E-commerce customer journeys

Deliverable D2.3

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Change Log

Version	Description of change
V0.1	Initial version preparation
V0.2	Internal review
V0.3	Version ready for review
V1.0	Final version, after reviews

List of abbreviations

Abbreviation/Term	Description
CA	Consortium Agreement
D	Deliverable
DOA	Description of Action
EC	European Commission
EU	European Union
GA	Grant Agreement
KPI	Key Performance Indicator
MS	Milestone
PC	Project Coordinator
PO	Project Officer
PSC	Project Steering Committee
SAB	Stakeholders Advisory Board
WP	Work Package
WPL	Work Package Leader

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Executive Summary

This deliverable presents the final outcomes of Task 2.3, which focuses on mapping behavioural patterns and customer journeys in the context of sustainable e-commerce logistics. The aim is to support the GreenTurn project in developing evidence-based behavioural interventions by identifying how different types of e-customers experience delivery and return processes, and how their needs, preferences, and barriers intersect with sustainability goals.

The findings draw on two complementary research components: a large-scale Computer-Assisted Web Interview (CAWI) survey conducted in five countries, and five national focus group interviews (FGIs) that added qualitative depth to behavioural segmentation. Through this mixed-method approach, six validated consumer personas were identified—Tech-Savvy Shoppers, Time-Savers, Premium Shoppers, Health-Conscious Buyers, Brand-Seekers, and Review Enthusiasts—each representing distinct behavioural profiles related to time efficiency, health consciousness, price sensitivity, digital affinity, lifestyle aspirations, and trust in information sources. These personas were used as the foundation for detailed customer journey maps that visualise sustainability-related pain points and gains at each stage of the purchase and return cycle.

Importantly, the deliverable does not limit itself to the six validated personas. It integrates relevant traits and motivations from additional, lower-prevalence profiles that did not reach statistical validation, ensuring that the design process remains inclusive of emerging or niche consumer patterns. The research also highlights cross-cutting behavioural findings: consumers are aware of green options but rarely prioritise them; price, product quality, and payment security dominate decision-making; return rates are generally low but vary by market; digital channels are the most effective engagement point; perceptions of green options differ across cities; and uptake increases when green choices are competitively priced and require minimal behaviour change.

These insights make a direct contribution to WP2 and provide a behavioural evidence base for the project as a whole. They can inspire and inform stakeholder co-creation sessions (T3.1), guide MVP prototyping towards solutions most relevant to high-prevalence personas (T3.2), suggest refinements to the KPI set (T3.4), support pilot design choices on which nudges, packaging solutions, and messaging to test (T4.1–T4.3), strengthen the linkage between behavioural patterns and performance metrics (WP5), and ensure policy recommendations and replication strategies (WP6) reflect validated personas and market realities.

By translating segmented behavioural data into practical journey tools and linking them to project-wide applications, this deliverable ensures that future GreenTurn interventions are both user-centred and adaptable across diverse European contexts.

1. Introduction and objectives

The aim of *D2.3 E-commerce customer journeys* is to provide a detailed understanding of consumer needs, preferences, and barriers toward adopting more sustainable delivery and return solutions in e-commerce. By mapping these dimensions, the project seeks to identify opportunities for promoting greener last-mile practices that align with the behavioural tendencies of different customer groups.

This report builds upon earlier project outputs, particularly the stakeholder ecosystem mapping in D2.1, which analysed the local contexts of the five pilot cities. By grounding the research in these specific urban environments, the study ensures that differences across local markets, retail structures, and consumer behaviours are meaningfully captured. As a result, survey results and findings are structured to provide both aggregate insights and pilot-specific perspectives (focusing on pilot cities within each country), supporting tailored planning for each location.

Furthermore, this deliverable draws directly on the intersectional analysis carried out in D2.2, which defined twelve core e-commerce personas based on a systematic literature review. These personas provide a theoretical foundation for understanding diverse consumer motivations and preferences, especially regarding sustainable delivery and return choices. Task 2.2, combining quantitative survey data and qualitative retailer focus groups, serves to validate, refine, or adapt these personas to the realities of the pilot markets. This iterative approach ensures that the project's recommendations and strategies are grounded in robust, context-sensitive evidence.

Finally, the deliverable supports the project's broader objectives by providing an essential empirical basis for designing behavioural interventions and communication strategies in the accompanying and concurrent stages of work. The insights gathered here will feed directly into the development of advanced behavioural models for the purpose of *D2.4 Behavioural models and willingness to pay*, which will analyse consumers' willingness to pay and test how different nudges or incentives can encourage greener choices among different persona groups and pilot contexts. This modelling will help identify which interventions are both practical and impactful for the pilots. In parallel, the results from this deliverable will inform the design of communication strategies that can effectively present sustainability-related information in ways that resonate with diverse consumer segments (*D2.5 – Impact communication strategies*). These strategies will explore how best to communicate ecological and social impacts, building trust and encouraging customers to choose lower-emission delivery and return options. Together, this integrated approach ensures that the project's proposed solutions are not only well-informed and targeted, but also capable of driving real, sustainable change in urban e-commerce logistics.

2. Methodology

2.1. Overall approach & target groups

GreenTurn's Task 2.2 employs a comprehensive, multi-method approach to develop validated e-commerce customer journeys that reflect consumer needs, preferences, and barriers toward sustainable delivery and return options. By combining large-scale quantitative and qualitative research, the methodology ensures robust, context-sensitive insights that are relevant both at the national level and within the five pilot cities. Aligned with a design thinking approach, it supports the project's broader goals by delivering the essential "Empathise" and "Define" stages that guide collaborative ideation and prototyping with stakeholders.

The approach integrates:

- **Quantitative CAWI surveys** targeting e-commerce users across Poland, Austria, France, Greece, and Spain;
- **Stated preference experiments**, embedded within these surveys;
- Qualitative **Focus Group Interviews** (FGIs) with e-commerce retailers in each pilot country.

This multi-method strategy enables triangulation of findings, ensuring that the resulting customer journeys are empirically grounded, locally relevant, and actionable for planning sustainable delivery and return solutions. The sampling and recruitment were carefully designed to capture national-level consumer trends while also reflecting the unique urban contexts of the five pilot cities, ensuring both comparability across countries and relevance for local pilot planning.

A particular emphasis was placed on urban e-commerce consumers who regularly use delivery and return services, as their choices have a direct impact on last-mile logistics and are critical to the success of low-emission interventions. Additionally, the research explicitly addresses intersectional factors such as age, gender, income, education, and lifestyle, recognising the complexity of e-commerce behaviour and ensuring that the resulting journeys and personas are inclusive, representative, and suited to equitable, effective pilot design.

2.2. Data Collection and Analytical Methods

As mentioned before, Task 2.2 used an integrated research design combining quantitative and qualitative methods. This mixed-method approach allowed supporting the triangulation of evidence and providing a rich empirical foundation for further development of customer journeys and validating the personas as well as tailoring them to the pilot contexts (see Chapter 10). The data collection activities conducted are described in the following subsections.

CAWI Surveys

The central component of the quantitative data collection consisted of Computer-Assisted Web Interviews (CAWI) conducted across the five pilot countries: Poland, Austria, France, Greece, and Spain. The survey targeted e-commerce consumers aged 18–70 who regularly use delivery

and return services, with quotas and sampling approaches tailored to ensure representative national-level insights and comparability across contexts.

Key features of the CAWI survey design included:

- Large-scale sampling: 1000 respondents per country (5000 total), ensuring statistical robustness for country-level analyses.
- Stratified quotas: Ensuring balanced representation by age and gender.
- Translation and localisation: All instruments were adapted and tested in local languages to ensure cultural relevance and clarity.

The survey was available to respondents between the 14th and 27th of May 2025 The questionnaire used was developed by GreenTurn's WP2 partners, based on the knowledge of each involved consortium member as well as the needs and requirements stemming from deliverables that needed to submitted, related to customer journeys, behavioural modelling and communication strategies. The survey was then analysed and conducted by a professional social research company, selected by competitive tender, as envisioned under project's initial assumptions. The data obtained was shared with the GreenTurn consortium and formed the basis of D2.3, D2.4 and D2.5.

As mentioned above, the research technique used was CAWI- computer assisted web interview using Syno Panel online. The target sample achieved by the survey was 5000 online shoppers. The focus was on including respondents from 5 project countries, including the inhabitants of the selected pilot cities. A total of 10 724 people were invited to participate in the survey, full responses were obtained from 5000, giving a response rate of 46,6%. The tables below (Table 1,Table 2) provide a summary of the percentage of survey completion in each country and city, as well as a breakdown by gender and age ranges.

Selected countries/cities N	Austria 1000	France 1000	Greece 1000	Poland 1000	Spain 1000	Total 5000
Athens			51,9%			10,4%
Lyon		29,0%				5,8%
Poznań				40,6%		8,1%
Vienna	39,3%					7,9%
Zaragoza					30,1%	6,0%
Other city/town	60,7%	71,0%	48,1%	59,4%	69,9%	61,8%

Table 1. Summary of survey results by country and pilot city

In order to have the most comprehensive data possible for the pilot sites, an assumption was made that ca. 30,0% of the complete surveys in a given country should come from inhabitants of the cities hosting the demonstrations. As can be seen in Table **1**, this goal was achieved in almost every case, with a small exemption in France, where 29,0% of the surveys come from the city of Lyon (1,0% deviation), which means that the deviation does not drastically affect the targets and restrictions imposed on the survey. However, it is worth noting that Athens collected more than half of the responses coming from the entire country (51,9% of respondents), which marks the

highest level of responses obtained in the pilot city. As a result, Athens citizens contributed to as much as 10,4% of the total questionnaire responses.

Gender	Austria	France	Greece	Poland	Spain	Total
Female	50,9%	51,5%	51,1%	53,8%	51,5%	51,5%
Male	49,1%	48,5%	48,9%	46,2%	48,5%	48,5%
Age range	**Austria**	**France**	**Greece**	**Poland**	**Spain**	**Total**
18-29	18,4%	19,4%	15,9%	18,1%	14,7%	17,3%
30-39	21,1%	18,8%	20,1%	25,0%	18,6%	20,7%
40-49	19,5%	20,5%	26,5%	24,6%	25,4%	23,3%
50-59	20,6%	21,4%	19,5%	15,9%	21,0%	19,7%
60+	20,4%	19,9%	18,0%	16,4%	20,3%	19,0%

Table 2. Summary of survey results by gender and age range

There was a pretty even distribution of responses by gender of respondents, with a very subtle advantage for women across the entire set. The biggest difference can be seen in Poland, where 53,8% of responses were given by women and 46,2% by men. Table 2 shows also the different age ranges of the respondents. As can be seen, the youngest age group (18-29 years) had the lowest number of responses overall. Between 14,7 and 19,4% within the pilot countries. Overall, the highest number of responses was in the 40-49 age range, with a total of 23,3% of all responses, nearly a quarter.

The questionnaire was structured into the following sections:

- **Demographics and Intersectional Characteristics:** Captured age, gender, education, income, residence type and location (including pilot cities), ethnicity/origin, employment status, household composition, and car ownership. This data enables detailed segmentation and intersectional analysis of e-commerce behaviours across diverse user groups.
- **Digital Literacy and Online Shopping Preferences:** Explored device usage, preferred payment methods, customer support channels, and the importance of different shopping criteria such as price, delivery convenience, payment security, and sustainability features like green packaging or delivery modes.
- **Proximity and Access to Delivery/Return Points:** Investigated how respondents travel to pick-up or return points (walking, cycling, car, public transport) and their typical travel times, informing the physical accessibility of last-mile logistics solutions.
- **Attitudes, Values and Purchasing Perspectives:** Assessed agreement with statements on convenience, brand quality, trust and safety, family influence, health consciousness, cultural sensitivity, technology use, social media influence, and sustainability motivations. This section provides rich insight into values and priorities that shape delivery and return choices.

- **Detailed Shopping and Return Behaviours:** Collected data on the frequency and nature of recent online purchases and returns (categories, delivery and return methods, reasons for returns), offering a behavioural baseline to contextualise stated preferences.
- **Stated Preferences Experiments (Conjoint Analysis):** Embedded within the survey were two detailed experiments: one on delivery options and one on return options. Respondents chose between realistic scenarios varying in delivery/return mode, cost, time, environmental impact, travel distance, incentives, and nudging strategies. This approach (described deeply in D2.4) allowed modelling of trade-offs and willingness to pay for sustainable options, which contributed to D2.4.
- **Motivational Factors for Sustainable Choices:** Evaluated the motivational impact of various messages and incentives designed to encourage sustainable delivery and return decisions, supporting the development of behavioural interventions.

Focus Group Interviews (FGIs)

Complementing the quantitative survey, Focus Group Interviews (FGIs) were conducted in each pilot country with representatives of the e-commerce retail sector.

Key design elements and initial assumptions:

- **Participant profile:** 5–6 retail professionals per session, drawn from different product categories (e.g., fashion, electronics, FMCG) and possessing direct experience with customer interactions, delivery, and returns.
- **Format:** Online or in-person sessions lasting up to 2 hours, moderated using a structured scenario collaboratively designed within the GreenTurn consortium.
- **Objectives:**
    - Explore retailers' perspectives on consumer needs and preferences.
    - Identify practical barriers and opportunities for sustainable delivery and return models.
    - Validate and enrich understanding of customer personas and journeys by reflecting everyday retail experiences.

Discussion guides were tailored to encourage storytelling, mapping of customer journeys, and identification of pain points and gains. Specific exercises included needs/barriers mapping and persona validation cards developed based on D2.2 outputs.

Analysis and Synthesis

The analysis held in T2.2 was designed as a structured, integrative process that aligns with GreenTurn's design thinking approach by combining large-scale survey results and qualitative retailer insights. This ensured the development of customer journeys that are both data-driven and operationally grounded:

- Quantitative survey data were processed using statistical software to generate national-level and cross-country profiles of e-commerce consumer behaviour. Descriptive and inferential analyses explored variations by country, city size, demographic segment, and key behavioural attributes such as delivery frequency, sustainability attitudes, and return habits.
- FGI transcripts were thematically analysed to extract insights into retailers' experiences with customer pain points, observed preferences and barriers, and perceived opportunities for improving sustainable delivery and return options. These insights were used to contextualise and enrich the survey findings with operational perspectives and real-world experience.

The synthesis process in D2.3 relied on triangulating two key sources of evidence:

- Declarative preferences and barriers (CAWI survey results) to provide broad, self-reported trends and variation across contexts.
- Retailer FGI outputs to ground these trends in operational reality and add qualitative depth on obstacles and potential improvements.

This integration ensures that the validated customer journeys emerging from Task 2.2 reflect both consumer and retailer perspectives.

2.3. Use of outcomes

The findings from this research (as presented in the following chapters) will serve multiple, integrated purposes across the GreenTurn project. By delivering an empirically grounded understanding of consumer needs, preferences, and barriers toward sustainable delivery and return options, these results provide essential foundations for the project's subsequent activities.

First, they will enable the development of **validated customer journeys**, offering nuanced, data-backed representations of how different consumer segments interact with e-commerce delivery and return processes. These journeys highlight pain points, expectations, and opportunities for more sustainable choices, supporting targeted solution design.

Secondly, the segmentation and attitudinal insights generated will feed into **behavioural modelling work** undertaken in parallel, helping to structure and parameterise models of willingness to pay and likely adoption of low-emission delivery options. This ensures that behavioural models are not abstract or theoretical, but are rooted in actual consumer patterns and attitudes.

Third, these insights will be critical for shaping **effective communication strategies** by clarifying which sustainability messages, incentives, and information formats resonate with specific personas and contexts. This allows for tailored, impactful engagement with diverse consumer groups.

Finally, the research will directly support **collaborative co-creation activities** planned in WP3. By providing a shared, evidence-based understanding of consumer needs and challenges, these

outcomes will ensure that ideation sessions with stakeholders are focused, realistic, and capable of generating practical, sustainable logistics solutions that can be effectively piloted in the five cities.

3. E-commerce Consumer Profiles & Trends

This chapter presents the core findings of the consumer survey, which collected 5,000 complete responses across the five GreenTurn pilot countries to build a clear picture of who e-commerce users are, how they shop online, and what shapes their delivery and return choices. By examining responses to 28 targeted questions, the study reveals key patterns in user characteristics, shopping habits, payment and support preferences, delivery and return behaviours, and attitudes toward sustainability.

The results are presented both in aggregate—highlighting overall trends across all countries—and in subsequent sections with country-level details. This dual perspective enables cross-country comparisons and a fine-grained understanding of local contexts. The insights serve as the evidence base for refining consumer personas, mapping customer journeys, and designing effective, sustainable delivery and return solutions tailored to diverse European urban settings and the connections between different customer approaches to sustainable delivery.

3.1. Demographic and Socioeconomic Profile

3.1.1 Residence and education

The first general comparison concerns the level of education of the respondents. The project team cross-compared this data with the type of residence, as can be seen in Figure 1. Respondents are dominated by those with a high school diploma or equivalent (2004 out of 5000). This gives, in percentage, more than 40,1% of the people participating in the survey. The clear majority of respondents also marked their place of residence as highly populated urban areas (56,3%). This is not surprising, since one of the objectives of the survey was to conduct it on a group of residents of large cities, which are part of the pilot implementation. Among the 5000 respondents, 29 did not give a clear answer to the question about the level of education.

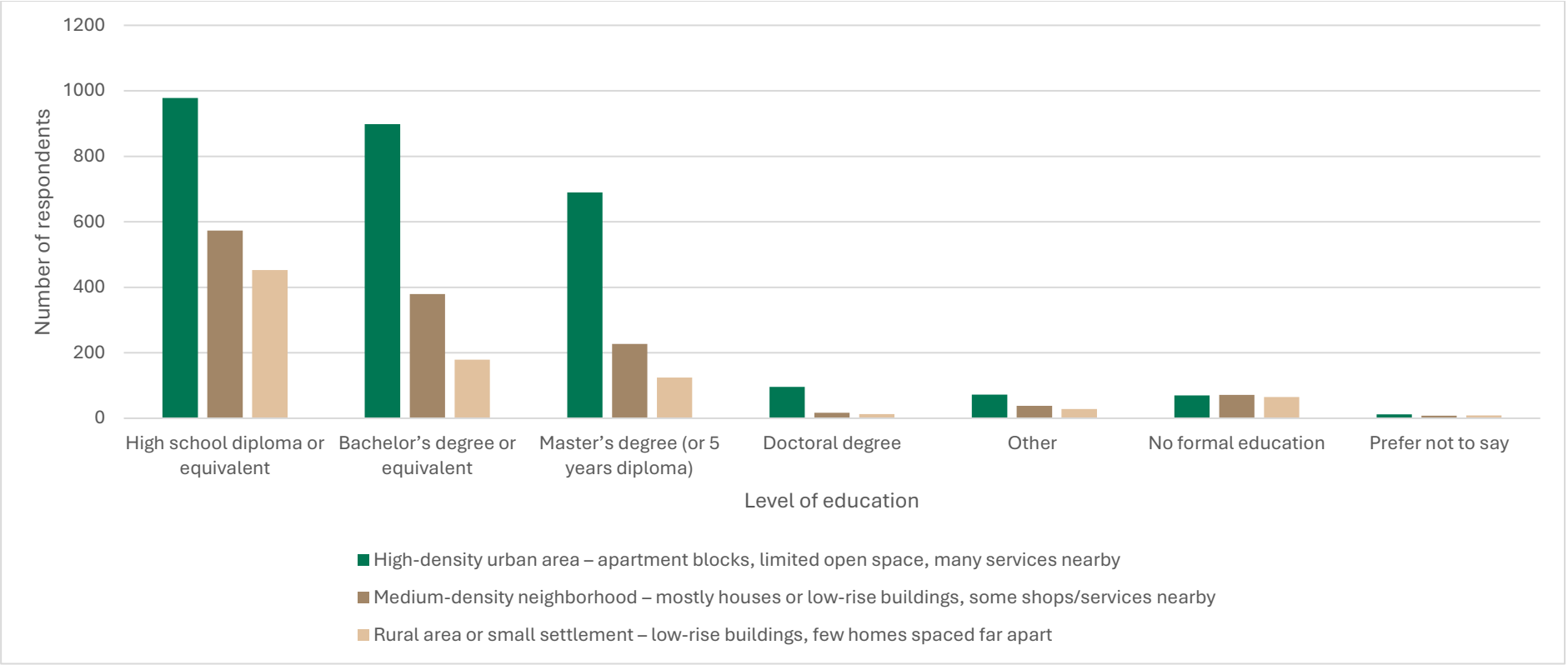

Figure 1. Residence and education of all respondents

3.1.2 Employment status

Respondents were also asked about their employment status (Figure 2). Most of them counted themselves as employed full-time in the private sector (45,3% of the total sample of 5000 people). The smallest group on this list was represented by students working part-time - less than 0,8% of all respondents.

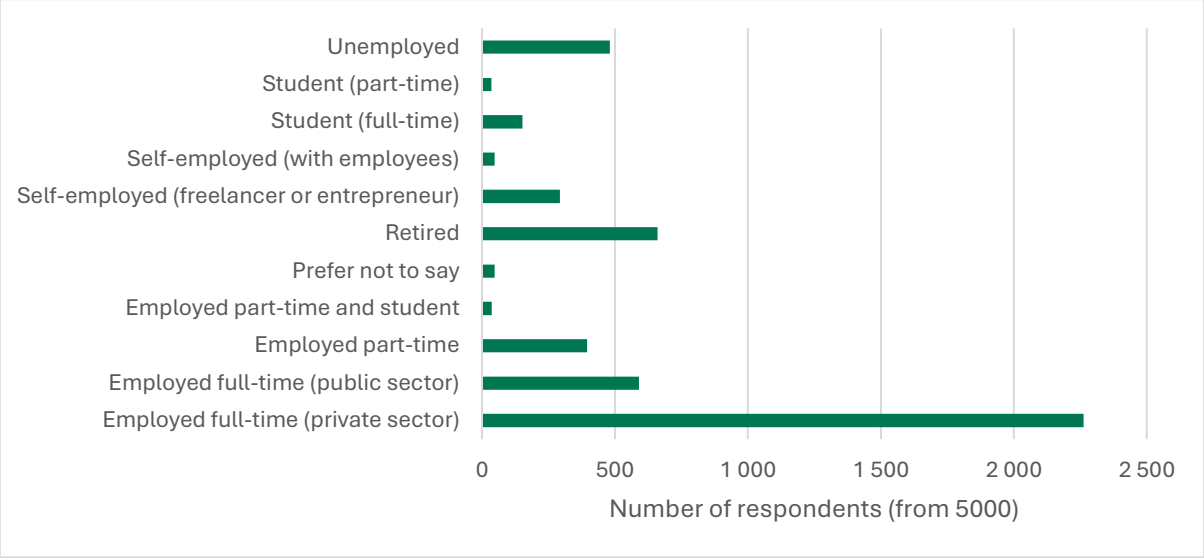

Figure 2. Employment status of survey respondents

3.1.3 Income

The project team also analysed the net monthly income in € per respondent. Most of the respondents were in the range of €1001- €2000 per month (35,9%). The vast majority of the survey participants (85,5%) indicated that the monthly income does not exceed €4000, which corresponds with Eurostat's data, indicating that an average full-time adjusted monthly salary per employee for the European Union equalled €3 155 in 2023. A notable 5,7% of respondents did not agree to reveal their earnings, selecting the "prefer not to say" option (Figure 3).

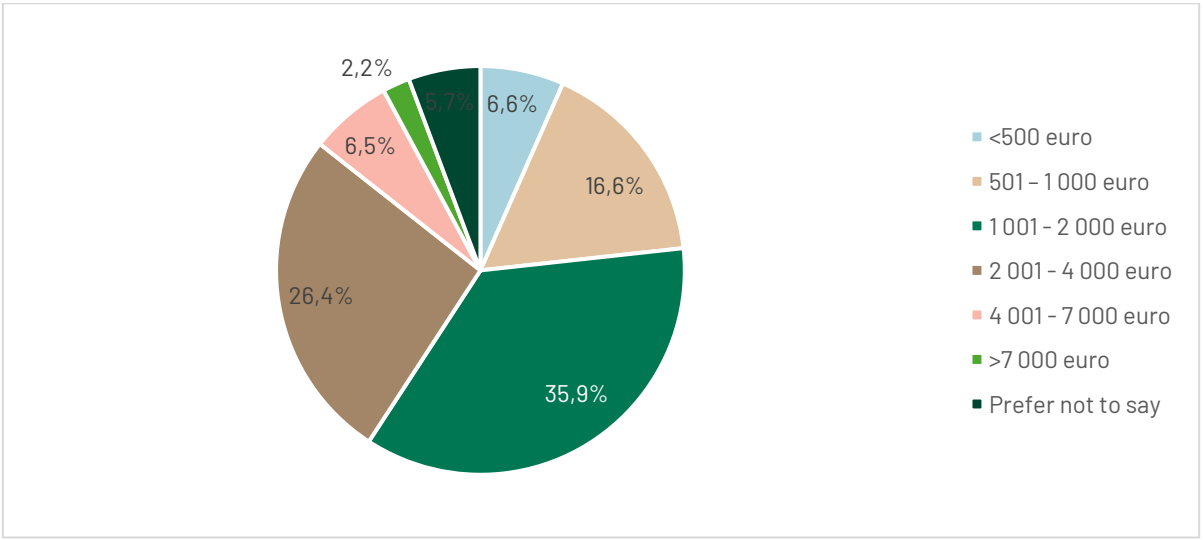

Figure 3. Ranges of respondents' monthly income

The demographic profile of survey respondents closely reflects the key characteristics of active e-commerce users across the EU, according to Eurostat's 2024 findings[1]. The majority of participants were employed full-time and had a medium or high level of formal education- both factors are strongly associated with frequent online shopping. Eurostat highlights that those with stable employment and higher education are significantly more likely to engage in e-commerce. This correlation strengthens the survey's credibility in targeting the right user base in the digital space.

The survey also reflected EU trends in terms of urban concentration, with respondents from high-density areas making up the largest group. This is consistent with Eurostat's observation that online shopping is more prevalent in cities than in rural areas. However, the GreenTurn data underrepresents certain groups, such as students, part-time workers and those with lower incomes or no formal education.

3.2. Online Shopping Behaviour

Another part of the data analysis focused on how consumers shop online, particularly which devices they use. Many respondents reported using multiple devices. As shown in Figure 4, smartphones and laptops dominate online shopping, each receiving over 3000 affirmative responses. Tablets were used less frequently but still significantly, with 1057 respondents indicating their use. Other devices, such as gaming consoles or smart TVs, were rarely used, appearing only eight times in total. Figure 4 shows a summary of the percentage share of each device in online shopping.

3.2.1 Devices used

As can be seen below in the graphic representation, the most common option for online shopping is the use of a smartphone. This is not surprising, as the current development of mobile applications and the convenience of shopping via phone is leading not only among the young, but also older generations. *" We observe that older generations are feeling increasingly comfortable in the digital shopping space, appreciating its key advantages such as speed, convenience and flexible payment options."*[2]

[1] https://ec.europa.eu/eurostat/statistics-explained/index.php?title=E-commerce_statistics_for_individuals [Accessed: 15/07/2025]

[2] https://www.infor.pl/twoje-pieniadze/zakupy/6861913,zakupy-ze-smartfonem-starsi-dla-wygody-najmlodsi-z-nawyku-kto-i-co.html [Accessed: 24/06/2025]

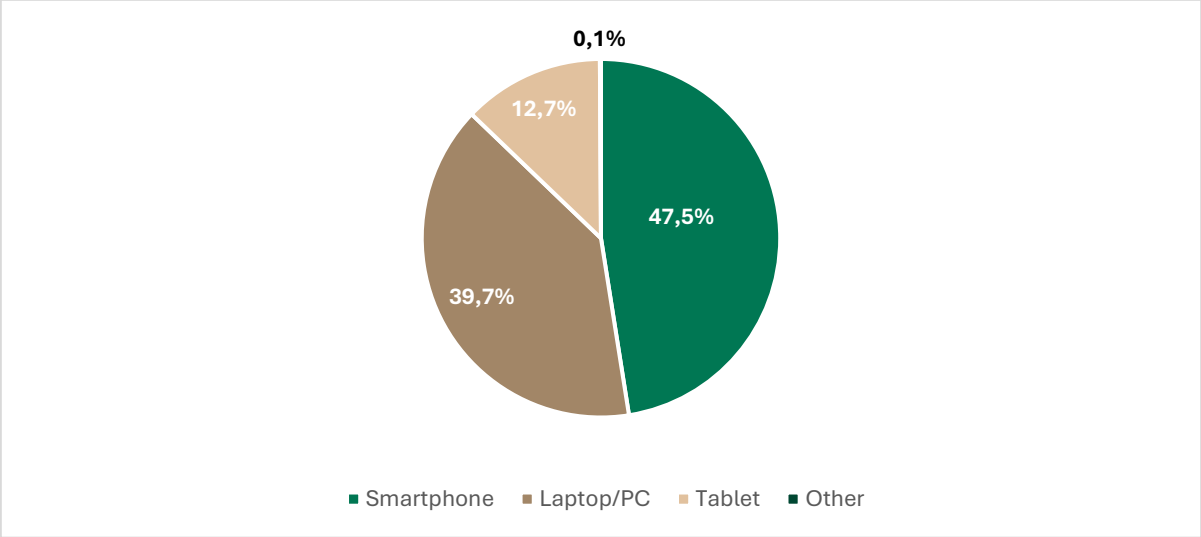

Figure 4. Percentage use of different devices during online shopping

3.2.2 Payment methods

To understand consumers' preferred payment methods for online shopping, respondents were asked to indicate all options they use regularly. As can be seen in Figure 5, the largest number of survey participants indicated purchase by credit or debit card as their preferred method of payment for online purchases (30,9% of responses). PayPal came in second place (20,6%), and bank transfer was ranked third (13,7%).

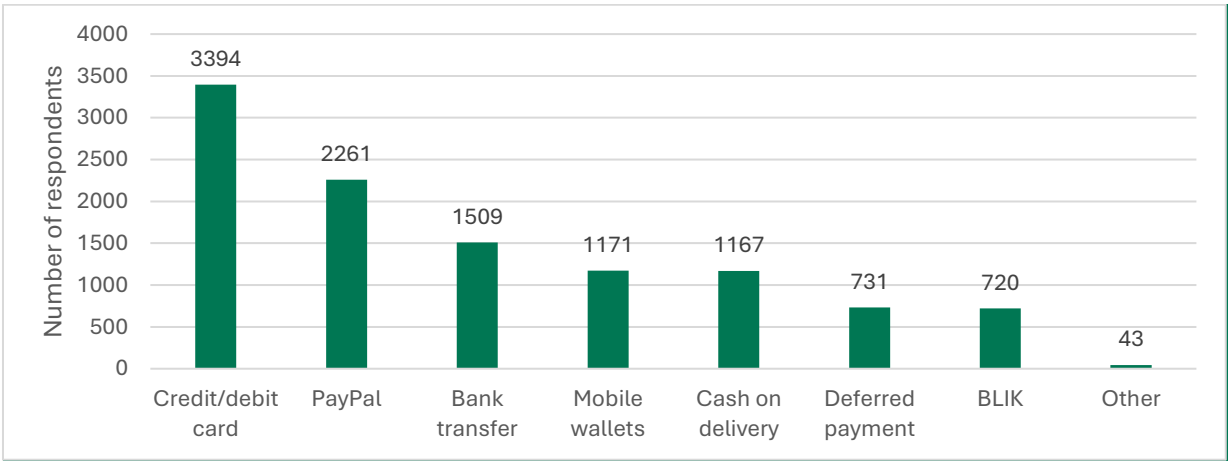

Figure 5. Preferred payment method for online purchases

3.2.3 Customer support channels

Message-based support channels dominated the ranking of preferred customer service contact methods. Among them, email emerged as the most frequent option (1695 responses), likely due to its flexibility—allowing customers to send inquiries at their convenience without the need for real-time interaction. Live chat with a representative ranked second (1386 out of 5000 responses). This option provides less flexibility, but is nevertheless still the preferred and quick method of helping a customer. Completing the top three was the traditional phone call, chosen by nearly a quarter of respondents, only slightly behind live chat. Other methods of contact

received significantly less interest, with none surpassing 300 responses. Figure 6 illustrates the overall distribution of preferences, which confirms the dominant role of message-based support: email and live chat together accounted for over 61,6% of all selections.

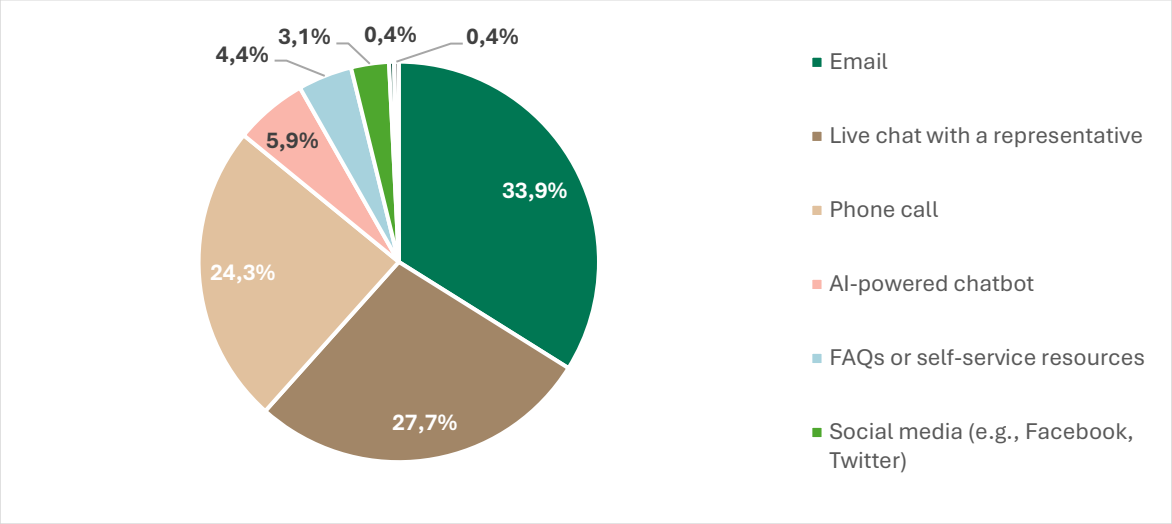

Figure 6. Preferred support method in percent

Observed preferences in device usage, payment methods and customer service underscore a maturing e-commerce environment in Europe shaped by digital convenience and consumer autonomy. The dominant use of smartphones confirms the continued growth of mobile technology and retail, reinforcing the strategic need for mobile optimized platforms. Bacik et al. (2020) found that laptops were the most commonly used device for online shopping, with smartphones, tablets, and desktops forming a middle category in terms of consumer preference. The authors also predicted an upward trend in the use of tablets and, more notably, smartphones, alongside a declining preference for desktop computers. These trends are confirmed in the results of the GreenTurn project's survey, which shows that while laptops still maintain a strong position, they are increasingly giving way to more convenient smartphones—devices that consumers typically carry with them at all times.

Preferences for payment methods appear to depend on various contextual factors, such as the type of goods purchased, their price, and the available options provided by the online retailer. It is important to note that not all e-commerce platforms offer a full range of payment or delivery options, which can influence consumer behaviour. For example, a study conducted during the COVID-19 pandemic on the Romanian market found that, even in the context of grocery shopping—specifically vegetables—credit and debit cards were still the most preferred payment method, selected by 857 out of 1806 respondents (Brumă et al., 2024). These findings are consistent with the GreenTurn project's survey, which also identified card payments as the most frequently chosen option.

Similar convergence can be observed in the area of customer support preferences. A 2019 survey conducted by the YourCX portal revealed that the three most preferred communication channels when contacting an online store were email (ranging from 20,0% to 31,0% depending on the

product category), phone (23,0–30,0%), and live chat with a consultant (17,0–28,0%)[3]. These findings are closely aligned with the GreenTurn survey, which confirmed that email and live chat remain the dominant forms of customer support. However, the order of preferences has shifted slightly: in the GreenTurn data, live chat overtook phone calls to claim second place, suggesting a growing consumer preference for message-based, real-time but non-verbal interactions.

3.3. Delivery and Return Practices

3.3.1 Frequency of online orders

The survey asked respondents how many online orders they had placed in the past two weeks. While a notable share of respondents—569 out of 5000 (11,4%)— reported placing no orders at all, the research allowed focusing on active online shoppers. As shown in Figure 7, the most common responses were two orders (1206 people; 24,1%) and one order (1055 people; 21,1%). A small number of respondents (18 individuals) reported placing as many as 20 orders within this short timeframe, though such high-frequency shoppers represent a clear minority. Overall, more than 91,3% of respondents placed between 0 and 6 orders, indicating that the majority engage in online shopping with moderate frequency.

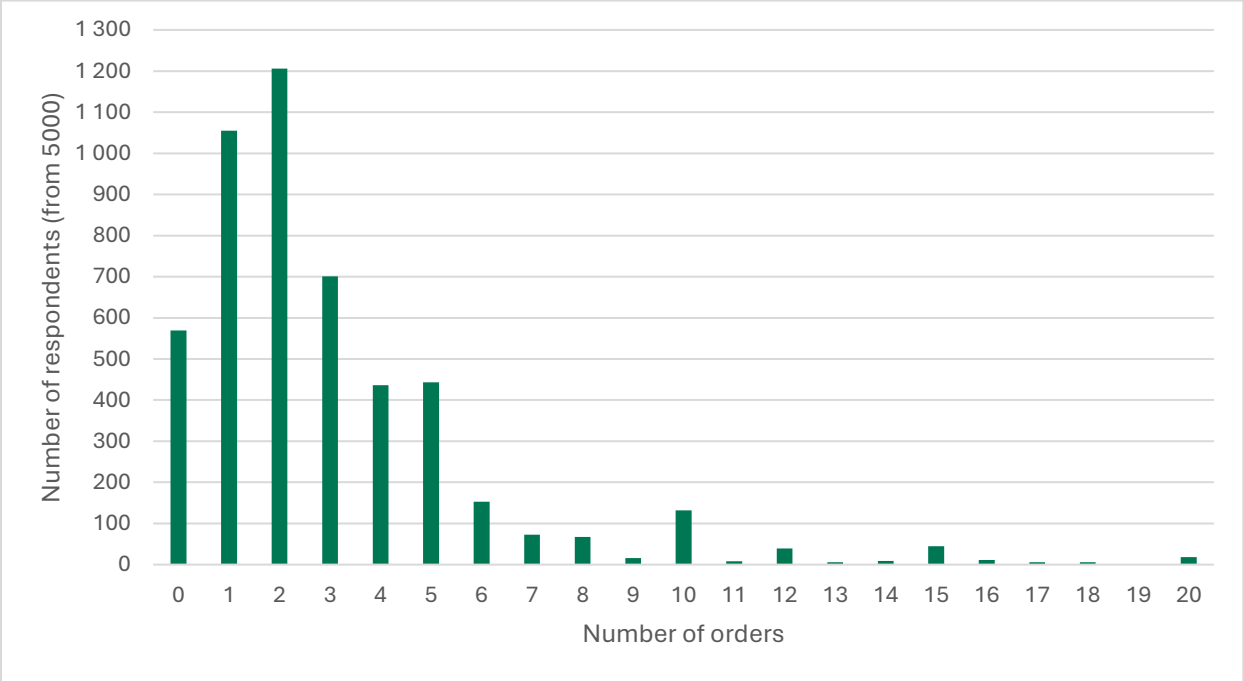

Figure 7. Number of buyers in relation to the number of orders in the last 2 weeks

3.3.2 Typical order value

To complement the question about order frequency, respondents were also asked to indicate the total value of their online purchases over the past two weeks, selecting from predefined value ranges. The most frequently selected category was between €31 and €100. Such orders accounted for 39,0% of all responses. This was closely followed by the €11- €30 range, which was indicated by 37,6% of respondents. At the other end of the spectrum, high-value purchases

[3] https://yourcx.io/en/blog/2019/01/preferred-channels-of-contact-with-e-commerce/ [Accessed: 15/07/2025]

exceeding €500 were relatively rare, indicated by only 83 respondents—less than 1,7% of the total sample, as shown in Figure 8.

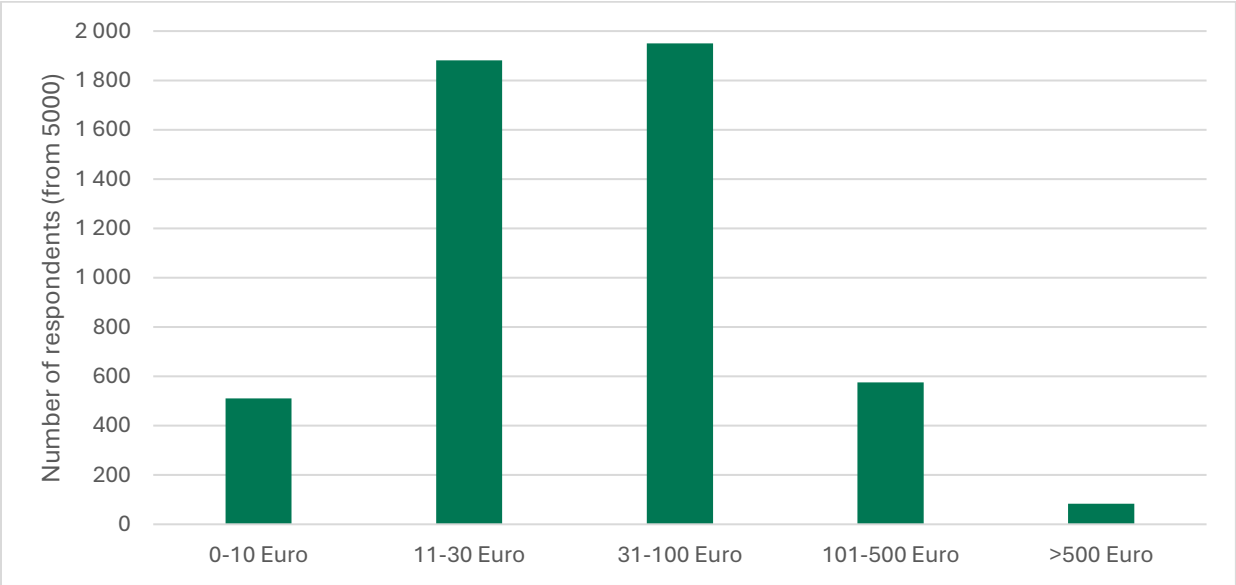

Figure 8. Price range of purchased goods in relation to the number of customers

3.3.3 Return frequency

The vast majority of respondents reported making no returns during the two weeks prior to the survey—84.4% of those who answered this question (Table 3). The second most common response was a single return, though this was selected by more than nine times fewer respondents than those reporting no returns. As with purchase frequency, the number of respondents decreased progressively with each higher return count. However, an exception appears at the upper end of the scale: the final option—ten returns—was selected by 23 respondents, indicating a small group of high-return users.

How many returns (from on-line purchases) have you made in the last 2 weeks?	Number of respondents
0	4 220
1	462
2	164
3	64
4	21
5	33
6	4
7	3
8	3
9	3
10	23

Table 3. Number of returns made by a given number of respondents during the last two weeks

3.3.4 Transport modes to pick-up/return points

As part of the survey analysis, transportation methods for accessing the nearest pickup or return point were compared (

Figure **9**). Walking was by far the most popular option, chosen by 2861 out of 5000 respondents (57,2%). Among walkers, the majority reported a travel time of no longer than five minutes, while the next largest walking cohort took six to ten minutes. Driving was the second most common mode—most often taking six to ten minutes as well. The rest of the transportation methods are much less popular, but there are cases when customers choose a bicycle, public transportation or a motorcycle. Nevertheless, such methods are less convenient and are chosen by a niche group of respondents.

These patterns align with recent research on the relationship between proximity and shopping behaviour. Verma et al. (2025) demonstrate that consumers are significantly more likely to walk for in-person shopping when multiple retail options are located within a 0.5-mile radius of their residence—particularly for everyday goods such as groceries or restaurant food. The observed dominance of walking as a mode of access to pick-up/return points in the GreenTurn survey thus reflects not only convenience but also an urban spatial logic that prioritizes accessibility and short travel times. Their findings further suggest that while proximity has limited influence on whether individuals choose to shop online or in-person, it strongly shapes the choice of transport mode when shopping offline. This supports the interpretation that short walking trips are not only feasible but preferred when infrastructure and store density allow for it.

Collectively, respondents' delivery and return behaviour reflects a pattern of limited activity: most placed 2–3 orders in the two weeks before the survey and made no returns. Mid-value purchases (€11–€100) dominated the shopping mix, suggesting most customers opt for mid-range goods. Furthermore, walking—typically a short five-minute trip—was the dominant method for reaching pickup/return points, underscoring the importance of proximity and convenience in shaping customer satisfaction. Altogether, e-commerce customers appear to be price-conscious, convenience-oriented and make targeted purchases with low returns.

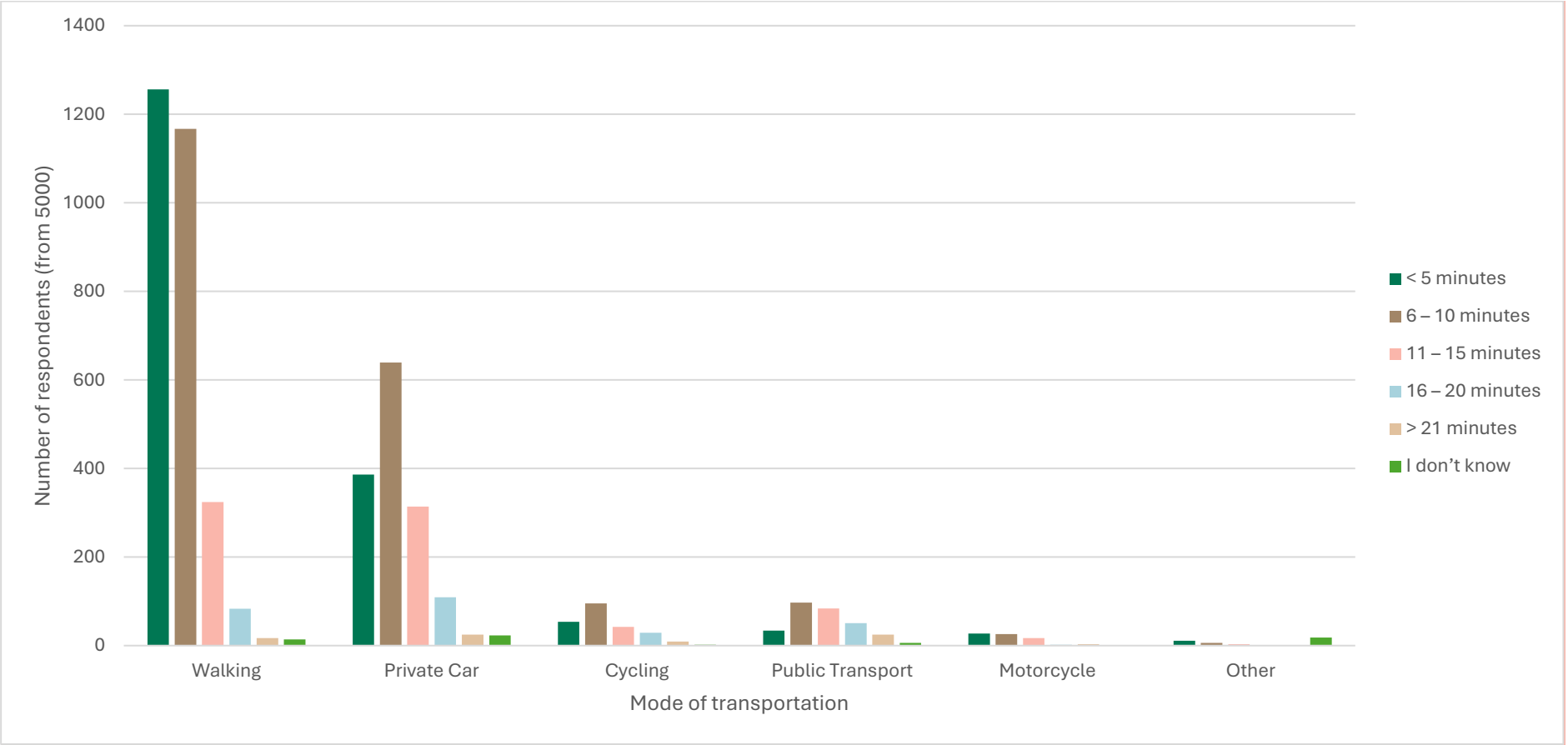

Figure 9. Method and time of transportation to the nearest pick-up/return point or locker

3.4. Attitudes to Sustainability in Delivery

3.4.1 Importance of eco-friendly options

Figure 10 presents a consolidated visual summary of respondents' attitudes toward various aspects of the online shopping experience. Fourteen factors were evaluated using a five-point Likert scale, where a score of 1 indicated strong disagreement (interpreted as low importance), and a score of 5 indicated strong agreement (reflecting high importance). To capture overall trends, the responses for each factor were averaged across the full sample of 5000 completed surveys.

This aggregation allows for a clear identification of the elements that respondents consider most influential in shaping their online shopping behaviour. As shown in the chart, payment security emerged as the most important factor, receiving the highest average score of 4.68. Close behind were product price (4.54) and product quality (4.53), confirming the centrality of financial and value-related considerations in consumer decision-making.

Notably, all fourteen factors received average scores above 3.0, indicating that none were dismissed as irrelevant by the respondent pool. However, the lowest-rated items—green packaging (3.21) and eco-friendly delivery modes (3.31)—suggest that environmental considerations, while not entirely overlooked, remain secondary to more immediate concerns such as cost and security. These factor ratings provide a meaningful basis for interpreting the broader behavioural patterns observed in the GreenTurn survey.

The consumer profile emerging from these results is characterised by a strong emphasis on practicality, efficiency, and a preference for streamlined, secure shopping experiences. This type of consumer prioritises value, understood both as competitive pricing and reliable product quality, and expects each stage of the purchase process—from browsing to delivery and returns—to be seamless, fast, and trustworthy. Elements such as convenient payment options, rapid and cost-effective delivery, and user-friendly return procedures are perceived not as added value but as baseline expectations.

Rather than relying on brand reputation or external reviews, these consumers are primarily guided by their own evaluation of convenience and service reliability. Digitally literate and risk-aware, they demand high standards of cybersecurity and platform integrity. Although sustainability remains a visible component of e-commerce marketing strategies, it appears to exert a weaker influence on actual purchasing decisions. Environmental features, such as green packaging or low-emission delivery modes, tend to be deprioritised in favour of factors that directly affect the consumer experience—namely, transparent return policies, efficient logistics, and flexible payment mechanisms.

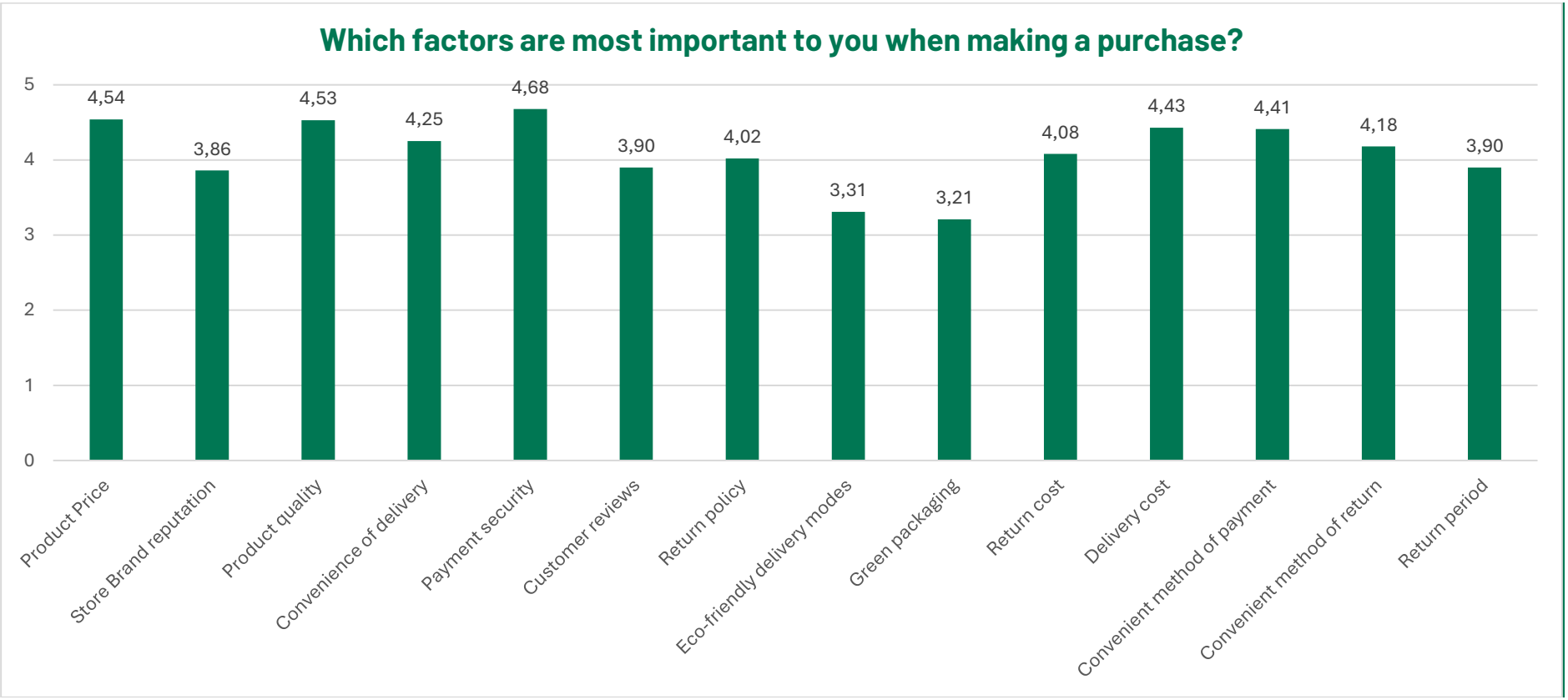

Figure 10. Average scores from responses on a scale of 1 (strongly disagree) to 5 (strongly agree)

Overall, the data point to a pragmatic and informed consumer who carefully weighs what matters most to their personal needs. Retailers and service providers who want to meet the demands of this market need to focus on delivering a fast and secure experience, keeping functionality and ease of customer service at the centre of their offerings.

This profile is consistent with recent academic findings. In their recent study, Agarwal and Kandpal (2025) identified product price as the most influential factor shaping online shopping preferences, followed closely by product quality and payment security—a pattern that directly mirrors the results of the GreenTurn survey. These shared findings confirm that modern online consumers are primarily motivated by value, reliability, and transaction safety, rather than by branding or sustainability messaging alone.

3.4.2 Motivators for choosing green delivery

Part of the survey focused on evaluating respondents' motivation toward various sustainable delivery options. Participants were asked to assess the level of motivation each hypothetical option would elicit, allowing researchers to identify which elements are most effective in influencing consumer decisions regarding environmentally friendly parcel logistics. This approach also sheds light on the types of messaging—such as key terms or "buzzwords"—that resonate most strongly with potential customers.

Figure **11** presents an expanded visualisation of these results, from which several insights can be drawn about consumer attitudes toward sustainable delivery. Notably, the first statement tested used quantitative environmental framing, referring to a specific "x% reduction in CO_2 emissions" achieved through the selected delivery method. However, this statement elicited a notably neutral reaction: over 33,4% of respondents selected the neutral category, making it the highest neutrality score among all evaluated options. This suggests that technical or data-driven messaging about emissions reductions may not be the most compelling motivator for the broader customer base.

The second statement evaluated in the survey focused on the idea of sustainable delivery being achieved by reducing mileage within the consumer's existing delivery area—emphasising that the parcel is already on its way for another customer. This more context-specific message appeared to resonate more strongly with respondents than the previous, abstract percentage-based framing. Neutral responses were significantly fewer, while the most frequently selected category was "moderately motivating" (30,3%). Additionally, a relatively high number of respondents (21,8%) found this option to be "very motivating," suggesting that consumers respond more positively to statements that convey concrete relevance and shared resource efficiency. Compared to the prior message focused solely on CO_2 reduction percentages, this framing was notably more engaging.

The third motivational statement involved the translation of emission reductions into saved car travel, expressed as a specific number of kilograms of CO_2 corresponding to "x" kilometres not driven. This option again relied on numerical framing, similar to the first question, and yielded similar results. The largest proportion of respondents (30,4%) indicated a neutral stance, and slightly fewer (29,0%) selected "moderately motivating." The proportion of respondents selecting the "very motivating" category was noticeably lower than in the second statement, reinforcing

the conclusion that technical or data-heavy environmental framing is generally less effective in stimulating consumer motivation than personalised, situational messages.

The fourth sustainable delivery statement focused on local environmental benefits, specifically improving neighbourhood air quality and reducing street congestion. This option yielded one of the most balanced distributions of responses across the five-point motivational scale. The highest number of responses fell into the "moderately motivating" category, closely followed by "very motivating." Although neutral responses still formed a significant portion (1,417 respondents; 28,3%), this was the lowest count of neutral answers across all the evaluated statements, suggesting stronger overall engagement with this locally framed environmental benefit.

The final statement presented a trade-off between CO_2 emissions and the symbolic value of saving a certain number of trees. This framing proved to be the most effective in terms of strong positive motivation: 23,3% of respondents selected "very motivating"—the highest figure in that category across all options. In contrast, the first statement, which used an abstract percentage reduction in CO_2 emissions, was not only the least engaging but also attracted the highest number of negative responses: 11.9% (594 individuals) marked it as "not at all motivating." This contrast highlights the importance of emotional and relatable framing—such as tree preservation—over technical or numerical expressions of environmental benefit when attempting to influence consumer behaviour.

The analysis presented here focuses on the general motivational impact of various framings of sustainable delivery options. A more detailed exploration of how these motivational patterns differ across demographic segments—such as age, income, education, or digital behaviour—is provided in Deliverable D2.5 of the GreenTurn project. That document offers complementary insights into how different consumer groups respond to sustainability messaging, highlighting the importance of aligning communication strategies with specific audience profiles.

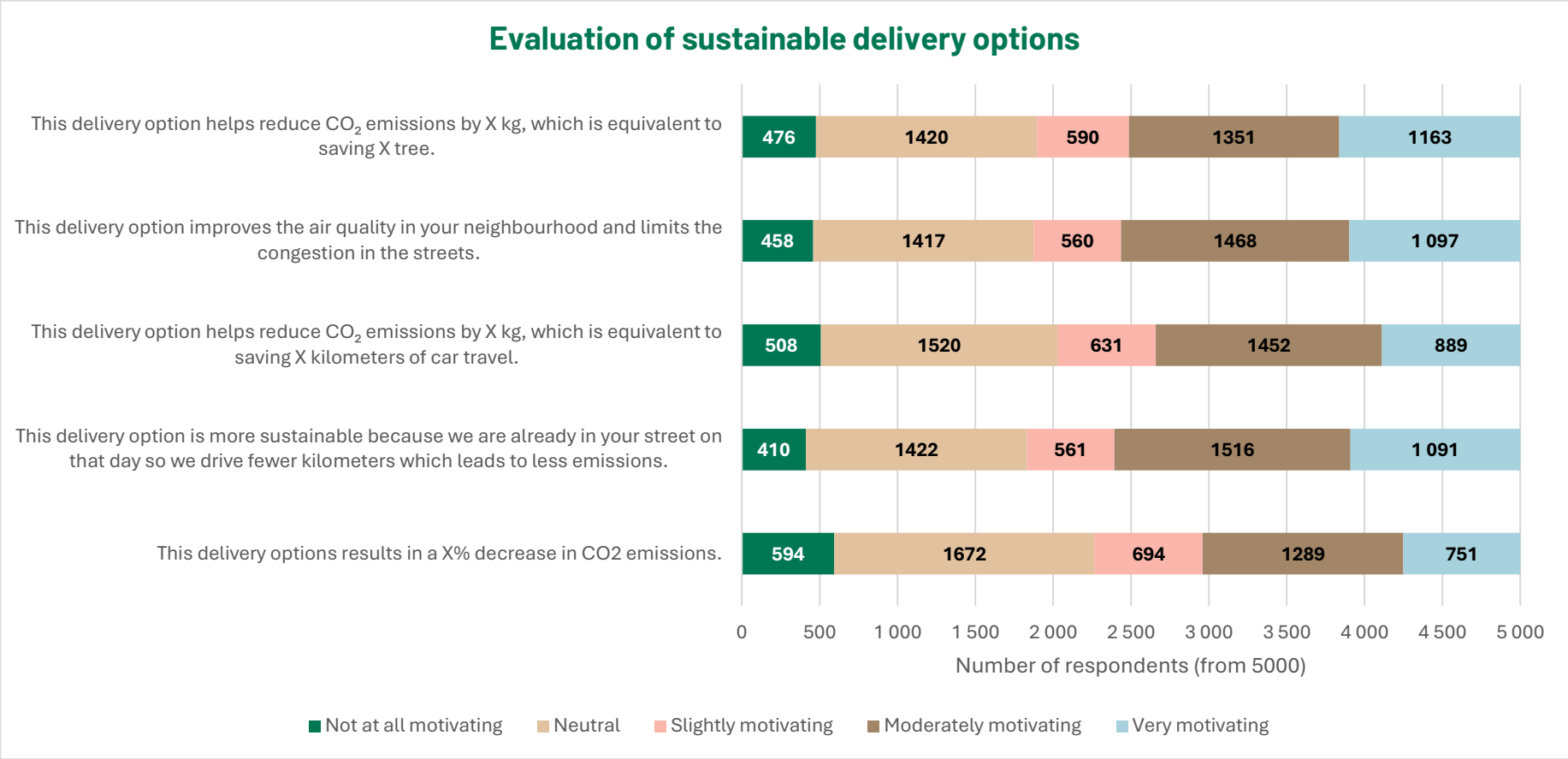

Figure 11. Motivation of respondents to choose sustainable supply options

Evaluating sustainable delivery options reveals the profile of an informed but convenience-oriented consumer. This group values environmental responsibility, but their motivation to act increases significantly when the sustainable choice is clearly linked to personal or local benefits, such as improved air quality on their street. Abstract or generalized environmental benefits (e.g., global CO_2 reductions) are less compelling if they are not translated into referable, concrete results, such as "saving a tree."

This consumer is not an idealist, but rather a pragmatic environmentalist, someone who supports green solutions as long as their impact is easy to understand and directly related to their daily lives. They respond to data-driven, transparent messages that connect sustainability to their immediate environment or routine. Emotional appeals alone appear insufficient—effective communication must emphasise practicality, measurability, and locality.

A useful point of reference for understanding the broader evolution of environmental attitudes can be found in the longitudinal study by Gajdzik et al. (2023), which traced the growing ecological awareness of Polish e-consumers over a ten-year period. According to her findings, the share of respondents identifying as environmentally conscious increased from 37,0% in 2010 to 86,0% in 2020, reflecting a significant rise in general environmental concern. The study also noted shifting factors behind online purchasing decisions, with sustainability playing an increasingly important role. However, the GreenTurn survey confirms that while general awareness is indeed rising, many consumers still show hesitation or neutrality when presented with sustainability claims—particularly when those claims are vague or overly technical.

3.4.3 Incentives to reduce returns

The survey explored consumer responses to various store-led initiatives designed to discourage product returns (Figure 12). Respondents were presented with a range of options, including loyalty points, discounts on future purchases, and informational messages about environmental impacts. Among these, the most motivating initiative was a partial refund of €5 on the item, highlighting the strong influence of direct, tangible financial incentives. This option received the highest proportion of positive responses, indicating that small but immediate economic benefits are the most effective lever in shaping return-related behaviour.

In contrast, the least effective initiative involved communicating the CO_2 emissions generated by the return process. This statement not only attracted the highest number of neutral responses, but also received the greatest share of strongly negative reactions, suggesting limited consumer engagement with abstract environmental appeals in this context. These findings echo previous sections of the survey, where symbolic or numerical sustainability framing proved less persuasive than personally relevant, action-oriented messaging.

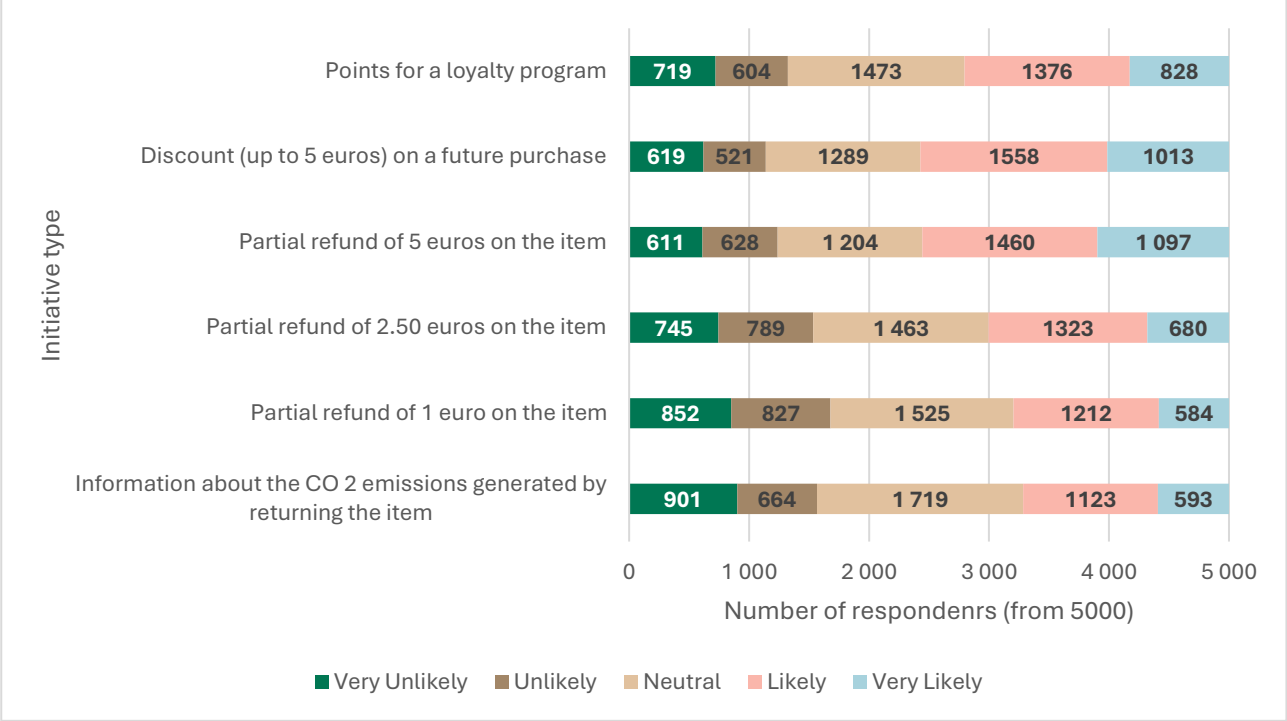

Figure 12. Incentives for consumers not to return products

Overall, the survey results indicate that consumers are most responsive to practical and immediate incentives when deciding whether to keep or return a product. Financial benefits—particularly partial refunds or discounts on future purchases—ranked highest in perceived effectiveness. A significant proportion of respondents reported being "very likely" or "likely" to refrain from returning products if such initiatives were in place. This behavioural pattern suggests that return decisions are primarily driven by direct economic self-interest, and that even modest incentives (e.g. a €2.50 partial refund) can meaningfully influence consumer choices. For retailers, this points to the strategic value of incorporating small, cost-effective nudges that reward retention rather than relying on moral or environmental appeals alone.

In contrast, non-monetary incentives—such as providing information about the carbon footprint of returns—appear significantly less compelling to consumers. The high number of "very unlikely" responses to such environmental impact messaging suggests that, while sustainability remains a recognised concern, it is not a sufficiently strong motivator on its own to change return behaviours. These findings reinforce the conclusion that economic incentives, even modest ones, are more persuasive in encouraging product retention. Retailers aiming to reduce return rates should therefore prioritise financial strategies, and potentially combine them with loyalty programmes or discount-based offers to enhance both customer satisfaction and retention.

These conclusions are further supported by findings from the *June 2023 Global Consumer Insights Pulse*[4] conducted by PwC. In this study, online shoppers were asked what would help reduce the number of product returns. The most frequently mentioned factor was more accurate sizing information, cited by nearly half of respondents—just ahead of the need for more precise product descriptions. Additionally, 40,0% indicated that access to reviews from other customers would reduce their likelihood of returning items. Notably, 10,0% of shoppers stated they *rarely or never*

[4] https://www.pwc.com/gx/en/industries/consumer-markets/consumer-insights-survey.html access 15.07.2025

return online purchases, pointing to the existence of a segment that either shops more cautiously or has a higher satisfaction rate post-purchase.

To deepen the general analysis, the survey results were further disaggregated by country. In each of the five pilot countries, 1,000 complete responses were collected and examined, with attention given both to the designated pilot city and to responses from other urban areas. The same question set was used across all locations, ensuring comparability. This structured breakdown enables the identification of behavioural trends within and across national contexts. The goal of this comparative step is to support the development of a typology of online customer profiles, based on meaningful differences in consumer attitudes and practices observed across GreenTurn pilot countries.

4. Results of the survey in Poland

4.1. Demographic and Socioeconomic Profile in Poland

Figure 13 presents the employment status of survey respondents in Poland, revealing a clear dominance of individuals employed full-time in the private sector. This trend is observed both among respondents from the pilot city of Poznań and those from other parts of the country. However, the second most common employment category differs slightly: in the "other" category, retirees rank second, whereas in Poznań, the second-largest group consists of those employed full-time in the public sector.

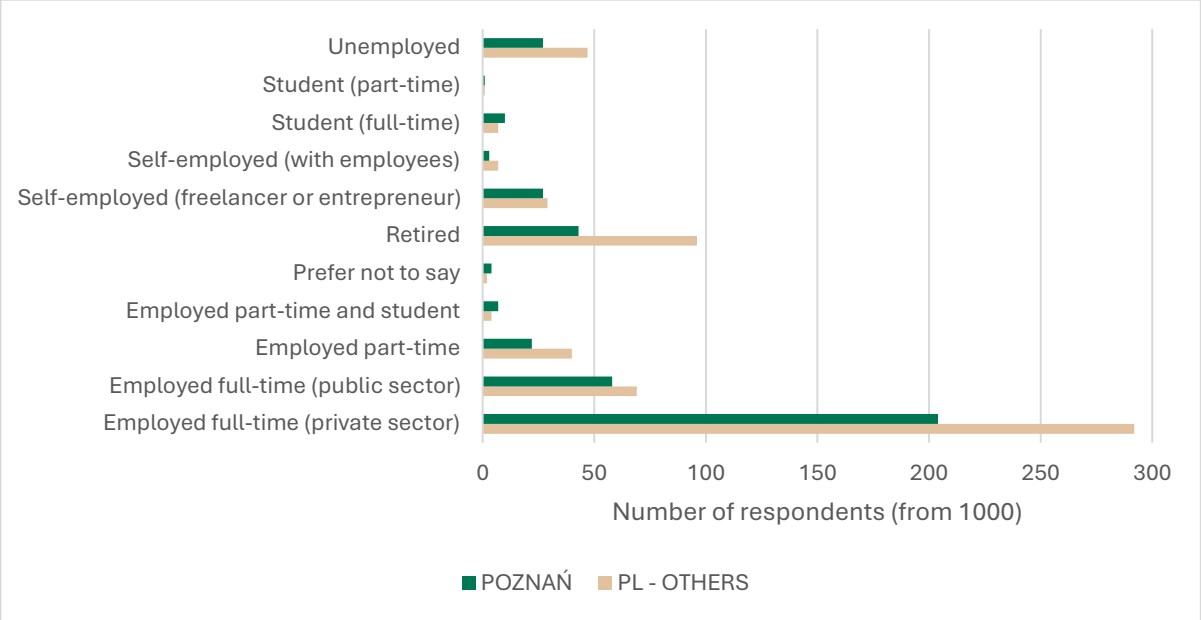

Figure 13. Employment status of respondents in Poland

In terms of income distribution, the most common monthly net earnings among respondents in Poland fall within the €1001–€2000 range. This income bracket dominates in both Poznań and the rest of the surveyed areas. A small number of respondents—55 out of 1000—chose not to disclose their income. At the highest end of the earnings spectrum, only 11 individuals reported making more than €7000 per month, highlighting the limited representation of top earners within the sample (see Figure 14).

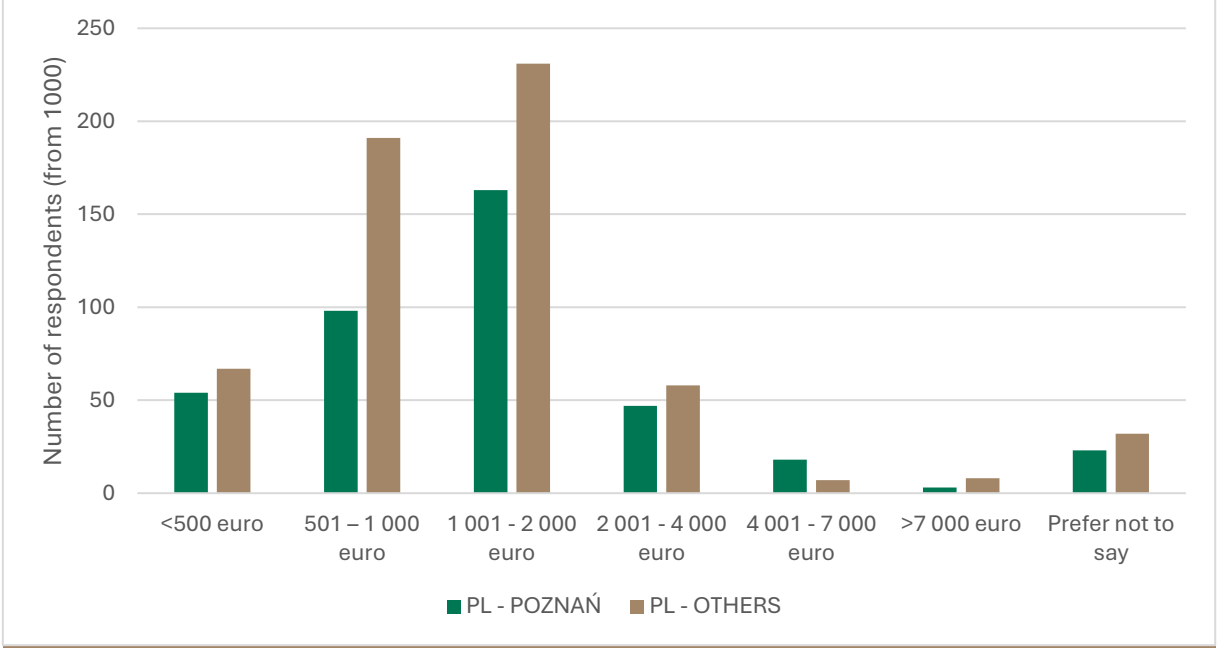

Figure 14. Monthly net income of respondents in Poland

Together, the employment and income data highlight a clear socioeconomic distinction between Poznań and other parts of Poland. The Poznań respondent emerges as a younger, more professionally active, and financially stable consumer—traits that may shape their digital purchasing patterns and openness to innovative delivery solutions. These findings point to a demographically favourable environment for testing sustainable last-mile interventions in the city, as such consumers are more likely to engage with new technologies and value-added services..

4.2. Delivery and Return Practices in Poland

Regarding the number of online purchases made during the two weeks prior to the survey, the most frequently indicated response was two orders (Table 4). This option was selected by 84 respondents from Poznań and 138 from other parts of Poland, making it the dominant choice across both groups. Notably, a considerable number of respondents also reported making no purchases during this period, suggesting a sizeable share of occasional or inactive online shoppers. In contrast, responses indicating more than ten orders were extremely rare, highlighting that high-frequency online purchasing remains limited among Polish consumers.

PL - POZNAŃ		PL - OTHERS	
How many online purchases did you make in the last 2 weeks?	Number of respondents	How many online purchases did you make in the last 2 weeks?	Number of respondents
0	31	0	61
1	69	1	98
2	84	2	138
3	48	3	92
4	43	4	55
5	57	5	57
6	21	6	24
7	7	7	10
8	8	8	12
9	0	9	6
10	21	10	22
11	3	11	1
12	1	12	2
13	3	13	0
14	0	14	1
15	2	15	9
16	2	16	2
17	1	17	0
18	1	18	1
19	0	19	0
20	4	20	3

Table 4. Number of online orders placed during the last two weeks of respondents from Poland

The typical range for the value of orders placed by Poles during this period was €11-30. This response met with a clear advantage among the others available both in Poznan and other Polish cities, as can be seen in Figure 15.

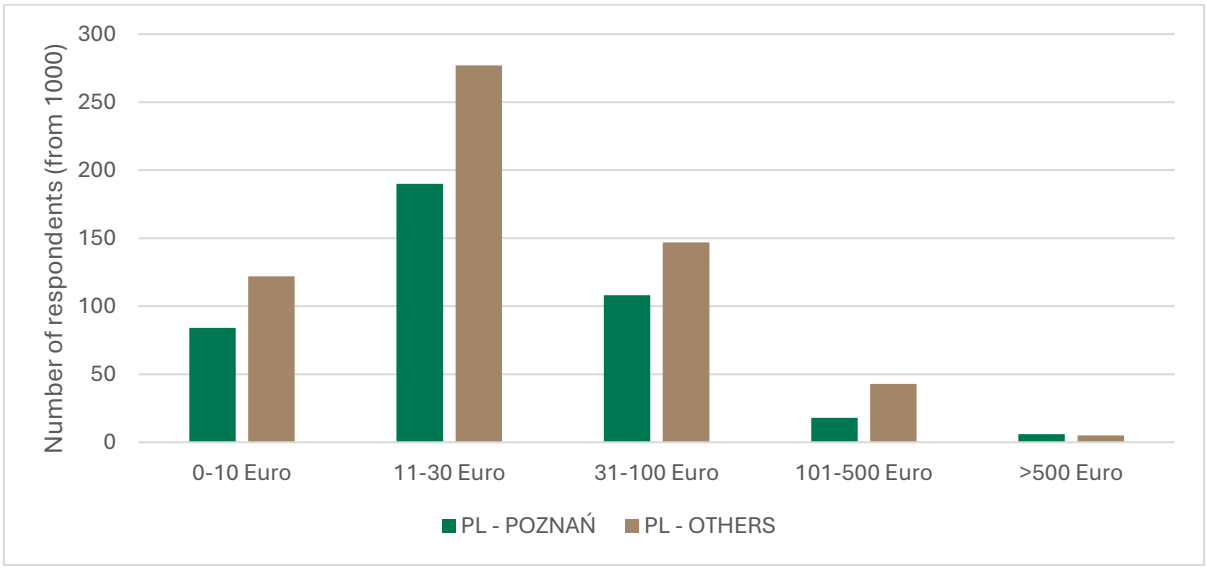

Figure 15. Price range of purchased goods in Poland

In contrast to questions about the number of orders placed, respondents were also asked about the returns they had made in the past two weeks. Table 5 provides a summary that shows how the numbers of responses differed between residents of Poznań and other cities. The dominant response was no returns-324 responses in Poznań and 512 outside the pilot city. In Poznań, none of the respondents returned more than 7 parcels during the period. At the same time, outside the city, none of the respondents returned more than 5. This may be related to the wider access to return points in Poznan than in other parts of the country, where the prospect of returning at a far-away point may effectively discourage consumers from doing so.

PL - POZNAŃ		PL - OTHERS	
How many returns (from online purchases) have you made in the last 2 weeks?	Number of respondents	How many returns (from online purchases) have you made in the last 2 weeks?	Number of respondents
0	324	0	512
1	48	1	62
2	23	2	14
3	6	3	2
4	1	4	0
5	3	5	4
6	0	6	0
7	1	7	0
8	0	8	0
9	0	9	0
10	0	10	0

Table 5. Number of returns made by a given number of respondents during the last two weeks in Poland

Taken together, the data suggest that residents of Poznań are more active participants in e-commerce than those from other parts of Poland. A greater proportion reported making between two and five purchases during the reference period, and a small but notable group shopped even more frequently. At the same time, the vast majority of respondents across all locations reported no returns—possibly indicating satisfaction with purchases, or alternatively, friction in the return process. The slightly higher incidence of returns in Poznań may reflect a more mature digital shopping culture, where experienced consumers feel more confident asserting their return rights.

4.3. Attitudes to Sustainability in Delivery in Poland

As with the general respondent pool, the attitudes of Polish consumers toward various aspects of online shopping were measured using a five-point Likert scale. Among the 1000 survey participants in Poland, payment security emerged as the most important factor, mirroring the trend observed in the full international dataset of 5000 responses. In Poznań, this aspect received an average rating of 4.68, while respondents from other cities scored it slightly lower at 4.66. All fourteen evaluated factors received average scores above 3.0, indicating generally positive attitudes toward the elements included in the survey.

However, environmentally focused factors were rated consistently lower. The lowest scores were observed for "green packaging," with an average rating of 3.08 in Poznań and 3.26 in other parts of the country. Similarly, sustainable delivery modes were assessed as less important compared to more pragmatic concerns. Interestingly, respondents in Poznań expressed slightly more critical attitudes toward green logistics than their counterparts elsewhere, further reinforcing the perception of a practical, efficiency-oriented urban consumer. The comparative results are presented in Figure 16.

These data suggest that Polish online consumers—both in Poznań and in other cities—prioritise functional aspects of e-commerce, such as transaction safety, product price and quality, and convenient payment methods. These elements consistently topped the list of key factors in shaping purchasing decisions. Meanwhile, secondary considerations like eco-friendly packaging or delivery received modest scores, especially among urban respondents. This points to a clear consumer hierarchy of needs, with practicality taking precedence over sustainability.

A subtle yet noteworthy trend can be observed in the responses from outside the pilot city. In these locations, environmental considerations such as green delivery options or packaging received slightly higher average ratings than in Poznań. This may reflect a gradual shift in awareness and growing openness to aligning consumer behaviour with broader environmental values in smaller cities or less saturated markets.

The Polish e-commerce customer is primarily a person who values security, quality and price, making a moderate number of online purchases, mostly in the middle price ranges. Returns are infrequent, and sustainability aspects are still of low importance, although a growing ecological sensitivity is emerging outside major cities.

The consumer from Poznań differs subtly in behaviour and expectations. This group tends to be more digitally engaged, places a stronger emphasis on service convenience and quality, and is slightly more active in returns and high-value purchases. While still open to green practices, their choices are primarily guided by functionality, comfort, and reliability, with environmental issues remaining secondary.

These survey findings were further supported by qualitative data gathered through the structured stakeholder interviews, which provided information on the relevance of given shopping factors directly from retailers. During the focus group meeting in Poznań, participants suggested specific communication activities to increase customer awareness of sustainable delivery and reduce returns in online shopping. According to the results of the survey, green aspects in Poland did not gain the sympathy of respondents. In Poznań, attitudes and evaluations of green forms were even worse than in the rest of the country.

The need for direct communication on websites and e-commerce platforms using benefit-focused rather than moralizing language was pointed out. Also among the recommendations were a nationwide education campaign, promoting conscious shopping, and working with e-commerce companies to review their delivery and return policies. Specific examples of messages were also prepared. Retailers recommended simple, visual education, through videos, infographics and animations, showing the environmental impact of returns. They pointed out the need to present hard data (e.g., CO_2 emissions) and break down myths that green delivery is less convenient or safe. They stressed the importance of rewarding eco choices (e.g., with discounts),

encouraging people to think more carefully about their purchases (e.g., by checking the size tables), and building trust in delivery and returns processes.

Polish customers showed openness to green practices, but at the same time emphasized the need for convenience, reliability and clarity of message. They want to know that their choices have a real impact, but do not want to be shamed. They expect transparency, motivators and proven, safe processes, indicating the need for a well-designed, positive and educational e-commerce communication strategy.

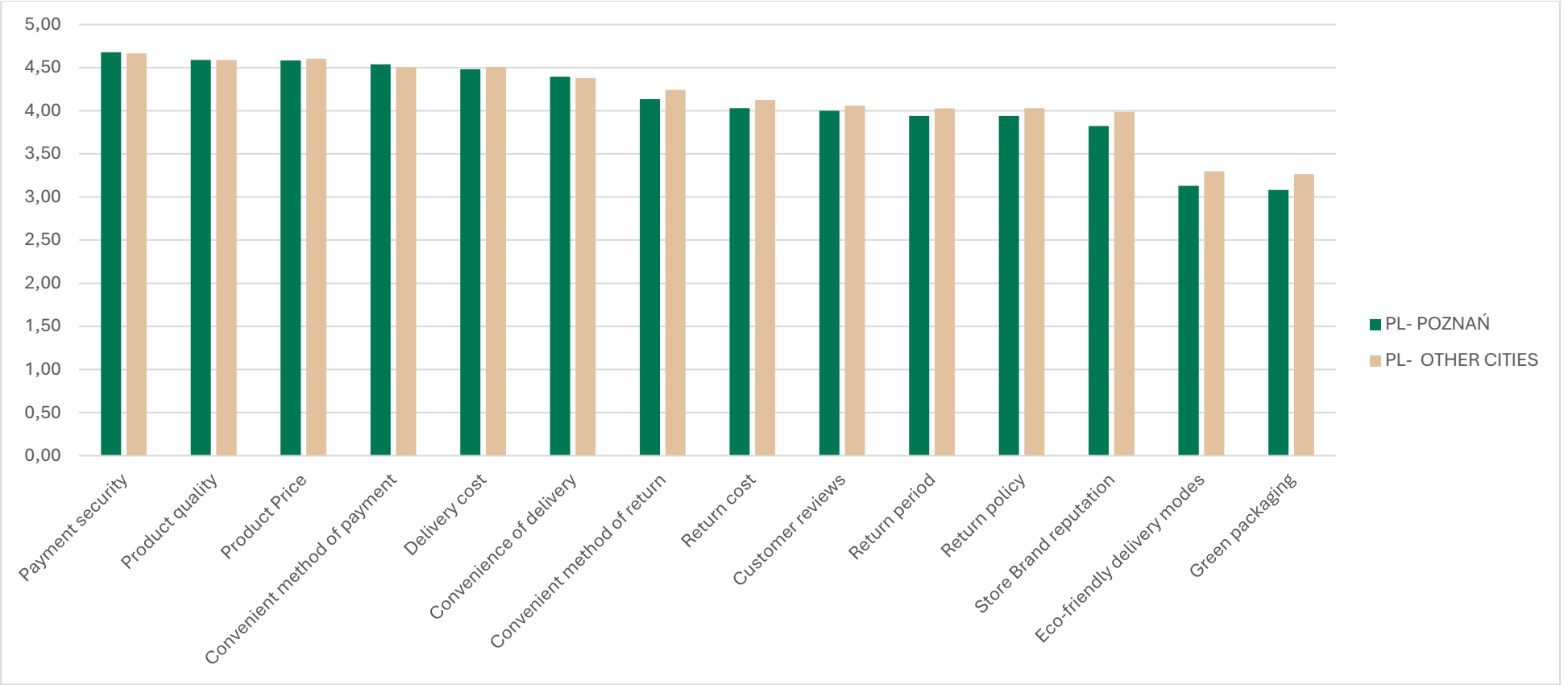

Figure 16. Average ratings of importance of given online shopping factors on a scale of 1-5 in Poland

5. Results of the survey in Greece

5.1. Demographic and Socioeconomic Profile in Greece

Among the 1000 survey respondents in Greece, the most frequently reported employment status was full-time work in the private sector, reflecting a pattern also observed in Poland (Figure 17). In Athens, nearly half of the 519 respondents selected this option, while outside the capital, the figure was slightly lower at 35,1%. The least common employment status in Athens was "part-time student," with no respondents selecting this category, compared to three individuals in other cities.

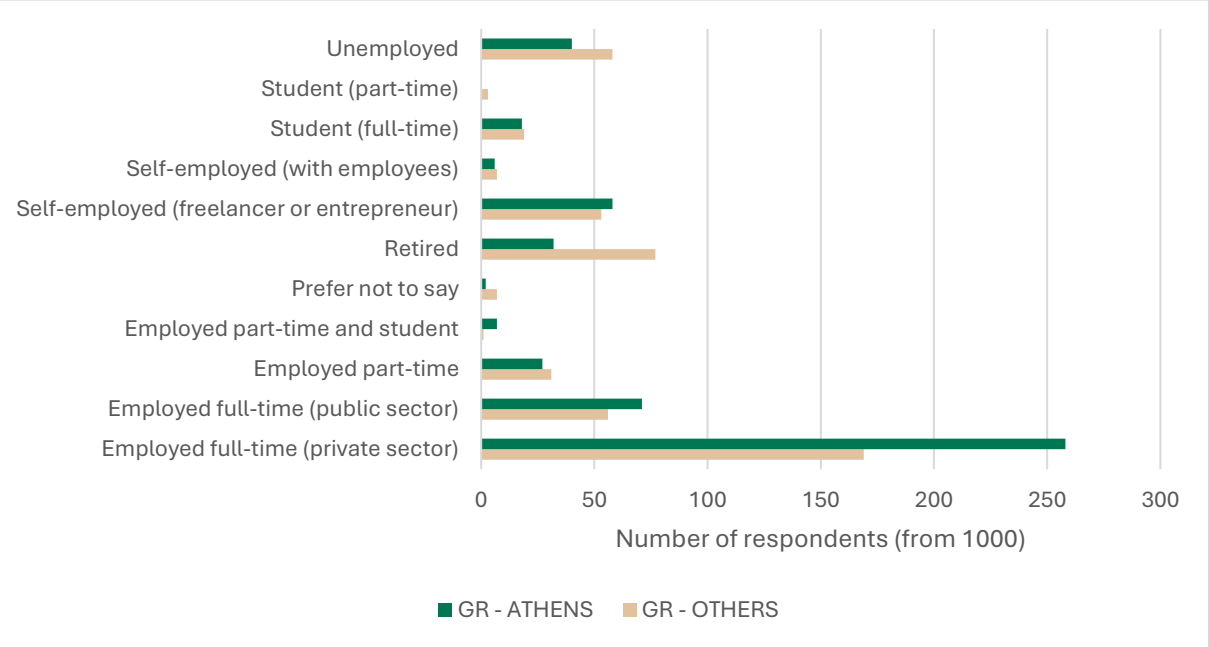

Figure 17. Employment status of respondents in Greece

In response to a question about the level of monthly earnings in Euros, the majority of those surveyed in Greece answered that they are in the range of 1001-2000 Euros. There were 215 such respondents in Athens, which represents 41,4% of all Athenians' responses. The highest level of earnings (above €7000) was indicated by 14 people in Athens. Outside the pilot city, the range of highest earnings was indicated by 5 people. Among the entire sample of 1000 people in Greece, 50 people refused to share information on monthly earnings. A visualization of the responses to the question about the level of earnings is shared in Figure 18.

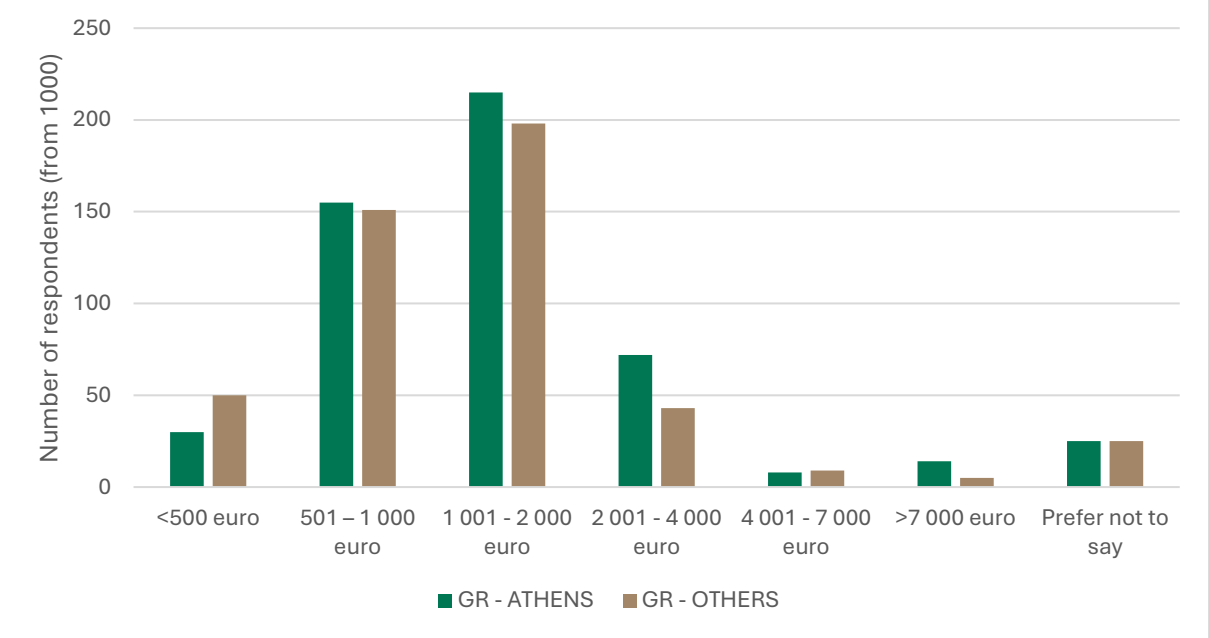

Figure 18. Monthly net income of respondents in Greece

The demographic profile of Greek online consumers reveals a largely professionally active population, with private sector employment dominating across the country. In Athens in particular, significant shares are also found among the self-employed and public sector employees, pointing to a relatively diverse and stable labour force. Conversely, higher levels of unemployment—especially outside the capital—suggest more varied economic conditions, which may correspond to differing levels of demand or sensitivity to price and service quality.

In terms of purchasing power, the majority of Greek respondents fall within the moderate-income bracket, suggesting stable but cautious spending patterns. Notably, Athens stands out with a higher proportion of high-income earners (above €2000), indicating a stronger consumption potential in the capital. The relatively high share of self-employed individuals may also point to a dynamic, entrepreneurial consumer base with distinct shopping behaviours and flexibility in managing expenses.

5.2. Delivery and Return Practices in Greece

Table 6 presents the distribution of responses to the question regarding the number of online orders placed during the two weeks preceding the survey. Across Greece, the most frequently indicated number was two orders, a pattern consistent both in Athens and in other regions. Notably, no respondent reported placing more than 18 orders during the period. Higher-frequency shopping behaviour—defined here as 10 or more purchases—was concentrated in the capital: 20 respondents in Athens reported such activity, compared to only half that number in other Greek cities.

GR - ATHENS		GR - OTHERS	
How many online purchases did you make in the last 2 weeks?	Number of respondents	How many online purchases did you make in the last 2 weeks?	Number of respondents
0	47	0	66
1	112	1	97
2	128	2	130
3	83	3	66
4	45	4	38
5	53	5	52
6	16	6	11
7	7	7	7
8	7	8	3
9	1	9	1
10	13	10	5
11	0	11	0
12	1	12	4
13	0	13	0
14	0	14	0
15	2	15	1
16	1	16	0
17	1	17	0
18	2	18	0
19	0	19	0
20	0	20	0

Table 6. Number of online orders placed during the last two weeks of respondents from Greece

Online purchases made by Greeks were most often in the range between €31 and €100. In Athens, more than 41,4% of respondents placed orders falling within this range. Outside the capital, this answer received 44,1% of all respondents' answers. The least popular answer was very expensive purchases in the range of more than €500. A total of only 13 people in Greece marked this range of data. In the contrast range of very cheap orders (0-€10) , it can be noted that Athenians place such orders far more often than residents of other areas of Greece. The results of the summary of purchase cost ranges are shown in Figure 19.

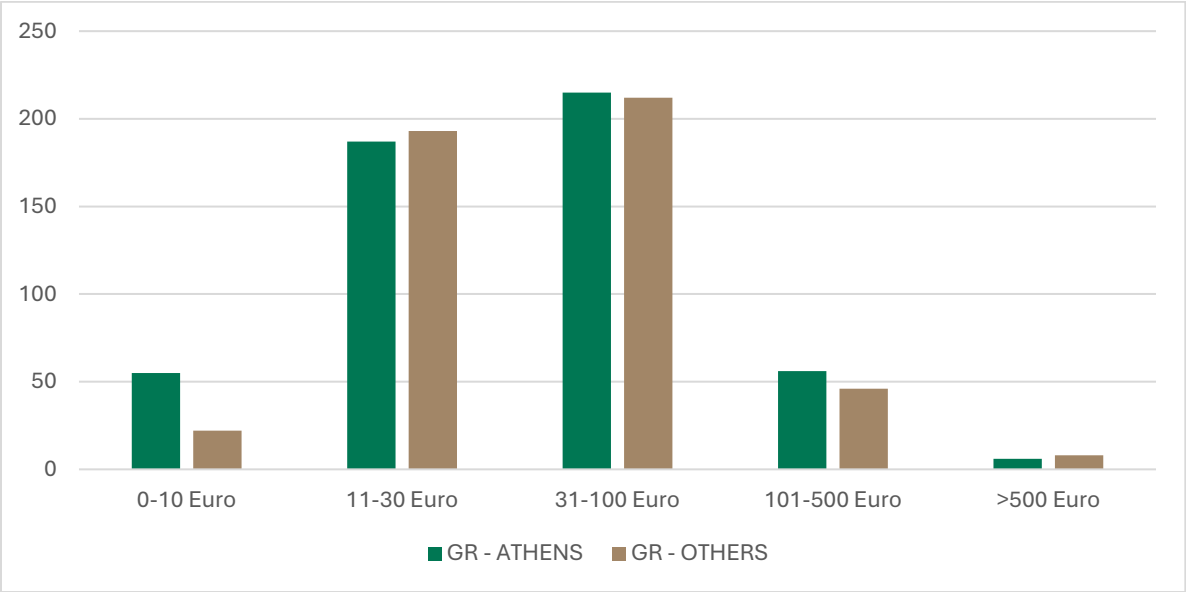

Figure 19. Price range of purchased goods in Greece

The frequency of product returns was also investigated. Table 7 summarises these results, revealing that returns are rare across Greece. A significant majority of respondents reported making no returns in the preceding two weeks: 89,0% in Athens and 90,2% outside the capital. Returns exceeding three items were extremely uncommon and appeared only as isolated cases.

GR - ATHENS		GR - OTHERS	
How many returns (from online purchases) have you made in the last 2 weeks?	Number of respondents	How many returns (from online purchases) have you made in the last 2 weeks?	Number of respondents
0	462	0	434
1	32	1	28
2	15	2	9
3	5	3	3
4	1	4	4
5	4	5	1
6	0	6	0
7	0	7	0
8	0	8	1
9	0	9	0
10	0	10	1

Table 7. Number of returns made by a given number of respondents during the last two weeks in Greece

The combined data on purchase frequency, value, and returns indicate that the typical Greek online consumer engages in moderate e-commerce activity, generally placing one to three orders within a two-week period. Orders exceeding five in this time frame are rare, suggesting a pattern of deliberate, well-considered purchasing. The low incidence of returns may reflect high product satisfaction, careful selection processes, or logistical challenges associated with returning items.

In terms of the value of purchases, the middle price segment dominates, suggesting a pragmatic approach on the part of consumers, a desire to use online shopping while controlling the budget. The Greek online customer is thus a moderately active, price-conscious shopper who rarely makes returns, which may create good conditions for brands offering stable quality, transparent shopping policies and attractive value for money.

5.3. Attitudes to Sustainability in Delivery in Greece

Figure 20 presents the average scores given by Greek respondents when evaluating the importance of various factors involved in the online purchasing process. Responses were collected using a five-point Likert scale, where 1 indicated minimal importance and 5 indicated strong importance. Among Greek consumers, product price emerged as the most important factor. This item received an average score of 4.67 in Athens and 4.73 in other parts of the country—marking a notable deviation from the trends observed in Poland and the overall dataset, where payment security held the top position. In Greece, payment security was still rated highly, ranking second overall.

As in the Polish results, environmental aspects such as green packaging were rated as the least important. The average score for this item was 3.17 in Athens and 3.29 in other cities. Similar to trends in Poland, respondents outside the capital assigned slightly higher importance to eco-friendly options than those in the pilot city. This suggests that while sustainability is acknowledged, it remains a secondary consideration in Greek consumers' purchasing decisions—particularly in urban centres like Athens.

Based on a compilation of factors influencing online shopping, the Greek customer can be characterized as pragmatic, cautious and value-oriented, as well as transaction security. The Greek consumer focuses primarily on the fundamental aspects of the shopping process: attractive price, product quality and reliability of payment. This approach is indicative of an experienced and informed customer who makes decisions based on rational considerations, expecting seamless service and predictability. The importance of a store's reputation or the opinions of other users is treated as a decision support, but is not the main selection criterion.

Environmental considerations, by contrast, ranked consistently low on the list of priorities. Elements such as eco-friendly packaging or sustainable delivery methods were assigned the least importance, indicating that sustainability currently plays a minimal role in influencing purchasing behaviour. This pattern suggests that while environmental awareness may be increasing in general discourse, it has not yet translated into concrete decision-making criteria for the majority of Greek consumers. Their behaviour is governed more by utilitarian logic than by ideological alignment with green values.

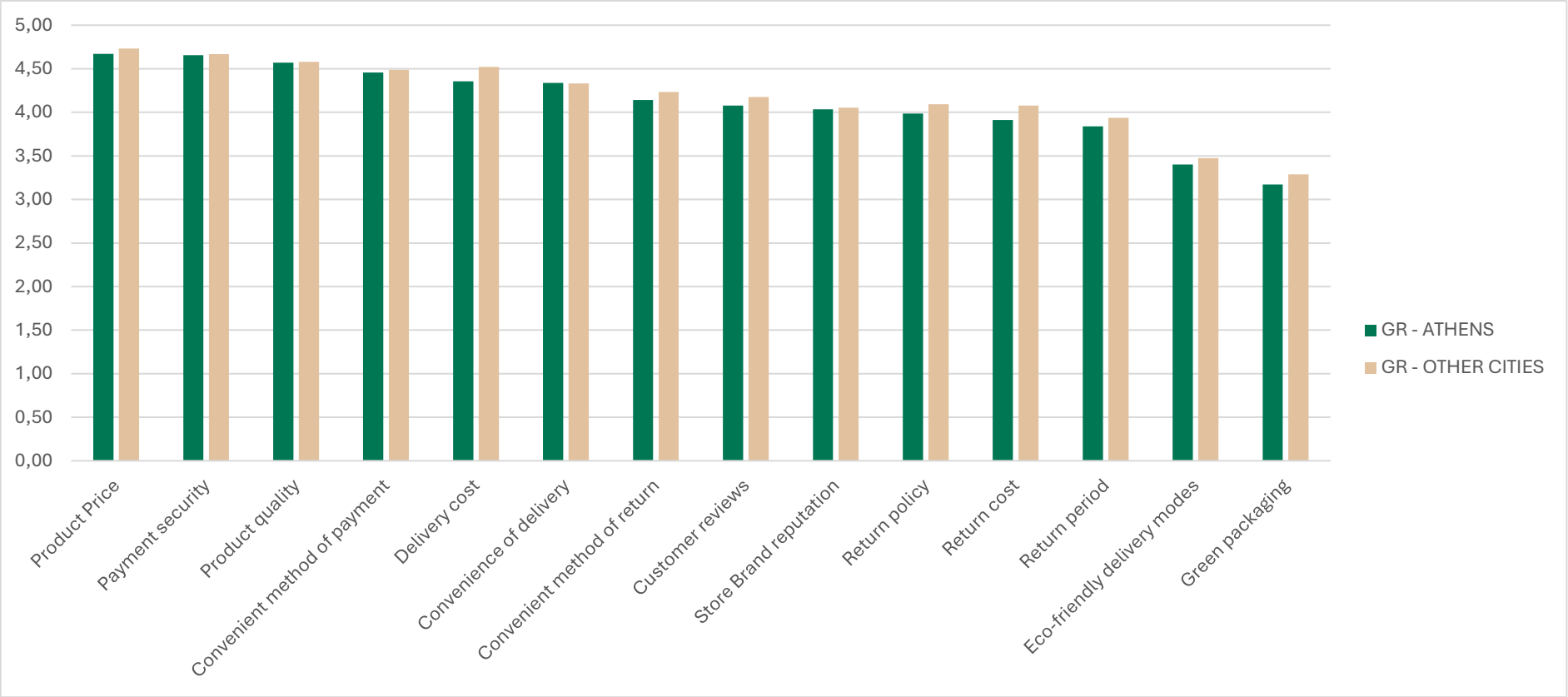

Figure 20. Average ratings of importance of given online shopping factors on a scale of 1-5 in Greece

The Greek customer is thus best characterised as a rational, cost-sensitive online shopper, most often employed in the private sector. He or she engages with e-commerce periodically, typically selecting products within the middle price range and returning items infrequently. Purchasing decisions are largely driven by price, quality, and transaction security, with ecological factors occupying a peripheral position.

Within this national context, the consumer in Athens exhibits a slightly more active digital profile. Respondents from the capital are more likely to engage in online shopping, show a higher frequency of purchases, and report somewhat higher income levels than those in other areas. They also demonstrate a greater willingness to spend in higher price categories. Nonetheless, their motivations and priorities remain consistent with the rest of the country: price, convenience, and trust in the process take precedence over sustainability.

These findings are further supported by stakeholder insights gathered through focus group interviews in Greece. Nine participants discussed potential interventions that could increase consumer uptake of green delivery methods. Across the group, there was unanimous agreement that financial incentives—such as free delivery or a discount—would be the strongest motivating factor in choosing an environmentally friendly delivery option. This confirms the low salience of ideological appeals: while the concept of sustainability is acknowledged, it is unlikely to influence behaviour unless directly tied to personal benefit.

Other options that received positive support included minimal differences in delivery time between green and conventional methods, as well as convenient pickup options such as parcel lockers or nearby collection points. However, proposals such as combined deliveries to reduce trips or displaying the CO_2 footprint of each option received no endorsement at all. This strongly reinforces the view that practical convenience and financial benefit are the only currently viable behavioural levers for promoting sustainable choices among Greek consumers.

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6. Results of the survey in Spain

6.1. Demographic and Socioeconomic Profile in Spain

In Spain, the pilot city of Zaragoza reflects a broader national trend in employment structure, with full-time work in the private sector emerging as the dominant status among respondents. As shown in Figure 21, this category was selected by 55,5% of Zaragoza participants (301 in total), and by 42,8% of respondents from other parts of the country. The prominence of full-time private sector employment underscores a strong representation of economically active individuals in the sample, particularly in the pilot city. At the other end of the spectrum, part-time employment combined with studying was the least common response. Only one person in Zaragoza selected this option, and just seven respondents across the entire Spanish sample (0,7%) indicated this dual status, suggesting it is a marginal category in the current labour landscape of Spanish e-consumers.

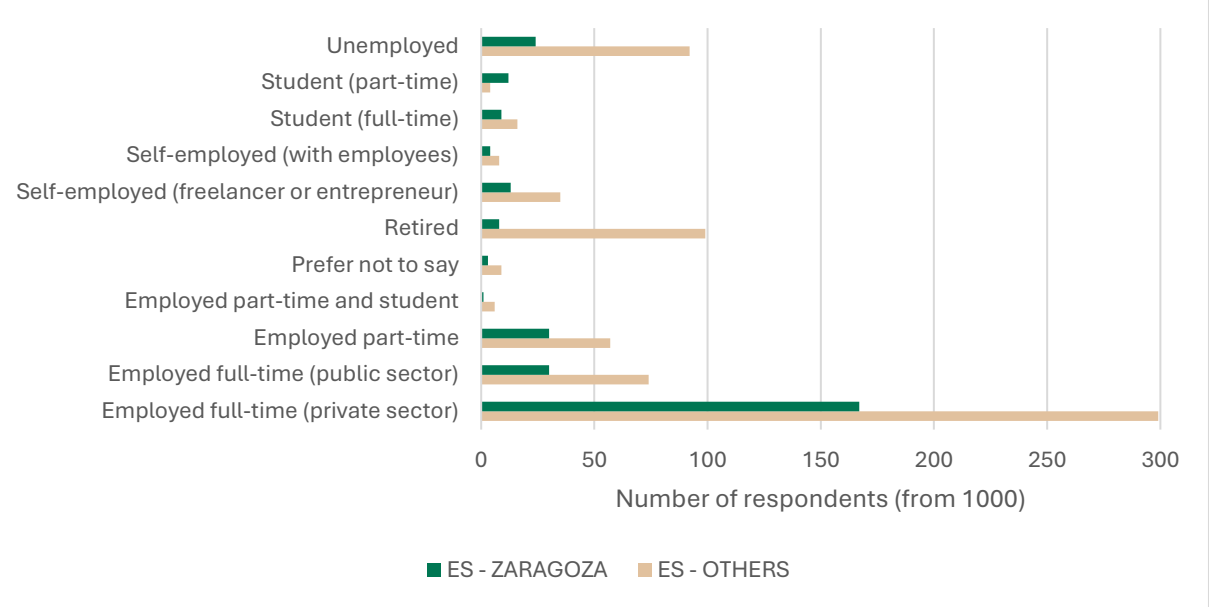

Figure 21. Employment status of respondents in Spain

Responses to the question on net monthly earnings are presented in Figure 22. As observed in other countries, the most frequently selected income bracket among Spanish respondents was €1001–€2000 per month. This range was indicated by 39,2% of respondents in Zaragoza and 41,3% in other areas of Spain, suggesting a concentration of moderate earners across the national sample. A total of 45 individuals—15 in the pilot city and 30 outside it—chose not to disclose their income, reflecting a relatively low level of non-response on this question.

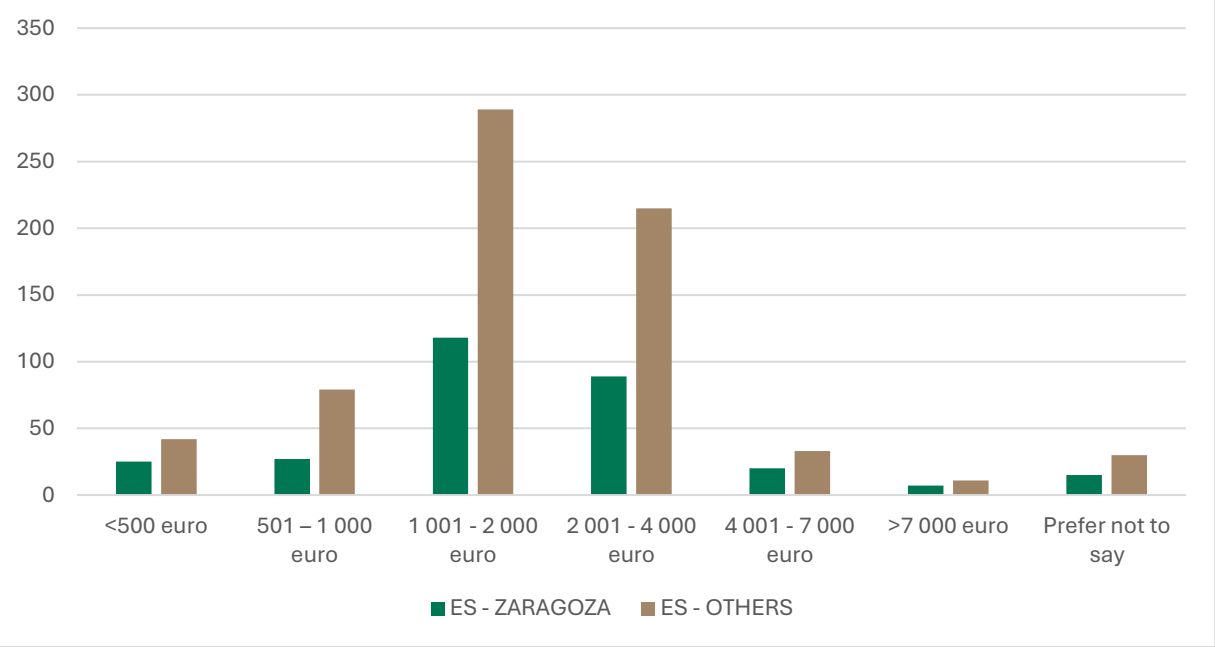

Figure 22. Monthly net income of respondents in Spain

Spanish online consumers represent a varied socioeconomic profile, with notable contrasts between Zaragoza and other regions. Respondents from Zaragoza are more likely to be in full-time private sector employment, suggesting greater economic activity and potentially more consistent engagement with e-commerce. In contrast, respondents from outside the pilot city more frequently include retirees, students, or the unemployed, pointing to a broader mix of digital access and shopping behaviours.

These differences in employment status are mirrored in the income distribution. While the €1001–2000 range is the most common nationwide, Zaragoza exhibits a more even spread across income brackets, with both lower and higher earnings more frequently represented. This indicates that the city's online shoppers reflect a more diverse economic base, with varying purchasing capacities and motivations.

6.2. Delivery and Return Practices in Spain

Spanish consumers exhibit a broad range of online shopping behaviours, particularly in terms of order frequency. Most respondents reported making between one and six purchases in the two weeks preceding the survey, with very few exceeding that range. Notably, only one respondent in Zaragoza placed as many as 20 orders during that period, while outside the pilot city the maximum reported was 16. A relatively small share of respondents made no purchases at all—fewer than 9,0% in Zaragoza and around 12,0% elsewhere—indicating a generally high level of digital shopping engagement.

ES - ZARAGOZA		ES - OTHERS	
How many online purchases did you make in the last 2 weeks?	Number of respondents	How many online purchases did you make in the last 2 weeks?	Number of respondents
0	27	0	84
1	42	1	172
2	84	2	172
3	55	3	103
4	37	4	64
5	19	5	53
6	10	6	17
7	4	7	7
8	2	8	5
9	1	9	2
10	7	10	13
11	1	11	1
12	5	12	4
13	0	13	0
14	1	14	0
15	4	15	1
16	1	16	1
17	0	17	0
18	0	18	0
19	0	19	0
20	1	20	0

Table 8. Number of online orders placed during the last two weeks of respondents from Spain

The most popular price range ordered by respondents in Zaragoza was the 31-€100 range, in contrast to other parts of Spain, where the second range (11-€30) was more popular (Figure 23).The lowest price range was chosen more than twice as often by residents outside Zaragoza. Only 13 people, including five from the pilot city, were among those who chose the more than €500 option.

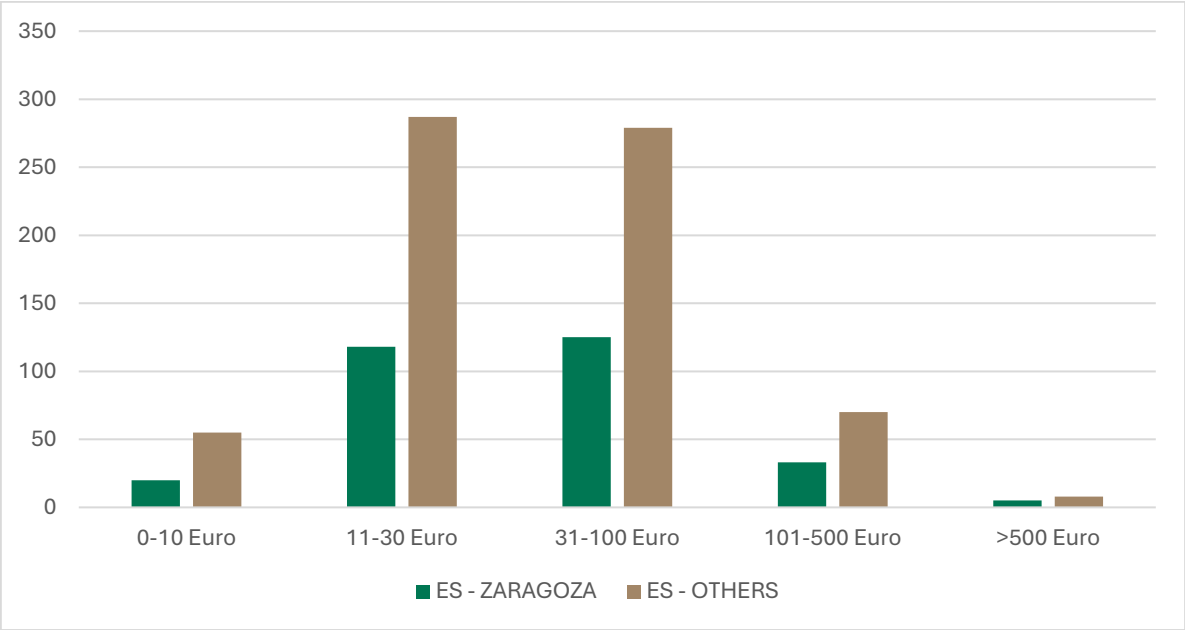

Figure 23. Price range of purchased goods in Spain

As in other countries, when asked about returns on online orders, most people did not return any shipments. Table 9 summarizes data on the number of returns in the pilot city and in other parts of Spain. 85,0% of all responses, that is, 850 out of 1000 respondents in Spain selected no returns in the past two weeks. Returns of more than four can be considered marginal; there were very few in the entire sample. In the pilot city, two respondents marked a response of 10 returns in the past two weeks, the maximum value. In other cities, such a number of returns was not recorded in any survey.

ES - ZARAGOZA How many returns (from online purchases) have you made in the last 2 weeks?	Number of respondents	ES - OTHERS How many returns (from online purchases) have you made in the last 2 weeks?	Number of respondents
0	256	0	594
1	25	1	68
2	12	2	28
3	3	3	5
4	3	4	1
5	0	5	1
6	0	6	1
7	0	7	0
8	0	8	0
9	0	9	1
10	2	10	0

Table 9. Number of returns made by a given number of respondents during the last two weeks in Spain

The data shows that the typical Spanish online shopper is a user who makes several purchases in a short period of time, chooses products of medium value and rarely makes returns. The dominant price ranges are €11-100. This means that they are mostly informed consumers, regularly buying everyday products or electronics and clothing in the mid-price segment, likely

with a good knowledge of the offer and a low level of dissatisfaction with their orders. The Zaragoza customer is characterized by a more moderate shopping frequency and a lower tendency to return. This is dominated by those making 1-4 purchases per two weeks, also in the medium price range, suggesting a more conservative and thoughtful approach. The high percentage of no returns in both groups indicates a high degree of accuracy in shopping choices, which may be due to customers' good preparation for purchase, product knowledge or effective filters and descriptions in online stores.

6.3. Attitudes to Sustainability in Delivery in Spain

As in Poland, payment security was rated the most important factor by Spanish online shoppers when evaluating different aspects of the purchasing process. On a scale from 1 to 5, this factor received an average score of 4.61 in Zaragoza and an even higher 4.72 across other parts of the country, confirming its centrality to consumer trust. Product quality and price followed as the second and third most important factors, respectively. This contrasts slightly with the Greek results, where price held the top position, but the pattern reinforces that consumers across countries generally prioritise reliability, quality, and value.

At the opposite end of the spectrum, sustainability-related features—specifically green packaging and environmentally friendly delivery methods—received the lowest average scores among all 14 assessed factors. These results suggest that, despite growing awareness of environmental issues, ecological considerations still rank low in terms of actual influence on Spanish consumers' purchasing decisions. The full set of average scores is presented in Figure 24.

Spanish online shoppers can , thus, be characterised as pragmatic, efficiency-driven individuals who value reliability in the digital purchasing experience. They are primarily economically active, often employed in the private sector, and approach e-commerce with a practical mindset. Their behaviour reflects informed decision-making: purchases are purposeful, returns are rare, and preferences are shaped more by functionality and convenience than by ideology. Trust in the transaction process—manifested in the importance placed on secure payments, reliable delivery, and product quality—serves as the foundation of their consumer habits.

The Zaragoza shopper fits this general profile but displays an even more measured and deliberate pattern of engagement. Less frequent in their purchasing, they nonetheless exhibit a high degree of consumer awareness and digital literacy. While open to sustainability, they place lower priority on green delivery solutions, reinforcing the view that ecological considerations are still peripheral to their shopping rationale. What defines both groups is not indifference to environmental values, but a hierarchy of needs where stability, simplicity, and control outweigh broader ethical concerns.

The general conclusions derived from the survey were complemented by insights from a focus group interview conducted in the Zaragoza pilot city. This qualitative input enabled the identification of three key consumer segments based on age and associated shopping preferences. These segments reveal not only generational differences in online purchasing behaviour but also distinct attitudes toward sustainability, digital literacy, and retailer expectations.

The first segment, comprising consumers under the age of 40 (approximately 10,0% of the sample), is marked by strong value-driven motivations. These younger shoppers place considerable emphasis on environmental sustainability, ethical sourcing, and corporate responsibility. They are especially receptive to brands that demonstrate transparency, social commitment, and ecological innovation—such as CO_2-neutral delivery or recyclable packaging. Their purchasing decisions are often influenced by ideological alignment and a desire to support businesses with authentic environmental and ethical practices.

The second group, aged 41 to 60 (around 60,0% of participants), represents a more pragmatic cohort. Their loyalty is shaped by consistent service quality, clear warranty terms, and the reputation of established brands. They value functionality over ideology and expect reliability at each stage of the shopping process—from detailed product descriptions and easy comparison tools to secure payments and dependable delivery. While this group expresses interest in environmental issues, it seeks concrete, credible information rather than abstract messaging. Trust must be earned through clarity and evidence rather than aspiration alone.

The third segment includes shoppers aged 61 and above (about 30,0% of the respondents). While many still favour traditional retail channels, their presence in e-commerce is steadily increasing. This group values simplicity, user-friendly interfaces, and accessible technology—often preferring tablets or larger devices to aid navigation. Their trust hinges on clear terms, thorough support, and visibly reliable service. Importantly, they demonstrate a preference for local products and small businesses, yet remain cautious of generic green claims. They demand validated, transparent data before accepting sustainability narratives.

Together, these segments illustrate the generational diversity of Spain's online shoppers. Preferences, expectations, and values vary significantly across age groups, often in opposing directions. Tailoring digital retail strategies to these differentiated needs is essential. A one-size-fits-all approach is unlikely to resonate: effective engagement requires a nuanced understanding of how age intersects with purchasing behaviour, trust, and openness to sustainability.

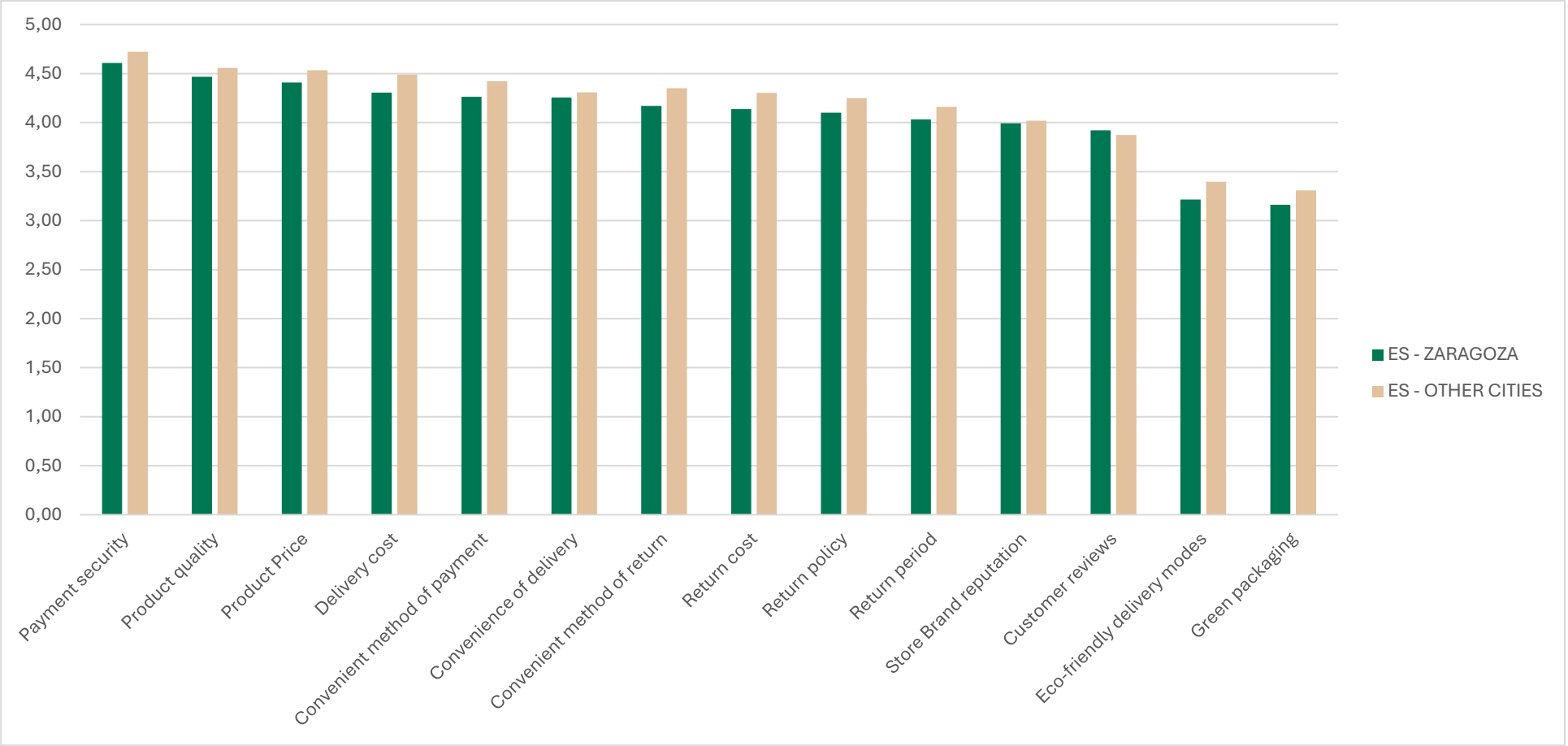

Figure 24. Average ratings of importance of given online shopping factors on a scale of 1-5 in Spain

7. Results of the survey in Austria

7.1. Demographic and Socioeconomic Profile in Austria

In Austria, as in the other pilot countries, the largest share of respondents reported being employed full-time in the private sector. This group accounted for 41,7% of survey participants in Vienna and 35,3% in other parts of the country. A notable difference, however, is the substantial proportion of retirees—particularly outside the pilot city—where they represent 21,4% of respondents, indicating a more diverse age and employment profile. The least represented group across the sample were part-time employees who also study; only three such individuals were identified in Vienna, and none outside the capital. The breakdown of employment status across Austria is presented in Figure 25.

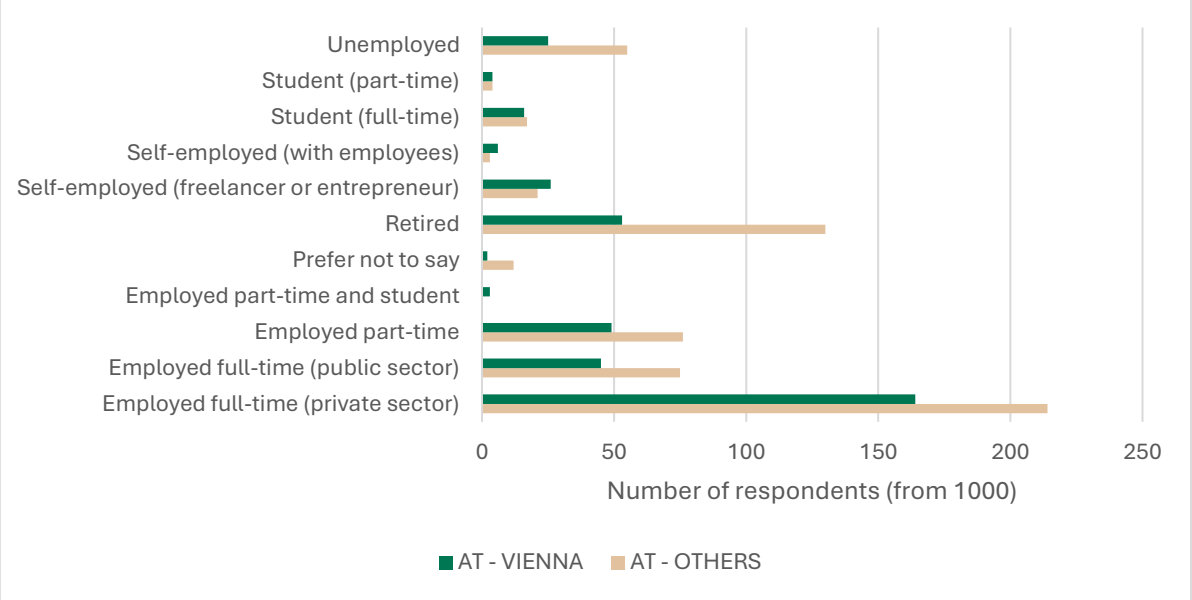

Figure 25. Employment status of respondents in Austria

Earnings in Austria, as can be seen in the chart in Figure 26, are significantly higher than in the previously analysed countries and in the overall comparison. Most respondents both in the capital and in other parts of the country earn between €2001 and €4000 net per month. Of the total 1000 respondents in Austria, 39,4% chose this range. The results of the Austrian earnings surveys noted a relatively large group that chose not to answer the earnings question. In total, more than a hundred people did not disclose their earnings for the survey.

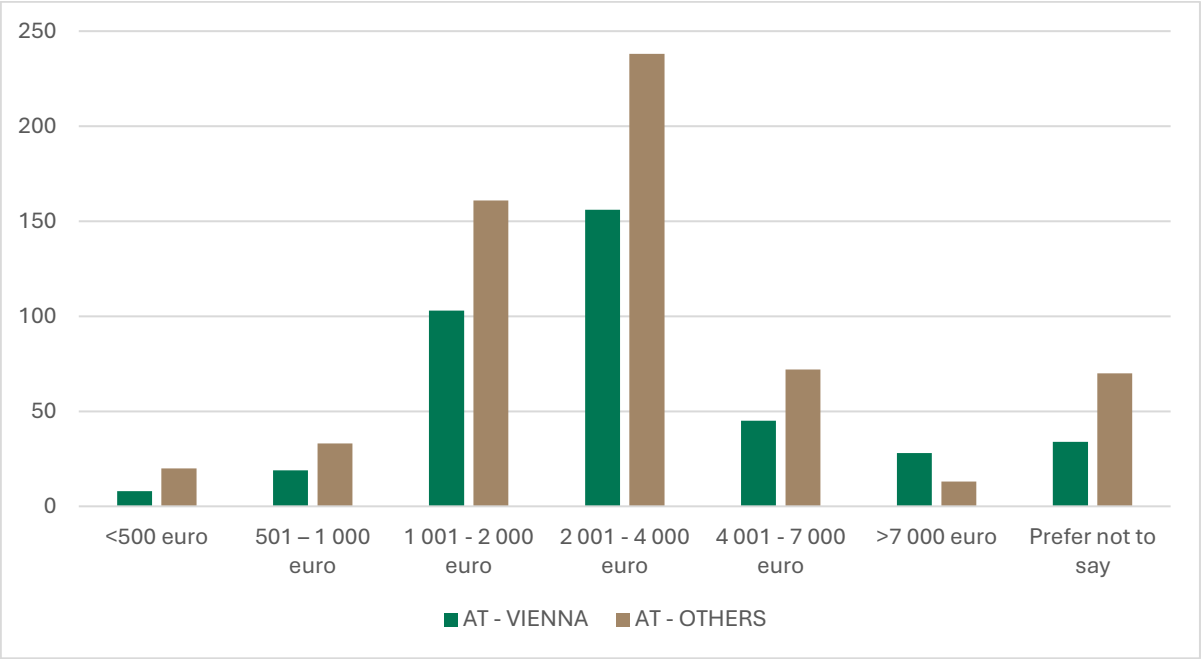

Figure 26. Monthly net income of respondents in Austria

Austrian online shoppers form two distinct consumer profiles shaped by regional differences in employment and income. In Vienna, the dominant presence of full-time private sector workers is complemented by a notable share of students and freelancers, suggesting a dynamic, mobile, and digitally connected workforce. This urban demographic is typically younger, more flexible, and economically active, reflecting a consumer segment that is not only comfortable with online transactions but also open to innovation and premium e-commerce services.

In contrast, respondents from other Austrian regions are more likely to be retirees or unemployed, indicating a more static and aging population with potentially more conservative shopping habits. This divergence is also reflected in income structure: while middle-income brackets (€2001–4000) dominate across Austria, Vienna stands out for its broader income distribution, including a higher presence of high earners with purchasing power to match. This urban-rural divide suggests that Viennese consumers may be more inclined to engage in high-value or experience-driven online shopping, whereas customers outside the capital may prioritise reliability, price transparency, and functional value.

Furthermore, the relatively high rate of income non-disclosure—especially outside Vienna—may signal a heightened concern for privacy, which could translate into more cautious digital behaviour. Together, these patterns reflect a nuanced Austrian e-commerce landscape, where regional differences in economic status, employment type, and digital fluency shape how consumers approach the online marketplace.

7.2. Delivery and Return Practices in Austria

In Austria, the most frequently selected response concerning the number of online purchases made during the two weeks preceding the survey was one or two orders. In Vienna, 163 out of 393 respondents (41,5%) fell into this range, while outside the capital the proportion was slightly higher, reaching 44,5%. A total of 50 respondents in Vienna and 68 in other regions reported making no purchases during the same period. These findings highlight the widespread

engagement of Austrian consumers with e-commerce, demonstrating the established presence of online shopping habits across both urban and non-urban areas. A detailed breakdown of responses is provided in Table 10.

AT - VIENNA		AT - OTHERS	
How many online purchases did you make in the last 2 weeks?	Number of respondents	How many online purchases did you make in the last 2 weeks?	Number of respondents
0	50	0	68
1	82	1	127
2	81	2	143
3	51	3	95
4	33	4	46
5	30	5	46
6	15	6	16
7	4	7	15
8	8	8	8
9	1	9	1
10	15	10	17
11	1	11	1
12	6	12	10
13	2	13	0
14	2	14	5
15	7	15	4
16	0	16	2
17	1	17	1
18	1	18	0
19	0	19	0
20	3	20	2

Table 10. Number of online orders placed during the last two weeks of respondents from Austria

Among the Austrian sample of 1,000 respondents, the most commonly reported value range for online purchases was between €31 and €100. This category was overwhelmingly dominant compared to other response options. In Vienna, 42,7% of respondents selected this range, while outside the capital, the figure was slightly higher at 47,1%. The lowest price bracket (€0–10) was chosen a total of 51 times nationwide, whereas the highest category (above €500) was selected 29 times, indicating that high-value purchases remain relatively rare within the sample.

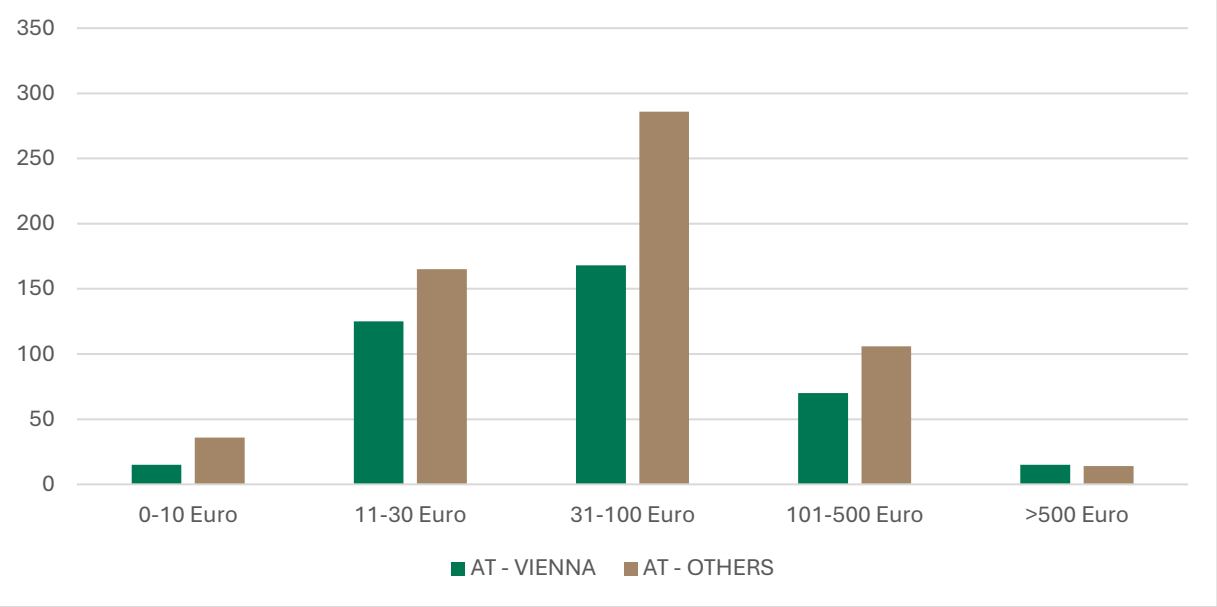

Figure 27. Price range of purchased goods in Austria

As shown in Table 11, 29,6% of respondents in Austria reported not returning any parcels during the two-week reference period. Notably, a total of fourteen individuals indicated that they had made ten returns within that timeframe—six from Vienna and eight from other regions. This represents a relatively high level of return activity, especially when compared to the figures recorded in other countries, highlighting a greater incidence of high-frequency returns within the Austrian sample.

AT - VIENNA How many returns (from online purchases) have you made in the last 2 weeks?	Number of respondents	AT - OTHERS How many returns (from online purchases) have you made in the last 2 weeks?	Number of respondents
0	296	0	481
1	45	1	75
2	17	2	17
3	16	3	9
4	3	4	7
5	7	5	6
6	2	6	0
7	1	7	0
8	0	8	2
9	0	9	2
10	6	10	8

Table 11. Number of returns made by a given number of respondents during the last two weeks in Austria

Austrian online shoppers display a generally pragmatic and quality-driven approach to e-commerce. Consumers across the country tend to make purchases in the mid-price segment, indicating a balanced focus on value and reliability. However, a clear distinction emerges between customers in Vienna and those in other regions.

Viennese shoppers exhibit more dynamic purchasing behavior. They tend to shop more frequently, show greater openness to higher-value transactions, and are more likely to engage in product returns. This suggests a digitally confident, convenience-oriented consumer who expects efficiency, flexibility, and responsive customer service. These users are likely to appreciate advanced features such as easy return mechanisms, personalized recommendations, and premium delivery options.

By contrast, online consumers in other parts of Austria appear more reserved in their shopping habits. They are typically more price-conscious and less inclined to return items, pointing to a careful and deliberate approach to online purchasing. For e-commerce providers, this implies the need for clear product information, competitive pricing, and reliable fulfillment rather than experimentation with luxury offerings or complex return options.

Together, these profiles reflect a dual landscape in Austrian e-commerce: an urban, high-engagement customer segment centered in Vienna, and a broader national market characterized by consistency, caution, and an emphasis on core value propositions.

7.3. Attitudes to Sustainability in Delivery in Austria

The analysis of survey responses concerning the importance of various purchasing factors reveals that payment security consistently ranks as the most critical consideration for Austrian consumers. Respondents evaluated each factor on a 1–5 scale, with higher values indicating greater importance, and results were disaggregated between those living in the pilot city (Vienna) and those from other regions.

In Vienna, payment security achieved an average score of 4.64, while outside the capital, it was rated even slightly higher at 4.69, confirming its position as the top priority nationwide. The second most important factor across both groups was product price, followed closely by product quality, reflecting a general orientation toward reliability and value in e-commerce transactions.

In contrast, sustainability-related features were assigned significantly lower importance. Particularly noteworthy is the score attributed to green packaging among respondents from outside Vienna, which was the only factor in the Austrian dataset to fall below an average rating of 3, receiving just 2.95. This suggests limited consumer emphasis on environmental attributes when compared to more pragmatic concerns such as cost, security, and quality. A full comparison of average scores for all purchasing factors is presented in Figure 28.

Residents of both Vienna and other Austrian cities have very similar priorities, with payment security, product price and product quality rated highest. This indicates a rational and practical approach to online shopping throughout the country. It is worth noting, that residents of smaller cities rate a number of factors slightly higher, which may indicate greater caution or less digital confidence. The differences are small but consistent, especially with issues like payment convenience or delivery costs.

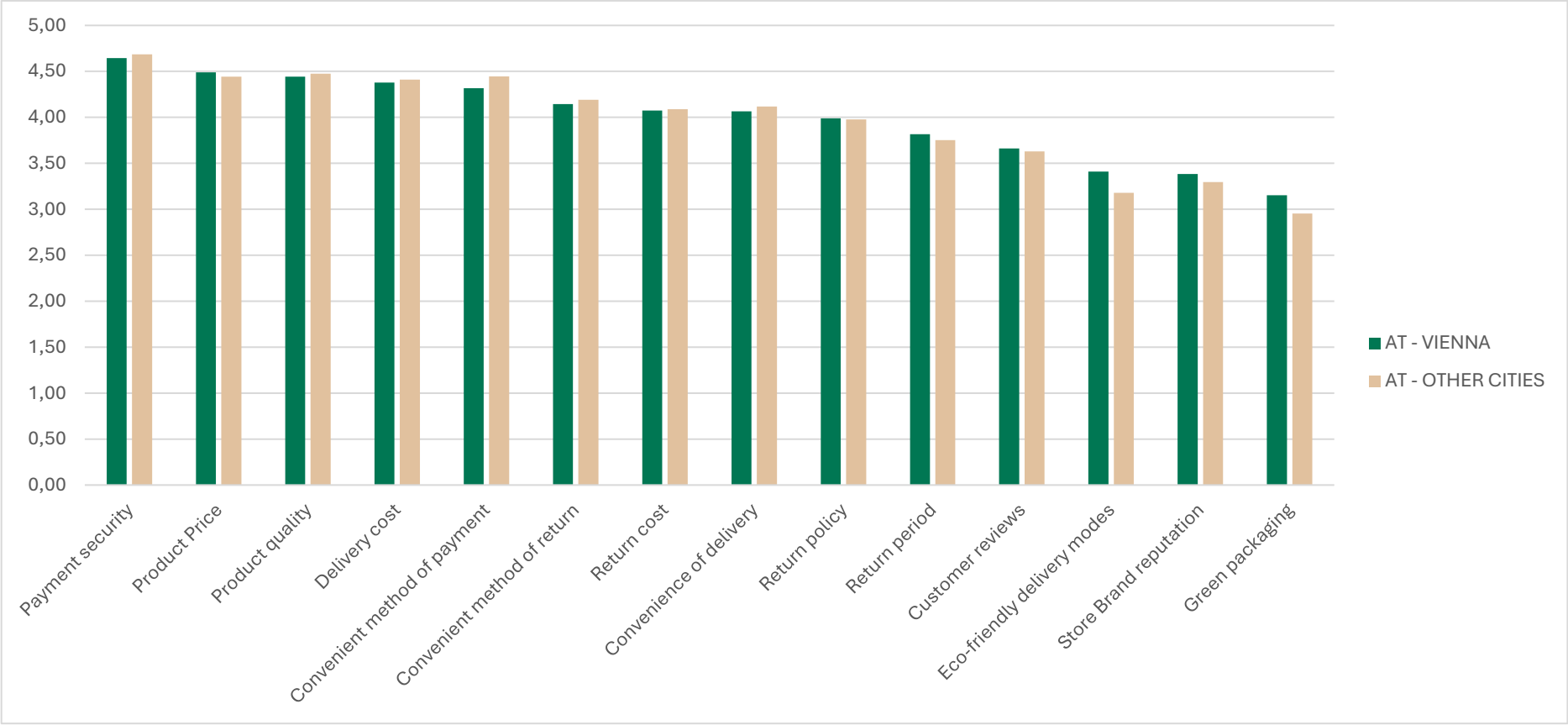

Figure 28. Average ratings of importance of given online shopping factors on a scale of 1-5 in Austria

Customers outside the capital are more flexible and less reputationally demanding, which may indicate greater trust in brands. Residents of the capital place more importance on eco-friendly forms of delivery or green packaging. This may indicate a higher willingness of the capital's residents to adapt green behaviour, but it is still not a priority for them, as evidenced by the lowest ratings for this segment in the entire set.

The online customer from Austria represents a segment of the conscious and functional consumer, whose purchasing decisions are rational and strongly rooted in everyday needs. It is characterized by a high value attributed to transparency in purchasing processes and minimization of transactional risks. He is a cautious customer who makes decisions based on clear criteria: cost, quality and trust in the seller. Branding and innovation are of secondary importance to him, more important is the efficiency and smoothness of the entire process. Sensitivity to the cost of delivery and security of payment indicate a preference for purchases without hidden risks. This customer profile requires clear communication, solid logistics and clearly communicated product value.

Shopper from Vienna is an active participant in the e-commerce market, who purchases online more often than residents of other regions and is more likely to make multiple transactions in a short period of time. He is characterized by a higher level of digital maturity, which manifests itself in greater shopping flexibility and readiness for returns. His purchases are more likely to include products in higher price ranges, indicating the higher potential of this market for premium online shopping. A resident of Vienna expects a smooth shopping process and efficient logistics. Environmental issues are slightly higher for him than at a neutral level, but this level is higher than in the rest of the country.

An additional layer of insight into the survey results was provided through a focus group study conducted with stakeholders in Vienna. Participants were asked to assess the relevance and recognizability of various consumer profiles in the Austrian market, as well as to reflect on the visibility and significance of sustainable and pro-environmental behaviours from their own professional perspectives.

A consistent theme emerged from the discussion: pro-environmental actions are perceived as effective only when they align with the everyday routines and intrinsic motivations of the target consumer segment. Stakeholders expressed strong reservations about introducing green incentives in contexts where they are not naturally embedded in consumers' lifestyles. In particular, imposing sustainability measures on customer groups characterised by low self-discipline or a high demand for convenience was deemed counterproductive. Such approaches, they argued, risk alienating consumers and disrupting the purchasing process rather than encouraging more responsible choices..

8. Results of the survey in France

8.1. Demographic and Socioeconomic Profile in France

In France, the survey covered both the pilot city of Lyon and other regions. As in other pilot countries, full-time private sector employment dominated among respondents, which is in line with the overall picture and trends in other pilot countries. Outside the city of Lyon, retirees and the unemployed also represented a large group of respondents. The smallest group in France was the self-employed. There was only one such person in Lyon, and two outside that city in all of France (a total of 3 people out of 1000 respondents). Figure 29 provides a visualization of the results of the employment status question.

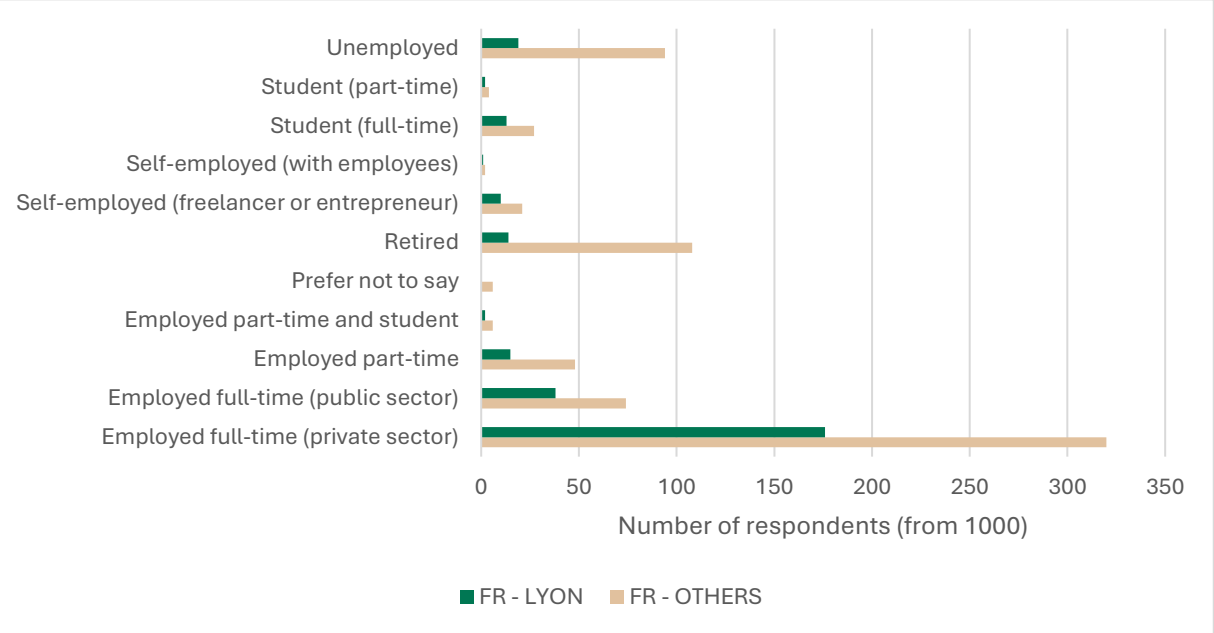

Figure 29. Employment status of respondents in France

As shown in Figure 30, the most frequently selected income bracket among French respondents was €2001- €4000 net per month. These findings, consistent with the results from Austria, suggest that France—especially the Lyon region—belongs to the group of pilot countries with higher average earnings, in contrast to Poland, Spain, and Greece, where lower income brackets dominate. In Lyon, this range corresponded to 41,4% of the responses, while outside the city it was almost 39,9%. Those who were unwilling to share information on earnings were far fewer than in Austria, with 31 people overall not giving a clear answer.

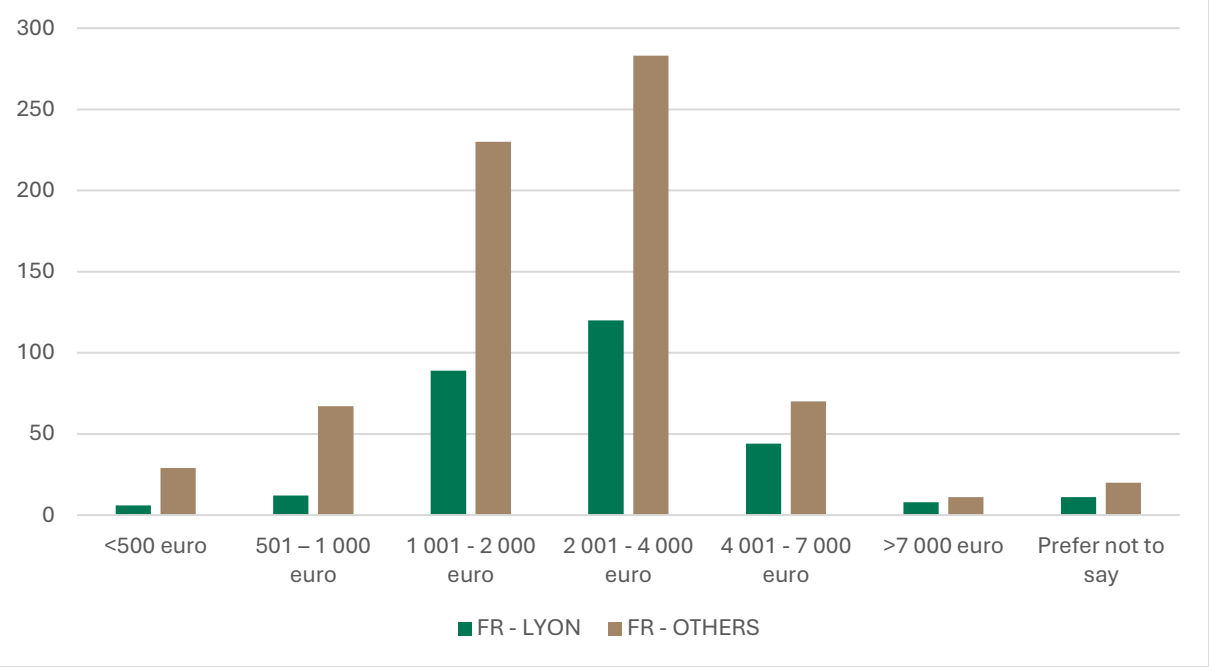

Figure 30. Monthly net income of respondents in France

The e-commerce customer profile in France, as derived from the survey's socio-economic data, is predominantly that of a professionally active individual employed full-time in the private sector, with a stable net monthly income typically ranging between €1001 and €4000. This indicates a relatively high purchasing power and a propensity to engage in online shopping driven by convenience, accessibility, and a broad product offering. The demographic structure of online shoppers also includes notable segments of students and retirees, reflecting the diversity of user profiles. While younger consumers may prioritise competitive pricing and fast delivery, older customers tend to value reliability, brand trust, and clarity throughout the purchasing process.

8.2. Delivery and Return Practices in France

Table 12 summarizes the number of orders placed by respondents in the city of Lyon and other areas of France preceding each respondent's completion of the survey. The majority of survey participants—89.3% in Lyon and 93.0% in other areas—reported placing between zero and six orders, indicating a moderate level of purchasing activity across both groups. Notably, no respondent from Lyon reported more than 15 orders, whereas in other parts of the country, 11 individuals indicated having made between 16 and 20 purchases, suggesting that instances of high-frequency online shopping were limited but slightly more prevalent outside the pilot city.

FR - LYON		FR - OTHERS	
How many online purchases did you make in the last 2 weeks?	Number of respondents	How many online purchases did you make in the last 2 weeks?	Number of respondents
0	34	0	101
1	74	1	182
2	67	2	179
3	29	3	79
4	24	4	51
5	28	5	48
6	3	6	20
7	4	7	8
8	6	8	8
9	1	9	2
10	7	10	12
11	0	11	0
12	4	12	2
13	0	13	1
14	0	14	0
15	9	15	6
16	0	16	2
17	0	17	2
18	0	18	1
19	0	19	1
20	0	20	5

Table 12. Number of online orders placed during the last two weeks of respondents from France

The price ranges of orders placed by the French were also analysed. The dominant range was 31-€100, both in Lyon and in other parts of the country. In Lyon, this range covered 43,1% of all responses. Outside the pilot city, this range was selected in more than 40,1% of responses. The lowest price range was chosen by overall 102 people, and the highest, above €500- by 16. A chart representing the distribution of responses to this question in France is represented in Figure 31.

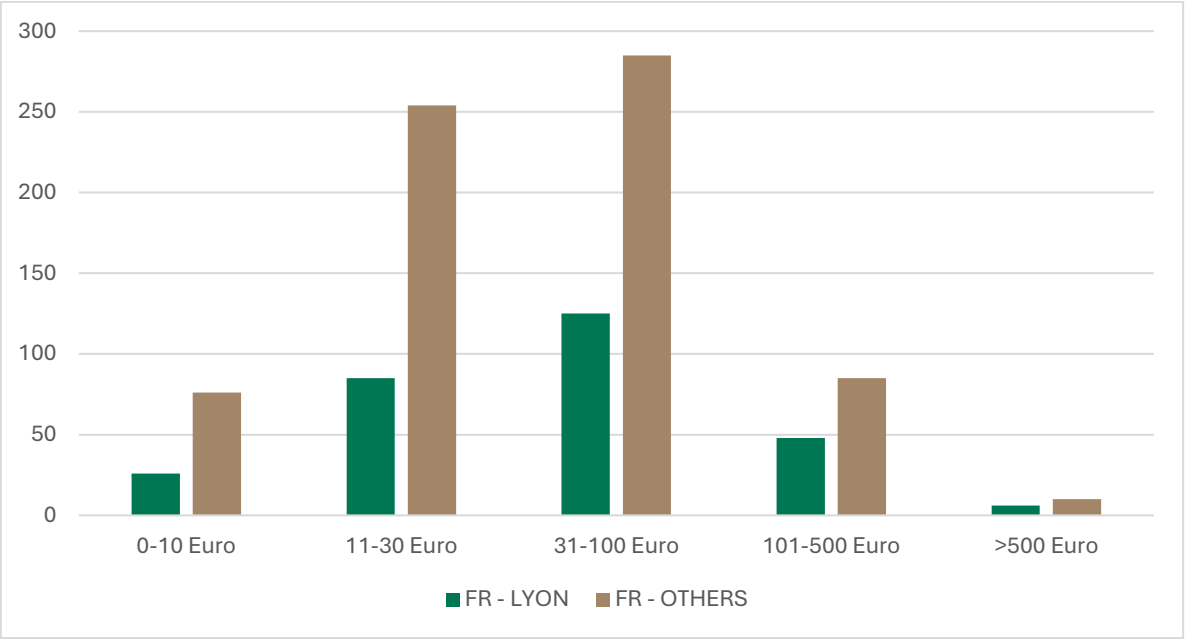

Figure 31. Price range of purchased goods in France

A clear majority of respondents in France reported making no returns during the two-week period preceding the survey. Table 13 shows the distribution of respondents' answers to this question in the survey. Out of all respondents (1000 people in France), 86,1% did not return any parcels. In contrast, there were six responses in which the respondent marked the highest possible number-ten returned packages during just two weeks. Two of these people are residents of the pilot city and four are from outside Lyon.

FR - LYON How many returns (from online purchases) have you made in the last 2 weeks?	Number of respondents	FR - OTHERS How many returns (from online purchases) have you made in the last 2 weeks?	Number of respondents
0	237	0	624
1	25	1	54
2	14	2	15
3	4	3	11
4	1	4	0
5	5	5	2
6	1	6	0
7	1	7	0
8	0	8	0
9	0	9	0
10	2	10	4

Table 13. Number of returns made by a given number of respondents during the last two weeks in France

E-commerce customers in France, both from Lyon and the rest of the region, show moderate but marked online shopping activity. Most respondents have made between one and three transactions in the past two weeks, suggesting regular but not impulsive shopping behavior. The great majority of consumers do not make extremely intensive purchases. The structure of

spending indicates that purchases in the range of €11-100 are dominant, confirming a preference for medium-value products. At the same time, the percentage of returns remains very low, the vast majority of respondents did not return any product during the period under review. This may indicate a high level of satisfaction with purchases, but also a conscious approach to consumption based on well-considered decisions.

8.3. Attitudes to Sustainability in Delivery in France

Respondents in France were asked to assess the importance of various purchasing factors using a five-point scale, where 5 represented the highest importance. Among French consumers, the most highly valued factor was payment security. This aspect received an average score of 4.62 in Lyon and an even higher 4.71 in other parts of the country, as illustrated in Figure 32. Product quality ranked second, followed by price in third place, indicating that French shoppers prioritize reliability and value in their online transactions.

At the lower end of the ranking were sustainability-related elements. Eco-friendly delivery methods received the lowest average scores, particularly outside Lyon, where the factor was rated at 3.26—the lowest value observed across all measured variables. Nevertheless, it is noteworthy that none of the surveyed factors received an average score below 3, suggesting an overall positive or at least neutral attitude toward the evaluated aspects of online shopping. However, the relatively low ratings of green delivery options confirm that sustainability is not yet a key driver in the purchasing decisions of French consumers.

French e-commerce consumers can be described as pragmatic, value-conscious, and security-oriented. Their purchasing behaviour reflects a strong preference for reliability in transactions, with particular attention paid to clear product information, secure payment systems, and predictable delivery services. Convenience and functionality dominate the online shopping experience, revealing a mature and thoughtful customer base that seeks efficiency and control rather than novelty or emotional engagement.

While environmentally friendly practices and brand image are acknowledged, they remain secondary considerations. These aspects are appreciated but rarely decisive, suggesting that French consumers still prioritize practical benefits over ideological alignment in their shopping decisions.

Within this national landscape, the typical online shopper from Lyon exhibits similar priorities, though with some nuances. This consumer tends to be economically active, professionally stable, and slightly more affluent, which supports a consistent—though not excessive—level of online purchasing. Their behaviour is guided by rational decision-making and a measured pace of consumption, favouring quality and reliability over experimentation or impulse.

Overall, both profiles illustrate a segment of e-commerce users that are informed, selective, and primarily driven by personal utility rather than social or environmental aspirations. For businesses, this points to the need for streamlined processes, transparent communication, and well-calibrated offers that emphasize trust, performance, and convenience.

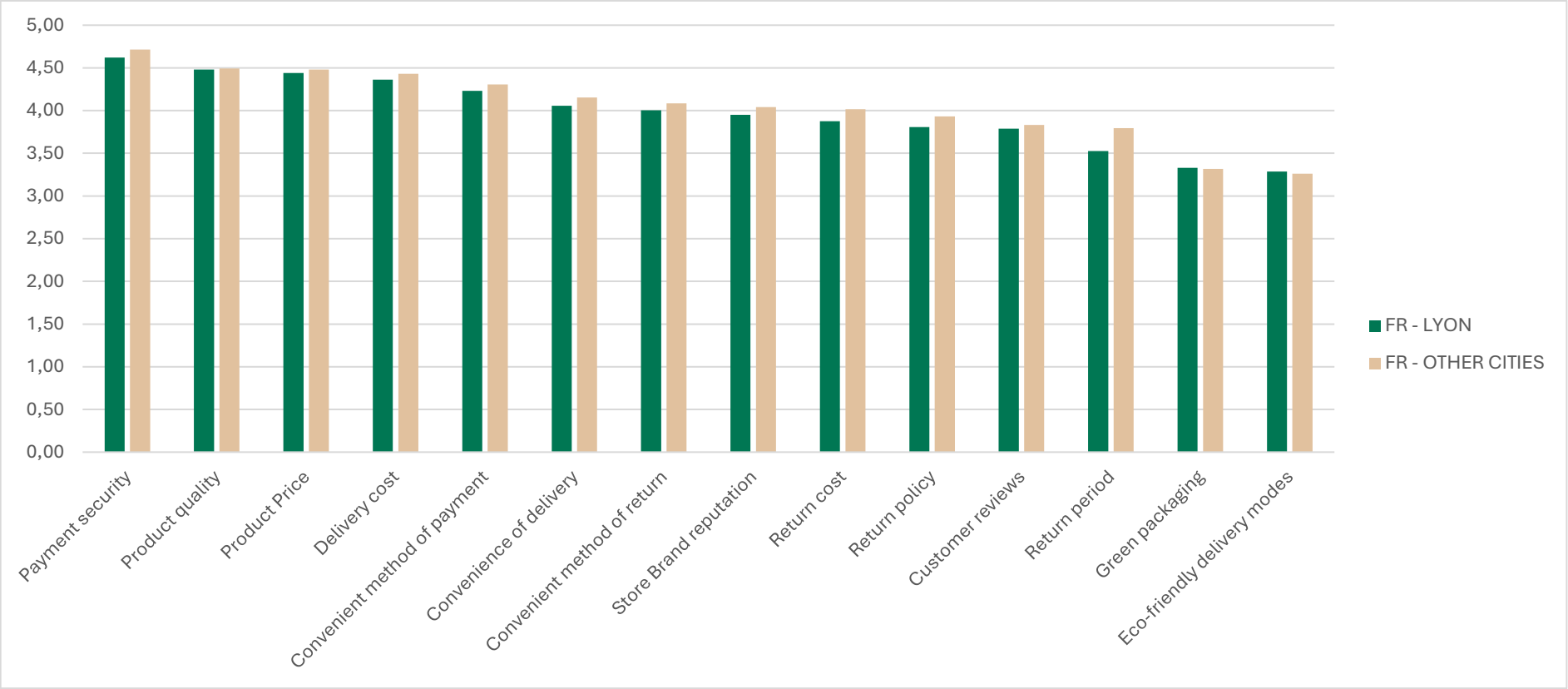

Figure 32. Average ratings of importance of given online shopping factors on a scale of 1-5 in France

The survey findings were further enriched by a complementary qualitative study in the form of focus group interviews conducted in Lyon. These discussions provided participants with an opportunity to deepen their understanding of environmental awareness in the context of e-commerce and to explore practical measures for encouraging more sustainable consumer behaviour. During the sessions, reference was made to recent research indicating that approximately 10% of consumers already prioritize environmental considerations when selecting products—a figure that is reportedly growing steadily.

In light of this emerging trend, participants proposed the introduction of an environmental rating system for deliveries, inspired by the Nutri-Score model, to assist consumers in assessing and selecting lower-impact delivery options. Additionally, a point-based reward mechanism was suggested to incentivize greener choices. This system would ideally be embedded within existing loyalty programs, tailored to individual customer profiles and delivery preferences, and informed by best practices from other industries. Such a framework was seen as beneficial for both businesses and consumers—enabling greater personalization, fostering customer loyalty, and advancing broader sustainability objectives.

A cross-country analysis of the GreenTurn survey data reveals both shared patterns and notable divergences in online shopping behaviour across the five pilot countries. While respondents differed in income levels, frequency of online purchases, and socio-demographic characteristics, the most significant variations emerged in how they prioritized specific factors in the purchasing process. Importantly, the data confirm that meaningful differences also exist within countries, between the pilot city and other regions, highlighting the need for localized strategies. Across all contexts, three core drivers—product quality, price, and payment security—consistently ranked as the most influential purchasing factors, although their order varied slightly by country. In contrast, sustainable logistics features such as green delivery or eco-packaging were rated lower, yet still received overall positive evaluations. Despite growing environmental awareness, these options remain secondary considerations in the decision-making processes of most e-commerce users.

To complement the cross-country comparison, Figure 33 presents a structured summary of key survey outcomes across the five pilot cities. The table highlights distinctive patterns in employment, income levels, purchasing behavior, and the importance attributed to sustainability-related factors, illustrating both shared tendencies and localized variations in consumer profiles.

City	Income	Order Frequency (per 2 weeks)	Returns	Top Priority	Green Options	Customer Traits
Poznań	Mid (€1001–2000)	1–3	Very low	Payment security	Low-rated, positive	Young, pragmatic, cost-conscious
Athens	Mid (€1001–2000)	1–2, rarely returns	Very low	Price	Least interest shown	Value-driven, cautious
Zaragoza	Mid (€1001–2000)	1–4, few high outliers	Very low	Payment security	Slightly better outside city	Informed, moderate, loyal
Vienna	High (€2001–4000+)	Frequent in capital	Higher in Vienna	Payment security	Green packaging lowest rated	Affluent, demanding, eco-aware (some)
Lyon	High (€2001–4000+)	1–3, regular	Very low	Payment security	Eco delivery lowest rated	Rational, stable, function-focused

Figure 33. Comparative summary of E-commerce customers in GreenTurn pilot cities

9. Persona Validation and Refinement

As part of GreenTurn's WP2, an earlier stage of research (reported in D2.2 Intersectional Analysis) developed an initial set of twelve e-commerce consumer personas. These were created through a systematic literature review and intersectional analysis to link demographic and behavioural characteristics with delivery and return behaviours in e-commerce. The resulting personas represented diverse motivations and barriers, forming an initial framework to support behavioural interventions encouraging sustainable delivery and return options. D2.2 also identified potential nudging strategies tailored to these profiles, while emphasising the need for empirical validation through survey research and retailer focus groups in Task 2.2. To clarify the starting point for this validation process, Table 14 below summarises the twelve hypothesised persona types, including their key defining characteristics:

Persona Type	Key Characteristics
Time-Savers	Prioritize convenience, value time over price, avoid physical stores.
Brand Seekers	Prefer trusted brands, willing to pay more for quality and reputation.
Review Enthusiasts	Check reviews, ratings, and product authenticity before purchasing.
Family-Centric	Make decisions heavily influenced by family needs and values.
Health-Conscious	Focused on buying organic, sustainable, and environmentally friendly products.
Cultural Guardians	Value products and brands respectful of cultural traditions.
Tech-Savvy Shoppers	Confident with apps and e-commerce platforms, enjoy personalized, tech-enabled shopping experiences.
Social Shoppers	Heavily influenced by social media trends and recommendations.
Cost-Conscious	Seek value through deals and discounts, focus on cost-effectiveness.
Impulsive Buyers	Make quick, emotional decisions for instant gratification.
Global Explorers	Shop internationally for unique items, balancing cost and exclusivity.
Premium Shoppers	Value exclusivity, quality, and premium service experiences.

Table 14. Identified types of personas

These initial personas served as hypotheses about the types of users that e-commerce logistics solutions should address, describing expected motivations, habits, and pain points. However, recognising that these profiles were conceptual starting points, Task 2.2 was specifically designed to validate them in practice, testing how strongly they appeared in real consumer behaviour across the pilot countries.

To achieve this, the team incorporated targeted survey questions capturing agreement with key behavioural statements aligned with persona attributes. Respondents' answers were analysed using a structured mapping matrix (provided as Annex 1), enabling comparison of their behavioural patterns with the hypothesised profiles. The validation approach grouped these statements into thematic categories such as convenience, brand loyalty, trust, social responsibility, family orientation, health consciousness, cultural sensitivity, technological fluency, engagement, delivery, and returns habits.

Importantly, this process did not assume all twelve personas would be equally confirmed. Instead, it aimed to identify which profiles were strongly represented in the consumer population, which emerged as niche or minority patterns, and which might require reconsideration. This differentiation ensures that GreenTurn's planned behavioural modelling, communication strategies, and pilot interventions will be evidence-based, proportionate, and targeted to the most relevant user segments.

9.1. Survey-Based Validation Results

Respondents rated **convenience-related factors** highly overall. Saving time (average 4.14) and the ability to shop anytime (4.10) emerged as top priorities, while avoiding trips to physical stores also scored strongly (3.98). By contrast, seeing offline shopping as more convenient was less common (3.34), confirming a general preference for the flexibility of e-commerce.

Category	Statement	Average
Convenience	Shopping online saves me valuable time compared to shopping in physical stores.	4,14
	I prefer online shopping because it allows me to shop at any time that is convenient for me.	4,10
	Online shopping helps me avoid the hassle of going to physical stores.	3,98
	I find offline shopping more convenient because it avoids the hassle of deliveries and potential returns.	3,34

Table 15. Statements- convenience category

These results strongly support the relevance of the **Time-Savers** persona hypothesis, confirming that a substantial share of the consumer population prioritises convenience and time efficiency. The high average scores show this behaviour is widespread and well-defined across countries, making Time-Savers one of the clearly validated segments.

For **quality and brand loyalty**, the survey reveals more moderate patterns. Respondents valued shopping from trusted brands (3.71) and prioritised product quality over price (3.44), though their willingness to pay more for reputable brands was somewhat lower (3.23), indicating a careful balance between quality and cost.

Category	Statement	Average
Quality and Brand	I am willing to pay more for products from reputable brands.	3,23
	The quality of the products I buy online is more important than the price.	3,44
	I prefer to shop from well-known brands that I trust.	3,71

Table 16. Statements- quality and brand category

These outcomes partially validate the **Brand Seekers** persona. While trust in brands and quality matters, the lower willingness to pay premium prices suggests this profile exists in the population but may represent a smaller or more niche segment, consistent with its low final share in segmentation results.

Safety and Trust factors were consistently important, with product authenticity (4.11) being especially important to consumers. Checking reviews before purchase (3.89) and feeling secure with digital payments (3.87) were also strong, showing that trust and safety remain crucial in online shopping.

Category	Statement	Average
Safety and Trust	I always check reviews and ratings before making an online purchase.	3,89
	I feel secure using digital payment methods when shopping online.	3,87
	The authenticity of products is crucial to me when shopping online.	4,11

Table 17. Statements- safety and trust category

These results confirm that trust and safety behaviours are significant across the sample. However, the low final share of **Review Enthusiasts** as a distinct persona suggests that while these attitudes are common, they may not cluster tightly enough into a standalone type for most respondents. Instead, they may cross-cut other segments (like Tech-Savvy Shoppers or Premium Shoppers) as important attributes.

Consumers showed moderate concern for ethical business practices. While respondents appreciated brands that treat employees well (3.51), they were less inclined to pay extra for insured delivery (2.98) or to consider health and safety regulations (2.97), indicating that social responsibility matters, but isn't a top priority.

Category	Statement	Average
Workplace conditions	I consider a company's health and safety regulations before making a purchase.	2,97
	I am willing to pay more for delivery if the delivery employee is properly insured.	2,98
	I am more likely to shop with a brand that treats their staff well.	3,51

Table 18. Statements- workplace conditions category

These patterns indicate that ethical and workplace considerations, while present, are not strong enough to support a distinct persona in the final segmentation. Although socially conscious attitudes exist, they appear dispersed across other types rather than forming a cohesive, standalone group.

Family-related values had a notable impact on purchase decisions. All statements scored relatively high, especially the importance of choosing products beneficial for the family (3.84). This suggests that many consumers align their shopping habits with the needs and values of their households.

Category	Statement	Average
Family-Centric	My purchasing decisions are strongly influenced by the needs of my family.	3,57
	I choose products that align with my family's values.	3,58
	I prioritize buying products that are beneficial for my family.	3,84

Table 19. Statements- family-centric category

While these averages indicate meaningful family influence on behaviour, the low share of the **Family-Centric** persona in the final segmentation suggests this pattern, though real, was too niche to define a large, uniform consumer group across countries.

Health and sustainability emerged as important motivators. Health-related purchase decisions scored 3.63, while preference for organic and sustainable products received 3.35.

Category	Statement	Average
Health-Conscious	I prefer to buy organic and sustainable products.	3,35
	Health considerations are a major factor in my purchasing decisions.	3,63
	I am willing to spend more on products that are environmentally friendly.	3,24

Table 20. Statements- health-conscious category

These results offer **clear validation for the Health-Conscious persona**, even if it remained a smaller segment in final results. The consistent pattern of valuing health and sustainability supports targeted interventions for this consumer type.

Respondents valued cultural alignment to a moderate degree. Appreciation for products respecting local traditions scored 3.59, but considerations such as cultural impact (3.17) and brand sensitivity (3.16) received lower scores, showing that cultural factors are relevant, though not dominant.

Category	Statement	Average
Cultural Sensitivity	I value products that are culturally appropriate and respect local traditions.	3,59
	I consider the cultural impact of products before making a purchase.	3,17
	I prefer brands that are sensitive to cultural differences.	3,16

Table 21. Statements- cultural sensitivity category

While cultural sensitivity influences some purchasing decisions, the variation in scores and limited share in segmentation suggest it did not form a strong, cohesive persona across the sample. This theme may instead act as a cross-cutting modifier within other segments.

Technology-related comfort received some of the highest scores across all categories. Respondents felt secure using digital payment systems (4.11), found e-commerce websites and apps easy to navigate (4.10), and expressed strong overall comfort with using digital tools for shopping (4.07).

Category	Statement	Average
Comfort with Technology	I am comfortable using apps for my online shopping.	4,00
	I am comfortable digital payment systems for my online shopping.	4,11
	I find it easy to navigate and use e-commerce websites and apps.	4,10
	I enjoy leveraging technology to make my shopping experience more efficient.	3,91
	I find easy using digital tools and platforms for online shopping	4,07

Table 22. Statements- comfort with technology category

This strong, consistent pattern **robustly validates the Tech-Savvy Shoppers persona**. The high average scores confirm that this is a major, well-defined segment in the e-commerce consumer base, as reflected in its large share in final segmentation.

Engagement was moderately rated. Respondents appreciated loyalty programs (3.51) and personalized shopping platforms (3.31), but direct interactions with brands via apps or websites scored lower (3.08), suggesting that consumers value functional benefits over frequent brand engagement.

Category	Statement	Average
Engagement with Digital Services	I often use brand apps and e-commerce platforms to access loyalty programs and discounts.	3,51
	I prefer shopping on platforms that offer personalized recommendations.	3,31
	I actively engage with brands online, including using their apps and websites regularly.	3,08

Table 23. Statements- engagement with digital services category

These responses suggest that while engagement features are valued, they may not sufficiently cluster to define a distinct persona. Instead, these behaviours may enhance the profiles of Tech-Savvy Shoppers and Premium Shoppers, without creating a separate segment.

The Social Media Influence category had the lowest average ratings. While these channels generally exerted limited sway over purchasing decisions (2.55–2.64), some respondents still reported discovering new products through them.

Category	Statement	Average
Social Media Influence	I am influenced by social media when making purchasing decisions.	2,55
	I follow influencers and brands on social media that align with my lifestyle.	2,36
	Social media often introduce me to new products that I end up purchasing.	2,64

Table 24. Statements- social media influence category

These findings suggest **limited validation for the Social Shoppers persona**. While the behaviour exists, it is relatively niche in this sample, explaining its very small share in final segmentation results.

Delivery factors remain important. The highest-rated preference was for pick-up point or locker collection (3.52), reflecting a desire for flexibility and convenience. Tolerance for delivery delays was low (3.17), and limited acceptance of delivery time windows (3.06) suggests a demand for precise, reliable logistics.

Category	Statement	Average
Delivery	I can only accept deliveries when I am home.	3,06
	I do not tolerate delays in delivery times.	3,17
	I prefer receiving a parcel at a pick-up point or locker to save me the hassle of waiting at home.	3,52
	I often receive my online orders in multiple deliveries at different times or even days.	3,12

Table 25. Statements- delivery category

These responses show that delivery preferences are meaningful but operate more as cross-cutting attributes rather than forming a separate persona. They are highly relevant for service design across multiple consumer types.

The returns category also had relatively low average scores in all three questions. The statement that the respondent orders more to return the rest later received the lowest average (2.29) on this list. Slightly

higher was ordering to try something on and return it if not liked (2.49). The highest average in this set is the statement that free return is an important part of the online shopping experience (3.80).

Category	Statement	Average
Returns	Sometimes I order items (e.g., clothes) to try them and return them if I do not like them.	2,49
	Returning an unwanted item for free is an important part of the online shopping experience.	3,80
	Sometimes I order multiple items with different characteristics to choose one and return the others.	2,29

Table 26. Statements- returns category

This suggests that free returns are a critical expectation, but the behaviour of planning to return multiple items is limited. This category likely describes service design requirements rather than a stand-alone persona, reinforcing the importance of addressing pain points in the customer journey.

9.2. Final set of validated Personas

This section outlines the final segmentation of consumers into distinct personas based on survey results. The personas were developed and validated through data analysis to reflect key patterns among respondents. Each persona represents a unique consumer profile, characterized by specific motivations, habits, and priorities when shopping online.

Table 27 below presents the distribution of respondents across these personas, including both the absolute number and the percentage of participants in each group. The most prominent personas are **Tech-Savvy Shoppers, Time-Savers, and Premium Shoppers**, while smaller groups such as **Review Enthusiasts** and **Brand Seekers** represent niche consumer types.

Persona	Quantity	%
Tech-Savvy Shoppers	2975	45,7%
Time-Savers	1342	20,6%
Premium Shoppers	1264	19,4%
Global Explorers	450	6,9%
Cost-Conscious	246	3,8%
Health-Conscious	204	3,1%
Impulsive Buyers	10	0,2%
Family-Centric	8	0,1%
Social Shoppers	7	0,1%
Brand Seekers	4	0,1%
Review Enthusiasts	3	0,1%

Table 27. Final consumer breakdown

In addition to the quantitative distribution, validation analysis also assessed how strongly each persona type was supported in the survey data. The table below offers a consolidated view of these profiles as they emerged from the survey:

Persona Type	Interpretation in Validation
Tech-Savvy Shoppers	**Validated:** Large, distinct group confident with apps, personalised, tech-enabled shopping.
Time-Savers	**Validated:** Prioritise convenience, value time over price, avoid physical stores.
Premium Shoppers	**Validated:** Value exclusivity, quality, premium service experiences.
Global Explorers	**Validated:** Shop internationally for unique items, balancing cost and exclusivity.
Cost-Conscious	**Validated:** Seek value through deals and discounts, highly cost-aware.
Health-Conscious	**Validated:** Focus on buying organic, sustainable, environmentally friendly products.
Family-Centric	**Low prevalence:** Potential cross-cutting value orientation in other segments.
Brand Seekers	**Low prevalence:** May reflect trust-focused attitudes within broader groups.
Review Enthusiasts	**Low prevalence:** Suggests trust-checking as a trait rather than standalone type.
Social Shoppers	**Low prevalence:** Indicates social influence is a niche, cross-cutting factor.
Impulsive Buyers	**Low prevalence:** Represents a minor behavioural tendency, not a dominant segment.
Cultural Guardians	**Mixed evidence:** Cultural sensitivity traits spread across segments rather than defining them.

Table 28. Interpretation of persona validation results

While the primary customer journey maps developed in this deliverable focus on the six validated, high-prevalence personas, the additional profiles identified in D2.2 remain valuable for design and implementation planning. These lower-prevalence types did not emerge as distinct, widely shared behavioural clusters in the survey data, but they nonetheless highlight important cross-cutting characteristics and niche consumer motivations that can inform other aspects of the project.

Specifically, these personas serve several functions in the GreenTurn design process:

- Enriching core personas: They describe values and behaviours—such as brand trust, cultural sensitivity, or social media influence—that may also affect subsets of the validated personas, helping to ensure that pilot solutions remain inclusive and sensitive to diverse needs.
- Supporting communication strategies: Even minor segments can be important targets for tailored messaging or incentives in behavioural change campaigns, contributing to more nuanced and effective outreach.
- Informing co-creation and planning: These profiles can enrich discussions in WP3 workshops, guide ideas for communication and nudging activities, and ensure that pilot solutions are designed with a broad range of consumer contexts in mind.
- Providing future watchpoints: While not dominant in the current sample, these behavioural patterns could gain relevance over time or in specific local contexts, making them valuable for ongoing monitoring and future refinement.

As a result, while detailed customer journeys have been mapped only for the validated personas in the next chapter, insights from the full spectrum of profiles continue to inform the design thinking process,

ensuring that GreenTurn solutions are both evidence-based and adaptable to the diverse realities of last-mile e-commerce delivery.

9.3. Focus Group Interviews

The main types of customers proposed on the basis of the survey, were supplemented by focus group meetings that were conducted in each pilot country. Thanks to this approach, it was possible to highlight additional aspects that, for various reasons, might have been overlooked in the standard data analysis of the survey results.

Poland

Insights gathered from interviews with six retailers in the Polish FGI highlighted diverse perspectives on the proposed customer personas, particularly in relation to ecological shopping behaviour and e-commerce practices. As presented in Table 29, the personas that received the highest recognition from participants were *Time-Savers*, *Social Shoppers*, *Cost-Conscious*, *Impulsive Buyers*, and *Premium Shoppers*. All six stakeholders confirmed familiarity with these types and considered them realistic representations of their clientele. Among them, the *Cost-Conscious* persona was deemed most dominant within the Polish market, typified by a strong preference for low prices, free delivery, and promotional offers.

The *Time-Savers* and *Premium Shoppers* were also broadly recognised—valued for their emphasis on convenience and quality—but retailers noted that these segments tend to be reluctant to adopt green solutions. This unwillingness may pose a barrier to promoting pro-environmental behaviour among these groups. *Social Shoppers* were viewed positively, particularly for their potential role in amplifying sustainable practices through influencer engagement, although participants pointed out a general confusion regarding what constitutes "green products." Nevertheless, this group was seen as a promising vector for behavioural change, if properly mobilised.

	Do you know this type of customer?		Is this profile realistic?	
Persona Type	YES	NO	YES	NO
Time-Savers	6	0	6	0
Brand Seekers	5	1	5	1
Review Enthusiasts	3	3	5	1
Family-Centric	3	3	6	0
Health-Conscious	2	4	6	0
Cultural Guardians	1	5	4	2
Tech-Savvy Shoppers	5	1	6	0
Social Shoppers	6	0	6	0
Cost-Conscious	6	0	6	0
Impulsive Buyers	6	0	6	0
Global Explorers	1	5	6	0
Premium Shoppers	6	0	6	0

Table 29. Results of focus interviews in Poland

In contrast, the *Cultural Guardians* and *Global Explorers* personas were met with greater scepticism, mirroring their lower recognition scores in the Polish survey. Five out of six participants indicated unfamiliarity with the *Cultural Guardian* type, and two explicitly found it unrealistic. While this profile was

acknowledged as potentially relevant to niche markets—such as those for handicrafts or vintage items—it was considered marginal within mainstream e-commerce. The *Global Explorer* was regarded as plausible in theory, yet largely absent from the stakeholders' practical experience.

A recurring theme across interviews was the ambiguity surrounding key sustainability-related terms. Concepts such as "grouped deliveries," "consolidated shipping," and "ecological metrics" were perceived as vague and potentially misleading, requiring clearer definitions to ensure accurate communication and assessment of proposed interventions.

Retailers also expressed concern about the limited environmental awareness among Polish consumers. They noted that customers frequently lack understanding of sustainability labels and certifications, which weakens the impact of eco-marketing campaigns. In this context, participants strongly advocated for enhanced consumer education—especially to address detrimental behaviours such as excessive product returns—which they viewed as incompatible with green logistics objectives.

Greece

In Greece, eight independent stakeholders were interviewed and asked to evaluate the relevance of predefined customer personas. Their assessments, summarised in Table 30, reveal which profiles were perceived as most representative of the Greek market. The highest ratings were given to pragmatic and value-oriented personas, reflecting the dominant characteristics observed in the survey data. These types were considered realistic, familiar, and reflective of actual customer behaviour in Greece.

How realistic is this persona as a customer type?									
	P 1	P 2	P 3	P 4	P 5	P 6	P 7	P 8	Average
Tech-Savvy Shoppers	5	4	4	4	4	4	4	4	4,1
Time Savers	4	4	4	5	4	4	4	3	4,0
Cost-Conscious	3	5	5	4	2	5	4	4	4,0
Social Shoppers	4	4	3	4	4	4	4	4	3,9
Premium Shoppers	5	2	2	5	4	4	2	4	3,5
Family-Centric	2	4	4	4	3	5	2	3	3,4
Brand Seeker	2	3	4	4	2	4	4	3	3,3
Review Enthusiasts	4	3	3	4	1	4	3	4	3,3
Health-Conscious	2	4	2	2	4	4	2	3	2,9
Impulsive Buyers	3	4	2	4	1	4	3	2	2,9
Cultural Guardians	3	3	3	3	3	2	2	3	2,8
Global Explorers	1	3	1	3	4	3	2	3	2,5

Table 30. Results of focus interviews in Greece

Conversely, the lowest-rated types were *Cultural Guardians* and *Global Explorers*. Stakeholders noted that Cultural Guardians did not represent a distinct or cohesive segment, but rather dispersed traits found across other personas. Global Explorers, although accounting for 6.9% of the total survey sample—around 450 individuals—were not recognised as particularly relevant by Greek stakeholders. This discrepancy suggests that while such personas may be important at the transnational level, their salience may vary considerably depending on the local market context.

Spain

The Spanish focus group was structured around age-based segmentation, as detailed in subsection 6.3. This segmentation revealed marked differences in consumer needs across generations in Zaragoza.

Unlike in other pilot cities, the session did not focus on evaluating the predefined customer personas in relation to the Spanish market. Instead, the discussion confirmed the relevance of generational profiles and their distinct attitudes toward convenience, sustainability, and technology in e-commerce behaviour.

Participants noted a significant shift in online shopping habits during the COVID-19 pandemic, with a sharp rise in e-commerce that has since declined. Current levels of online purchases were reported to have dropped to less than half of those observed during lockdown. Stakeholders identified several factors inhibiting further growth of the online channel, including weak advertising strategies and persistent technical issues on retail platforms that contribute to customer dissatisfaction. As corrective measures, the group recommended investments in digital infrastructure, improved platform reliability, and increased visibility of e-commerce services—particularly by highlighting value-added features such as free parking or convenient parcel locker access.

Austria

During the focus group meetings, profiles such as Time-Savers and Impulsive Buyers were rated as familiar and realistic, but the comments clearly indicate that green options are unattractive to them due to perceived time-consumption or lack of spontaneity, as can be seen in Table 31, which summarizes the results of the person type study. In these cases, respondents clearly indicated that those driven by convenience or impulse buying would not be likely to use tools such as carbon footprint calculators or analyze eco-labels, these are too demanding and unintuitive.

	Do you know this type of customer?		Is this profile realistic?	
Persona Type	YES	NO	YES	NO
Time-Savers	3	2	5	0
Brand Seekers	4	1	5	0
Review Enthusiasts	4	1	4	1
Family-Centric	4	1	4	1
Health-Conscious	5	0	4	0
Cultural Guardians	4	1	4	1
Tech-Savvy Shoppers	5	0	5	0
Social Shoppers	5	0	5	0
Cost-Conscious	5	0	5	0
Impulsive Buyers	4	1	4	1
Global Explorers	3	2	3	2
Premium Shoppers	5	0	5	0

Table 31. Results of focus interviews in Austria

In contrast, types such as Brand Seekers and Health-Conscious also scored high in recognition and realness. In the comments, however, there is a clear difference in purchase motivation: Brand Seekers are willing to pay more, but their decisions are not driven by environmental values, but by perceived brand prestige. Health-Conscious, on the other hand, focus more on the locality and naturalness of the products than on their environmental aspects, suggesting the need to redefine the communication of "green" products in this segment - as "clean" and "healthy," and not necessarily "sustainable."

Doubts were especially raised about the Global Explorers profile, which, as in the Greek discussions, was met with scepticism. While the idea was conceptually engaging, stakeholders found it difficult to match the profile with real consumer behaviour observed in the Austrian market. At the same time, segments

with social or technological motivations—Social Shoppers and Tech-Savvy Shoppers—were evaluated positively, but not without reservations. Stakeholders pointed to contradictions within these personas: for instance, influencer marketing can be effective but also raise doubts among informed consumers. Technology and transparency were welcomed, but only when they simplify the shopping journey, not complicate it.

France

During the focus group interview conducted in France, several customer personas were validated, including Time-Savers, Family-Oriented, Health-Conscious, Brand-Seekers, Cultural Guardians, Tech-Savvy Shoppers, and Review Enthusiasts. While most profiles were considered accurate and reflective of the local market, scepticism emerged toward two types. Cultural Guardians were seen as disconnected from online shopping habits, as their preference for traditional retail environments undermines their relevance in an e-commerce context. Review Enthusiasts were challenged for lacking distinctiveness—participants noted that reading reviews is common across several profiles, particularly Tech-Savvy Shoppers. Additionally, product reviews were not perceived as meaningful sources of environmental information, limiting their influence in sustainability-oriented decisions.

French stakeholders offered several recommendations for fostering greener consumer behaviour. They emphasized the importance of financial incentives for choosing sustainable delivery options, and proposed equalizing lead times and costs to remove the bias in favour of standard delivery. A logistics label modelled on the Nutri-Score system was suggested to clearly indicate the environmental impact of delivery choices. Further recommendations included investing in infrastructure for electric vehicles, promoting educational campaigns on transport emissions, and introducing loyalty systems that reward eco-conscious decisions. The feedback highlights the need to make sustainable choices more transparent, cost-effective, and seamlessly integrated into the shopping experience.

Table 32 presents a comparative summary of key findings from focus group interviews conducted in each pilot country, highlighting validated customer profiles, contested personas, and proposed strategies for promoting sustainable online shopping behaviours.

Country	Key Validated Personas	Rejected or Contested Personas	Notable Observations	Stakeholder Recommendations
Poland	Time-Savers, Cost-Conscious, Social Shoppers, Premium Shoppers, Impulsive Buyers	Cultural Guardians, Global Explorers	Strong alignment with pragmatic profiles; low awareness of green terminology; confusion over grouped/consolidated delivery terms	Need for consumer education on green products; clarify ecological metrics; engage Social Shoppers as influencers
Greece	Tech-Savvy Shoppers, Time-Savers, Review Enthusiasts	Cultural Guardians, Global Explorers	Cultural Guardians seen as dispersed; skepticism toward Global Explorers' relevance	Highlight convenience in green tools; avoid overcomplicating interfaces; balance influencer impact with credibility
Spain	Not formally assessed by persona type – discussed by age segment	–	Huge generational gaps; online sales dropped post-COVID; technical issues reduce adoption	Improve e-commerce platform UX; invest in marketing visibility; emphasize tangible delivery benefits like lockers
Austria	Time-Savers, Impulsive Buyers, Social Shoppers, Tech-Savvy Shoppers	Global Explorers (strong doubts), partial skepticism towards Cultural Guardians	Green options viewed as too effort-intensive for convenience-driven buyers; influencer campaigns may backfire	Keep green actions seamless; avoid tools requiring extra effort; maintain trust in tech without adding friction
France	Time-Savers, Family-Oriented, Health-Conscious, Brand Seekers, Tech-Savvy Shoppers	Cultural Guardians, Review Enthusiasts	Cultural Guardians seen as offline-focused; Review Enthusiasts overlap with other types and lack eco-credibility	Propose Nutri-Score-style label for delivery; offer financial incentives; invest in EV infrastructure; loyalty for green choices

Table 32. Summary of Focus Group Interview results by country

10. Customer Journey mapping by Persona

Building on the previous chapter's segmentation, this section focuses on mapping the customer journeys of the six validated, high-prevalence personas identified in the survey. Each journey map provides a structured view of motivations, touchpoints, barriers, and opportunities for sustainable last-mile delivery, offering clear guidance for tailoring GreenTurn solutions.

While these detailed maps centre on the six robust personas, the design process remains informed by the broader spectrum of profiles identified in earlier research. Insights from lower-prevalence personas—such as impulsive buying tendencies, family-centric needs, or social influence patterns—continue to shape inclusive design principles, co-creation planning, and behavioural intervention ideas.

Thus, the journey maps presented here serve as focused, evidence-based tools to guide solution development, while still supporting an adaptable and holistic approach that addresses the diverse realities of last-mile e-commerce delivery.

10.1. Time-Saver – Customer Journey Mapping

Persona overview

Time-Saver customers are highly efficiency-driven individuals who prioritise speed, convenience, and simplicity in every aspect of their shopping experience. They want minimal friction from discovery to delivery and returns. For them, efficiency is not just a feature—it's the core value proposition that determines loyalty and long-term engagement.

Needs

- Fast, consolidated deliveries: Prioritizes speed and efficiency — wants all items delivered together in the shortest possible time, ideally with fewer touchpoints.
- Quick checkout with eco-options: Expects a streamlined, almost instant checkout experience where green choices are pre-selected or easy to accept.
- Streamlined return process: Needs a frictionless return flow that doesn't slow them down — minimal taps, no printing, no unnecessary steps.

Preferences

- Doorstep pickup or nearby drop-off: Prefers returns handled at their door or dropped at a nearby spot — no special trips or long waiting times.
- Bundled delivery with minimal clicks: Appreciates systems that automatically bundle items for green delivery without requiring effort or filter use.
- App-based return with no printing: Wants to complete returns entirely through their phone, using QR codes and tap-based confirmations — never paper.

Barriers

- Eco-options slow down checkout: Avoids sustainability features when they add steps or delay — especially if hidden or confusing.
- Limited access to grouped deliveries: Gets frustrated when orders are split across multiple deliveries, defeating the purpose of grouping.

- Time-consuming return process: Dislikes returns that require extra steps like printing, repacking, or contacting support — expects automation.

Survey-based drivers

- High preference for next-day or same-day delivery options.
- Significant drop-off rates when checkout involves more than three steps.
- Low tolerance for returns requiring printing or in-person drop-offs.
- Positive response to clear, upfront delivery timelines and costs.

Sub-patterns within Time-Savers

Impulsive wing: expects near-instant checkout with pre-selected green delivery options.

Brand-focused wing: demands trusted, clear sustainability credentials without added steps.

Family-oriented wing: prefers grouped or bundled deliveries that save time and reduce environmental impact.

Social-influence wing: open to quick sharing of green choices or earning eco-rewards with friends.

Ethical-conscious wing: willing to choose low-emission delivery or sustainable packaging if presented simply and with no extra effort.

Journey narrative

Time-Saver customers are highly efficiency-driven individuals who prioritize speed, convenience, and simplicity in every aspect of their shopping experience. Their journey begins when they encounter engaging ads or social media content that immediately communicates the promise of time-saving benefits. These customers are attracted to platforms that showcase product comparisons at a glance, allowing them to evaluate their options quickly without extensive research. They appreciate services that clearly demonstrate how their products or offerings can eliminate friction and save time in everyday life. As they continue exploring, Time-Savers are drawn to streamlined interfaces that enable fast one-click shopping, intuitive browsing, and checkout flows that require minimal effort. They respond positively to retailers who remove unnecessary steps and offer quick delivery as a standard option. These shoppers expect transparency in shipping timelines and look for solutions that integrate automation or predictive suggestions to reduce decision fatigue. When it comes to making a purchase decision, these customers are influenced by services that are optimized for speed. User-friendly platforms that highlight delivery speed comparisons, easy return policies, and clear expectations around timing help guide their choices. They are less likely to spend time deliberating when the convenience factor is clearly addressed. In the final stages of the journey, Time-Savers complete their purchases on platforms that consolidate delivery discounts, provide real-time updates, and offer flexible return options like doorstep pickups or local drop-offs. They are loyal to brands that continue to simplify their post-purchase experience, ensuring that returning or exchanging a product doesn't become a new task that wastes time. For this segment, efficiency isn't just a feature—it's the value proposition that determines their loyalty and long-term engagement.

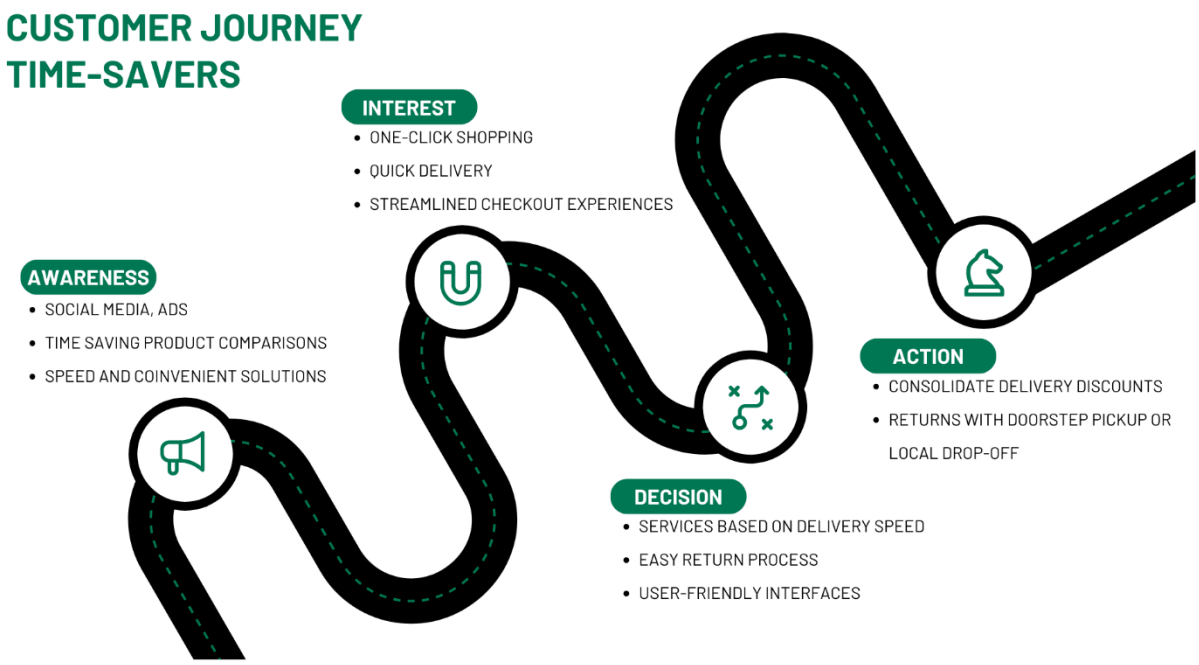

Figure 34. Customer journey map - Time-Savers

Journey description:

Orders multiple household items using a fast, automatically grouped green delivery and completes a return via one-tap scheduling in the app, with real-time refund tracking.

Journey steps

Step 1: Adds items to cart

Pain: Sustainable delivery options are buried under advanced filters or hidden tabs, making them hard to discover and select.

Gain: App or site automatically groups all eligible items into a consolidated, low-emission delivery option — clearly labelled as time-saving and eco-conscious.

Step 2: Checks out

Pain: Multiple shipping types are listed with unclear icons and language, causing confusion and slowing the process.

Gain: Checkout flow is optimized with a pre-selected grouped green delivery. The system highlights a discount for bundling items, making the eco-choice faster and cheaper.

Step 3: Delivery received

Pain: Despite grouping at checkout, items arrive on different days or in separate boxes, wasting time and reducing confidence in system.

Gain: All items arrive in one zero-emission delivery within the promised time window. Notification confirms it's a grouped, sustainable shipment.

Step 4: Returns one item

Pain: Wants to initiate a return quickly but no available pickup slots within 48 hours, requiring extra planning or effort.

Gain: Opens app, taps "Return," and books a same-day pickup in under a minute. No label required — driver brings reusable return pouch.

Step 5: Refund issued

Pain: Must contact customer service or refresh the app repeatedly to check if refund has been processed.

Gain: Receives real-time status updates directly in the app — "Item picked up," "Item received," "Refund processed." Refund hits account instantly after return is confirmed.

10.2. Health-Conscious- Customer Journey Mapping

Persona overview

Health-Conscious customers are deeply aligned with sustainability, well-being, and environmental ethics. They care about the full impact of their purchases—on themselves, their communities, and the planet. Their loyalty is built on trust, transparency, and principled choices that support personal health and environmental responsibility at every stage of the journey.

Needs

- Organic and toxin-free packaging: Expects all packaging materials to be safe for personal health — free from plastics, dyes, or chemicals — and aligned with certified organic standards.
- Health and planet-friendly delivery options: Seeks delivery methods that minimize environmental harm while also reducing exposure to pollutants or toxic handling.
- Sustainable feedback system: Wants to understand the environmental and social impact of their purchase and feel empowered to make even healthier future choices.

Preferences

- Compostable, reusable materials: Prefers packaging that can either safely return to the earth or be reused in the home, especially for food, wellness, or home care items.
- Donations tied to purchases: Feels good knowing part of their order goes to verified health or environmental causes — especially when linked to carbon-saving delivery options.
- Eco-impact info post-purchase: Likes receiving personalized data or visuals after the order — such as CO_2 saved, toxins avoided, or donation results.

Barriers

- Greenwashing or vague labels: Hesitates to trust brands that use unverified terms like "natural" or "eco-friendly" without certifications or clear definitions.
- Unclear post-purchase eco impact: Wants follow-through — doesn't like when sustainability claims stop after checkout or aren't followed by meaningful proof or results.
- Complexity or inconvenience in choosing sustainable options or returns.

Survey-based drivers

- High value placed on certified organic and toxin-free products.
- Strong interest in understanding full lifecycle environmental impact.
- Positive response to donation tie-ins and clear sustainability commitments.
- Reported frustration with vague or misleading eco claims.

Sub-patterns within Health-Conscious

Premium wing: Values luxury sustainable packaging and ethical sourcing while maintaining high-end aesthetics.

Family-oriented wing: Focuses on safe, toxin-free products for all household members, especially children.

Social-influence wing: Shares and promotes verified sustainable choices within social networks.

Ethical-conscious wing: Prioritizes brands with strong donation programs and visible community impact.

Cost-conscious wing: Seeks affordable certified organic options without premium markups.

Journey narrative

Health-conscious customers are deeply aligned with sustainability, well-being, and environmental ethics. Their shopping journey is driven by content that speaks to these values—such as sustainability-focused campaigns, influential eco-advocates, and health blogs that promote brands committed to ethical sourcing and environmentally responsible practices. They are highly receptive to storytelling that communicates not just the quality of the product, but its full environmental and social impact. As they dive deeper into their search, these shoppers are interested in brands that offer organic products, use minimal and recyclable packaging, and maintain transparency throughout their supply chain. Clear labelling and open communication about ingredients, sourcing, and production processes build trust and foster loyalty. They are likely to compare products based not only on quality but also on how responsibly they were made. When making purchasing decisions, health-conscious customers weigh multiple factors beyond price. Environmental impact assessments, product lifecycle transparency, and partnerships with charitable or environmental organizations often tip the scales. Brands that offer donation tie-ins or clearly articulate how their products minimize harm to the planet have a strong advantage. Once ready to take action, these shoppers appreciate platforms that offer eco-impact feedback, such as carbon footprint tracking or impact scores for each product. They're encouraged by donation-based nudges at checkout and prefer reusable or compostable packaging. Return options are expected to reflect the same sustainability standards—low-impact methods like consolidated returns, eco-courier services, or returnable containers score high with this audience. Overall, their loyalty is rooted in values, and brands that live up to those values at every stage of the journey earn a long-term, principled customer.

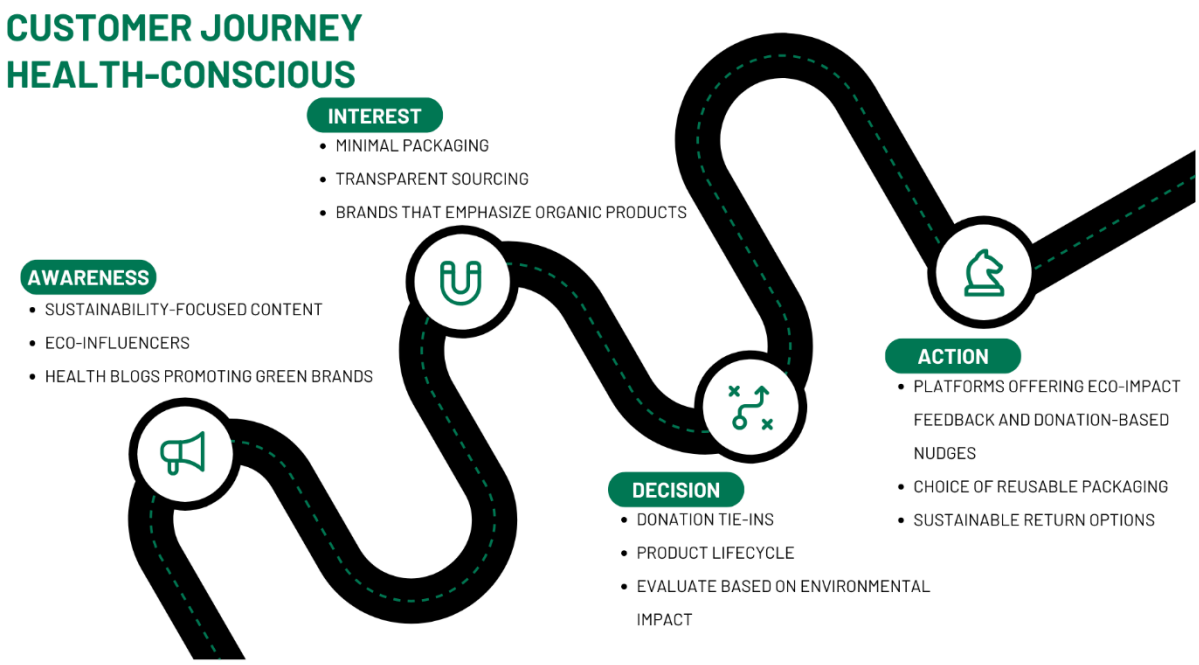

Figure 35. Customer journey map - Health-Conscious

Journey description:

Orders certified organic home goods with plastic-free delivery and automatically donates to a health-related cause — with compostable packaging and a reusable return option.

Journey steps

Step 1: Searches clean, organic options

Pain: Many products claim to be "natural" or "eco" without showing valid certifications — hard to separate marketing from truth.

Gain: Easily finds products labelled with trusted organic certifications (e.g., USDA Organic, COSMOS) and sees CO_2 impact for each item. Filters available for "verified toxin-free" or "plastic-free."

Step 2: Adds to cart

Pain: No mention of donations or social impact tied to eco choices — makes checkout feel transactional.

Gain: Sees a notification that selecting eco-friendly delivery contributes to a health initiative (e.g., clean water, plant-based nutrition programs). Donation amount is displayed transparently.

Step 3: Delivery received

Pain: Although delivery claims to be plastic-free, some materials are unlabelled or ambiguous — causing concern about toxicity or recyclability.

Gain: Package includes clearly labelled compostable, toxin-free materials. An info card offers tips on safe disposal and wellness suggestions for healthier living.

Step 4: Returns one product

Pain: Return requires printing a label, which disrupts the low-waste experience and adds hassle.

Gain: Return can be completed using the original reusable pouch. A QR code on the app or email enables label-free drop-off at nearby locations.

Step 5: Refund

Pain: No link between the refund and the donation — feels like the impact may be reversed or ignored.

Gain: After the refund, the shopper receives a summary email showing the total donation made, waste avoided, and impact of the purchase (e.g., "You helped fund 2 clean meals"). The feedback loop feels complete.

10.3. Tech-Savvy- Customer Journey Mapping

Persona overview

Tech-Savvy customers are forward-thinking, digitally native individuals who prioritise innovation, personalisation, and seamless digital experiences. They expect brands to offer advanced, intuitive, and automated solutions that fit their connected lifestyle. For them, innovation isn't just appealing—it's a baseline expectation that must be continually exceeded to earn their loyalty.

Needs

- Seamless, app-first shopping experience: Expects a smooth, end-to-end mobile journey — from product discovery to delivery and returns — with no need to switch between channels or devices.
- Automated eco-recommendations: Wants smart, context-aware suggestions for greener alternatives based on browsing behaviour and purchase history.
- Digital-first returns and tracking: Requires fast, app-based return flows with live status tracking and no manual paperwork or printouts.

Preferences

- Gamified rewards for green choices: Enjoys interactive incentives — like badges, progress bars, or point systems — when choosing sustainable products or slower delivery.
- AI-driven product suggestions: Relies on personalization features that show the best-fit items with lower environmental impact, powered by real-time data.
- Automated return processing: Prefers tech-driven return systems that use QR codes, digital lockers, and instant refund triggers — no forms, no waiting.

Barriers

- Manual steps in green delivery: Gets frustrated when eco-options require effort — like printing documents, navigating multiple menus, or making physical drop-offs.
- No real-time return updates: Dislikes being left in the dark after returning a product — expects immediate status visibility via app alerts or dashboard updates.

Survey-based drivers

- Strong preference for fully app-based journeys and digital integrations.
- High sensitivity to app performance, UI simplicity, and automation.
- Positive response to rewards or incentives for sustainable choices.
- Reported frustration with hidden or complicated eco-delivery options.

Sub-patterns within Tech-Savvy

Impulsive wing: expects immediate checkout with pre-selected green delivery options and minimal confirmation steps.

Brand-focused wing: values clear, trustworthy sustainability credentials and transparent green claims.

Cost-conscious wing: looks for incentives, loyalty points, or discounts for choosing low-emission delivery.

Social-influence wing: shares sustainable choices on social media or within app communities.

Ethical-conscious wing: prefers apps that show detailed environmental impact and allow for donation tie-ins at checkout.

Journey narrative

Tech-savvy customers are forward-thinking, digitally native individuals who prioritize innovation, personalization, and seamless digital experiences. Their journey often begins in digital-first environments—discovering new brands through app stores, social media, or technology review platforms. They are highly receptive to innovation and quick to explore new offerings that promise smarter, faster, or more personalized service. From the start, these customers look for interactive, immersive experiences like virtual product try-ons or AI-powered recommendations that reflect their preferences. Brands that offer app personalization, customizable settings, or cutting-edge product features such as automation, smart integration, or connected technologies stand out. They enjoy exploring new functionalities and expect a user journey that evolves with them. Their purchasing decisions are strongly influenced by digital performance. High app ratings, seamless user interfaces, and intuitive navigation are essential. They expect real-time responsiveness, well-integrated systems, and automation that enhances rather than complicates the experience. If an app crashes, lags, or presents barriers to check out, they are quick to abandon it in favor of more polished competitors. When taking action, tech-savvy customers look for platforms that support their digital lifestyle—offering features like real-time parcel tracking, app-integrated returns, and loyalty or reward points tied to sustainable or intelligent choices. They value platforms that enable full control from their smartphone, with minimal need for human intervention unless requested. For these customers, innovation is not just an appeal—it's a baseline expectation that must be continually exceeded to earn their loyalty.

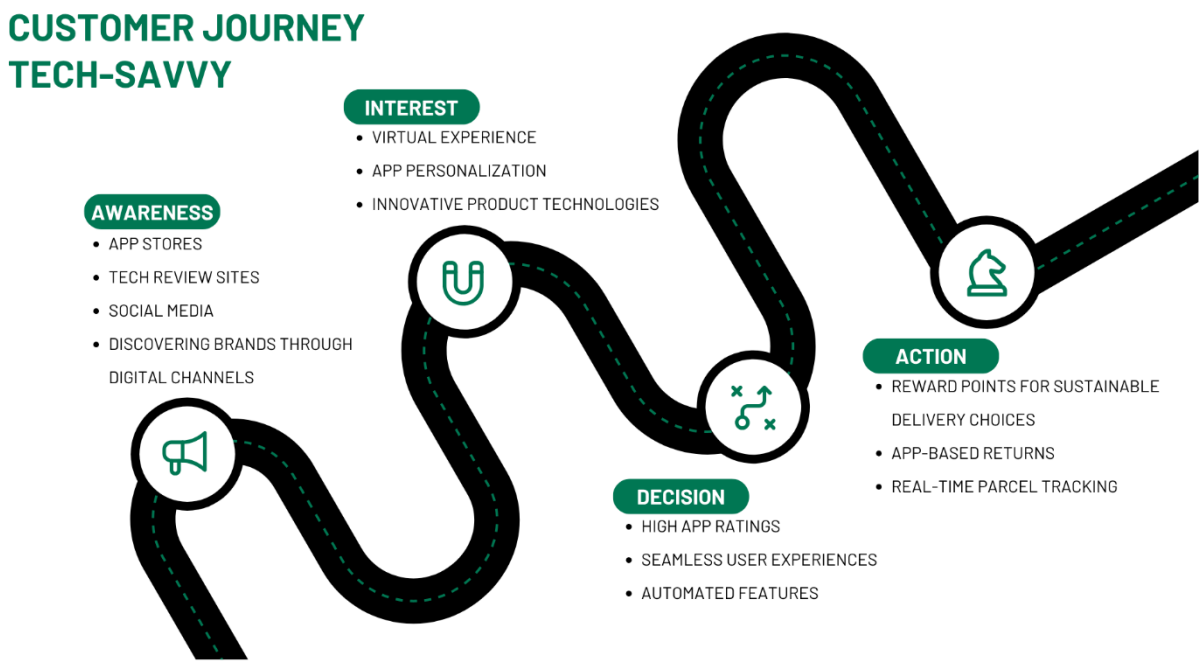

Figure 36. Customer journey map - Tech Savvy

Journey description:

Orders smart home products via an app, selects a gamified green delivery option, and completes a return using a QR code and real-time tracking — all within the mobile app.

Journey steps

Step 1: Browses in shopping app

Pain: Eco-friendly filters are hidden deep within the app's settings, making them hard to find and discouraging engagement with sustainable options.

Gain: The app's AI proactively suggests eco-friendly alternatives based on past purchases and interests, clearly highlighting their environmental impact and benefits — e.g., "Uses 40% less energy, ships carbon-neutral."

Step 2: Checkout with delivery

Pain: Choosing a greener delivery option feels unrewarding — no acknowledgment or benefit for making a sustainable choice.

Gain: App gamifies the checkout experience — unlocking a digital badge for selecting zero-emission delivery, adding eco-points to their profile, and tracking sustainability milestones.

Step 3: Delivery received

Pain: Tries to scan QR code on package to check status or instructions, but the code is faulty or lacks functionality.

Gain: App automatically detects delivery through smart locker integration or GPS confirmation. Delivery details and eco-journey summary are accessible with a single tap.

Step 4: Starts a return

Pain: Mobile experience for returns is clunky or redirects to a desktop site; printing and form-filling are required.

Gain: Initiates a return directly in the app using a dynamic QR code — no label needed. Tracks return in real-time with updates like "Dropped off," "In transit," and "Received."

Step 5: Refund processed

Pain: No confirmation or progress updates after the item is returned, leaving uncertainty about refund timing.

Gain: App sends a push notification the moment the return is scanned at the drop-off point. Refund is processed automatically, and user sees confirmation instantly in their transaction history.

10.4. Cost-Conscious- Customer Journey Mapping

Persona overview

Cost-Conscious customers are strategic, budget-aware shoppers who prioritise finding the best value at every step of their journey. They are highly deliberate, relying on deal aggregators, coupon sites, and price comparison tools to stretch their budgets. For them, value is non-negotiable, and they expect clarity, fairness, and savings—even when choosing greener options.

Needs

- Affordable green products and shipping: Seeks environmentally friendly options that don't come with a premium price tag. Sustainability must fit within a tight or practical budget.
- Free, no-risk returns: Expects returns to be easy and cost-free, regardless of order value — no hidden fees or fine print.
- Deals on consolidated deliveries: Willing to wait longer or bundle purchases in one shipment to reduce both environmental impact and shipping costs.

Preferences

- Visible savings on eco-options: Wants clear, upfront display of how much money they save by choosing green delivery or bundling.
- Discounts for sustainable purchases: Responds well to promotions that reward choosing eco products — like coupon codes, loyalty points, or cash-back offers.
- Free label-free returns: Prefers hassle-free return processes that don't require printing, packaging, or going to specific drop points.

Barriers

- Green delivery seen as more expensive: Perceives sustainable shipping as an "add-on" rather than a value-saving alternative — often avoids it if it costs extra.
- Complex return fees: Gets discouraged by minimum spend requirements, restocking fees, or confusing return policies tied to discounts.

Survey-based drivers

- High prioritisation of lowest total cost, including delivery and return fees.
- Sensitivity to promotions, discounts, and clear cost breakdowns.
- Positive response to bundling and grouped delivery offers.
- Frustration with hidden charges and non-transparent pricing structures.

Sub-patterns within Cost-Conscious

Impulsive wing: drawn to time-limited deals or flash discounts on eco-options.

Brand-focused wing: wants trusted brands but still demands fair, competitive pricing.

Family-oriented wing: seeks bundled deliveries and savings for larger household purchases.

Ethical-conscious wing: willing to choose sustainable packaging or delivery *if* it reduces cost or is transparently priced.

Social-influence wing: shares good deals, discounts, and eco-saving tips within personal networks.

Journey narrative

Cost-conscious customers are strategic, budget-aware shoppers who begin their journey by actively seeking the best value. They often start by browsing deal aggregator websites, coupon platforms, and price comparison tools, carefully evaluating where they can stretch their money the farthest. For this segment, value is king—and promotions, discounts, and bundled deals are critical entry points. These customers pay close attention to offers such as free shipping, first-time buyer discounts, and purchase bundles that reduce the effective price per item. They take a holistic view of cost, considering not just the sticker price but the total expense including taxes, shipping, and return fees. Clear pricing structures and upfront communication about additional costs make a significant difference in their decision-making process. As they evaluate their options, cost-conscious shoppers are influenced by platforms that allow them to sort and filter by price, cost of delivery, and return options. Transparency is crucial—hidden fees or unclear return policies can quickly drive them away. They are more likely to buy from platforms that show them how much they're saving and that offer assurance they won't incur unexpected costs later. When it's time to purchase, these shoppers look for platforms with strong free return policies, particularly if trying a new brand or product category. They are also open to eco-packaged products if it results in a lower delivery cost. For cost-conscious customers, practicality and price lead the journey, and brands that consistently offer affordability without compromising on clarity or fairness are most likely to earn their loyalty.

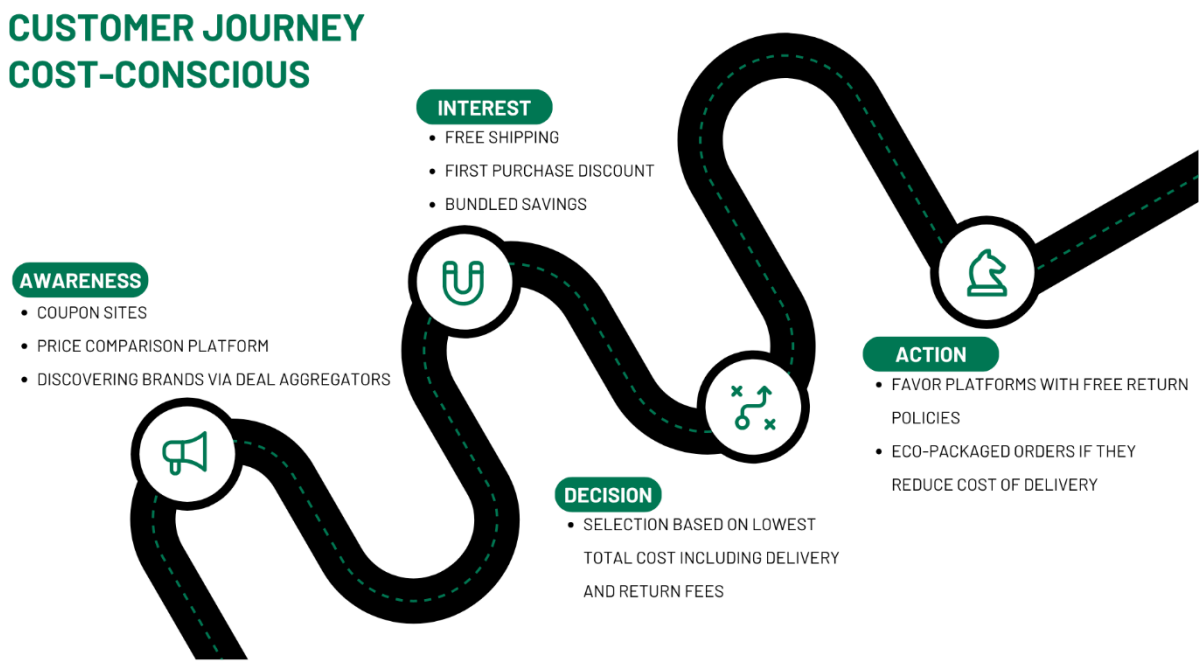

Figure 37. Customer journey map- Cost Conscious

Journey description:

Buys affordable eco-cleaning items using discount for grouped delivery and completes a free label-free return.

Journey steps

Step 1: Browses eco section

Pain: Notices that eco-friendly alternatives are priced noticeably higher than conventional versions, making them seem like a luxury rather than a necessity.

Gain: Uses a filter to sort by the lowest-cost sustainable products and shipping methods. Sees "eco-saver" badge for items eligible for discounted green delivery.

Step 2: Checkout

Pain: Green delivery option adds an extra charge at checkout, making them question if it's worth the tradeoff.

Gain: Offered a discount for consolidating multiple items into one shipment — both eco-friendly and wallet-friendly. Visuals show savings in both money and emissions.

Step 3: Delivery received

Pain: Package includes no clear guidance on whether it can be reused or recycled, leading to confusion and potential waste.

Gain: Delivery arrives in a simple but eco-certified box with a printed "Thank You" message and a voucher for future savings on sustainable purchases.

Step 4: Starts return

Pain: Learns that free return is only available over a certain spend threshold, which their order didn't meet — creating friction.

Gain: Is able to return the product for free using a label-free, drop-off method — no printer needed, barcode scanned from phone, and no extra fees applied.

Step 5: Refund processed

Pain: Refund is delayed because the original order was discounted, leading to doubts about eligibility or final amount.

Gain: Gets an immediate email confirmation with full refund details and expected timeline. Clear messaging ensures confidence and satisfaction.

10.5. Global Explorers- Customer Journey Mapping

Persona overview

Global Explorers are adventurous, open-minded consumers who seek unique products and international brands not always available in local markets. They value cultural exploration, craftsmanship, and the experience of buying globally. While they are willing to accept longer shipping times for special items, they expect absolute clarity, trust, and sustainability from cross-border e-commerce providers.

Needs

- Eco info on international shipping: Wants clear insights into the environmental impact of cross-border deliveries — including emissions by transport mode and origin country.
- Rewards for slower, sustainable shipping: Willing to wait longer for delivery if incentivized with loyalty points, discounts, or sustainability badges.
- Flexible, affordable international returns: Needs practical return solutions that work across borders — including local drop-off, minimal fees, and no complex paperwork.

Preferences

- Unique products with clear green impact: Interested in artisanal, handmade, or ethically sourced goods with visible sustainability practices — like low-energy production, fair trade sourcing, or local materials.
- Multi-country pickup/drop-off points: Prefers globally connected logistics with access to local courier partners or collection hubs in multiple countries for ease of returns or exchanges.
- Digital customs and return handling: Looks for fully digital customs declarations, pre-filled forms, and barcode-enabled returns that simplify cross-border logistics.

Barriers

- No visibility into global carbon footprint: Frustrated by the lack of transparency around how international shipping choices affect the planet — often unsure if "eco" claims are greenwashing.
- Expensive cross-border returns: Hesitant to buy due to high return fees, customs taxes, or uncertainty around whether returns are even possible from their country.

Survey-based drivers

- High interest in purchasing unique or hard-to-find international products.
- Strong demand for transparent shipping costs and return policies.
- Positive response to rewards and loyalty incentives for sustainable delivery choices.
- Frustration with unclear or complicated international logistics processes.

Sub-patterns within Global Explorers

Premium wing: seeks luxury or exclusive international goods with trusted eco-certifications.

Cost-conscious wing: balances uniqueness with affordable shipping and return fees.

Ethical-conscious wing: prioritises fair-trade, low-emission, and socially responsible sourcing.

Impulsive wing: drawn to limited-edition or rare products but requires fast, clear checkout and shipping details.

Social-influence wing: shares discoveries of unique green products with peers or on social media.

Journey narrative

Global Explorers are adventurous, open-minded consumers who seek unique products and international brands not always available in local markets. Their journey often begins through global e-commerce platforms (one store selling worldwide), travel blogs, and cross-border marketplaces (many sellers to global buyers). Inspired by cultural exploration and novelty, they gravitate toward shopping experiences that bring the world to their fingertips. These customers are drawn to hard-to-find or exclusive items, especially those that reflect different cultures, regions, or craftsmanship styles. They value clarity around international shipping terms, customs fees, and return processes—since they are willing to buy globally, but only if the logistics are transparent and trustworthy. Platforms that specialize in cross-border commerce or offer concierge-style guidance through international transactions are particularly appealing. Purchase decisions are made by weighing product uniqueness and perceived value against shipping timeframes and associated international fees. Global Explorers are not deterred by longer wait times if the product is special, high-quality, or tied to an experience. However, they do expect reliability and consistent updates throughout the journey. When completing purchases, these customers appreciate platforms that reward them for buying internationally, whether through loyalty points, exclusive offers, or sustainable global shipping options. Flexible return policies are essential—especially when purchasing from unfamiliar brands—so they look for services that provide local drop-off, extended return windows, or easy repackaging options. For this group, the shopping journey is part of the cultural experience, and platforms that support exploration with ease and transparency become long-term favourites.

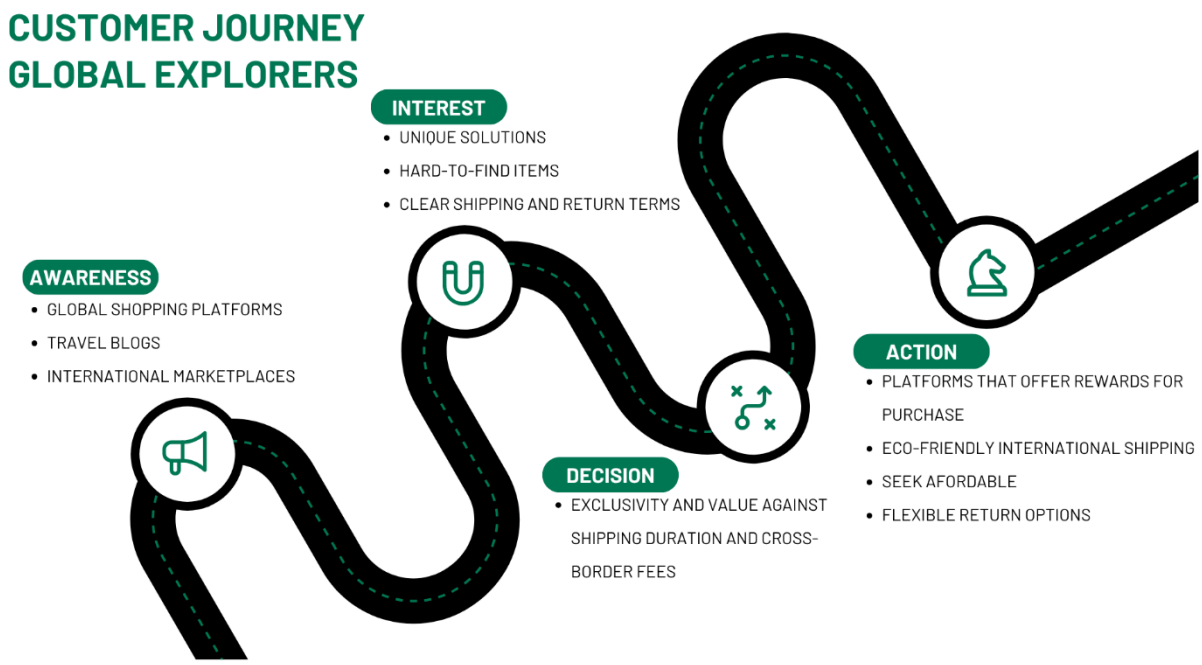

Figure 38. Customer journey map- Global Explorers

Journey description:

Orders handcrafted item from abroad with slow, low-emission shipping and uses localized drop-off return option.

Journey steps

Step 1: Browses international eco marketplace

Pain: Struggles to find clear data on how each item's journey — from origin to doorstep — impacts the environment. Shipping sustainability often hidden or vaguely labeled.

Gain: Marketplace provides carbon emission breakdown by shipping mode (air, rail, sea), estimated impact in kg CO_2, and highlights lower-footprint alternatives. Products show origin sustainability ratings.

Step 2: Selects delivery option

Pain: Low-emission options (like ocean freight or ground transport) have longer delivery times, making them less appealing for urgent needs.

Gain: Shopper chooses slower shipping but is rewarded with eco-points or a discount on the next purchase. The interface highlights how many emissions were saved by choosing this route.

Step 3: Receives delivery

Pain: International orders sometimes arrive in oversized or overwrapped packaging, creating unnecessary waste and disappointment.

Gain: Receives item in compact, compostable packaging with global sustainability credentials — including multilingual care labels and a QR code to trace the item's eco-journey.

Step 4: Wants to return item

Pain: Cross-border returns are complicated — requiring printed customs forms, unclear duties, and high courier costs.

Gain: Shopper accesses an in-country drop-off point with automated customs clearance. The system pre-fills digital return forms and provides real-time status updates via app or email.

Step 5: Refund processed

Pain: Refund takes weeks due to customs verification and overseas processing delays, causing anxiety and dissatisfaction.

Gain: Shopper receives a digital tracker that shows refund progress in real-time. Early refund release is triggered once the return is scanned at the local hub.

10.6. Premium Shoppers- Customer Journey Mapping

Persona overview

Premium Shoppers are luxury-driven consumers who expect exceptional experiences from start to finish. They are motivated by brand prestige, storytelling, and the promise of exclusivity. Every interaction, from marketing to delivery to returns, must communicate quality, elegance, and personal attention. Sustainability matters to them—but it must match their aesthetic and service expectations without compromise.

Needs

- High-quality, eco-conscious products: Seeks premium products that are not only high-end in performance and aesthetics but also made with ethically sourced, organic, or recycled materials.
- Sustainable packaging that reflects luxury: Expects eco-friendly packaging to match the elegance and quality of the item — biodegradable, reusable, or upcycled packaging with a refined, polished look.
- Priority delivery, white-glove return experience: Desires fast, flexible, and luxurious logistics services — including carbon-neutral express shipping and premium, concierge-style return experiences.

Preferences

- Exclusive green product lines: Prefers curated, limited-edition eco collections not widely available to the public — emphasizing uniqueness and prestige.
- Reusable, elegant packaging: Wants packaging that doubles as a keepsake or storage solution — sturdy, beautiful boxes or pouches that signal quality and sustainability.
- Effortless, VIP-style return options: Expects a seamless return process — home pickup, pre-scheduled appointments, minimal effort required, and high-end service.

Barriers

- Perception that eco equals less luxurious: Concerned that sustainable products may feel basic, plain, or compromised in design and indulgence.
- Generic or standard customer experience: Avoids one-size-fits-all service; wants personalization and elevated treatment reflecting their premium status.

Survey-based drivers

- High willingness to pay for premium, sustainable products if quality and experience are guaranteed.
- Positive response to curated, exclusive eco-friendly collections.
- Demand for elevated, frictionless service at every stage, especially for returns and delivery.
- Frustration with standardised, non-personalised eco-offers.

Sub-patterns within Premium Shoppers

Ethical-conscious wing: prioritises brands with verified sustainability certifications and visible social impact.

Impulsive wing: seeks instant gratification with premium express shipping and immediate availability.

Brand-focused wing: values established luxury brands with clear sustainability commitments.

Social-influence wing: enjoys showcasing exclusive sustainable purchases in social circles or online.

Cost-conscious wing (niche): still values luxury but responds to loyalty rewards or future discounts for sustainable choices.

Journey narrative

Premium shoppers are luxury-driven consumers who expect nothing less than an exceptional experience from start to finish. Their journey begins with exposure to high-end advertising, beautifully curated digital experiences, and premium product showcases that immediately communicate exclusivity and quality. They are motivated by brand prestige, aesthetics, and storytelling that appeals to sophistication and lifestyle aspirations. These shoppers are not just buying a product—they are investing in a complete brand experience. They are drawn to sleek designs, elegant packaging, and content that reflects refinement and attention to detail. Quality assurances and VIP-level messaging further reinforce their confidence in the brand and elevate their interest. These customers expect proactive communication and white-glove service from the moment they engage. When evaluating their options, Premium Shoppers look for exclusivity, premium service guarantees, and access to limited edition or members-only products. Superior packaging, thoughtful presentation, and brand reputation play a crucial role in their final decision. They are willing to pay more—but only if the product and the overall experience deliver on every premium promise. Upon completing a purchase, they expect high-touch post-sale support, including professional customer service, seamless and respectful return processes, and options for priority eco-friendly returns that align with their values. For these discerning consumers, the customer journey must exude elegance, ease, and excellence—every interaction should reinforce the feeling of being a valued, elite customer. Brands that deliver consistently on these fronts secure both their loyalty and advocacy.

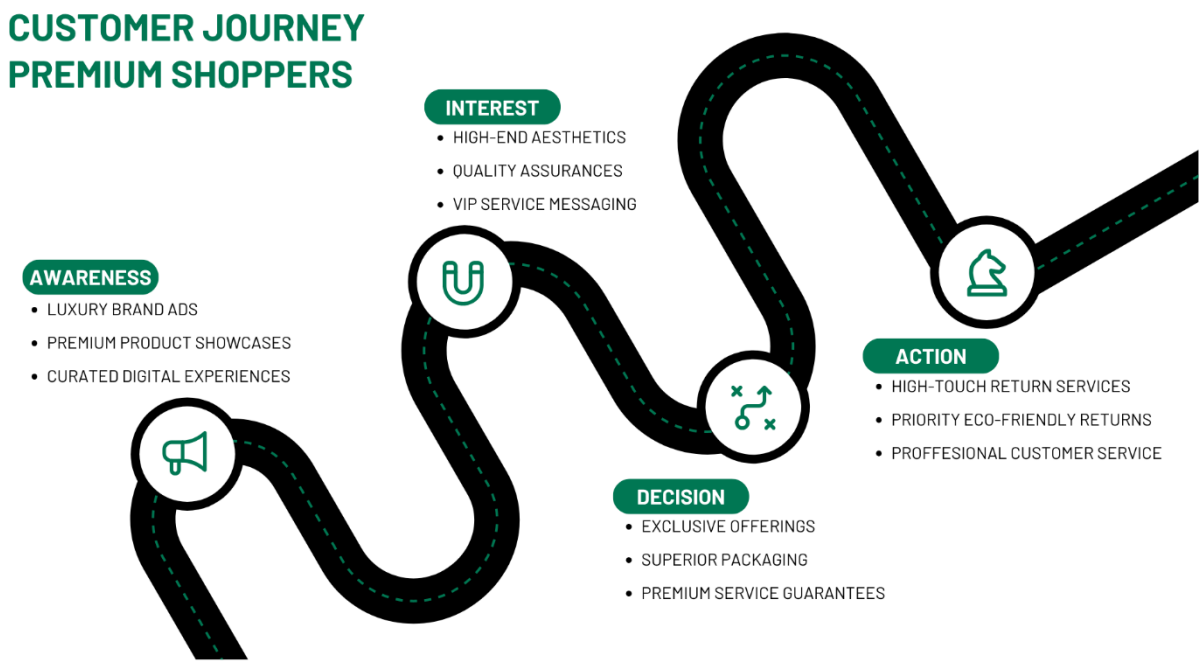

Figure 39. Customer journey map- Premium Shoppers

Journey description:

Purchases a luxury sustainable item with premium carbon-neutral shipping and reuses packaging for an elegant, scheduled return

Journey steps

Step 1: Browses curated eco-luxury collection

Pain: Eco-products are often presented in a plain or minimalist way, lacking the rich storytelling or visual allure expected from luxury brands. The assortment can feel generic or mass-market.

Gain: Discovers a hand-picked collection of exclusive, high-end sustainable products with detailed craftsmanship, origin stories, and premium branding — such as limited-edition organic skincare or artisan-made apparel with carbon-positive sourcing.

Step 2: Selects delivery method

Pain: The default shipping options for sustainable purchases often lack the premium feel — no express delivery, no elegant packaging upgrades, or unclear eco credentials.

Gain: Can select carbon-neutral express shipping with optional upgrades like signature-required delivery, luxury wrapping, and an unboxing experience that feels bespoke and elevated.

Step 3: Delivery received

Pain: Eco-friendly packaging can be underwhelming — plain cardboard, limited branding, and minimal design can reduce the sense of excitement and value.

Gain: Receives the item in a beautifully designed, reusable box or pouch made from recycled or organic materials, with a sustainability message or certificate enclosed — blending elegance with environmental consciousness.

Step 4: Returns item

Pain: Standard return processes feel impersonal and inconvenient — generic packaging, unclear instructions, or having to visit a drop-off location diminish the premium experience.

Gain: Easily schedules a home pickup for return via a white-glove service that includes repacking assistance. The original packaging is designed for reuse, making the process both simple and luxurious.

Step 5: Refund processed

Pain: Delays in processing refunds — especially for high-ticket items — create frustration and erode trust in the brand's premium promise.

Gain: Enjoys a same-day or next-business-day refund policy once the return is scanned or picked up, reinforcing a fast, frictionless, and VIP-level service.

10.7. Other Customer Types

For the purposes of this analysis, journey maps have been created only for the validated personas. Other identified persona types were excluded due to an insufficient number of survey respondents, which did not allow for reliable or representative mapping of their experiences. Focusing on validated personas ensures that the insights derived are based on robust data, providing a clearer understanding of customer behaviours, motivations and pain points. Future research and data collection efforts may help expand the scope to include additional personas as more representative feedback becomes available.

Persona	Quantity	%
Impulsive Buyers	10	0,2%
Family-Centric	8	0,1%
Social Shoppers	7	0,1%
Brand Seekers	4	0,1%
Review Enthusiasts	3	0,1%

Table 33. Final consumer breakdown – personas with low rate of respondents in the survey

11. Conclusions

To enable sustainable behaviours at scale, e-commerce logistics must evolve beyond generic green features and instead respond to diverse customer expectations and behavioural patterns. This deliverable demonstrates that sustainability uptake is closely linked to factors such as convenience, perceived value, trust, and emotional alignment. Consumers do not evaluate green options in isolation—they assess them through the lens of their habits, needs, and context-specific trade-offs. As such, effective interventions must be designed with a clear understanding of different behavioural profiles.

The customer journey maps developed in D2.3 highlight specific pain points and motivational triggers at each stage of the online shopping process. These insights suggest that improving the adoption of sustainable delivery and return options requires a mix of strategies: reducing friction, offering well-timed nudges, and aligning sustainability with existing preferences and goals. Tailored communication, simplified eco-choices, real-time feedback on environmental impact, and value-based incentives all have a role to play in increasing uptake across segments.

At the same time, design and implementation must reflect operational feasibility. Frictionless user flows, app-based services, and integrated packaging and return systems are not only desirable from the user's perspective but necessary for achieving environmental benefits at scale. A key finding is that even consumers open to green options may abandon them when they are poorly integrated, time-consuming, or perceived as costly or untrustworthy.

This deliverable was developed under Task 2.2 and forms part of an integrated set of outputs alongside D2.4 (behavioural modelling) and D2.5 (communication strategies). Together, these deliverables constitute the core behavioural evidence base of Work Package 2, translating consumer research into actionable design principles. They provide a shared foundation for the development of behavioural interventions in WP3 and their operational testing in WP4 pilot activities. The persona-driven customer journeys and identified behavioural levers from D2.3 directly inform the co-creation processes in Task 3.1 and the prototyping and testing planned in Tasks 3.2 and 4.2. This ensures that all interventions are grounded in empirical insights and behavioural realism, supporting both impact assessment and replication.

Building on the above analysis, several key findings emerge from D2.3 that provide important guidance for the design, implementation, and replication of GreenTurn activities.

- **Consumers are aware of sustainable e-commerce options but rarely prioritise them.** While respondents could identify green delivery and return choices, these were often outweighed by convenience, price, and trust factors. This suggests that awareness alone is insufficient to drive change without interventions that make sustainable choices effortless and attractive.
- **Price, product quality, and payment security dominate decision-making.** Across all pilot countries, these factors consistently outweighed environmental considerations, indicating that green options must match or exceed standard offers in perceived value and reliability to achieve significant uptake.
- **Six predefined customer profiles were validated and connected to retailer experience.** Survey and focus group results confirmed the presence of Tech-Savvy Shoppers, Time-Savers, Premium Shoppers, Health-Conscious Buyers, Brand-Seekers, and Review Enthusiasts, bridging the

theoretical segmentation with real-world market observations and providing a robust behavioural basis for targeting interventions.

- **Three dominant customer types emerged across pilots.** Tech-Savvy Shoppers, Time-Savers, and Premium Shoppers were consistently identified as high-prevalence profiles, suggesting these should be prioritised in behavioural modelling and pilot design, while the other validated personas may be addressed through niche or context-specific interventions.
- **Return rates are generally low but vary in cause and pattern.** Although most consumers make few returns, motivations differ between markets, underlining the need for locally tailored strategies to improve packaging reuse and reverse logistics efficiency.
- **Digital channels are the most effective engagement point for sustainable offers.** Customers are more likely to encounter and consider green delivery choices when they are embedded in the platforms they already use for purchasing, opening a key space for behavioural nudges and targeted communication.
- **Perceptions of green options differ across cities.** Cultural, economic, and infrastructural contexts influence how consumers value eco-friendly deliveries and returns, reinforcing the need for flexible pilot configurations and tailored replication strategies.
- **Competitive pricing and minimal behaviour change drive sustainable option uptake.** When green choices are priced comparably and integrate seamlessly into existing habits, consumers are significantly more likely to adopt them, highlighting the importance of aligning behavioural design with operational feasibility.

While these findings will continue to evolve as further evidence emerges, they can inform and inspire work across the project. Possible applications include:

- Providing a behavioural evidence base for stakeholder co-creation, ensuring personas, local perceptions, and decision drivers are reflected in the design of incentives, communication approaches, and service configurations (T3.1).
- Suggesting features and delivery/return models for MVP prototyping that are most relevant to high-prevalence personas, while also identifying niche opportunities for targeted interventions (T3.2).
- Indicating potential refinements to the KPI set—such as tracking adoption by persona, uptake of default green choices, and return/reuse rates by intervention type—to allow richer cross-city comparisons (T3.4).
- Supporting pilot city teams in selecting which nudges, packaging solutions, and messaging formats to test, ensuring both cross-site comparability and local adaptation (T4.1 / T4.2 / T4.3).
- Informing assessment frameworks by linking observed behavioural patterns to economic, operational, and environmental performance metrics (WP5).
- Contributing to policy guidance, replication materials, and city profiles by grounding recommendations in validated personas, cultural context, and market realities (WP6).

References:

Agarwal, D., Kandpal, A., S.. Analyzing Online Shopping Preferences: A Consumer Behaviour Study. J Agri Busi 2025; 11(1): 07–11. http://dx.doi.org/10. 21088/ijab.2454.7964.11125.1

Bacik, R., Gavurova, B., Fedorko, R., & Olearova, M. (2020). Using digital devices in the process of online shopping: a study of demographic differences. Marketing and Management of Innovations, 4, 154-167. https://doi.org/10.21272/mmi.2020.4-12

Brumă I, Cautisanu C, Tanasă L, Ulman S, Gâlea M, Jelea AR. Does the payment method matter in online shopping behaviour? Study on the Romanian market of vegetables during the pandemic crisis. Agric. Econ. - Czech. 2024;70(1):34-47. https://doi.org/10.17221/314/2023-AGRICECON

Gajdzik B, Bartuś K, Jaciow M, Wolniak R, Wolny R, Grebski WW. Evolution of Polish E-Consumers' Environmental Awareness and Purchasing Behavior over Ten Years. *Sustainability*. 2024; 16(11):4686. https://doi.org/10.3390/su16114686

Verma, R., Dalla Chiara, G. and Goodchild, A., 2025. Does proximity matter in shopping behavior? Transportation Research Part A: Policy and Practice, 196, 104471. https://doi.org/10.1016/j.tra.2025.104471

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Annex I. Personas Structured Mapping Matrix Example

Question Number	Category	Question	Time-Savers	Brand Seekers	Review Enthusiasts	Family-Centric	Health-Conscious	Cultural Guardians	Tech-Savvy Shoppers	Social Shoppers	Cost-Conscious	Impulsive Buyers	Global Explorers	Premium Shoppers
1	Convenience	Shopping online saves me valuable time compared to shopping in physical stores.	X											
2	Convenience	I prefer online shopping because it allows me to shop at any time that is convenient for me.	X											
3	Convenience	Online shopping helps me avoid the hassle of going to physical stores.	X											
4	Convenience	I find offline shopping more convenient because it avoids the hassle of deliveries and potential returns.	X											
5	Quality and Brand	I am willing to pay more for products from reputable brands.		X										X
6	Quality and Brand	The quality of the products I buy online is more important than the price.		X										X
7	Quality and Brand	I prefer to shop from well-known brands that I trust.		X										X
8	Safety and Trust	I always check reviews and ratings before making an online purchase.			X				X					
9	Safety and Trust	I feel secure using digital payment methods when shopping online.							X					
10	Safety and Trust	The authenticity of products is crucial to me when shopping online.			X									
11	Workplace conditions	I consider a company's health and safety regulations before making a purchase.					X	X						

Question Number	Category	Question	Time-Savers	Brand Seekers	Review Enthusiasts	Family-Centric	Health-Conscious	Cultural Guardians	Tech-Savvy Shoppers	Social Shoppers	Cost-Conscious	Impulsive Buyers	Global Explorers	Premium Shoppers
12	Workplace conditions	I am willing to pay more for delivery if the delivery employee is properly insured.					X	X						
13	Workplace conditions	I am more likely to shop with a brand that treats their staff well.					X	X						
14	Family-Centric	My purchasing decisions are strongly influenced by the needs of my family.				X								
15	Family-Centric	I choose products that align with my family's values.				X								
16	Family-Centric	I prioritize buying products that are beneficial for my family.				X								
17	Health-Conscious	I prefer to buy organic and sustainable products.					X							
18	Health-Conscious	Health considerations are a major factor in my purchasing decisions.					X							
19	Health-Conscious	I am willing to spend more on products that are environmentally friendly.					X							
20	Cultural Sensitivity	I value products that are culturally appropriate and respect local traditions.						X						
21	Cultural Sensitivity	I consider the cultural impact of products before making a purchase.						X						
22	Cultural Sensitivity	I prefer brands that are sensitive to cultural differences.						X						
23	Comfort with Technology	I am comfortable using apps for my online shopping.							X					
24	Comfort with Technology	I am comfortable digital payment systems for my online shopping.							X					
25	Comfort with Technology	I find it easy to navigate and use e-commerce websites and apps.							X					
26	Comfort with Technology	I enjoy leveraging technology to make my shopping experience more efficient.							X					

Question Number	Category	Question	Time-Savers	Brand Seekers	Review Enthusiasts	Family-Centric	Health-Conscious	Cultural Guardians	Tech-Savvy Shoppers	Social Shoppers	Cost-Conscious	Impulsive Buyers	Global Explorers	Premium Shoppers
27	Comfort with Technology	I find easy using digital tools and platforms for online shopping							X					
28	Engagement with Digital Services	I often use brand apps and e-commerce platforms to access loyalty programs and discounts.							X	X				
29	Engagement with Digital Services	I prefer shopping on platforms that offer personalized recommendations.							X					
30	Engagement with Digital Services	I actively engage with brands online, including using their apps and websites regularly.							X	X				
31	Social Media Influence	I am influenced by social media when making purchasing decisions.								X				
32	Social Media Influence	I follow influencers and brands on social media that align with my lifestyle.								X				
33	Social Media Influence	Social media often introduce me to new products that I end up purchasing.								X				
34	Delivery	I can only accept deliveries when I am home.	X											
35	Delivery	I do not tolerate delays in delivery times.	X									X	X	X
36	Delivery	I prefer receiving a parcel at a pick-up point or locker to save me the hassle of waiting at home.	X								X		X	
37	Delivery	I often receive my online orders in multiple deliveries at different times or even days.	X										X	
38	Returns	Sometimes I order items (e.g., clothes) to try them and return them if I do not like them.										X	X	X
39	Returns	Returning an unwanted item for free is an important part of the online shopping experience.	X								X	X	X	X

Question Number	Category	Question	Time-Savers	Brand Seekers	Review Enthusiasts	Family-Centric	Health-Conscious	Cultural Guardians	Tech-Savvy Shoppers	Social Shoppers	Cost-Conscious	Impulsive Buyers	Global Explorers	Premium Shoppers
40	Returns	Sometimes I order multiple items with different characteristics to choose one and return the others.										X	X	X
41	Importance when buying online	Product price									X		X	
42	Importance when buying online	Store Brand Reputation		X										X
43	Importance when buying online	Product Quality		X			X							X
44	Importance when buying online	Convienience of Delivery	X											X
45	Importance when buying online	Payment Security							X					
46	Importance when buying online	Customer Reviews			X									
47	Importance when buying online	Return Policy	X		X	X					X	X	X	X
48	Importance when buying online	Eco-Friendly Delivery Modes		X			X	X	X	X	X	X	X	X
49	Importance when buying online	Green Packaging					X							X
50	Importance when buying online	Return Cost	X								X	X	X	
51	Importance when buying online	Delivery Cost	X								X		X	

Question Number	Category	Question	Time-Savers	Brand Seekers	Review Enthusiasts	Family-Centric	Health-Conscious	Cultural Guardians	Tech-Savvy Shoppers	Social Shoppers	Cost-Conscious	Impulsive Buyers	Global Explorers	Premium Shoppers
52	Importance when buying online	Convenient Method of Payment							X					
53	Importance when buying online	Convenient Method of Return	X		X	X			X		X	X	X	X
54	Importance when buying online	Return Period				X								X
55	Encourage sustainable delivery	This delivery option results in a X% decrease in CO2 emissions.		X	X		X		X	X	X	X	X	X
56	Encourage sustainable delivery	This delivery option is more sustainable because we are already in your street on that day so we drive fewer kilometers which leads to less emissions.	X	X			X		X	X	X		X	X
57	Encourage sustainable delivery	This delivery option helps reduce CO_2 emissions by X kg, which is equivalent to saving X kilometers of car travel.			X		X		X	X		X	X	
58	Encourage sustainable delivery	This delivery option improves the air quality in your neighbourhood and limits the congestion in the streets.	X				X	X		X				X
59	Encourage sustainable delivery	This delivery option helps reduce CO_2 emissions by X kg, which is equivalent to saving X tree.			X		X							
60	Encourage keeping low-cost items (up to €15)	Information about the CO_2 emissions generated by returning the item			X		X		X					
61	Encourage keeping low-cost items (up to €15)	Partial refund of 1 euro on the item									X	X	X	

Question Number	Category	Question	Time-Savers	Brand Seekers	Review Enthusiasts	Family-Centric	Health-Conscious	Cultural Guardians	Tech-Savvy Shoppers	Social Shoppers	Cost-Conscious	Impulsive Buyers	Global Explorers	Premium Shoppers
62	Encourage keeping low-cost items (up to €15)	Partial refund of 2.50 euros on the item									X	X	X	
63	Encourage keeping low-cost items (up to €15)	Partial refund of 5 euros on the item									X	X	X	
64	Encourage keeping low-cost items (up to €15)	Discount (up to 5 euros) on a future purchase	X							X	X	X		
65	Encourage keeping low-cost items (up to €15)	Points for a loyalty program		X					X	X	X			X

PL - POZNAŃ						
Choice	5	4	3	2	1	Average
Product Price	279	92	30	3	2	4,58
Store Brand reputation	109	160	105	20	12	3,82
Product quality	277	97	28	2	2	4,59
Convenience of delivery	222	133	43	5	3	4,39
Payment security	306	75	20	5	0	4,68
Customer reviews	145	142	99	14	6	4,00
Return policy	151	127	95	19	14	3,94
Eco-friendly delivery modes	76	91	114	60	65	3,13
Green packaging	68	94	120	51	73	3,08
Return cost	180	111	77	23	15	4,03
Delivery cost	245	118	37	5	1	4,48
Convenient method of payment	261	105	38	1	1	4,54
Convenient method of return	189	126	64	11	16	4,14
Return period	160	125	76	27	18	3,94

Annex II. Survey Template

Green Turn Funded by the European Union ABR SESTA MARKET RESEARCH & CONSULTING

This survey is organized by the European Horizon Funded "GreenTurn: Enabling stakeholder-centric zero emission e-commerce and return practices through transparent and collaborative supply chains" and specifically in the frame of WP2 "Empathise & define: Understanding stakeholders and behaviours". The aim of the survey is to understand choices and willingness to pay for different delivery and return alternatives.

Your participation in this survey is voluntary and will not take more than 15 minutes. All data are anonymous and will be used strictly for the purposes of said research.

In case of questions feel free to reach out: contact@green-turn.eu

Before you begin, please check the box below if you agree to participate in this survey:

I agree to participate in the survey

GreenTurn has received funding from European Union´s Horizon Europe Programme under grant agreement no°101147942. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or European Commission. Neither the European Union nor the granting authority can be held responsible for them.

Section 1: Getting Started

Q1 What best describes your gender?

1 Male
2 Female
3 Non-binary/Third gender
4 Prefer not to say

Q2 How old are you?

1 18-29
2 30-39
3 40-49
4 50-59
5 60-69
6 70 or more
7 Prefer not to say

Q3 What type is your residence area?

1. Rural / Low Density (<1200 people/ km2)
2. Mid-Density (1200-3000 people/km2)
3. Urban-High Density (> 3000 people/km2)

Q4 What is your level of education?

1 No formal education
2 High school diploma or equivalent
3 Bachelor's degree or equivalent
4 Master's degree (or 5 years diploma)
5 Doctoral degree
6 Other (please specify):
6 Prefer not to say

Q5 What is your Ethnicity/Origin?

List Name: ethnList in file: ConsumerBehaviorQuest - Lists 2025 04.xlsx

Q6 What is your country of residence?

List Name: CountryResList in file: ConsumerBehaviorQuest - Lists 2025 04.xlsx

Q7 What is the town/city of your residence?

Poland

1. Poznań
2. Other city/town

France

1. Lyon
2. Other city/town

Greece

Athens

1. Other city/town

Austria

1. Vienna
2. Other city/town

Spain

1. Zaragoza

Q8 Other city/town**Have you ever purchased anything online?**

1 Yes
2 No

Section 2: Digital Literacy and Preferences

Q9 Which devices do you typically use for online shopping?

(You can select more than one)

1 Smartphone
2 Tablet
3 Laptop/PC
4 Other (please specify):

Q10 Which of the following payment methods are you typically using when shopping online?

(You can select more than one)

1 Cash on delivery
2 Bank transfer
3 Credit/debit card
4 Mobile wallets (e.g., Google Pay, Samsung Pay, Apple Pay)
5 PayPal
6 BLIK (method that uses a one-time code to make purchases)
7 Deferred payment (e.g. "Buy Now, Pay Later" payment after 30 days)
8 Other (please specify):

Q11 How do you prefer to receive customer support when shopping online?

1 Live chat with a representative
2 AI-powered chatbot
3 Email
4 Phone call

5 Social media (e.g., Facebook, Twitter)
6 FAQs or self-service resources
7 Video call
8 Other (please specify):

Q12 When deciding where to shop on-line, how important are the following elements to you?
(Rate on a scale of 1-5 where 1 = Not Important and 5 = Very Important).

1 Product Price:
2 Store Brand reputation:
3 Product quality:
4 Convenience of delivery:
5 Payment security:
6 Customer reviews:
7 Return policy:
8 Eco-friendly delivery modes:
9 Green packaging:
10. Return cost
11. Delivery cost
12. Convenient method of payment
13. Convenient method of return
14. Return period

Section 3: Proximity to Pick-Up and Return Points

Q13 How do you usually travel to your nearest pick-up/return point or locker?

1 Walking
2 Cycling
3 Public Transport
4 Private Car
5 Motorcycle
6 Other (please specify):

Q14 What is the typical travel time to your nearest pick-up/return point or locker?

1 < 5 minutes
2 6 – 10 minutes
3 11 – 15 minutes
4 16 – 20 minutes
5 > 21 minutes
6 I don't know

Section 4: Personal Perspectives and Attitudes

Q15 How much do you agree with the following statements?
(Rate on a scale of 1-5 where 1 = Strongly Disagree and 5 = Strongly Agree)

1) Convenience:

1 Shopping online saves me valuable time compared to shopping in physical stores.
2 I prefer online shopping because it allows me to shop at any time that is convenient for me.
3 Online shopping helps me avoid the hassle of going to physical stores.
4 I find offline shopping more convenient because it avoids the hassle of deliveries and potential returns.

2) Quality and Brand:

1 I am willing to pay more for products from reputable brands.
2 The quality of the products I buy online is more important than the price.
3 I prefer to shop from well-known brands that I trust.

3) Safety and Trust:

1 I always check reviews and ratings before making an online purchase.
2 I feel secure using digital payment methods when shopping online.
3 The authenticity of products is crucial to me when shopping online.

4) Workplace conditions:

1 I consider a company's health and safety regulations before making a purchase.
2 I am willing to pay more for delivery if the delivery employee is properly insured.
3 I am more likely to shop with a brand that treats their staff well.

5) Family-Centric:

1 My purchasing decisions are strongly influenced by the needs of my family.
2 I choose products that align with my family's values.
3 I prioritize buying products that are beneficial for my family.

6) Health-Conscious:

1 I prefer to buy organic and sustainable products.
2 Health considerations are a major factor in my purchasing decisions.
3 I am willing to spend more on products that are environmentally friendly.

7) Cultural Sensitivity:

1 I value products that are culturally appropriate and respect local traditions.
2 I consider the cultural impact of products before making a purchase.
3 I prefer brands that are sensitive to cultural differences.

8) Comfort with Technology:

1 I am comfortable using apps for my online shopping.
2 I am comfortable digital payment systems for my online shopping.
3 I find it easy to navigate and use e-commerce websites and apps.
4 I enjoy leveraging technology to make my shopping experience more efficient.
5 I find easy using digital tools and platforms for online shopping

9) Engagement with Digital Services:

1 I often use brand apps and e-commerce platforms to access loyalty programs and discounts.
2 I prefer shopping on platforms that offer personalized recommendations.
3 I actively engage with brands online, including using their apps and websites regularly.

10) Social Media Influence:

1 I am influenced by social media when making purchasing decisions.
2 I follow influencers and brands on social media that align with my lifestyle.
3 Social media often introduce me to new products that I end up purchasing.

11) Delivery:

1 I can only accept deliveries when I am home.
2 I do not tolerate delays in delivery times.
3 I prefer receiving a parcel at a pick-up point or locker to save me the hassle of waiting at home.
4 I often receive my online orders in multiple deliveries at different times or even days.

12) Returns:

1 Sometimes I order items (e.g., clothes) to try them and return them if I do not like them.
2 Returning an unwanted item for free is an important part of the online shopping experience.
3 Sometimes I order multiple items with different characteristics to choose one and return the others.

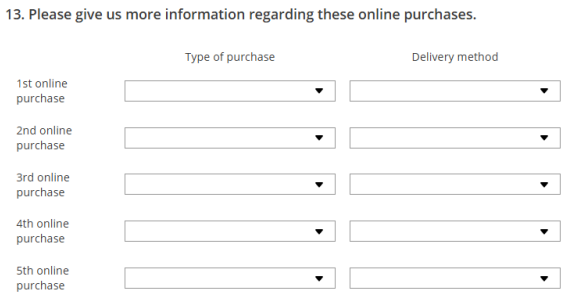
xx. Please, check the box 4 (rather agree).

Section 5: Recent Shopping Behavior

Q16 How many online purchases did you make in the last 2 weeks?
The response must be between 0 and 20. You cannot select more than 20 purchases

Q17 Please give us more information regarding these online purchases.

1 1st online purchase
2 2nd online purchase
3 3rd online purchase
4 4th online purchase
5 5th online purchase



1 Type of purchase

2 Delivery method

1 Electronics items (e.g., phones, laptops, gadgets)
2 Re-commerce items (e.g., pre-owned items from platforms like Vinted, eBay)
3 Fashion/Clothing (e.g., clothing, accessories, footwear)
4 Pharmaceuticals (e.g., medications, vitamins; excludes cosmetics and toiletries)
5 Fresh groceries, food or beverages (e.g., fresh produce, pantry items, pre-packaged meal kits)
6 Prepared Meals (e.g., pizza, deli items, beverages)
7 Toys, Books or Other Consumables (e.g., diapers, stationery, hobby supplies, small household items, any other item)
8 None of the above. (Please specify):

1 Click-and-collect (from the retailer's own store)
2 Neighborhood collection point (e.g., local convenient store not owned by the retailer or pickup hub)
3 Smart lockers
4 Home delivery
5 Workplace delivery
6 Delivery to a friend or family member's address

Section 6: Recent Online Purchase Behavior

Q18 What was the last item you purchased online?
1 Electronics items (e.g., phones, laptops, gadgets)
2 Re-commerce items (e.g., pre-owned items from platforms like Vinted, eBay)
3 Fashion/Clothing (e.g., clothing, accessories, footwear)
4 Pharmaceuticals (e.g., medications, vitamins; excludes cosmetics and toiletries)
5 Fresh groceries, food or beverages (e.g., fresh produce, pantry items, pre-packaged meal kits)
6 None of the above. (Please specify):

Your last on-line purchase was from category:
Q19 What was the price range of the item purchased?
Greece, Austria, Spain, France:
1 0-10 Euros
2 11-30 Euros
3 31-100 Euros
4 101-500 Euros
5 >500 Euros

Poland:
1 **0-43 zł** (0-10 Euros)
2 **44-130 zł** (11-30 Euros)
3 **131- 430 zł** (31-100 Euros)
4 **431-2150 zł** (101-500 Euros)
5 **> 2150 zł** (>500 Euros)

Section 7A: SP Experiment: CBC1

CBC1

Details in file: CBC description ConsumerBehaviorQuest 2025 04.docx

A. Delivery options - Scenario 1

A. Delivery options - Scenario 2

A. Delivery options - Scenario 3

A. Delivery options - Scenario 1

In the following scenarios, imagine making an online purchase similar to your last one

Hypothetical Scenario: If you were to purchase an item similar to your last purchase (e.g., [% Label (LastItem) %] and at a similar price (e.g., [% Label (PriceRange)%]), which delivery option would you prefer?

1) Home Delivery – Receive the item directly at your address.

2) Parcel Locker – Pick up your package from a secure, self-service locker.

3) Pick-up Point – Collect your package from a nearby store or shop.

4) Click & Collect – Buy online and pick up the item directly from the store.

1 refers to the Logistics Service Provider's delivery trip to the collection point

2 1 leaf indicates low level of commitment to environmental responsibility, while 5 leaves indicate high.

3

[Attribute List]:

1 Choice
2 Delivery Time
3 Delivery Cost
4 Environmental Impact 1,2
5 Travel time to Collection Point
6 Delivery Date

Attribute 1: Choice

Levels:

1 Home Delivery
2 Parcel Locker
3 Pick-up point
4 Click&Collect

Attribute 2: Delivery Time

Levels:

1 2 hours
2 Same day

3 Next day
4 3 days
5 7 days

Attribute 3: Delivery Cost
Levels:
1 0 EUR
2 3 EUR
3 5 EUR
4 8 EUR
5 10 EUR

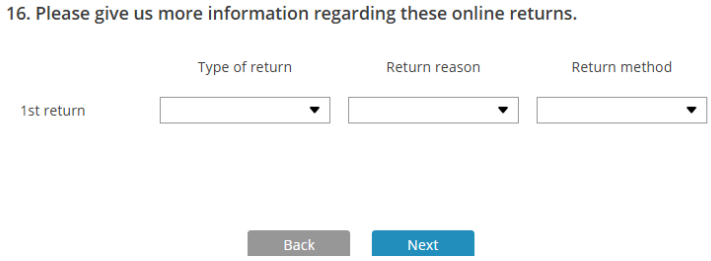
Attribute 4: Environmental Impact 1,2

Attribute 5: Travel time to Collection Point
Levels:
1 less than 5 min
2 5 min
3 10 min
4 15 min
5 20 min or more
6 -
Attribute 6: Delivery Date
Levels:
1 Having the opportunity to choose
2 Not having the opportunity to choose
3 -

Section 8: Recent Return Behavior

Q20 How many returns (from on-line purchases) did you make in the last 2 weeks?
The response must be between 0 and 20. You cannot select more than 20 returns

Q21 Please give us more information regarding these online returns.
1 1st return
2 2nd return
3 3rd return
4 4th return
5 5th return



1 Type of return
2 Return reason
3 Return method

1 Electronics items (e.g., phones, laptops, gadgets)
2 Re-commerce items (e.g., pre-owned items from platforms like Vinted, eBay)

3 Fashion/Clothing (e.g., clothing, accessories, footwear)
4 Pharmaceuticals (e.g., medications, vitamins; excludes cosmetics and toiletries)
5 Fresh groceries, food or beverages (e.g., fresh produce, pantry items, pre-packaged meal kits)
6 Toys, Books or Other Consumables (e.g., diapers, stationery, hobby supplies, small household items, any other item)
7 None of the above. (Please specify):

1 Defective or damaged product.
2 Product does not match the description or images.
3 Wrong size, color, or fit.
4 Found a better price elsewhere after purchasing.
5 Changed my mind or no longer needed the product.
6 Late arrival of the product.
7 Poor quality or unsatisfactory performance.
8 Mistake in ordering (e.g., ordered the wrong item).
9 Other (please specify):

1 Return to Store
2 Parcel Locker / Pick-up Point
3 Home Pick-up
4 Workplace Pick-up
5 Coordinate a pickup from a friend/family member's address
6 Other (please specify):

Section 7B: SP Experiment: CBC2

CBC2

B. Return options - Scenario 1
B. Return options - Scenario 2
B. Return options - Scenario 3

B. Return options - Scenario 1

Hypothetical Scenario: If you considered to return an item similar to your last purchase (e.g., [%Label(LastItem)%]), priced (e.g., [%Label(PriceRange)%]), which return option would you prefer?

1) Parcel Locker / Pick-up Point – Return at a convenient nearby parcel locker or participating store.
2) Home Pick-up – Schedule a pick-up from your address.
3) Return to Store – Return the item directly to the store where it was purchased.

1 refers to the Logistics Service Provider's trip from the return point to the retailer/warehouse.

2 1 leaf indicates low level of commitment to environmental responsibility, while 5 leaves indicate high.

[Attribute List]:

1 Choice
2 Return Period
3 Return Cost
4 Environmental Impact1,2</sup>
5 Distance to Return Point
6 Incentives for Sustainable Delivery Return Policies
7 Nudging Strategies for Delivery Return Policies

Attribute 1: Choice
Levels:

1 Home Pick-up
2 Parcel Locker / Pick-up Point
3 Return to Store
4 No Return

Attribute 2: Return Period
Levels:

1 0 days
2 7 days
3 14 days
4 28 days
5 -

Attribute 3: Return Cost
Levels:

1 0 EUR
2 3 EUR
3 5 EUR
4 8 EUR
5 10 EUR
6 -

Attribute 4: Environmental Impact1,2

Attribute 5: Distance to Return Point
Levels:

1 0.5 km
2 1 km
3 2 km
4 5 km
5 10 km

6 -

Attribute 6: Incentives for Sustainable Delivery Return Policies
Levels:
1 Get a 5% discount on your next purchase if you choose not to return your current item.
2 Get a 15% discount on your next purchase if you choose not to return your current item.
3 Get a 25% discount on your next purchase if you choose not to return your current item.
4 Get 1% cashback reward in EUR if you choose not to return your current item.
5 Get 2.5% cashback reward in EUR if you choose not to return your current item.
6 Get 5% cashback reward in EUR if you choose not to return your current item.
7 Get rewarded with 1 EUR or 25 loyalty points when you make fewer than 2 returns in a year.
8 Get rewarded with 5 EUR or 100 loyalty points when you make fewer than 2 returns in a year.
9 Get rewarded with 12 EUR or 200 loyalty points when you make fewer than 2 returns in a year.
10 -

Attribute 7: Nudging Strategies for Delivery Return Policies
Levels:
1 By choosing not to return this item, you help reduce CO_2 emissions, making a positive environmental impact.
2 Thank you for not returning! This choice helps reduce your carbon footprint and improves air quality in your neighborhood.
3 Opting not to return this item saves valuable resources and prevents unnecessary emissions—thank you for contributing to a greener planet!
4 By keeping this item, you avoid contributing to environmental harm, supporting a more sustainable future.
5 Choosing not to return helps us avoid unnecessary trips and packaging waste, making a positive impact on the environment.
6 By keeping this item, you're supporting a more sustainable logistics system and helping to reduce congestion.
7 Every small choice counts! By deciding not to return, you're helping to create a cleaner and healthier future for everyone.
8 Your decision to keep this item means fewer resources are wasted, less packaging is used, and the planet thanks you!
9 We appreciate your environmentally conscious choice! Opting for no return saves emissions, time, and resources—every effort makes a difference.
10 -

Section 9: Motivational Factors for Sustainable Delivery Choices

Q22 How motivating would each of the following statements be in encouraging you to choose a sustainable delivery option?

Important note: "X" was intentionally used to direct your attention to the message rather than the specific numbers, as the environmental impact is of a similar magnitude across all options.

1 This delivery options results in a X% decrease in CO2 emissions.
2 This delivery option is more sustainable because we are already in your street on that day so we drive fewer kilometers which leads to less emissions.
3 This delivery option helps reduce CO_2 emissions by X kg, which is equivalent to saving X kilometers of car travel.
4 This delivery option improves the air quality in your neighbourhood and limits the congestion in the streets.
5 This delivery option helps reduce CO_2 emissions by X kg, which is equivalent to saving X tree.

1 Not at all motivating
2 Slightly motivating
3 Neutral
4 Moderately motivating
5 Very motivating

Q23 As part of an initiative to reduce the environmental impact of e-commerce returns, we are exploring ways to encourage customers to keep low-cost items (up to 15 euros) instead of returning them.

How likely are you to keep an item under 15 euros (rather than returning it) if the following nudges or incentives were presented to you?

Greece, Austria, Spain, France:

1 Information about the CO 2 emissions generated by returning the item
2 Partial refund of 1 euro on the item
3 Partial refund of 2.50 euros on the item
4 Partial refund of 5 euros on the item
5 Discount (up to 5 euros) on a future purchase
6 Points for a loyalty program

Poland

1 Informacje o emisji CO2 generowanej przy zwrocie produktu
2 Częściowy zwrot 4,50 zł (1 euro) za produkt
3 Częściowy zwrot 11zł (2,50 euro) za produkt
4 Częściowy zwrot 21zł (5 euro) za produkt
5 Rabat do 21zł (do 5 euro) na przyszły zakup
6 Punkty w programie lojalnościowym

1 Very Unlikely
2 Unlikely
3 Neutral
4 Likely
5 Very Likely

Section 10: Demographic Information

Q24 Please provide the zip code of your primary residence:
The response must be a number.

Q25 What is your monthly Income Level (net, personal, EUR):
Greece, Austria, Spain, France:

1 Below 500 euro
2 501 – 1000 euro
3 1,001 - 2,000 euro
4 2,001 - 4,000 euro
5 4,001 - 7,000 euro
6 Above 7,000 euro
7 Prefer not to say

Poland:

1 poniżej 2150zł (poniżej 500 euro)
2 2 151 zł – 4 300 zł (501 – 1000 euro)
3 4 300 zł – 8 600 zł (1,001 - 2,000 euro)
4 8 601zł – 17 200 zł (2,001 - 4,000 euro)
5 17 201 zł – 30 100 zł (4,001 - 7,000 euro)
6 powyżej 30 100 zł (powyżej 7,000 euro)
7 Wolę nie odpowiadać

Q26 What is your employment status?
1 Employed full-time (private sector)
2 Employed full-time (public sector)
3 Employed part-time
4 Self-employed (freelancer or entrepreneur)
5 Self-employed (with employees)
6 Student (full-time)
7 Student (part-time)
8 Employed part-time and student
9 Unemployed
10 Retired
11 Prefer not to say

Q27 What is your household composition
1 Number of adults (age 18 and over):
2 Number of children (age 0-5 years):
3 Number of children (age 6-12 years):
4 Number of children (age 13-18 years):
5 Prefer not to say

Q28 How many cars are in your household?
1 0
2 1

3	2
4	3
5	4
6	5
7	6
8	7
9	8
10	9

Your survey was successfully completed and your data are stored.
It's safe to close your window!
Thank you very much for your participation!

Annex III. FGI Setup

FGI setup:

When: May/June 2025

Where: 5 pilot countries (Austria, France, Greece, Poland and Spain)

Format: in-person (if applicable) and virtual meetings to accommodate stakeholders availability and hosting partner's organisational capabilities

Participants: up to 6 participants per FGI (1 per pilot country); ~30 participants (5 FGIs across all pilot countries)

Time: 90-120 minutes

Recording: Sessions will be recorded (with consent) and transcribed (if needed).

Target participants:

Retailers & E-commerce businesses;

Objectives of FGI research:

- **Capture real-world knowledge** from retailers about the types of e-commerce customers they encounter in their daily operations.
- **Identify customer needs, preferences, and behavioural patterns** related to delivery and return logistics, particularly in relation to sustainability.
- **Uncover barriers** that prevent consumers from choosing low-emission or eco-friendly delivery and return options.
- **Gather retailers' insights and reflections** on how to better promote sustainable logistics choices among consumers.
- **Generate qualitative input** that will support the refinement of consumer personas and customer journeys developed in WP2, feeding into the design of solutions in WP3.

FGI Breakdown:

Session Segment	Duration (Maximum)	Purpose	Discussion Focus / Activities	Suggested Tool
1. Welcome & Introduction	10 min	Set the stage and **explain the workshop structure and goals**. **Present the GreenTurn project** and place the FGI within actions carried out.	Brief welcome by moderator. Present agenda and interaction rules.	**Online**: PPT presentation **In-person**: PPT presentation, flipchart with printed agenda + verbal introduction
2. Exploring Customer Types	20 min	Capture typical customer types and their logistics behaviours.	Customer Type Canvas: Describe real customer profiles using sticky notes (who they are, how they behave, what they expect).	**Online**: Miro – Persona canvas **In-person**: Pre-printed persona template (A3) + sticky notes or marker pens
3. Identifying Needs, Preferences & Barriers	25 min	Understand real-life insights retailers have from customer interactions.	Sticky note clustering in 3 columns: Needs, Preferences, Barriers. Optional dot voting to prioritize insights.	**Online:** Miro (Board) + Mentimeter (polling) **In-person**: Flipchart matrix (3 columns) + sticky notes + dot stickers for voting
4. Journey Mapping	25 min	Explore customer experience across delivery/return touchpoints.	Map steps of a typical journey; tag pain points (🔴) and gains (🟢).	**Online**: Miro – Journey map template **In-person**: Printed journey map on flipchart or drawn on whiteboard + sticky notes & markers

5. Retailers' Reflections	20 min	Collect recommendations on how to promote sustainable logistics.	Prompt questions on customer motivation, communication, and incentives.	**Online**: Sticky note wall in Miro + optional Mentimeter word cloud **In-person**: Reflections flipchart wall + colored sticky notes
6. Mini Validation Activity	15 min	Light-touch check of persona relevance	Show or hand out 1–2 sentence summaries of 6–8 predefined personas (not all 12).	**Online:** Poll + Miro dot voting **In-person:** Printed persona cards + sticker voting or yes/no cards
7. Wrap-Up & Next Steps	5 min	Thank participants and summarize key insights.	Moderator highlights the main takeaways and explains follow-up use.	**Online**: Summary frame in Miro **In-person**: Verbal summary + optional summary handout or photo capture of boards