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Challenges of the Fast Fashion Industry and Sustainable Development Initiatives in Georgia

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Abstract

The two main hubs of the first industrial revolution were agriculture and textiles. This is where the intersection of fashion and economics begins (Industrial Revolution 1.0). The fashion industry is a segment of business that has become increasingly diverse and high-budgeted over the years.

The paper reviews the social and ecological aspects of clothing fashion, current barriers, and forecasts. Particular emphasis is placed on the challenges of achieving a balance between the profitability of the fashion industry and the observance of environmental norms.

The rise of "fast fashion" has transformed the global clothing industry. Although Georgia does not have a strong fashion sector, its clothing market remains important. This article discusses the impact of clothing costs on the Georgian economy, focusing on consumer behavior and market trends.

The research methodology is a bibliographic analysis of world sources, a quantitative study conducted by the authors to examine the preferences of the Georgian population with the variability of the fashion industry.

We have also used the Denton-Cholet method to turn annual data into quarterly intervals, which reinforces economic analysis.

We have selected "fast fashion" as the focus of the study. The reason for selecting this focus is the current main challenge, as it is within the framework of "fast fashion" that non-friendly clothing is made in harmful ways for the environment, the price and quality of which are quite low. In quantitative research, the sampling volume was determined by G. Based on the methodology developed by Cochran.

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Introduction

The "fast fashion" industry has successfully conquered much of the clothing market in the last decade. Demand for fast-growing fashion products is growing at a high rate, as evidenced by the large consumer spending on clothing by the population, so the level of competition in this industry is high.

In the context of globalization, the main concept of the clothing fashion industry is seen as a combination of design, manufacturing, and marketing processes that focus on delivering clothes quickly, cheaply, and in large quantities to the population. The retail chain responds to the demand of customers with different incomes for brands with the rapid delivery of new design clothes. Consumer behavior is influenced by various factors, such as historical, economic, political, social, and other factors, which were brought about by the four industrial revolutions over the years. (Kharaishvili E., Lobzhanidze N. 2023) [25].

The lifestyle of consumers and the perception of the fashion world have undergone a significant transformation. Low prices, revenue growth, constant changes in demand, access to new design brands, the rapid introduction of new lines by the fast-growing retail chain, and other factors contribute to impulsive purchases by the population, maximizing overall sales volume.

"fast fashion" features include frequent product consumption, high impulsive purchases, short life cycles, and low prices. Due to these characteristics, the consequences of the negative impact on the environment of the "fast fashion" industry have increased significantly in recent times. The need to avoid linear production and move to a circular economy approach is already on the agenda in the fast-paced fashion industry, which is also in line with the goals of industrial ecology. The urgency of the problem has led to the need to study consumer demand and behavioral characteristics in the products of the "fast fashion" industry in Georgia.

The aim of the research: The study aims to study the trends and challenges of the fashion industry in the example of Georgia and to develop recommendations on its development directions.

Research Methodology: The paper uses bibliographic research, analysis, induction, comparison, expert, factor, and other methods; Quantitative research has been conducted; The bases of the National Department of Statistics of Georgia and the International Statistical Data are analyzed. Used in auto.arima function R to evaluate the ARIMA model. ARIMA model predicts sustainable growth in Georgia's clothing production sector. Stakeholders should be vigilant against the backdrop of potential external changes.

Background Literature Review

Scientists are analyzing the phenomenon of the fashion industry, focusing on the driving factors of competitiveness in this market. In terms of consumer behavior, the attitudes of young generations to fashion industry trends have been studied. Particular attention is paid to sustainability issues and the application of the principles of a circular economy (Patrizia Gazzola, Enrica Pavione, Roberta Pezzetti, Daniele Grechi, 2020) [13].

Studies show the effects of a pandemic on the "fast fashion" world, suggest future development strategies during the post-pandemic period, and justify the growth of sales through online social media platforms such as Instagram, online stores, and e-commerce websites (Kavita Patil, 2021) [14].

The fashion industry has one of the most negative effects on the emission of thermal gases and climate change. Scientists are exploring opportunities, trends, and directions for sustainable fashion (SF) development. Particular emphasis is placed on the peculiarities of consumer behavior, and ways of buying and using. Also, the introduction of a circular economy and sustainability-oriented innovations is a necessity (Subhasis Ray. Lipsa Nayak, 2023).

Today, there is an active discussion about the problems of reducing the negative impact in specific industries. Scientists are researching waste problems in the unscrupulous fashion industry (VR Sampath, SVITT, Shri Vaishnav Institute of Science, SVVV, Indore, 2023).

In the "fast fashion" industry, it is important to gain the trust of consumers. Studying consumer behavior in this regard will help increase the supply of clothing suitable for the market. Scientists are looking for the answer to the question of what motives affect consumer behavior when buying "fast fashion" clothes (Ramratan Guru, sushil Kumar (2023).

It has been studied that quality is important for consumers in general in the procurement process (Talikadze Nino, Kharaishvili Eter, 2022) [18] "fast fashion" is a model of the clothing supply chain that responds quickly to news. Fashion trends are rapidly reflected in the frequent renewal of clothing in large shopping malls, which could ultimately jeopardize ecological and social values. Identifying and assessing economic and social challenges based on sustainability principles in the "fast fashion" industry is still a significant problem today (Bahareh Zamani, 2016).

There are many challenges to sustainable development today in terms of "fast fashion" production. Despite the many harmful effects on the environment, the demand for "fast fashion" is growing. Therefore, studying the challenges facing sustainable fashion brands is a priority (Sushil Kumar, Ramratan Guru (2023).

It is necessary to develop strategies to maintain a profitable position in a more demanding market. From this point of view, "fast fashion" is considered from the perspective of both the supplier and the customer (Vertica Bhardwaj, Ann Fairhurst. 2010) [21]. Fashion, in a global society, is inseparable from trends. Consumers update their wardrobes according to rapidly changing fashion trends, getting "fast fashion" clothes at an affordable price in a short time (Ni Kadek Yuni Diantari, 2021).

Globalization has played a major role in the fashion industry. One of the trends in the impact of globalization on rapid fashion is that clothing has become more accessible to consumers around the world. However, the correlation between fashion and globalization is a complex and multidimensional phenomenon, and requires appropriate research to expand the "fast fashion" industry (Victoria Ledezma, 2017) [23].

With "fast fashion", cheap and widely available modern clothing has changed the way people buy and dispose of these products. By selling large quantities of clothing at low prices, "fast fashion" has become the dominant business model, which in turn has led to an increase in demand for clothing. This transformation is sometimes seen as fashion "democratization" as the latest style has become available to all classes of users. However, due to the short life cycle of clothing, this process is accompanied by high risks of negative impact on the environment. The process of democratization of the "fast fashion" industry " should be considered taking into account environmental and social costs. Scientists argue that negative external factors have created a dilemma of global environmental justice at each stage of the "fast fashion" supply chain. Based on this, the authors are complexly considering the role of industry, policymakers, consumers, and scientists through sustainable production and ethical consumption. (Rachel Bick, Erika Halsey, Christine C. Ekenga, 2018) [24].

Scientists are particularly emphasizing the importance of achieving a balance between the profitability of the fashion industry and the observance of environmental norms (Kharaishvili E., Lobzhanidze N. 2023) [25].

Global Clothing Market

The clothing market includes all kinds of clothing, from sportswear to business clothing, from expensive clothing to luxury items. Since the market recovered in 2021 from the influence of the Coronavirus (COVID-19) pandemic, high inflation in 2022 has created more difficulties for the global clothing industry. Production costs have risen and consumer confidence has fallen. Global clothing market revenue in 2022 was \$ 1.53 trillion, down slightly from the previous year. In 2023, however, more than \$ 1.7 trillion in revenue was expected to increase. Countries that make up the majority of clothing demand are the United States and China, both of which generate substantially higher incomes than any other country. Perhaps it is not surprising that the two named countries play an important role in international trade. In 2021, China had the highest value of clothing exports. At the cost of importing clothing, the United States was second only to the European Union. Revenues from the women's clothing market are much higher than men's or children's clothing. In the United States alone, women's clothing generated about \$ 163 billion in revenue. That's more than the U.S. men's and children's markets together. There are many sections in the clothing industry, many of which coincide. One of the most distinctive is the used clothing industry, which is likely to grow as consumer demand for environmentally friendly clothing options increases. The luxury market is also a key market in the clothing industry; It is projected to double from 2022 to 2028 (Sky Ariella, 2023) [12].

According to Fashion United, the industry has 3,384.1 million jobs. Its value is equal to \$ 3 trillion. This means that it corresponds to 2% of the world's gross domestic product (GDP) (Fashion United).

The fashion industry continues to grow positively, especially in emerging markets in the Western, Asian, and European regions. As for the exclusively Asian market, last year a 38% share of world clothing demand was projected (Statista).

From a wide range of views, 3,000 billion textile and sewing companies enter the market every day. Most of these companies remain unknown to most consumers. Still, that doesn't mean they don't gain popularity in society.

Among the world's leading exporters of clothing are China and EU countries, with a corresponding 32.8% and 28.1%, followed by Bangladesh, Vietnam, Turkey, India, Malaysia, the United Kingdom and Indonesia (Statista). As for the world's leading clothing importing countries, in this case, the leading EU and the United States, followed by Japan, Great Britain, China, Canada, the Republic of Korea, the Russian Federation, Switzerland, and Australia (Statista).

Although profitable and massive, the clothing market has historically been environmentally friendly. The following facts show:

- The fashion industry accounts for about 10% of humanity's carbon emissions.
- 85% of all tissue is found in landfills each year.
- 57% of all thrown clothes eventually go to the landfill. One garbage truck full of clothes is thrown at either a

- landfill or burned every second.
- Synthetic clothing materials are responsible for 35% of plastic microbes in the ocean.
- 3781 liters of water are needed to make jeans pants from start to finish.
- The process of making one jeans allocates about 33.4 kilograms of carbon equivalent. Through similar processes, the fashion industry uses about 93 billion cubic meters of water each year (Kovaleski, 2023) [3].

The impact of the pandemic on the fashion industry should also be noted. COVID-19 has negatively affected the success of the clothing market. It was one of the most affected industries during the pandemic, namely retail sales in clothing and fashion stores fell by 28.5%, the biggest drop in all time in the retail industry to date.

However, e-commerce has given hope to the world of fashion. Over the past decade or more, e-commerce has grown greatly in popularity, and it has changed the way consumers buy. In many ways, this has given new life to the fashion and clothing industry. In addition, some ecologically unsustainable ways of the fashion industry may disappear. The fashion industry, despite the barriers described above, is undoubtedly growing at a positive pace, by 5.46% since 2017. However, there are forecasts for higher growth rates in 2020-2022. The global fashion market is expected to see a 5.5% annual growth rate from 2020 to 2025 (CAGR) (Sky Ariella, 2023) [12].

Methodology

Justification based on the Time Series Analysis

The global clothing industry has undergone significant transformation in recent years, driven largely by the rise of "fast fashion". While Georgia's clothing market may not boast a robust "fast fashion" sector, it remains a crucial component of the country's retail landscape. This analysis aims to explore the impact of clothing expenditures on Georgia's economy, focusing on consumer behavior and market trends. Despite the absence of a prominent "fast fashion" presence, understanding the potential implications of "fast fashion" growth is essential for stakeholders in Georgia's clothing industry.

Effective economic analysis requires timely and granular data. To achieve this, we employ the Denton-Cholette method to transform annual data into quarterly intervals. This method enhances granularity, facilitates smoother time series modeling, and provides more timely insights into economic trends. By leveraging this approach, we aim to gain a comprehensive understanding of the dynamics shaping Georgia's clothing manufacturing sector.

As part of our research on the textile industry in Georgia, we have obtained quarterly data on clothing manufacturing spanning several years. Before performing ARIMA estimation using the **auto.arima** function in R, we conducted a thorough analysis of the time series to inform our modeling approach.

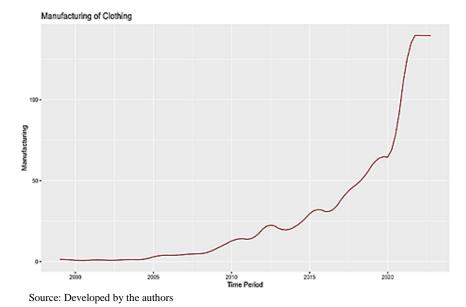


Fig 1: Manufacturing of Clothing

Upon initial examination, we observe a distinct upward trend in the series, most notably post-2010. The data from 2000 to 2005 shows a relatively stable manufacturing index, which then enters a phase of gradual increase until around 2010. After this point, the manufacturing activity experiences a significant and sustained surge. This pattern suggests an expanding textile sector, which may be attributed to economic, policy, or market changes within the country.

The quarterly nature of the data necessitates a careful consideration of seasonal effects. Although the visual representation does not immediately indicate a strong seasonal pattern, the potential for underlying seasonal effects cannot be disregarded without a more sophisticated analysis. These effects could be linked to fashion cycles, harvest periods for raw materials, or festive seasons affecting production and sales.

Cyclical fluctuations are less apparent, although some minor oscillations are observed between periods of growth. These could be related to broader economic conditions or industry-specific factors that influence production volumes.

In terms of volatility, the series shows some variations in the manufacturing index's growth rate, particularly in the latter years where there appears to be a sharp increase. This indicates a possible change in variance, which we will need to account for in our ARIMA modeling to ensure that our forecasts are robust and reliable.

In brief, analysis of clothing manufacturing data in Georgia reveals a significant post-2010 uptrend, suggesting robust textile sector growth. While stability is noted from 2000 to 2005, gradual increases precede this surge, indicating shifting economic dynamics. Seasonal effects, though not immediately apparent, warrant consideration given the quarterly data. Minor cyclical fluctuations, likely tied to broader economic conditions, are observed. Variations in growth rate imply changing volatility, requiring careful consideration in ARIMA modeling for reliable forecasts. These insights are vital for informed decision-making in Georgia's clothing manufacturing industry.

The ARIMA model formula expresses the relationship between a time series and its lagged values, as well as the forecast errors. In R.

The general formula for an ARIMA(p, d, q) model can be

written as:

$$\begin{aligned} Y_t &= c + \phi_1 Y_{t-1} + \phi_2 Y_{t-2} + \ldots + \phi_p Y_{t-p} - \theta_1 \epsilon_{t-1} \\ &- \theta_2 \epsilon_{t-2} - \ldots - \theta_q \epsilon_{t-q} + \epsilon_t \end{aligned}$$

Where:

- Y_t is the value of the time series at time t.
- c is a constant term.
- *p* is the autoregressive order, representing the number of lagged observations included in the mode
- *d* is the differencing order, indicating the number of times the series needs to be differenced to achieve stationarity.
- *q* is the moving average order, representing the number of lagged forecast errors included in the model.
- $\phi_1, \phi_2, \dots, \phi_p$ are the autoregressive coefficients.
- $\theta_1, \theta_2, \dots, \theta_q$ are the moving average coefficients.
- ϵ_t represents the white noise error term at time t.

This formula captures the relationship between the current value of the time series (Y_t) and its past values $(Y_{t-1}, Y_{t-2}, \ldots, Y_{t-p})$, as well as the past forecast errors $(\epsilon_{t-1}, \epsilon_{t-2}, \ldots, \epsilon_{t-q})$, with appropriate coefficients. The constant term c accounts for any overall trend or bias in the data.

AutoARIMA, short for Automatic AutoRegressive Integrated Moving Average, is a powerful and widely used algorithm in time series analysis and forecasting. Developed based on the Box-Jenkins methodology, AutoARIMA automates the process of identifying the optimal parameters for an ARIMA model, which includes the orders of differencing, autoregression, and moving average.

This algorithm is particularly valuable in research settings where time series data is abundant but selecting appropriate ARIMA parameters manually can be time-consuming and prone to error. By leveraging algorithms such as AutoARIMA, researchers can efficiently build robust and accurate forecasting models without requiring in-depth expertise in time series analysis.

AutoARIMA works by systematically testing different combinations of ARIMA parameters and selecting the model

that minimizes a chosen criterion, often the Akaike Information Criterion (AIC) or the Bayesian Information Criterion (BIC). This approach helps researchers identify the simplest model that adequately captures the underlying patterns and dynamics in the data, thereby facilitating more accurate forecasts.

```
## Series: df$C
## ARIMA(2,2,1)(1,0,0)[4]
##
## Coefficients:
##
       ar1 ar2
                 ma1 sar1
##
      1.673 -0.806 -0.882 -0.783
## s.e. 0.082 0.068 0.078 0.067
##
## sigma^2 = 0.531: log likelihood = -104.48
## AIC=218.96 AICc=219.64 BIC=231.68
## Training set error measures:
##
             ME RMSE
                          MAE
                                   MPE MAPE
MASE
         ACF1
## Training set 0.082692 0.70566 0.29697 0.65593
1.3499 0.047622 -0.066664
```

Model Parameters Interpretation:

The significant coefficients for the AR, MA, and seasonal AR terms (1.673, -0.806, -0.882, and -0.783 respectively) indicate that the model captures the autocorrelation and seasonality patterns present in the data.

Log Likelihood and Information Criteria:

The negative log likelihood (-104.48) and low values of AIC (218.96), AICc (219.64), and BIC (231.68) indicate a relatively good fit of the model to the data compared to alternative models.

Residuals Variability

The estimated variance of the residuals (sigma 2 = 0.531) suggests a moderate level of variability in the observations around the fitted values.

Training Set Error Measures

The mean error (ME = 0.082692), root mean squared error (RMSE = 0.70566), and mean absolute error (MAE = 0.29697) provide insight into the accuracy of the forecasts. The moderate values indicate a reasonable level of accuracy, although there is a slight positive bias in the forecasts (ME = 0.082692).

Mean Absolute Scaled Error (MASE):

The MASE value (0.047622) suggests that the ARIMA model outperforms a naive forecast, indicating improved forecasting accuracy compared to simple methods.

Autocorrelation in Residuals

The first-order autocorrelation coefficient (ACF1 = 0.066664) being close to zero suggests that there is no significant autocorrelation remaining in the residuals after modeling. Based on the analysis, the ARIMA model (ARIMA (2,2,1) (1,0,0) [4]) demonstrates satisfactory performance for modeling the Manufacturing of Clothing time series data. The model captures the underlying patterns well, as evidenced by the significant parameters and low information criteria values. While there is room for improvement, the model provides reasonably accurate forecasts, with further validation recommended on a holdout dataset.

Validation of the ARIMA model is crucial for ensuring the reliability and accuracy of forecasts. Our diagnostic checks provide confidence in the model's performance, indicating its suitability for forecasting clothing manufacturing sales in Georgia. However, it's essential to remain vigilant for potential limitations and external factors that may impact the model's predictive power.

The ARIMA model forecasts sustained growth in Georgia's clothing manufacturing sector, providing valuable insights for stakeholders and policymakers. While these forecasts offer optimism for the industry's future, it's crucial to recognize the inherent uncertainties and assumptions underlying the model. Stakeholders should remain adaptive and responsive to changes in market conditions, ensuring resilience and sustainability in the face of potential challenges.

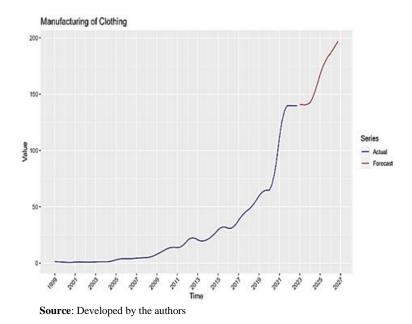


Fig 2: Manufacturing of Clothing (Forecast)

In conclusion, our analysis offers valuable insights into the dynamics of Georgia's clothing manufacturing sector. The Denton-Cholette method and ARIMA modeling provide robust tools for understanding economic trends and forecasting future sales. While the forecasts signal positive prospects for the industry, stakeholders must remain vigilant and adaptive to navigate the complexities of the clothing market effectively.

Ouantitative Research Results - Georgian Clothing Market Discusiion

According to 2022 data, 10,547 people were employed in clothing production in Georgia. And as of the third quarter of 2023, 8,592 people are employed in this field. Which is 0.6% of the total number of employees.

The added value created in the production of clothing in 2022 amounted to 200.9 mln of GEL, which is a 44% increase compared to 2021. At the same time, the production of clothing in the total output of the economy amounted to 641.4 mln of GEL, which is 9% more than in the previous year. The total output for the three quarters of 2023 was 427.8 mln of GEL. Unfortunately, the rate of labor production (production output / average annual number of employees) in clothing production is low, and it is 0.05, which should be considered a challenge. Remuneration in clothing production in 2022 amounted to 936.8 GEL. It should be noted that the section in the field of manufacturing industry has one of the low wages, although in the third quarter of 2023, the situation is improved and relative growth is recorded, in particular, 1,139.8 GEL is defined as compensation. In this regard, the financial result of the enterprises engaged in the production of clothes in Georgia is interesting. In 2022, for example, the profit was 85 mln of GEL, and the loss was 17.5 mln of GEL. Compared to 2021, profits have increased by 133%, which is a sign that this area has recovered after the pandemic. At the same time, the average monthly expenditure of households on clothing per household in 2022 was 26.5 GEL, and in 2021 it was 19.0 (39% increase), and in one per capita it was 7.9 GEL and 5.7 GEL (39% increase) (Geostat).

As part of the work on the paper, a quantitative study was conducted in August-September 2023. The main goal was to identify the preferences of the Georgian population based on the trends in the fashion industry. Particular attention was paid to "fast fashion" to reveal population awareness levels. Quantitative research was conducted in August-September 2023. 324 respondents were interviewed based on the Google Form online questionnaire. Quantitative research data allowed us to do descriptive (descriptive) analysis. The questionnaire included sections identification, for competencies, practical and evaluation. In addition, open, discussion questions were offered. 25.6% of respondents are women and 74.4% are men. Among respondents, young people (19-25 years) lead by 47.5. The share of the next generation of representatives is equally distributed. Based on the above, the rate of student involvement in quantitative research is high, namely 46.3%.

The level of brand awareness was assessed as part of the study. It has been found that consumers in the local market prefer the following brands when buying clothes: Zara 50.9%, Waikiki 42.3%, H&M 34.6%, Mango 23.8%, Bershka 20.1%, The New Yorker 16.7%, Stradivarius 14.5%, Pull &3%. Other brands have also been identified as individual responses: Massimo Dutti, Terranova, Polo, Marks & Spencer and others (Figure 3).

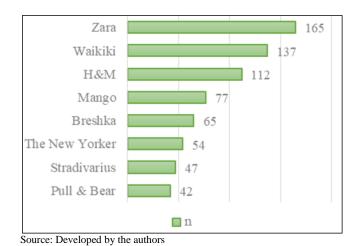


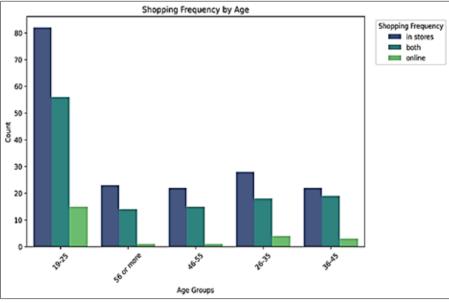
Fig 3: Respondents' configuration on the question: for the most part, which brand do you choose

The above-mentioned brand of clothing is mainly purchased in stores (54.6%), and the number of online-buying customers is relatively small (7.7%). 122 respondents (37.7%) choose to buy both of them (shops and online shopping).

Asked how often they buy "fast fashion" brands in stores, the majority of respondents (170 respondents) answered that clothes are rarely bought in stores, often bought by 125 respondents, a small part - 2.8% buy very often, and 6.2% never buy.

Unlike stores, there is less demand for online "fast fashion" brands. Through this acquisition, 107 respondents have never benefited. The majority of respondents rarely buy (150 respondents).

The study assessed the demand for secondary or vintage clothing by the population. It was found that 158 respondents rarely bought such clothes, 84 respondents - often 71 respondents never. It should be noted that 17 respondents provided their clothes to the used clothing market. The majority of respondents give up (246 respondents) or use it for charity (49 respondents). However, other answers were also recorded. In particular, storage, landfill redirection, etc.

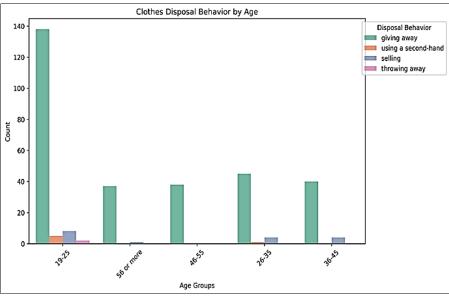


Source: Developed by the authors

Fig 4: Shopping Frequency by Age

In Figure 4 we see purchases grouped by age. It seems that in all age categories the leading position is to buy in stores.

Online purchases are high in the 19-25 age category compared to others.



Source: Developed by the authors

Fig 5: Clothes Disposal Behavior by Age

In Figure 5 we see the distribution of answers to the question of how consumers behave when they decide they no longer need clothes. In this case in all age categories. At the same time, the level of awareness of the population about the disadvantages of "fast fashion" has been determined. Three main areas have been identified: environmentally friendly (42.9%), losing brands to uniqueness (42%), and deteriorating clothing quality (33.6%). Also, one of the beneficiaries focused on the principles of sustainable development. Several of the respondents noted that "fast fashion" has no negative impact at all (Figure 3).

Given the above, a significant proportion of respondents believe that rapid fashion affects our planet and humans negatively (136 respondents), most find it difficult to respond (148 respondents), and a small part point to its positive effect (40 respondents).

Conclusion

Discussions around fashion industry issues are complex and important. Its impact on the environment, society, and the economy is enormous. Undoubtedly, the global fashion market is very profitable and employs many people around the world, but the industry does not fulfill these tasks in the most environmentally friendly way.

As our research has shown, the fashion industry is of global importance in economic, social, and other fields. However, it needs serious change. We need to continue discussions that will help increase the social environmental and economic positive impact of the sector.

A study conducted by us found that consumer choice of "fast

fashion" products is largely due to availability. The sustained growth forecasted by the ARIMA model signals positive prospects for the industry. However, stakeholders must remain vigilant and adaptive in the face of potential external changes. Factors such as new trade policies, shifts in global demand, or technological disruptions can significantly impact the sector's trajectory.

Furthermore, while the ARIMA model offers a valuable tool for forecasting, it inherently assumes that past patterns will continue. This assumption may overlook potential external shocks or structural shifts in the economy. Therefore, industry players and policymakers need to supplement quantitative analysis with qualitative insights and scenario planning.

Moreover, the limitations of the ARIMA model, such as its sensitivity to data quality and the inability to incorporate external factors directly, highlight the need for continued research and refinement. Exploring alternative modeling approaches and integrating external factors could enhance the accuracy and robustness of clothing manufacturing sales forecasts in Georgia.

Analyzing the opinions of respondents, the relevance of the research was emphasized, given the modern challenges and sustainability. In their view, as far as the pros are concerned, has a "fast fashion" and the demand from consumers is great, because defined style clothes are available at a relatively low price, so much so harms ecology that will bring unfavorable results in the long run.

Just as fashion has the power of transformation, it has the power of destruction. The key is to know how to bring its power to positive impact and bring positive change into the industry, which means a balance between maintaining profitability and adhering to environmental norms, which is ultimately one of the main missions of sustainable development through the formation of environmentally friendly sustainable fashion.

The concept of the "fast fashion" industry has a significant impact on the clothing industry. This trend will continue to persist for the next decade. Constant and complex research is needed on the problems of "fast fashion" delivery, however, the main focus is on ethical issues of consumer behavior, including clothing consumption.

"fast fashion", as a business model, causes environmental degradation and creates social problems at each stage of the supply chain. It is important to continue discussions and research to overcome the dilemma of global environmental injustice at each stage of the "fast fashion" supply chain.

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