			styles.	
McKinsey & Re		Replenishm	Initiating the subscription:	Cancellation:
Company (2	2018)	ent	financial incentive, recommended by	Dissatisfied
Survey (n =	5000;	subscription	someone	with
USA)			To continue: convenience, value for	product/experie
			money, personalization.	nce
		Curation	Initiating the subscription: trying	<b>Cancellation:</b>
		subscription	something new, recommended by	Value for
			someone	money,
			To continue: personalization	dissatisfied with
				product/experie
				nce
		Access	Initiating the subscription:	Cancellation:
		subscription	recommended by someone, trying	value for
			something new, financial incentive	money,
			To continue: personalization.	dissatisfied with
				product/experie
				nce, prefer to
				buy, when need
Palkina	Students	Music	Sales for students, absence of	
	(n=215)	streaming	advertisement, access without	
		services in	internet, usability of interface, time	
		Russia	saving on searching for content,	
			access to a new music.	

The comparative analysis of studies on subscription services reveals key consumer motives and barriers. Common motives include convenience, ease of use, performance expectancy, hedonic motivation, personalization, price value, and surprise. Consumers value the time-saving aspects and utility of subscriptions, with enjoyment and new experiences particularly influential

in fashion and beauty. The element of surprise, in particular, enhances the appeal and satisfaction of these services. Personalization also plays a crucial role in increasing user satisfaction, while cost savings and financial incentives drive both initiation and continuation of subscriptions. Specific contexts highlight that music streaming services benefit from performance expectancy, habit, and the absence of ads, while fashion and beauty consumers are motivated by both utilitarian and hedonic benefits, with surprise being a significant factor. E-books are influenced by content quality, infrastructure, price, and habit, and retail by convenience and variety. Barriers include perceived poor value, dissatisfaction, and the commitment required by subscriptions. To improve their offerings, companies should focus on enhancing personalization, emphasizing value and convenience, addressing quality concerns, and incorporating elements of surprise to attract and retain subscribers. Understanding these factors is crucial for research model for our study.

#### 1.1.3 Role of demographic characteristic in behavior of people towards subscription

Demographic characteristics play a secondary role in the analysis. However, they can provide additional insights that enhance the understanding of consumer behavior and preferences. Incorporating demographic data such as age, gender, income, education, and occupation can help identify specific trends and patterns within different segments of the population. This can lead to more targeted marketing strategies and a deeper understanding of the diverse factors influencing subscription decisions.

Several studies have been conducted to examine the relationship between sociodemographic characteristics and the willingness to pay for general online content (Table 2). Punj, G. identified patterns about who pays for online content and how much they spend. (Punj, 2015) When it comes to purchasing online content, women are more likely than men to make such transactions, with 55% of women paying for content as opposed to 45% of men. However, among those who do pay, men tend to spend more on average, shelling out about \$171, while women spend around \$104. This highlights an interesting dynamic where women are more frequent buyers, but men are higher spenders in the realm of online content. In terms of age differences, those between 45-54 years old show the highest likelihood of paying for online content. However, it's the 55-64 age group that, although smaller in number, tends to spend more when they do purchase, averaging \$243 compared to the \$81 spent by the 45-54 age bracket. In terms of educational background, individuals with some college educations are the most likely to purchase online content compared to other educational groups. However, those who possess a college degree, despite being fewer in number, tend to spend more on average. Specifically, college graduates spend about \$209, whereas those with some college education spend around \$128. In

summary, just because a group is more likely to pay for online content does not mean they spend the most money on it. Different groups show higher spending despite fewer members participating.

Findings J. Bray Younger individuals aged 18–44 is more likely to subscribe to subscription services compared to those aged 45 and above, with significant differences in subscription rates across age groups. (Bray et al, 2021) Higher household incomes correlate with a greater likelihood of subscription, showing a clear trend that as income increases, so does the likelihood of subscribing. Full-time employees are more likely to subscribe than those employed part-time or unemployed. There were insights for different types of retail subscription. In home entertainment subscriptions, younger age groups subscribe more frequently than older ones, with subscription rates declining with age. Higher incomes also correlate with increased subscriptions, and full-time employees subscribe more than part-time or unemployed individuals. Men subscribe more than women, though this is not statistically significant. For personal care services, having young children increases subscription likelihood, particularly among lower-income households. In household and housekeeping services, the presence of young children significantly boosts subscription rates. Luxury subscription services are more popular among higher-income individuals and those living alone or single, showing a positive income correlation and an influence of household composition on subscription behavior.

Table 2. Demographic Characteristic and Consumer Behavior

Article	Method	Context	Characteristic	
Punj, G	Telephone	General	Gender	Women pay more often, but men spend
	survey	online		more on average
		content	Age	45-54 years group pays more often, but
				55-64 age group spends more on
				average
			Education	People with college degree, despite
				being fewer in number, tend to spend
				more on average
Bray et	Survey with	Retail	Age	individuals aged 18–44 are more likely
al.	close			to subscribe compared to those aged 45
(2021)	(quantitative)			and above
	and open		Income	Higher household incomes correlate
	(qualitative)			with a greater likelihood of subscription

questions n =	Employment	Full-time employees are more likely to
1356		subscribe than part-time employed or
		unemployed
	Home	Subscription rates declining with age.
	entertainment	Higher incomes and full-time
		employment correlate with increased
		subscriptions
	Personal care	Having young children increases
	services	subscription likelihood
	Housekeeping	The presence of young children
	services	significantly boosts subscription rates
	Luxury	High-income and living alone or single
	subscription	have positive correlation towards
	services	subscription

For our research of food delivery subscriptions, the following demographic data can provide valuable insights. Younger individuals (18-44 years old) and those with higher incomes are more likely to subscribe, making these groups key target audiences. Full-time employment also increases the likelihood of subscription. The presence of young children may also increase interest in subscription, as families seek to save time on cooking. Understanding these trends can help develop more effective marketing strategies and offerings for different population segments.

#### 1.2. Subscription Economy

#### 1.2.1 Subscription Business Model

The subscription business model is not new; it is been around since the first magazines and newspapers were published. For example, Charles Dickens used to publish his novels in parts, like episodes. One of his famous works, "The Pickwick Papers," was serialized in Victorian England and was as popular back then as shows like "Game of Thrones" are today, but it was much less violent. This old way of releasing stories helped keep readers coming back for more, much like modern TV series do. Today's technological advancements have dramatically simplified the access to and distribution of goods and services, expanding subscription models across various industries. Everyone is aware of how Netflix brought cable TV to an end, but other industry titans in software, such as Microsoft and Adobe, have embraced subscription models after years of selling their products as one-time purchases. (Barseghian, 2019) The subscription-based business model has made strong inroads into consumer software (Microsoft 365), food preparation (Blue Apron),

health and beauty products (Dollar Shave Club), and a large array of subscription-based software-as-a-service (SaaS) enterprises in the B2B space, as businesses look to increase the predictability of their revenue streams. Many experts have written in depth about this topic (Baxter 2015; Janzer 2015; Warrillow 2015).

A key feature of the Subscription Economy is the transition from a product-centric to a customer-centric approach. (Tzuo & Weisert, 2018) In the past, companies primarily focused on manufacturing products and pushing them into the market, aiming to sell as many units as possible. They distributed their products through numerous sales channels, often without knowing much about the end consumers. The main goal was to maximize sales volume, with little attention paid to who was buying the products or why. Today, however, successful businesses have adopted a customer-centric approach. They start by understanding the customer's needs and behaviors, recognizing that customers interact with brands across various channels. By being present across these diverse channels, businesses can better meet their customers' needs. The wealth of data gathered from these interactions enables companies to serve their customers more effectively, enhancing the overall customer experience.

This approach fosters longer-term customer relationships. Instead of focusing on one-time sales, businesses now aim to develop ongoing interactions with customers, turning them into long-term subscribers. This model encourages a continuous exchange of value: customers receive personalized, continually improving services, and businesses gain stable, recurring revenue. Moreover, this digital transformation shifts the business focus from linear, transactional processes to a circular, dynamic relationship with customers. In this model, feedback and data from customers lead to better product and service development, which in turn attracts more customers and encourages existing ones to stay longer. This circular dynamic creates a positive feedback loop that enhances customer loyalty and increases the lifetime value of each customer, making the business more sustainable and resilient in the long run.

#### 1.2.2 Advantages and Disadvantages of Subscription Model for Customers

The subscription model has number of various *advantages for customers*. (Forbes, 2019)

First is *reduction of costs*. Subscription allows to reduce price due to the number f purchase. The Dollar Shave Club became very popular due to the fact that the razors it offered were cheaper compared to the in-store prices and that home deliveries enhanced the convenience of receiving the product. Besides that, monthly payments for a software program are cheaper than one-time purchasing for individuals.

Subscriptions also leverage *convenience*, especially in the replenishment category. Customers can subscribe to get regular periodic deliveries of necessities like dog food, grill charcoal, or any other replenishment need through the online service of Amazon, freeing them from the hassle of going to the store.

Another huge benefit is *personalization*. Such companies as Blue Apron and Loot Crate make the product offering different on an individual basis, and thus, they ensure relevance in every delivery. What they deliver is not only unique products, but also the feeling that they "get" you and that you matter to them.

Here is one additional appeal of subscription services—*curation*. Unlike personalization, during curation, the expert team selects what to send to ensure the most amazing product experience. It is the magic behind a perfectly curated Spotify playlist or a cool fashion or beauty box from the services like Stitch Fix and Birchbox.

Subscriptions make the *pain of the decision* go away. They eliminate the hassles of ownership and maintenance. They provide the convenience of automation or regular service.

Subscriptions also foster enhanced *communication* among subscribers. Subscribers frequently share their experiences with friends, family, coworkers, and even strangers, leading to enriching conversations and connections. (Bhatt et al, 2021)

Subscription services, especially in fashion industry, provide a significant contribution to consumer satisfaction, particularly through the emotional benefit of *self-gratification*. (Bhatt, 2021) This benefit can be understood through the lens of personal reward and happiness that these services provide. The "surprise" element inherent in these services — akin to receiving an unexpected gift — plays a crucial role in the subscribers' emotional experience. This element of surprise enhances the feelings of delight and pleasure, making the unboxing experience feel like a personal celebration.

However, together with advantages, subscription model has disadvantages for customers.

Subscription models often require customers to provide extensive personal information, including payment details, preferences, and usage patterns. Since customer stay for long time with a company, they provide a lot of personal date. This data collection can lead to *privacy concerns*, as companies may share or sell this information to third parties, often without explicit consent from the customer.

Another inconvenience for subscription users is *unnecessary purchase*. The model locks a customer into preordered products or services, the customer will keep on receiving such for as

long as his or her subscription shall remain in effect. Especially in the case of curated surprise, customers can receive products that they do not like. (Pineda, 2021)

Even though subscription is supposed to reduce costs, in some case it is not favorable. For example, subscription in a software, *in the long run can be more expensive* in comparison with making a one-time purchase.

Difficulty in canceling subscriptions. Many consumers complain about the difficulty of removing themselves once they become members, resulting in unwanted recurring credit card fees. Companies can deliberately hide the unsubscribe button.

#### 1.2.3 Advantages and Disadvantages of Subscription Model for Business

Companies benefit significantly from adopting a subscription model for their products and services. (Wilson, 2024) Here are some of the key advantages:

*Predictable Revenue*: Businesses receive periodic and, more importantly, continuous payments. This allows a business to make quite stable predictions into the future, providing a level of financial stability very important for budgeting and long-term planning.

Higher Customer Engagement and Loyalty: Subscription models assess the provision of added customer value constantly, which increases the use of products or services frequently. A company is able to retain more customers because it assures brand loyalty when it is constantly engaging the customer.

Potential for Higher Customer Live Time Value (CLTV): Subscribers usually create a longer and, on average, larger lifetime value. A company is, therefore, in a position to derive much more of the lifetime value from the customer through the continued addition of value and meeting all customer needs to ensure sustainable growth and profitability.

Subscription-based business models come with several *disadvantages* that companies need to consider. Here are some key challenges identified in scientific and industry analyses:

One of the most significant disadvantages is the high *churn* rate, where customers can easily cancel their subscriptions if they are dissatisfied. Customers can easily try something new with a small price, but then they can realize that they do not need the product. This can lead to unstable revenue streams and increased pressure on companies to continuously provide value and engage customers. (Schlossberg, 2015)

*Initial Acquisition Costs*: Acquiring new customers costs a lot. Consequently, much marketing, in the form of free trials and discounts, is incurred, which eventually strains the financial resources of the stakeholders, mainly startups. (Pineda, 2021)

Next downside is linked to the prior. Market Saturation and Competition shows that as subscription services become more and more popular, the markets may just get saturated and it will be quite *challenging for new players* to differentiate and fish for subscribers into their offering. Further saturation may bring in the fierce competition including price wars that can further squeeze margins. For instance, in Russia, we have a telecom sector monopoly that uses the subscription model; there are only a few players in the market.

Free riders: The system can be abused by free riders, who sign up for free trials but cancel before being charged, which is another potential issue with subscriptions. People can cheat the system by using different phone numbers or email and use the service for free many times.

Alongside with subscription economy lies membership economy. In 2015 R. K. Baxter published a book "Membership Economy". (Baxter, 2015) The Membership Economy is enabling all kinds of organizations to create meaningful connections, sense of belonging and community with customers and build social capital. The Membership Economy has become vibrant as a result of changes in society. In a fast-paced world, people spend less time in traditional communities such as family gatherings, churches, and other social groups. This alienation drives consumers to seek connections elsewhere.

#### 1.2.4 Membership Economy as is an evolution of the subscription model

The Membership Economy is an evolution of the subscription model, extending far beyond traditional notions. Many organizations might label themselves as subscription-based, sharing businesses, transactional companies with affinity programs, or social networks, rather than seeing themselves as part of the Membership Economy. They may also mistakenly believe that true membership organizations must be mission-driven nonprofits focused on member connections. This perspective is limiting. What truly defines a membership organization is its mindset and the emotional connection of its members, not merely the existence of a subscription model. Subscriptions offer access and variety. For instance, while a transactional customer might own many movies, a Netflix subscriber gains access to thousands of films from diverse genres and countries, all for a low monthly fee, which helps manage cash flow. This model fosters ongoing relationships and mutual benefits between customers and organizations. Netflix's value extends beyond its extensive library. The community aspect—comments and reviews—adds significant

value. Additionally, Netflix's algorithm analyzes user behavior to provide personalized recommendations, enhancing the user experience. Despite these benefits, many Netflix users might not identify as members, yet they are still part of the Membership Economy, benefiting from its principles.

The impact of the Membership Economy is evident across various industries. For example, a California hair salon offers subscription haircuts and encourages social interactions among clients. News platforms like DIGG, Reddit, and News360 are revolutionizing how news is consumed and prioritized. YouTube enables individuals to achieve professional and personal milestones by sharing their content.

This trend is becoming the new norm. Major companies have teams dedicated to fostering community and a sense of belonging, even for the most ordinary products. Organizations are focusing on building long-term relationships and ensuring customer success, moving beyond the traditional tech support model. The Membership Economy integrates business practices with psychology, driven by deep-seated human needs. It continuously fulfills these needs through ongoing relationships, often facilitated by subscriptions.

We definitely should incorporate the factor of community in our model. We should check the hypothesis if the factor of community effect behavior of customers.

#### 1.3 Subscription Types

This section aims to provide a comprehensive overview of subscription types and their characteristics, facilitating the identification of the category to which food subscriptions belong.

One of typologies of consumer goods subscriptions divides these services into four archetypes based on the degrees of personalization and control over subscription contents (Figure 3). These archetypes are Predefined Subscriptions, Curated Surprise Subscriptions, Access Subscriptions and General Surprise Subscriptions. (Bischof et al, 2020)

*Predefined Subscriptions* offer low surprise, where customers know exactly what they will receive. This model gives subscribers full control over the items they get. The key value for customers is convenience. Examples of predefined subscription could be a monthly delivery of a specific set of household items, such as cleaning supplies or pantry staples, where the contents of the box are known and chosen by the subscriber beforehand.

Curated Surprise Subscriptions are characterized by high personalization but also a high degree of surprise. Subscribers receive items selected based on their preferences, but the exact contents are a surprise. This caters to the desire for discovery while maintaining some user preferences. However, curated surprise subscription is riskier, then predefined subscription. Customers can be dissatisfied with the goods. There is a concept of loss aversion that people are more sensitive to losses than gains (Kahneman and Tversky, 1984). However, the problem of the unpleasant goods can be solved by free return option. (Bischof et al, 2020) A good example of curated surprise could be beauty boxes such as Birchbox or fashion subscriptions like Stitch Fix, where products are selected based on individual style profiles or beauty preferences, providing a personalized yet unpredictable experience.

Access Subscriptions has a low personalization, but subscribers get exclusive access to products or purchasing environments, similar to a membership club. This archetype includes different type of services, for example gym membership or access for the place in Google disk.

General Surprise Subscriptions involve high surprise with minimal control over the contents, such as Subscription boxes like Loot Crate, which delivers assortments of pop culture goodies, or food subscription services like Universal Yums, which sends snacks from different countries each month. They send a variety of items without input from the subscriber. This type is geared towards customers looking for novelty and surprise without a focus on personal needs.

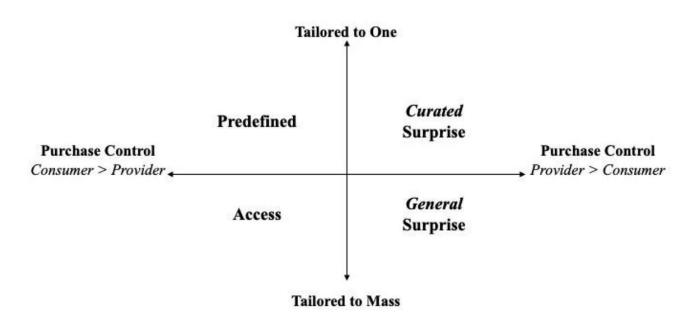


Figure 3. A framework on the four archetypes of consumer goods subscriptions by Bischof et al. (2020)

Another typology of subscription is Service-Based and Product-Based subscriptions.

Service-Based Subscription is a type of access subscription. Examples of this subscription could be streaming services or software subscriptions. There is a challenge of such type of business, since the web is known for its wide range of freely available digital content. Despite the growing demand for online content, consumers' willingness to pay remains largely unchanged, as many continue to see free access as a fundamental right. On the flip side, digital content creators see "smart" content as having transformative potential for users.

Most companies offering free digital content typically fund their operations through advertising revenue. In contrast, those that charge for content rely predominantly on subscription fees from users. Given the falling revenues from both print and digital advertising, an increasing number of content providers are exploring new models to monetize what used to be free content. This shift reflects the industry's ongoing adjustment to changing economic conditions.

A common strategy is the "freemium" model, where users can access basic content for free but must pay for premium features. Offering free content allows consumers to gauge its quality, serving as a teaser for the premium services. However, providing too much for free can decrease the likelihood that users will pay for additional features. An example of the freemium model is VK Music, where users can access music for free but also have the option to upgrade to a premium service. With the premium version, users enjoy an ad-free experience, can listen to music with their screen turned off, and even play tunes without an internet connection.

Another promotional strategy is **free trial** where users are given temporary access to a service's full premium features at no cost for a limited period. This allows potential subscribers to experience the service's complete offerings, including all the benefits of a paid subscription, without committing financially upfront. After the trial period ends, users typically have the option to continue with the service by paying for a subscription or to unsubscribe. Sometimes, users may forget to cancel their subscription before the trial ends, which can lead to the company automatically charging them for the next billing cycle. This situation can create an unpleasant experience for users who did not intend to continue with the service. An example of streaming service that use free trial as a tool for gaining new customers is Yandex Music. They offer a generous 90-day free trial that includes access to their full range of features, such as thousands of music tracks and podcasts, along with an AI-powered recommendation system designed to enhance user experience by personalizing content suggestions.

According to the commercial research of McKinsey & Company, subscription-based streaming services like Netflix have become common — about 46% of consumers subscribe to

one, online shoppers are increasingly subscribing to e-commerce services as well. In fact, 11% out 15% of online shoppers have signed up for box and media together. (McKinsey & Company, 2018)

*Product-Based Subscriptions* is delivering physical or digital products regularly, such as a monthly box of curated items. Valued at USD 196.35 billion in 2023, the growth rate of the global subscription e-commerce market is 65.80%, with an estimated value of USD 1,482.11 billion by 2027. (Subscription E-commerce Global Market Report, 2023)

Subscription e-commerce is a burgeoning sector that has significantly changed the shopping habits of consumers, especially in the USA. Subscription in retail industry can be classified into three primary types: replenishment, curation, and access. Replenishment subscriptions simplify life by regularly delivering essentials like toiletries or baby care products right to the door, ensuring consumers never run low on necessary supplies. Curation subscriptions provide a touch of excitement and personalization, delivering handpicked items across fashion, beauty, or gourmet foods, aiming to delight and surprise with each package—this approach is particularly favored, capturing 55% of the market. Lastly, access subscriptions offer exclusive perks or discounts, mostly in fashion and gourmet sectors, appealing to budget-conscious yet style-savvy consumers.

Subscription e-commerce has seen rapid growth in the U.S., with a marked increase in sales over the past five years and the entry of established consumer brands and retailers such as P&G, Sephora, and Walmart into the market. Companies like Dollar Shave Club, Blue Apron, and Stitch Fix offer regular deliveries of customized products at potentially lower costs, appealing particularly to younger, affluent urban residents. The sector has also attracted significant investment, evidenced by high-profile acquisitions like Unilever's purchase of Dollar Shave Club and Albertsons' acquisition of Plated. (McKinsey & Company, 2018)

While this subscription model is popular in the USA, its reception has been more tepid in Russia. There are some startups exploring this space in Russia, but subscription e-commerce has not yet gained widespread popularity. However, given the global trends and the increasing interest in personalized and convenient shopping experiences, this model could potentially gain traction in Russia as well. Adapting to local consumer preferences and market conditions will be key for businesses looking to expand subscription services in the Russian market.

We can define that subscription on meal delivery services refers to a product-base type. To define meal delivery subscription services according to the framework by Bischof et al., we need to analyze the factors of personalization and surprise. These constructs are crucial for the subscription model and were identified as important factors in paragraph 1.2. Therefore, *it is essential to incorporate personalization and surprise into our research model.* We can test

hypothesis about influence of personalization and surprise on intention to subscribe. Additionally, we can define the appropriate type for meal subscription.

#### 1.4 Food Subscriptions

The demand for food delivery, encompassing groceries, ready-made meals, and meal kits, has significantly increased due to the COVID-19 pandemic and continues to grow. In 2022, 41 percent of global subscribers used food subscriptions. Meal kits have emerged as a particularly popular category within food-related subscriptions. (Statista Research Department, 2024) Meal kits are delivered to consumers' homes in pre-packaged boxes including all the ingredients required to prepare a particular cuisine as well as detailed preparation instructions. Meal kits are designed to make it simple for consumers to prepare meals at home without requiring them to prepare meals ahead of time or go grocery shopping. Numerous meal kit providers give customers a variety of meal alternatives, and some even cater to special diets like vegetarian or gluten-free meals.

In the UK, convenience is king in the food industry. New food and recipe delivery models have been developed by British supermarkets, food start-ups, and internet retailers with the aim of saving their customers time, money, and effort. Meal kit sales in the UK were projected to increase from 1.25 million USD in 2021 to around 1.5 billion USD in 2022. It's expected that this growth will continue in the upcoming years. Meal kits' growing appeal within the broader convenience trend makes sense. In a recent survey, when British consumers were asked why they use meal kit services, almost half of them cited convenience as their main motivation. (Leading categories of subscription boxes shoppers buy in the United Kingdom (UK) in 2020., Statista, 2022)

With over 396 billion US dollars, China is ranked first in the online meal delivery business. The United States comes in second place with 287.5 billion dollars, while Italy comes the third in the list with 5.86 billion dollars. The fourth and the fifth go India and Brazil with 33.36 and 16.1 billion dollars respectively. (Revenue of the online food delivery market in selected countries worldwide in 2023. Statista, 2024) In 2023, the Latin American meal delivery market generated over 13,49 billion dollars in sales, with grocery delivery coming in at about 19,65 billion dollars that same year. (Revenue for the online food delivery market in Latin America from 2017 to 2027, by segment. Statista, 2024)

When discussing generational preferences, a widespread survey in the U.S. revealed that Zoomers had the highest average spend on meal kits and other food subscriptions, exceeding \$200 per capita. In contrast, Baby Boomers spent less than half of that amount. (Monthly food subscriptions spending in the United States in 2021, by generation. Statista, 2024)

In Russia in covid time food delivery market have grown in four times. (Revva N., 2021) From 2020 to 2022, the proportion of establishments offering delivery services in Russia increased to 61% of the total number of establishments. This is a 1.5-fold increase compared to 2020. On average, delivery now accounts for 24% of all restaurant orders. Its contribution grew 1.6 times from 2020 to 2022. About one-third (29%) of establishments that currently do not offer delivery plan to introduce it within the next 1-2 years. Additionally, the market for restaurant delivery is evolving with a growing trend of outsourcing delivery services. In addition to existing services, various new types of platforms providing storefront and logistics solutions are emerging, both large and small. These platforms allow restaurants to customize the ordering and delivery process individually. A third (32%) of all establishments in Russia have their own delivery service. Nearly half of these (15% of all establishments) combine both their own delivery service and the use of aggregators or other external services. (Data Insight, 2023)

The food delivery market in Russia in 2020 is dominated by several key players, with grocery deliveries accounting for a significant portion of the revenue turnover. (Tinkoff Data by Revva, 2021) Ozon leads the pack with an impressive turnover of 195 billion rubles, followed by X5 Retail Group with 21.9 billion rubles, SberMarket with 20.7 billion rubles, Utkonos with 16.4 billion rubles, VkusVill with 14.9 billion rubles, and igooods with 7.8 billion rubles.

In the grocery and ready meals segment, Yandex.Eda stands out with a turnover of 36 billion rubles. Moving to subscription services for ready meals, Perfomance Group leads with 3.2 billion rubles, followed by Kuhnya na Rajone with 3 billion rubles, Grow Food with 2.2 billion rubles, and Justfood with 0.45 billion rubles.

Finally, in the meal kits category, Shefmarket leads with a turnover of 1.16 billion rubles, followed by Elemenatee with 0.9 billion rubles. These players form the core of the food delivery market in Russia, showcasing the diverse range of services and options available to consumers in this rapidly growing industry.

#### **Summary of Chapter 1**

The first chapter begins by defining key concepts such as consumer behavior, the subscription economy, and the membership economy, and examines theoretical models like the Theory of Planned Behavior (TPB) and the Unified Theory of Acceptance and Use of Technology (UTAUT) that explain consumer decision-making processes. These models are crucial for understanding how consumers decide to subscribe to meal delivery services, highlighting factors

such as behavioral intention, performance expectancy, effort expectancy, social influence, attitudes, hedonic motivation, price value, and habit.

The chapter also identifies key motives and barriers to subscription services in different industries. While buyers of fashion and beauty products are driven by both utilitarian and hedonic benefits—with surprise playing a major role — music streaming services profit from performance anticipation, habit, and the lack of advertisements. Quality of content, infrastructure, cost, and habit all affect e-books, while convenience and variety affect retail sales. Demographic characteristics play a significant role in consumer behavior towards subscriptions. Younger individuals, those with higher incomes, and full-time employees are more likely to subscribe, as are families with young children seeking to save time on cooking.

Subscription models offer numerous advantages for customers, such as cost reduction, convenience, personalization, and self-gratification. While For businesses, the model provides predictable revenue streams and deeper customer insights.

The evolution of the subscription model is membership economy, where companies create bonds with customers and also provide a place for communication between members. *Therefore, community is an important concept for subscription, that is why we decided to use the factor Community in our research model.* 

We classified different types of subscriptions. There are product-based and service-based subscriptions. Also, we can classify them by the presence or absence of personalization and surprise. *Predefined Subscriptions* offer low surprise and high personalization, where core value is convenience. *Curated Surprise Subscriptions* are characterized by high personalization but also a high degree of surprise. *Access Subscriptions* has a low personalization and low surprise, but subscribers get exclusive access to products. *General Surprise Subscriptions* involve high surprise and low personalization. *We decided to include the factors of Personalization and Surprise in our research model to make it more specialized for analyzing subscription models*.

At the end of the first chapter, we did the overview on the demand for food delivery, including groceries, ready-made meals, and meal kits. The demand surged due to the COVID-19 pandemic and continues to grow. In 2022, 41% of global subscribers used food subscriptions, with meal kits being particularly popular. In the UK, convenience drives the market, with meal kit sales projected to increase significantly. China leads the online meal delivery market, followed by the United States and Italy. In Russia, the food delivery market grew fourfold during the pandemic, with delivery now accounting for 24% of all restaurant orders. Key players in Russia include Ozon, Yandex.Eda, and Shefmarket, highlighting the market's diversity and rapid expansion. Food

subscriptions for ready meals and meal kits are less popular compared to other segments of the food delivery market. Key players in the ready meals subscription market include Performance Group with a turnover of 3.2 billion rubles, Kuhnya na Rajone with 3 billion rubles, Grow Food with 2.2 billion rubles, and Justfood with 0.45 billion rubles. In the meal kits category, Shefmarket leads with a turnover of 1.16 billion rubles, followed by Elemenatee with 0.9 billion rubles. Despite their smaller market share, these players contribute to the diversity and growth of the food delivery market in Russia.

## CHAPTER 2. FACTORS INFLUENCING CONSUMER BEHAVIOR IN SUBSCRIPTION: RESULTS OF EMPIRICAL RESEARCH

This chapter contains a comprehensive description of the research methodology. The research design is conclusive, has a fixed structure, and is based on hypotheses. A quantitative research method was chosen for this study. Further details on the hypotheses, the description of the questionnaire, the sample, and the data collection instruments are outlined in this chapter.

In the second part of the chapter, we present the descriptive statistics of the data and analyze the data using correlation and regression analysis. This section also provides research findings and discusses their managerial and theoretical contributions.

#### 2.1 Methodology

The method is based on two theories: the Theory of Planned Behavior and the Unified Theory of Acceptance and Use of Technology. These models were integrated and refined through the addition of new factors.

We choose to use the Theory of Planned Behavior in building our model because it provides a framework that incorporates psychological factors influencing decision-making. As of April 2020, the theory of planned behavior has been applied in more than 4,200 papers referenced in the Web of Science bibliographic database. (Bosnjak et al, 2020) The TPB has received broad attention in areas such as the health sciences, business and management, environmental science, psychology and hospitality.

When it comes to subscription decisions, key components of the PBT are also relevant. First, customers' attitudes toward subscribing to a food delivery service may impact their decision. Believe in the result from action may be in the format of time-saving benefits, the variety of food options perceived, the quality of service, and convenience. By evaluating customers' beliefs about the advantages and disadvantages of the service, businesses can assess overall attitudes and the likelihood of subscription. Another important factor is subjective norms, which reflect the social influences on customers' decisions. The opinions and behaviors of friends, family, and social media trends can greatly affect whether customers decide to subscribe. Perceived behavioral control is also crucial. This refers to the perceived ease or difficulty of subscribing and using the service. Factors such as usability, ease of ordering, payment options, delivery reliability, and customer support contribute to this perception. Businesses might determine potential barriers to subscription and areas for improvement by assessing perceived difficulties or facilitating factors.

The TPB demonstrates strong predictive power for understanding and forecasting consumer behavior.

Given that subscription meal delivery services heavily rely on technology, we based the second core theory of our model on the Unified Theory of Acceptance and Use of Technology (UTAUT) Model 2. UTAUT2 has been applied in various studies on technology acceptance, including research on artificial intelligence virtual assistants (García de Blanes Sebastián et al., 2022), social recommender systems (Oechslein, 2014), mobile banking (Kwateng et al., 2018), mobile health apps (Schomakers et al., 2022), fitness mobile apps (Mazaya, 2022), educational apps (Ameri et al., 2020), online games (Ramírez-Correa, 2019), blended learning (Rudhumbu, 2022), and learning management software (Raman & Don, 2013), among others. Meal subscription services, which are based on website and mobile applications, are relatively new in Russia. Therefore, the UTAUT2 model is particularly relevant for our research.

For our model, we have chosen the following factors (Figure 4):

Performance expectancy refers to the belief that using the service will lead to specific benefits. For example, customers may anticipate a large reduction in the amount of time spent cleaning and cooking when using subscription-based meals. Furthermore, they could think that by offering healthier meal options, the business will raise the standard of their food. Also, because the program provides regulated serving sizes and nutritional data, users may believe that it will improve their ability to track their weight.

Effort expectancy measures how easy it is to use the service. In the case of meal subscription, this construct can be measured by how easy or difficult users perceive the process of subscription via a website or an app. Also, how users perceive convenience of receiving food from a courier every two days.

Social influence examines how social factors impact the user's decision to adopt the service. For example, people may be more likely to give a subscription a try if friends or coworkers recommend it. Close social circles' recommendations and opinions can have a big impact on their choice. Users may also be encouraged to subscribe if they believe that owning a meal subscription is a sign of good social standing.

*Hedonic motivation* evaluates the enjoyment or pleasure derived from using the service. Users might anticipate that the service will allow them to eat a more varied diet, which they find enjoyable. They may also look forward to trying new dishes, adding excitement to their meals.

Overall, users might expect to enjoy the experience of using the food delivery service, which enhances their motivation to subscribe.

*Price value* assesses the user's perception of the cost-benefit ratio of the service. For customers, it's critical that a food subscription offer exceptional value and a reasonable price. If people think the benefit of convenience, time savings, and better food quality outweighs the cost of the membership, they will think it is worth it.

Habit examines the user's current behavior and routines related to food services. Consumers who utilize food delivery services or frequently buy prepared meals at home are more likely to sign up for a subscription meal service. The transfer is made easier by their familiarity with comparable services. Furthermore, the quantity of subscriptions people owns to services other than food may also be a sign of how comfortable and which subscription models they favor.

We decided not include the construct *Facilitating Conditions* due to this factor refers to the external resources and support available to a user, such as technology access, infrastructure. Our model focuses more on the user's perceptions, motivations, and behaviors directly related to the service itself. Moreover, some aspects of Facilitating Conditions might overlap with other factors. For instance, Effort Expectancy covers the ease of subscribing and receiving deliveries, which could be influenced by facilitating conditions like technology and infrastructure.

We modified the UTAUT Model 2 by adding three new factors derived from literature on subscription business models: Community, Personalization, and Surprise. These additions make the UTAUT Model 2 specialized in examining consumer intentions to use subscription services. The inclusion of these factors helps tailor the model to better capture the unique elements and motivations associated with subscription services, providing a more comprehensive understanding of consumer behavior in this context.

According to Bitschof et al. (2020), the factors of Personalization and Surprise can help define the type of subscription business. These factors are crucial in determining customer preferences and tailoring the subscription model accordingly. If both Personalization and Surprise are important to customers, the subscription service falls into the *Curated Surprise* type. If Surprise is important but Personalization is not, the subscription service is categorized as *General Surprise*. When Personalization is important but Surprise is not, the service is classified as *Predefined*. Lastly, the *Access* type of subscription is defined when neither Personalization nor Surprise is important to customers.

Personalization has been identified as a motivational factor in various areas, including music streaming services (Barata and Coelho, 2021), fashion and beauty (Ramkumar and Woo, 2018), and subscription e-commerce (McKinsey & Company, 2018). Similarly, the concept of surprise has been found significant in the fashion and beauty industry (Bischof et al., 2020; Bhatt and Kim, 2018). In an article by Aditya Gupt et al. (2020), the authors examined how surprise influences the self-gifting process, a prevalent consumer behavior, especially in the U.S. Recent trends include incorporating surprise elements in self-gifts, such as subscription boxes. Key findings of the study indicate that positive surprises can lead to delight and strengthened consumer-retailer relationships, while negative surprises can lead to disappointment but are often mitigated by regifting.

Factor *Personalization* is the term used to describe the user's enhanced control over the service through various customization options. The ability for users to customize their meals to meet their dietary requirements by adjusting the number of calories in their food may be significant to them. Another essential feature that gives consumers flexibility in their meal selections is the option to add or remove ingredients from dishes. Additionally, customers may find value in an app that tailors meal recommendations to their tastes and interests, which makes the service more interesting and relevant. Finally, the ability to select which dishes to have delivered gives users a direct input in their meal plans and guarantees they get food that suits their needs and preferences.

Surprise focuses on the element of unpredictability and novelty in the service, which can enhance user enjoyment and engagement. Some users might enjoy the excitement of not knowing what kind of food will be in their delivery all the time or several days a week, adding a sense of adventure to their meal experience. Additionally, receiving small, unexpected surprises can delight users.

Factor *Community* was derived from the book Membership Economy by Baxter (2015). According to the author, the subscription model can evolve into the membership economy which has a big potential. Business can fulfill the fundamental human need in communication making strong bonds with customers and creating a place for collaboration between members. Community involves the social aspects of the subscription service, fostering a sense of belonging and support among users. Joining a community to talk about food-related subjects and exchange advice and experiences with like-minded people might be of interest to users. Members of a group that prioritizes healthful eating can offer encouragement and support, assisting users in reaching their dietary objectives. Additionally, by including social interaction and support into the service, the meal subscription app's ability to connect with such a community can improve user experience by making it more engaging and encouraging.

The dependent construct in this study is the *Intention to Subscribe* to a subscription meal delivery service. This construct measures the likelihood that potential customers will commit to regularly receiving meal deliveries through a subscription model. We did not include the *Behavior* factor in our study because meal delivery services are a relatively new type of business in Russia, and therefore, not many people currently use them. This limited usage makes it difficult to gather reliable behavioral data, so we focused on the Intention to Subscribe to better understand potential customer interest and future adoption.

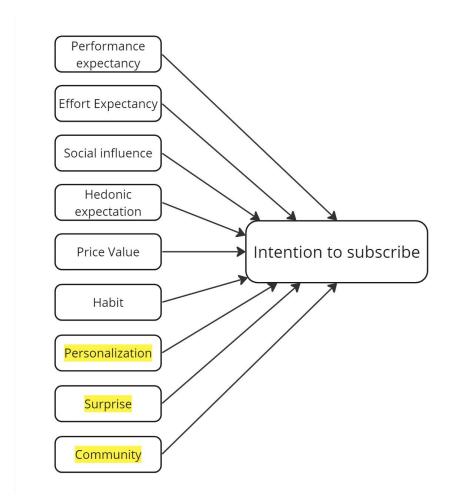


Figure 4. Research Model made by author on the base of the TBP and the UTAUT2

Based on the model we created the following hypothesis:

- H1 Utilitarian expectation positively affects Intention to Subscribe.
- H2 Effort Expectancy positively affects Intention to Subscribe.
- H3 Social influence positively affects Intention to Subscribe.
- H4 Hedonic expectation positively affects Intention to Subscribe.

H5 Price Value positively affects Intention to Subscribe.

H6 Habit positively affects Intention to Subscribe.

H7 Personalization positively affects Intention to Subscribe.

H8 Surprise positively affects Intention to Subscribe.

H9 Community positively affects Intention to Subscribe.

We chose the quantitative method for our study because most previous research has identified factors influencing user intention using this approach. To define each of the factors influencing user intention, we created questions based on the theory by Venkatesh et al. (2012). Most of these questions used a 7-point Likert scale, ranging from "strongly disagree" to "strongly agree." Additionally, demographic and social questions were included to better understand sample characteristics and to facilitate the formulation of possible research hypotheses in the future.

Our tool for data collection was Google Forms, and we distributed the survey through our social networks. Ultimately, we received 211 responses. The questionnaire was drafted in Russian, as our target audience is Russian-speaking. By not setting age limits, we were able to obtain a greater variety of responses. For analyzing our data, we used the IBM SPSS (Statistical package for the social sciences).

#### 2.2 Data Analysis

# **2.2.1 Descriptive Statistic**

We surveyed 211 respondents, of whom 54 are male (25.6%) and 157 are female (74.4%). The majority are aged 18-24 (50.2%), followed by those aged 25-34 (32.2%) and 35-44 (11.4%). A smaller portion are either 45 and older or under 18. In terms of income, 44.5% have enough money for food and clothes but find it difficult to purchase durable goods, while 42.2% can afford durable goods but struggle with expensive items like cars. Most respondents are from major cities: Saint Petersburg (49.8%), Moscow (14.2%), and other cities with populations of one million or more (13.7%). Additionally, 16.6% live in cities with populations under one million, and 5.7% reside in villages and rural areas.

As a result, the survey predominantly features young adults, especially females, from major urban areas with varied income levels, highlighting a significant urban and youth demographic among respondents.

According to the number of questions we have 27 variables. We combined the variables based on the questions. As a result, we created 10 variables out of 27. We have Performance expectancy, Effort Expectancy, Social influence, Hedonic expectation, Price Value, Habit, Personalization, Surprise, Community and Intention.

We conducted descriptive statistics for our study constructs and observed that constructs like Effort Expectancy, Hedonic Expectation, and Personalization have higher means, indicating positive perceptions. Social Influence, Habit, and Community have lower means, suggesting they are less influential. Community and Intention show the highest variation, indicating diverse opinions among respondents. Overall, most constructs have a mean around 4-5, suggesting a general positive inclination towards the system but with varying degrees of influence and perception.

We have 184 valid observations out of 211, which is more than sufficient to ensure that the distribution will not significantly affect statistical significance or confidence intervals. However, to ensure robustness, we assessed the distribution of our data. We created P-P Plot charts for this purpose. The results showed that the dots are normally distributed for all variables, indicating that our data meets the assumptions of normality.

#### 2.2.2 Correlation Analysis

Next step we conducted correlation analysis for all variables. Since we have scale data and it meets the assumptions of normality, we will use parametric correlation.

**Performance Expectancy** positively correlates with all variables. It has strong positive correlations with Hedonic Expectation (0.603), Social Influence (0.497), and Intention (0.537), all significant at the 0.01 level. Moderate positive correlations with Effort Expectancy (0.377), Price Value (0.485), and Personalization (0.375), indicating that these factors also positively impact performance expectancy.

**Effort Expectancy** positively correlates with medium effect with Price Value (0,417), Performance Expectancy (0.377), Hedonic Expectation (0.319), personalization (0,229) and Intention (0.357).

**Social Influence** has strong correlations with Hedonic Expectation (0.590), Intention (0.497), and Performance Expectancy (0.497) and medium correlations with Effort Expectancy (0,294), Price Value (0.267), Personalization (0.261), Surprise (0,253) and Community (0,331).

**Hedonic Expectation** strongly correlates with Performance Expectancy (0.603), Social Influence (0.590), Price Value (0.495) and Intention (0.540).

**Price Value** has strong correlations with Performance Expectancy (0.485), Hedonic Expectation (0.495) and Intention (0.500).

**Habit** shows weaker correlations with other variables, with the highest being with Performance Expectancy (0,195), Personalization (0.188) which means that habit is less influential in our model.

**Personalization** has moderate correlations with Performance Expectancy (0.375), Hedonic Expectation (0.328), Price Value (0.311), Community (0,317) and Intention (0.316).

**Surprise Variable** correlate with medium effect with with Social Influence (0.253) and Hedonic Expectation (0.256), suggesting that surprise elements are related to social influence and enjoyment.

**Community** has moderate correlations with Social Influence (0.331), Personalization (0,317) and Intention (0.348).

**Intention** is the key factor, it has strong correlations with Performance Expectancy (0.537), Hedonic Expectation (0.540), Social Influence (0.497), and Price Value (0.500), showing these factors are key determinants of the intention to use. Also, Intention Variable has medium correlation with Effort Expectancy (0,357), Personalization (0,316) and Community (0,348). Also, it is important that it does not correlate with Habit (p value = 0,161) and Surprise (p value = 0,187).

Next step is to calculate *Effect Size* of variables that influence Intention. Effect Size shows the amount of variability in one variable that is shared by another. In order to calculate it, we need to square Correlation Coefficients.

The effect size of Performance Expectancy (R^2=0,29) equals to 29% of the variability of Intention.

Similarly, the effect size of Hedonic Expectation (R^2=0,29) equals to 29%.

The effect size of Social Influence ( $R^2=0.25$ ) equals to 25%.

Similarly, the effect size of Price Value ( $R^2=0,25$ ) equals to 25%.

The effect size of Effort Expectancy ( $R^2=0,13$ ) equals to 13%.

The effect size of Personalization ( $R^2=0,1$ ) equals to 10%.

The effect size of Community  $(R^2=0,12)$  equals to 12%.

#### 2.2.3 Regression Analysis

For the regression analysis we take only variables that correlate with dependable variable Intention. We run multiple regression. First, we check for multicollinearity among your variables using the Variance Inflation Factor (VIF). According to the Table VIF value shows moderate correlation (less than 10).

The R-squared value of 0.448 indicates that approximately 44.8% of the variance in the intention to subscribe can be explained by the independent variables included in the model.

Table 3. Coefficients of the first regression analysis

	Coefficients <sup>a</sup>										
Unstandardized Coefficients			Standardized Coefficients			95,0% Confider	nce Interval for B	Collinearity	Statistics		
Model		В	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound	Tolerance	VIF	
1	(Constant)	-2,847	,678		-4,198	<,001	-4,186	-1,509			
	Performance_Expectancy	,312	,117	,199	2,672	,008	,082	,543	,564	1,774	
	Effort_Expectancy	,072	,096	,048	,753	,453	-,117	,262	,785	1,274	
	Social_influence	,255	,094	,196	2,710	,007	,069	,440	,602	1,663	
	Hedonic_expectation	,193	,111	,136	1,732	,085	-,027	,413	,506	1,975	
	Price_Value	,398	,131	,220	3,045	,003	,140	,656	,601	1,665	
	Personalization	,051	,100	,032	,510	,611	-,146	,248	,783	1,277	
	Community	,128	,067	,119	1,907	,058	-,004	,261	,811	1,233	

a. Dependent Variable: Intention

Table 4. Model Summary of the first regression analysis

	Model Summary"									
					Change Statistics					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	Durbin- Watson
1	,669ª	,448	,426	1,45770	,448	20,404	7	176	<,001	1,774

a. Predictors: (Constant), Community, Effort\_Expectancy, Personalization, Hedonic\_expectation, Price\_Value, Social\_influence, Performance\_Expectancy

Table 5. ANOVA of the first regression analysis

	ANOVA									
Model		Sum of Squares	df	Mean Square	F	Sig.				
1	Regression	303,497	7	43,357	20,404	<,001 <sup>b</sup>				
	Residual	373,981	176	2,125						
	Total	677,478	183							

a. Dependent Variable: Intention

b. Dependent Variable: Intention

b. Predictors: (Constant), Community, Effort\_Expectancy, Personalization, Hedonic\_expectation, Price\_Value, Social\_influence, Performance\_Expectancy

The ANOVA table shows that the regression model is statistically significant (p < 0.001), indicating that the independent variables together significantly predict the intention to subscribe.

By looking at Coefficient table we can define significant and non-significant variables.

Significant Variables are Performance Expectancy (p = 0.008), Social Influence (p = 0.007) and Price Value (p = 0.003).

Non-Significant Predictors are Effort Expectancy (p = 0.453), Hedonic Expectation (p = 0.085), Personalization (p = 0.611) and Community (p = 0.058).

Since we have non-significant variables, we run multi regression analysis the second time, but only with variables that were significant in the first multiple regression analysis, namely Performance Expectancy, Social Influence, and Price Value. We check for multicollinearity among three variables using the Variance Inflation Factor (VIF). According to the Table VIF value shows moderate correlation (less than 10).

Table 6. Coefficients of the second regression analysis

	Coefficients <sup>a</sup>										
		Standardized Coefficients			95,0% Confider	ice Interval for B	Collinearity	Statistics			
Model		В	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound	Tolerance	VIF	
1	(Constant)	-2,402	,574		-4,182	<,001	-3,535	-1,269			
	Performance_Expectancy	,392	,110	,250	3,563	<,001	,175	,610	,648	1,542	
	Social_influence	,376	,083	,289	4,538	<,001	,213	,540	,787,	1,270	
	Price_Value	,545	,117,	,301	4,641	<,001	,313	,776	,762	1,312	

a. Dependent Variable: Intention

Table 7. Model Summary of the second regression analysis

	Model Summary"									
					Change Statistics					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	Durbin- Watson
1	,651 <sup>a</sup>	,423	,414	1,47339	,423	44,026	3	180	<,001	1,811

a. Predictors: (Constant), Price\_Value, Social\_influence, Performance\_Expectancy

b. Dependent Variable: Intention

Table 8. ANOVA of the second regression analysis

ANOVA"
--------

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	286,721	3	95,574	44,026	<,001 <sup>b</sup>
	Residual	390,757	180	2,171		
	Total	677,478	183			

a. Dependent Variable: Intention

The three independent variables account for approximately 42.3% of the variance in the intention to subscribe, which is only 2,5% less, then in prior model.

The ANOVA table shows that the regression model is statistically significant (p < 0.001), indicating that the independent variables together significantly predict the intention to subscribe.

According to Coefficient table, all three variables positively effect the intention to subscribe (p-value < 0,001) with different Beta Coefficient. Based on the regression coefficients provided, the regression equation for predicting the dependent variable (Intention) can be formulated as follows:

Intention = -2.402 + 0.392\*Performance Expectancy + 0.376\*Social Influence + 0.545\*Price Value

#### 2.3 Discussion of Results

In our study, we identified a valuable sample primarily consisting of young adults residing in urban areas. This demographic, as highlighted in our literature review (1.1.3), demonstrates a strong inclination towards subscription services. Our correlation analysis has further substantiated this, revealing that factors such as Performance Expectancy, Hedonic Expectation, Social Influence, Price Value, Effort Expectancy, Personalization, and Community exhibit significant correlations with Intention to Subscribe. Conversely, factors like Habit and Surprise did not show any meaningful correlation with subscription intention, underscoring the unique dynamics of our industry. As a result, 7 out of 9 hypotheses were confirmed. (Table 9)

This nuanced understanding becomes evident when considering different sectors. For instance, while the surprise factor might hold considerable sway in industries like beauty and

b. Predictors: (Constant), Price\_Value, Social\_influence, Performance\_Expectancy

fashion, its relevance diminishes significantly in meal delivery services. Similarly, the concept of habit, vital in contexts such as music streaming and e-books, appears negligible in the food industry. Our research has also contributed novel insights by introducing the factor of community, which emerges as influential within our industry landscape.

Considering the findings that surprise factor does not correlate with intention, but personalization does, businesses in the meal delivery service industry should prioritize offering predefined subscription types. This model aligns well with the key value proposition of convenience, which is highly valued by consumers.

In delving deeper, we calculated the Effect Size of these variables to gauge their relative influence. Notably, Performance Expectancy and Hedonic Expectation emerge as the most impactful factors, with an Effect Size of 29%. Following closely are Social Influence and Price Value, each contributing 25% to the equation. Subsequently, Effort Expectancy, Community, and Personalization exhibit Effect Sizes of 13%, 12%, and 10%, respectively.

Table 9. Hypothesis

H2 Effort Expectancy positively affects Intention to Subscribe.       Confirmed         H3 Social influence positively affects Intention to Subscribe.       Confirmed	
H4 Hedonic expectation positively affects Intention to Subscribe. Confirmed	
H5 Price Value positively affects Intention to Subscribe.  Confirmed	
H6 Habit positively affects Intention to Subscribe.  Not confirmed	
H7 Personalization positively affects Intention to Subscribe. Confirmed	
H8 Surprise positively affects Intention to Subscribe.  Not confirmed	
H9 Community positively affects Intention to Subscribe.  Confirmed	

Through multiple regression analyses, we've distilled these findings into three core factors that collectively drive Intention to Subscribe: Performance Expectancy, Social Influence, and Price

Value. This synthesis underscores the essential elements shaping consumer behavior within our industry, paving the way for informed strategic decisions and targeted interventions.

#### 2.4 Conclusion

We completed **the goal** of our research, which was to identify and determine the degree of influence of primary motivational factors on subscription decisions that drive consumers to subscribe to meal delivery services in Russia. We created a model with relevant factors based on relevant theoretical frameworks and literature about subscription model. We created nine hypotheses. We collected data and conducted correlation. As a result, seven out of nine hypotheses were confirmed. To comprehensively address our **research question**, we employed multiple regression analysis. Through this rigorous statistical approach, we discerned three pivotal motivational factors: Performance Expectancy, Social Influence, and Price Value.

#### 2.4.1 Theoretical Contribution

Our study confirms the validity of the Unified Theory of Acceptance and Use of Technology (UTAUT) Model 2 within the context of subscription-based services. By applying this model to the meal delivery service sector, we affirm that factors such as performance expectancy, effort expectancy, social influence, and facilitating conditions significantly influence consumer intentions and behavior. This aligns with previous research but also extends the application of the model into a new domain.

We propose an expansion of the UTAUT Model 2 specifically tailored to subscriptionbased services. This modified model includes additional constructs that are particularly relevant to subscription services:

*Personalization* provides ability for users to customize the subscription service according to their individual preferences and needs.

*Surprise* is the element of unpredictability where customers do not know exactly what they will receive, bringing delight and anticipation.

*Community* involves creating communication bonds with customers and fostering a place for collaboration among members.

#### 2.4.2 Managerial Relevance

According to Correlation Analysis, seven out of nine variables positively influence Intention to subscribe. Therefore, companies should pay attention on those factors in planning business models and marketing strategies.

- 1. **Emphasize Performance and Utility:** Center marketing messaging around the food delivery service is time-saving and health-promoting qualities.
- 2. **Promote Variety and Pleasure:** To draw clients looking for exciting and enjoyable eating experiences, highlight the variety and pleasure of meals.
- 3. **Leverage Social Proof:** To increase your social influence, use recommendation programs and influencers on social media.
- 4. **Competitive Pricing:** Make sure your pricing tactics emphasize value for money, and use specials and promotions to draw in clients that are price conscious.
- 5. **Simplify the Subscription Process:** To lower entrance barriers, make the subscription process as simple and quick as you can.
- 6. **Encourage Community Engagement**: Build community elements into the app and improve social media communication to encourage and uplift users—especially those who are eating healthily.
- 7. **Offer Personalization:** Give clients the ability to alter their meal plans in accordance with their calorie needs and dietary preferences. Construct systems that make recommendations.
- 8. **Use Predefined Subscriptions type** with personalization and low surprise. The specific of this model is convenience. You also can offer to deliver ready meal or you can offer the pre-packaged boxes with ingredients required to prepare a particular cuisine.

After the multiple regression analysis, we defined three main factors that make influence together on Intention variable. These factors warrant special attention from companies.

In order to attract customers by **Price Value** emphasize the financial advantages of your offering. To demonstrate savings, compare prices with going grocery shopping and eating out. Implement dynamic pricing strategies like time-limited offers, seasonal discounts, and membership benefits to attract various customer segments.

In order to enhance **Social Influence**, encourage happy customers to leave reviews and share their experiences on social media and review sites. Create recommendation system where

members can benefit from inviting friends. Partner with influencers who resonate with your target audience to enhance your brand's credibility and expand your reach.

You should highlight **Performance Expectancy** of your offer by communicating clearly how your service saves customers time in meal planning, shopping, and cooking. Also, you should highlight the high-quality ingredients and balanced nutrition your service offers.

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#### **APPENDIX**

#### **Questionnaire**

Performance expectancy

### H1 Utilitarian expectation positively affects Intention to Subscribe.

- 1.1 Subscription-based meals will significantly save time on cooking and cleaning
- 1.2 Using the subscription food service can improve the quality of my eating.
- 1.3 Using this service will help me to better monitor my weight.

### Effort Expectancy

### H2 Effort Expectancy positively affects Intention to Subscribe.

- 2.1 It's easy for me to subscribe via a website or an app.
- 2.2 I believe it won't take long to subscribe.
- 2.3 It's not difficult for me to receive food from a courier every two days.

#### Social influence

#### H3 Social influence positively affects Intention to Subscribe.

- 3.1 I would try a subscription if my friends or colleagues advised me.
- 3.2 Having a subscription to food indicates a high social status.

#### Hedonic expectation

### H4 Hedonic expectation positively affects Intention to Subscribe.

- 4.1 I will enjoy the fact that the service will allow me to eat more varied.
- 4.2 I will enjoy being able to try new dishes.
- 4.3 I will enjoy using the food delivery service.

#### Price Value

#### H5 Price Value positively affects Intention to Subscribe.

- 5.1 It is important to me that the price for a food subscription is favorable.
- 5.2 I believe that price for a food subscription is favorable.

#### Habit

#### H6 Habit positively affects Intention to Subscribe.

- 6.1 I often order ready-made food at home.
- 6.2 I often order food delivery at home.
- 6.3 How many subscriptions do you have to other services (not just food)

#### Personalization

### H7 Personalization positively affects Intention to Subscribe.

- 7.1 It is important to me that I can choose the number of calories in the dishes.
- 7.2 It is important to me that I can add and remove products in dishes.
- 7.3 It is important for me that the app recommends dishes to me based on my interests.
- 7.4 It is important to me that I choose which dishes will be delivered to me.

### Surprise

#### H8 Surprise positively affects Intention to Subscribe.

- 8.1 I like it when I do not know what kind of food will be in the delivery.
- 8.2 I would like several times a week not to know which dish I will receive.
- 8.3 I would like to receive small additional surprises.

### **Community**

#### H9 Community positively affects Intention to Subscribe.

- 9.1 I would like to join the community to discuss food-related topics
- 9.2 A community of people who also want to eat healthy will help me achieve my goal.
- 9.3 I would like to Join the community through the Food subscription app.

#### Intention to Subscribe

11.1 I would like to subscribe to a meal delivery service.

### Demographic questions

#### 12 Gender

- 1. Male
- 2. Female

# 13 Age:

- 1. Less than 18
- 2. 18-24
- 3. 25-34
- 4. 35-44
- 5. 45-54
- 6. 55-64
- 7. 65 and older

#### 14 Income

- 1. I am barely scraping by. I even do not have enough money for food.
- 2. I have money for food, but purchase of clothes is problematic.
- 3. I have money for food and clothes, but purchase of goods of long using (the new refrigerator or the TV) is difficult.
- 4. I can easily purchase durable goods, but it is difficult to buy really expensive things, such as cars or cottages.
- 5. I can afford to buy quite expensive things: apartment, cottage, much more.

#### 15 Place of residence

- 1. Moscow
- 2. Saint Petersburg
- 3. City with a population of one million or more
- 4. City with a population of less than one million people
- 5. Village or rural area

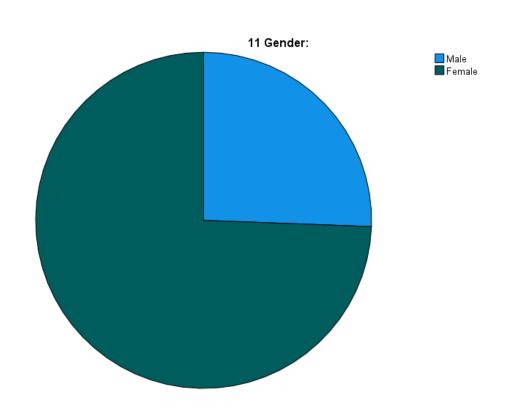
# **Descriptive Statistics**

**Statistics** 

		11 Gender:	12 Age	13 Income	14 Place of residence
Ν	Valid	211	211	211	211
	Missing	0	0	0	0
Mean		1,74	2,67	3,38	2,50
Mediar	n	2,00	2,00	3,00	2,00
Mode		2	2	3	2

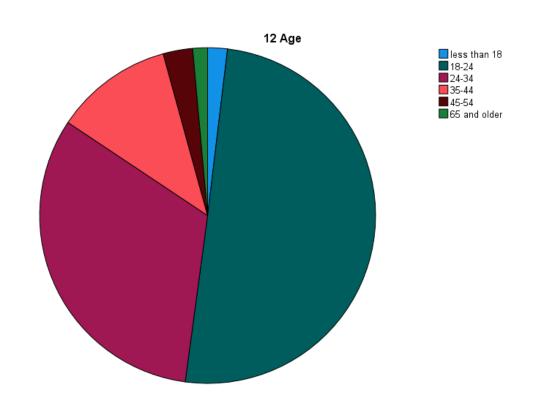
# 11 Gender:

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	54	25,6	25,6	25,6
	Female	157	74,4	74,4	100,0
	Total	211	100,0	100,0	



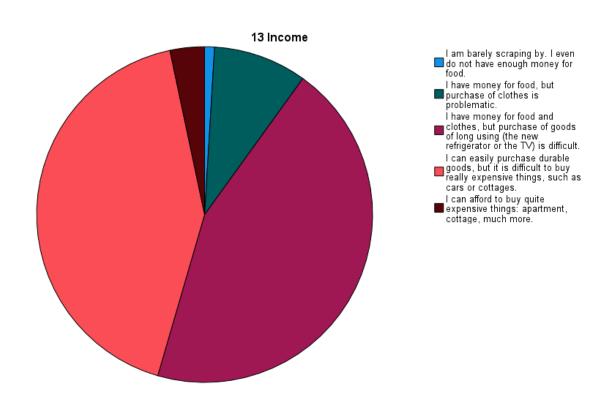
12 Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	less than 18	4	1,9	1,9	1,9
	18-24	106	50,2	50,2	52,1
	24-34	68	32,2	32,2	84,4
	35-44	24	11,4	11,4	95,7
	45-54	6	2,8	2,8	98,6
	65 and older	3	1,4	1,4	100,0
	Total	211	100,0	100,0	



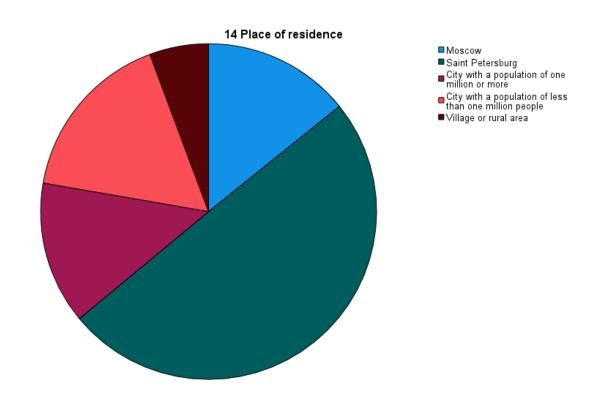
# 13 Income

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I am barely scraping by. I even do not have enough money for food.	2	,9	,9	,9
	I have money for food, but purchase of clothes is problematic.	19	9,0	9,0	10,0
	I have money for food and clothes, but purchase of goods of long using (the new refrigerator or the TV) is difficult.	94	44,5	44,5	54,5
	I can easily purchase durable goods, but it is difficult to buy really expensive things, such as cars or cottages.	89	42,2	42,2	96,7
	I can afford to buy quite expensive things: apartment, cottage, much more.	7	3,3	3,3	100,0
	Total	211	100,0	100,0	



# 14 Place of residence

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Moscow	30	14,2	14,2	14,2
	Saint Petersburg	105	49,8	49,8	64,0
	City with a population of one million or more	29	13,7	13,7	77,7
	City with a population of less than one million people	35	16,6	16,6	94,3
	Village or rural area	12	5,7	5,7	100,0
	Total	211	100,0	100,0	



#### Descriptive Statistics

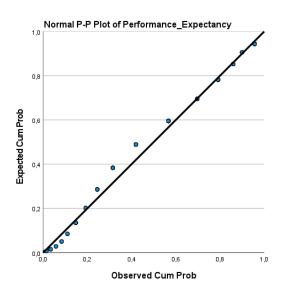
	Desci	riptive Sta	tistics		
	N	Minimum	Maximum	Mean	Std. Deviation
Subscription-based meals will significantly save time on cooking and cleaning	211	1	7	5,97	1,281
1.2 Using the subscription food service can improve the quality of my eating.	211	1	7	4,62	1,567
1.3 Using this service will help me to better monitor my weight.	211	1	7	4,52	1,738
2.1 It's easy for me to subscribe via a website or an app.	211	1	7	5,73	1,570
2.2I believe it won't take long to subscribe.	211	1	7	5,87	1,407
2.3 It's not difficult for me to receive food from a courier every two days.	211	1	7	4,89	1,752
3.1 I would try a subscription if my friends or colleagues advised me.	211	1	7	4,31	1,697
3.2 Having a subscription to food indicates a high social status.	211	1	7	3,52	1,955
4.1 I will enjoy the fact that the service will allow me to eat more varied.	211	1	7	5,18	1,612
4.2 I will enjoy being able to try new dishes.	211	1	7	5,58	1,416
4.3 I will enjoy using the food delivery service.	211	1	7	4,55	1,627
5.1 It is important to me that the price for a food subscription is favorable.	184	1	7	6,05	1,350
5.2 I believe that price for a food subscription is favorable.	211	1	7	3,91	1,492
6.1 I often order ready- made food at home	211	1	7	3,76	1,996
6.2 I often order food delivery at home.	211	1	7	3,90	2,312
6.3 How many subscriptions do you have to other services (not just food)?	211	0	3	1,57	1,037
7.1 It is important to me that I can choose the number of calories in the dishes.	211	1	7	4,23	2,153
7.2 It is important to me that I can add and remove products in dishes.	211	1	7	5,52	1,725
7.3 It is important for me that the app recommends dishes to me based on my interests.	211	1	7	5,53	1,544
7.4 It is important to me that I choose which dishes will be delivered to me.	211	1	7	6,22	1,184
8.1 I like it when I do not know what kind of food will be in the delivery.	211	1	7	2,97	1,991
8.2 I would like several times a week not to know which dish I will receive.	211	1	7	3,33	2,170
8.3 I would like to receive small additional surprises.	211	1	7	5,82	1,559
9.1 I would like to join the community to discuss food-related topics	211	1	7	2,79	1,924
9.2 A community of people who also want to eat healthy will help me achieve my goal.	211	1	7	3,45	2,052
9.3 I would like to Join the community through a food subscription app.	211	1	7	2,79	1,956
10.1 I would like to subscribe to a meal delivery service.	211	1	7	3,72	1,930
Valid N (listwise)	184				

# **Descriptive Statistics**

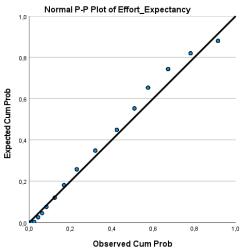
	N	Minimum	Maximum	Mean	Std. Deviation
Performance_Expectancy	211	1,33	7,00	5,0348	1,23864
Effort_Expectancy	211	1,00	7,00	5,4976	1,27631
Social_influence	211	1,00	7,00	3,9123	1,48745
Hedonic_expectation	211	1,00	7,00	5,1058	1,34867
Price_Value	184	1,00	7,00	4,9674	1,06305
Habit	211	,67	5,67	3,0758	1,38913
Personalization	211	1,00	7,00	5,3744	1,21287
Surprise_var	211	1,00	7,00	4,0411	1,44654
Community	211	1,00	7,00	3,0095	1,77696
Intention	211	1,00	7,00	3,7204	1,93034
Valid N (listwise)	184				

# P-P plot charts

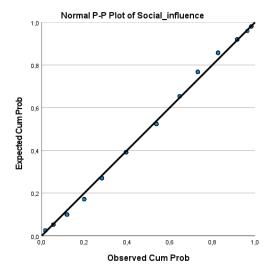
# **Performance Expectancy**



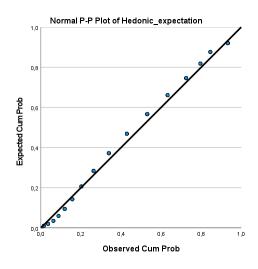
# **Effort Expectancy**



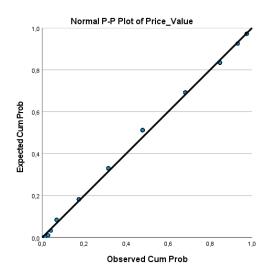
### **Social influence**



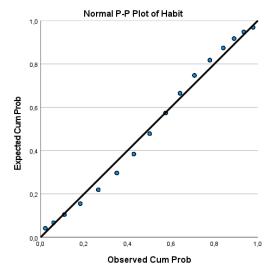
# **Hedonic expectation**



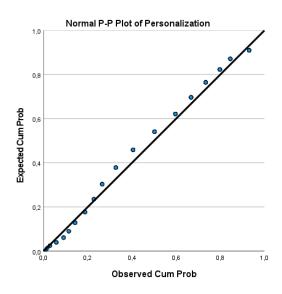
# **Price Value**



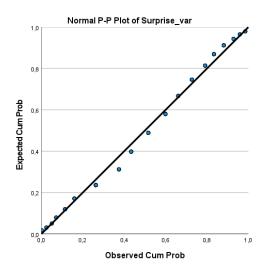
# Habit



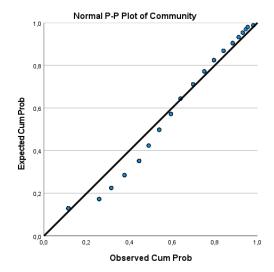
# Personalization



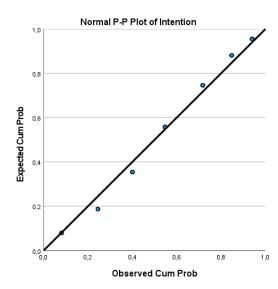
# Surprise\_var



# Community



# Intention



# **Correlation Table**

Performance_Enerthined         Figure from the performance and				ŏ	Correlations							
Expectancy   Pearson Correlation   1			Performance _Expectancy	Effort_Expect ancy	Social_influe nce	Hedonic_exp ectation	Price_Value	Habit	Personalizati on	Surprise_var	Community	Intention
Sign C-bailed)   Sign	Performance_Expectancy	Pearson Correlation	-	778,	**497	E09'	,485	.195	,375	.,218	,223	.537**
Page charry		Sig. (2-tailed)		<,001	>,001	<,001	<,001	500'	<,001	,000	100,	<,001
Expectancy   Pearson Correlation   377"   1		z	211	211	211	211	184	211	211	211	211	211
Sign Citatienth	Effort_Expectancy	Pearson Correlation	,377	-	,294	,319***	,417***	,160	,229	1/0,	,122	,357
National Plants		Sig. (2-tailed)	>,001		<,001	<,001	>,001	,020	<,001	308	870,	<,001
		z	211	211	211	211	184	211	211	211	211	211
Name	Social_influence	Pearson Correlation	.**5497	,294	-	065'	,267**	270,	,261	,253"	,331	.**764,
Nature Pearson Correlation 603" 319" 520" 111 184 211 211 211 211 211 211 211 211 211 21		Sig. (2-tailed)	<,001	>,001		<,001	<,001	,298	<,001	>,001	>,001	<,001
Pearson Correlation   Pearson Correlation   Fog3"   139"   159"   1495"   1495"   1495"   1589"   1598"   1598"   1598"   1598   1598"   159		z	211	211	211	211	184	211	211	211	211	211
Sig_2-talled)	Hedonic_expectation	Pearson Correlation	£09'	,319**	065'	-	,495	119	,328	,256	,253	,540
Name   Name   Pearson Correlation   Asher		Sig. (2-tailed)	<,001	<,001	>,001		<,001	,084	<,001	<,001	<,001	<,001
Value         Pearson Correlation         485"         417"         267"         495"         1         158"         311"         166"         281"           Sig. (2-failed)         <,001		z	211	211	211	211	184	211	211	211	211	211
Sig. 2-tailed)	Price_Value	Pearson Correlation	,485	,417**	,267**	,495***	-	,158	,311**	,166	,281	005
Name         184 <td></td> <td>Sig. (2-tailed)</td> <td>&gt;,001</td> <td>&lt;,001</td> <td>&gt;,001</td> <td>&lt;,001</td> <td></td> <td>,032</td> <td>&lt;,001</td> <td>,024</td> <td>&lt;,001</td> <td>&lt;,001</td>		Sig. (2-tailed)	>,001	<,001	>,001	<,001		,032	<,001	,024	<,001	<,001
Pearson Correlation         '196"         ',160"         ',072         ',198         ',188"         1         ',188"         1         ',188"         -,039         -,039         ',084         ',032         -,036         -,039         -,037         -,034         -,032         -,032         -,032         -,032         -,032         -,034         -,034		z	184	184	184	184	184	184	184	184	184	184
Sig. (2-tailed)         ,006         ,020         ,084         ,084         ,032         ,086         ,084         ,084         ,032         ,086         ,198         ,613         ,613         ,613         ,613         ,613         ,613         ,613         ,613         ,613         ,613         ,614         ,611	Habit	Pearson Correlation	.195	,160*	,072	,119	,158	-	.188	680'-	-,035	,120
National Nat		Sig. (2-tailed)	500'	,020	,298	,084	,032		900'	198	,613	,082
Jeating Pearson Correlation         ,375"         ,261"         ,281"         ,311"         ,188"         1         ,662         ,317"         ,188"         ,189"         ,189"         ,189"         ,189"		z	211	211	211	211	184	211	211	211	211	211
Sig. (2-tailed)         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         0,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001	Personalization	Pearson Correlation	.375,	,229	,261***	,328"	,311***	.188	-	,052	,317	,316"
Var         Pearson Correlation         .211         .211         .214         .214         .214         .214         .214         .214         .214         .214         .214         .214         .217         .217         .217         .217         .217         .226         .166        089         .052         .1         .237"         .237"         .237"         .237"         .237"         .237"         .237"         .237"         .237"         .237"         .237"         .237"         .231		Sig. (2-tailed)	>,001	<,001	<,001	<,001	<,001	900'		,448	>,001	<,001
Var         Pearson Correlation         ,218"         ,071         ,255"         ,166"         ,166"         ,168"         ,166"         ,168"         ,168"         ,168"         ,168"         ,178         <		Z	211	211	211	211	184	211	211	211	211	211
Sig. (2-tailed)         ,001         ,308         <,001         <,001         <,001         ,024         ,198         ,448         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001	Surprise_var	Pearson Correlation	,218	170,	,253	,256	,166	680'-	,052	-	,237	060'
Notation Notation 211 211 211 211 184 211 211 211 211 211 211 211 211 211 21		Sig. (2-tailed)	100,	308,	>,001	<,001	,024	198	,448		<,001	,193
N         Pearson Correlation         ,223"         ,122         ,281"         ,281"         -,035         ,317"         ,237"         1           Sig. (2-tailed)         ,001         ,078         <,001		z	211	211	211	211	184	211	211	211	211	211
Sig. (2-tailed)         ,001         ,078         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001         <,001	Community	Pearson Correlation	,223	,122	,331	,253**	,281***	-,035	,317**	,237**	-	,348"
N         211         211         211         184         211		Sig. (2-tailed)	100,	870,	<,001	<,001	<,001	,613	<,001	>,001		<,001
Pearson Correlation         ,537**         ,357**         ,497**         ,540**         ,500**         ,120         ,316**         ,090         ,348**           Sig. (2-tailed)         <,001		z	211	211	211	211	184	211	211	211	211	211
9. (2-tailed) <,001 <,001 <,001 <,001 <,001 (0.02) (0.01) (0.02) (0.01) (0.02) (0.01) (0.02) (0.01) (0.02)	Intention	Pearson Correlation		,357	,497	,540***	005'	,120	,316	060'	,348	-
211 211 211 211 211 211 211 211		Sig. (2-tailed)	<,001	<,001	>,001	<,001	<,001	,082	<,001	,193	<,001	
		z	211	211	211	211	184	211	211	211	211	211

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

<sup>65</sup>