



WPI



HellasVeg



falafel
tastemiddleeast

Increasing Awareness of Vegan/Vegetarian Accessibility in Greece

Mason Affricano, Tyler Herland, Anjolina Ortiz,
and Drew Ortlieb

Raising Awareness of Vegan/Vegetarian Access in Greece



An Interactive Qualifying Project Submitted to the Faculty of
WORCESTER POLYTECHNIC INSTITUTE

In partial fulfillment of the requirement for the degree of Bachelor of Science/Arts

Authors:

Mason Affricano – BS BME '27

Tyler Herland – BS ECE '27

Anjolina Ortiz – BS CBC '27

Drew Ortlieb – BS CE '26

6 May 2026

Report Submitted to:

Hellenic Vegetarian Association

Thomas Vassaras

Stella Vassaras

Zoi Nalmpanidou



Professor Melissa Butler

Professor Robert Kinicki

Worcester Polytechnic Institute

This report represents work of WPI undergraduate students submitted to the faculty as evidence of a degree requirement. WPI routinely publishes these reports on its website without editorial or peer review. For more information about the projects program at WPI, see <http://www.wpi.edu/Academics/Projects>.

Abstract



Merry Berry, Thessaloniki

Research indicates that there is limited awareness and accessibility of vegan and vegetarian dining information in Greece. This project evaluated and improved the HellasVeg Veggie Map to enhance usability, reliability, and visibility for consumers and restaurants. Surveys and interviews with consumers and restaurant owners in Thessaloniki revealed that while many restaurants offer modifiable plant-based options, poor labeling and low visibility hinder awareness. The redesigned map features improved search, navigation, detailed listings, and reliability tools. Veggie Map prototype evaluations indicate strong interest, especially among vegans and vegetarians, and highlight tourism as a key driver of demand for plant-based dining.



Executive Summary

Across Europe, interest in plant-based diets has increased due to growing awareness of health, environmental sustainability, and animal welfare (Alexandropoulou et al., 2025; Faber et al., 2024). Greece reflects this trend, with a significant portion of the population identifying as flexitarian, meaning they reduce but do not fully eliminate meat consumption (HellasVeg, n.d.). Despite this shift, a gap remains between consumer interest in plant-based eating and actual behavior. Research shows that consumers are more likely to choose plant-based meals when options are visible, convenient, affordable, and clearly integrated into restaurant menus and local food environments (Faber et al., 2024; Hollands et al., 2019).

In Greece, tourism and traditional cuisine further shape this challenge. Tourists and locals often rely on tools such as Google Maps, scattered online searches, or word-of-mouth recommendations to locate vegan and vegetarian dining options (Wang & Strong, 1996; Wright et al., 2019). These sources can provide incomplete or outdated information, making it difficult for users to identify restaurants with reliable plant-based options. At the same time, restaurants that offer vegan or vegetarian meals may lack an effective platform to communicate their options to consumers.

To address this issue, the Hellenic Vegetarian Association, or HellasVeg, developed the Veggie Map, an online tool designed to connect users with vegan- and vegetarian-friendly restaurants across Greece. However, the original platform had limitations in usability, awareness, and functionality.

Methods

The team accomplished our goal through three objectives:

1. Increased awareness and understanding of vegan/vegetarian benefits and experiences to all stakeholders in Thessaloniki.
2. Developed practical, evidence-based enhancements that strengthen the current platform's functionality, reliability, and overall user experience.
3. Evaluated the usability of the HellasVeg Veggie Map as a web-based information system with owners and consumers.

The goal of this project was to evaluate and enhance the HellasVeg Veggie Map to improve awareness of vegan and vegetarian accessibility. To accomplish this goal, the team assessed the platform's usability, reliability, and user engagement through surveys, restaurant interviews, and prototype testing. This project combines surveys and interviews to evaluate user interests and improve the Veggie Map. Data collection took place over a two-week period in Thessaloniki, Greece, focusing on both consumers and restaurant owners featured on the Veggie Map.

The team distributed a cross-sectional survey through a QR code as well as street surveying to residents and tourists to assess dietary preferences, dining behaviors, and experiences with plant-based dining. We also distributed our survey through online platforms like Facebook, Reddit, and Discord. In our survey, the team asked respondents about their dietary preferences, motivations behind their eating habits, and experiences with plant-based dining. Participants were also introduced to a prototype of the Veggie Map and asked to provide feedback on usability and desired features. Combined, we received 66 survey responses.

The team also conducted informal interviews with nine restaurant owners and formal interviews with four restaurant owners. The goal of informal interviews was to gauge awareness of the Veggie Map, gain information on vegan and vegetarian dining habits, and find motivations for serving plant-based options.

Formal interviews were more in-depth covering topics such as menu offerings, motivations for providing plant-based options, awareness of the Veggie Map, and interest in engaging with HellasVeg further. We recorded the interviews and coded the transcripts for themes to identify both similarities and differences across restaurants.

After conducting the consumer survey and the restaurant owner interviews, the team took the data from these research methods and compiled them into evidence-based enhancements for implementation into the new Veggie Map prototype. The enhancements the team made to the new Veggie Map relied on the needs of the stakeholders: the consumers, the restaurants, and HellasVeg. The team wanted to create a product that was rooted in stakeholder perspectives and would be sustainable, usable, and reliable.

After completing and launching the Veggie Map prototype, the team evaluated the platform to assess its usability, reliability, appearance, and long-term sustainability. The team collected feedback through a survey and distributed it in person through QR codes and online through Facebook, Reddit, and Discord groups, and received 31 responses. The team used feedback from respondents to evaluate the Veggie Map as a web-based information system, as well to make informed recommendations for future research and developments to the Veggie Map.

Results

The project findings revealed several important patterns regarding vegan and vegetarian dining in Greece, restaurant practices, tourism influences, and awareness of the HellasVeg Veggie Map. Survey data showed that while most participants regularly consume meat (86%), there is still significant interest in vegan and vegetarian eating, particularly among flexitarian consumers (Figure 0.1).

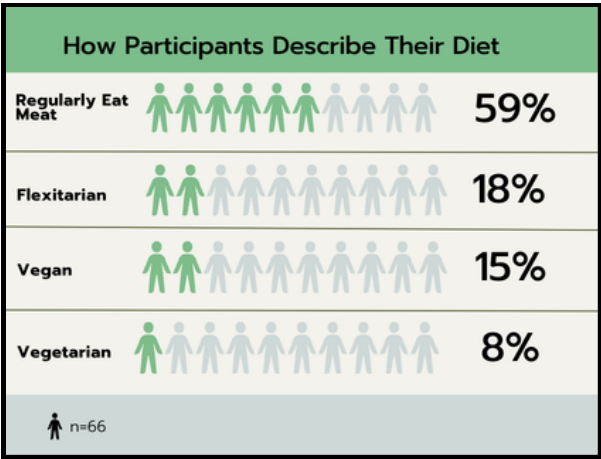


Figure 0.1 The dietary preferences of survey respondents.

Respondents were more likely to choose vegetarian or vegan dishes based on taste, appearance, and recommendations rather than sustainability concerns, suggesting that plant-based dining is often driven by convenience and enjoyment rather than strict dietary commitment (see Figure 0.2).

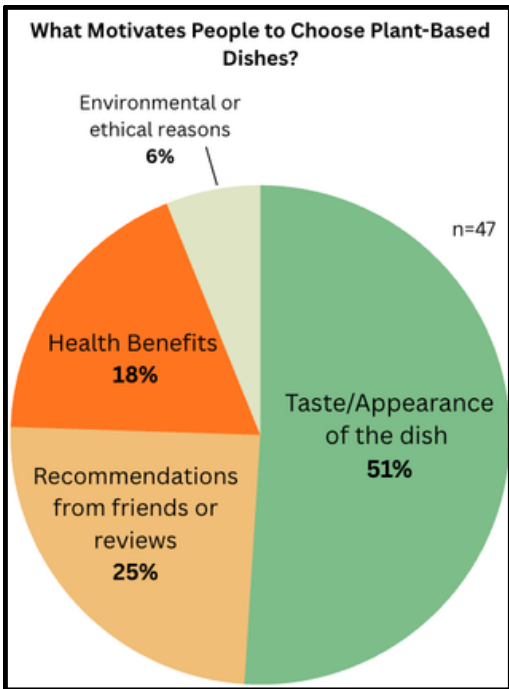


Figure 0.2: Motivations for choosing plant-based dishes.

Restaurant interviews demonstrated that vegan and vegetarian options were more available than consumers initially perceived. Although some restaurants reported limited dedicated vegan or vegetarian menu items, 4 out of 9 (44%) explained that they could easily modify dishes to accommodate vegan or vegetarian customers. However, the restaurants often did not clearly communicate these flexible options through menus or restaurant

marketing. Survey responses further showed that consumers prioritize restaurant ratings, reviews, and menu availability more than dietary specific information when selecting restaurants, reinforcing the communication gap between restaurants and consumers.

Tourism emerged as a major factor influencing vegan and vegetarian demand. 5 out of 9 (56%) restaurants identified tourists as the primary customers seeking vegan and vegetarian options, especially during peak tourist season (Figure 0.3). 3 out of 9 (33%) restaurants reported adjusting their menus seasonally or creating separate vegetarian or vegan menus during high tourism periods. At the same time, 81% of survey respondents stated that vegan or vegetarian food availability does not strongly influence their travel decisions.

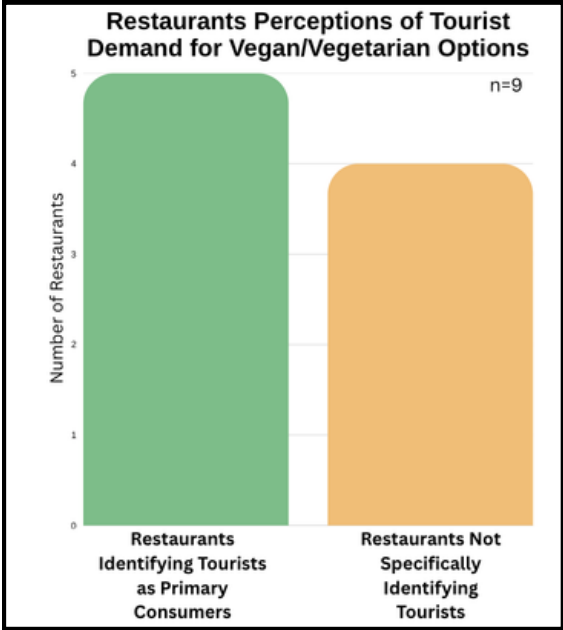


Figure 0.3: Restaurant perceptions of tourists influence on vegan/vegetarian demand and seasonal menu changes

The project also identified low awareness of the HellasVeg Veggie Map among both restaurants and consumers. Also, 89% of interviewed restaurants owners were unfamiliar with the platform, and many did not realize the Veggie Map already listed their restaurant. Similarly, 84% of survey participants had never heard of the Veggie Map before the survey (Figure 0.5). Despite low awareness, respondents expressed moderate to strong interest in using the platform after launch, including 86% of meat eater

participants. This finding demonstrates the platform’s potential to reach a broader audience if awareness and engagement improve.

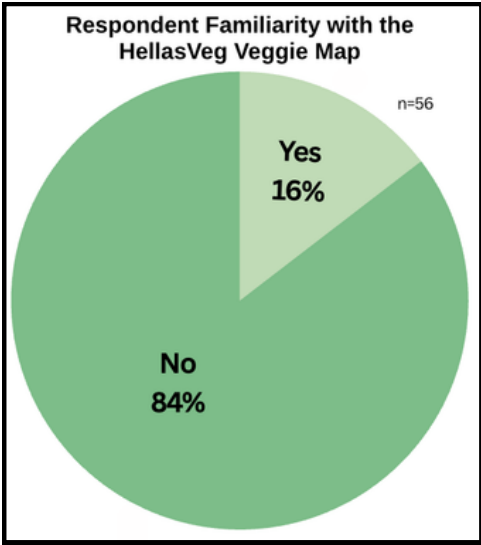


Figure 0.4: Respondent Familiarity with the HellasVeg Veggie Map.

Design

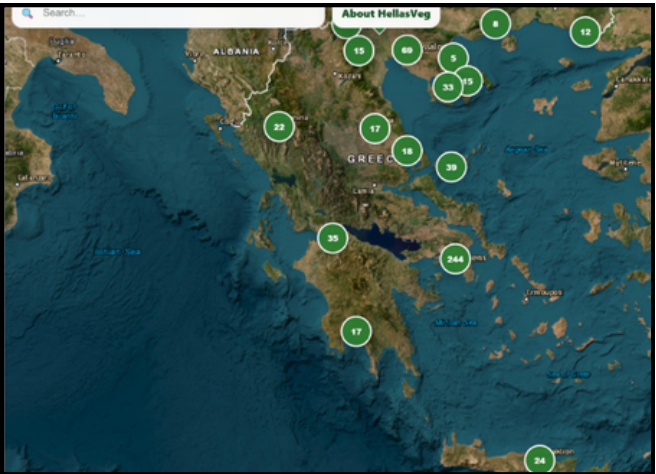


Figure 0.5: Main Veggie Map interface showing clustered restaurant markers across Greece.

Using these findings, the team designed and developed a new browser-based Veggie Map to replace the limitations of the original platform, which operated on Google MyMaps (Figure 0.4). The team built the final platform using React, Vite, Firebase, Firestore, and React Leaflet to create a more interactive and customizable system. Key features included advanced search and filtering tools, location-based searching (Figure 0.6), restaurant detail cards, dish specific reviews, reporting systems, and mobile responsive functionality. The design emphasized usability, flexibility, affordability, and

long-term sustainability while supporting both tourists and local users.

Recommendations

The project findings identified several recommendations for future development. Increasing awareness of the Veggie Map through social media, restaurant outreach, and tourism focused marketing would likely improve engagement among both consumers and restaurant owners. The project also identified an opportunity to include takeaway focused vegan and vegetarian options to better support users seeking quick and convenient meals. Future teams should continue improving the platform’s features by expanding review systems, integrating navigation and personalization tools, and strengthening long-term moderation and data management systems.

Conclusion

Overall, the project concluded that the primary limitations of the Veggie map is not the lack of vegan and vegetarian options in Greece, but rather the lack of communication, visibility, and engagement surrounding those options. By improving restaurant participation, increasing platform awareness, and better communicating available vegan and vegetarian choices, the HellasVeg Veggie Map has strong potential to become a valuable resource for both consumers and restaurant owners throughout Greece.

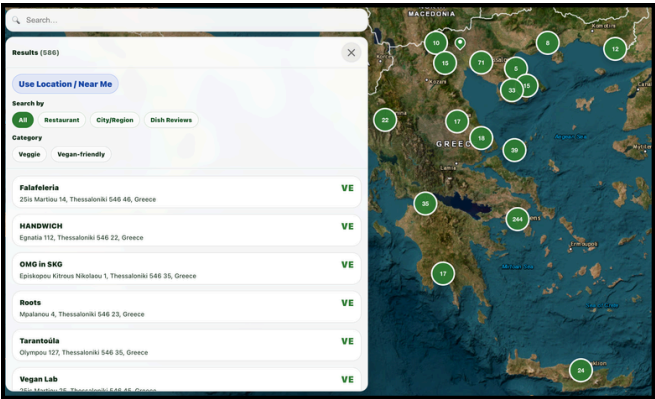


Figure 0.6: Search and filtering panel showing restaurant results, search categories, and category filters.

Prototype evaluation results showed strong positive feedback regarding the Veggie Map’s usability and convenience. 90% (n=31) participants described the platform as enjoyable to use and indicated that they would likely use or recommend it in the future (Figure 0.7). Many respondents also identified tourism related situations, such as traveling (77%) or finding food in unfamiliar areas (58%), as the most likely context for using the Veggie Map. These findings reinforced the importance of designing the platform to support travelers and tourists.

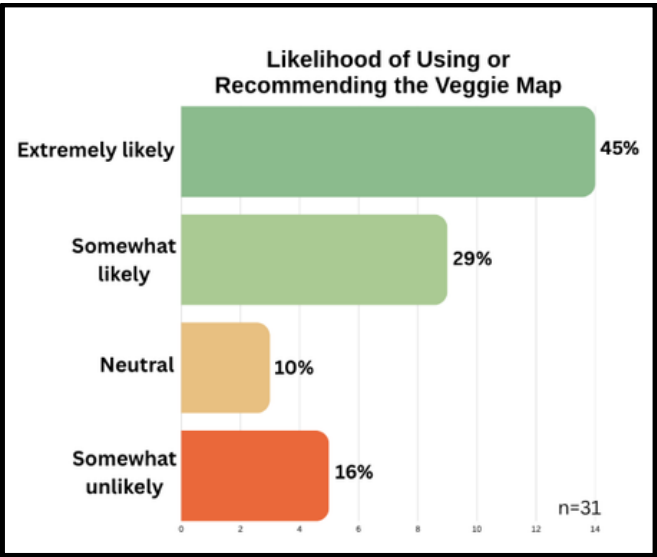


Figure 0.7: Overall user experience ratings for the Veggie Map.

Executive Summary References

Alexandropoulou, I., Gkouvi, A., Kontouli, K. M., Papadopoulou-Maniki, S., Giannioti, A., Bogdanos, D. P., Vassilakou, T., Mouchtouri, V. A., Goulis, D. G., & Grammatikopoulou, M. G. (2025). Sustainable healthy diet practices: A cross-sectional analysis of an adult Greek sample. *Nutrition Journal*, 24(1), Article 32. <https://doi.org/10.1186/s12937-025-01096-7>

Faber, I., Rini, L., Schouteten, J. J., Bom Frøst, M., De Steur, H., & Perez-Cueto, F. J. A. (2024). The mediating role of barriers and trust on the intentions to consume plant-based foods in Europe. *Food Quality and Preference*, 114, Article 105101. <https://doi.org/10.1016/j.foodqual.2024.105101>

HellasVeg. (n.d.). *HellasVeg – Hellenic Vegetarian Association*. Retrieved February 16, 2026, from <https://hellasveg.gr/en/hellasveg-en/>

Hollands, G. J., Shemilt, I., Marteau, T. M., Jebb, S. A., Kelly, M. P., Nakamura, R., Suhrcke, M., & Ogilvie, D. (2013). Altering micro-environments to change population health behaviour: towards an evidence base for choice architecture interventions. *BMC Public Health*, 13(1), Article 1218. <https://doi.org/10.1186/1471-2458-13-1218>

Wang, R. Y., & Strong, D. M. (1996). Beyond Accuracy: What Data Quality Means to Data Consumers. *Journal of Management Information Systems*, 12(4), 5–33. <https://doi.org/10.1080/07421222.1996.11518099>

Wright, L. B., Haug, J. C., & Huckabee, A. (2019). *Blueprint for retail website design: Attracting and retaining millennial online shoppers*. *Journal of Internet Commerce*, 18(2), 170–196. <https://doi.org/10.1080/15332861.2019.1584844>



Acknowledgements

Our team would like to express our sincere appreciation to everyone who contributed to and supported our research efforts throughout this project. We are grateful to the following organizations and individuals for their guidance, time, and expertise.

We would like to thank our sponsor, HellasVeg, for their guidance in shaping our project goals and for their support throughout the research process. We extend a special thank you to Stella Vassaras, Thomas Vassaras, and Zoi Nalmpandou for providing valuable insights and perspectives that informed our work. Their knowledge of the Veggie Map and the restaurant landscape in Thessaloniki was essential to the development of this project. We also greatly appreciate their assistance with translation support, which helped ensure clear communication throughout the research process. Additionally, we are thankful for their efforts in connecting us with restaurant owners and staff for interviews and for sharing the enhanced Veggie Map within their network to gather feedback and support final improvements.

We are especially thankful to the restaurant owners and staff who participated in our interviews. Despite their busy workdays, they took the time to meet with us and share detailed information about their establishments. Their input provided critical context and greatly strengthened our research.

We would also like to express our gratitude to our professors, Melissa Butler and Robert Kinicki, for their invaluable guidance, encouragement, and continuous support throughout the duration of this project. Their mentorship and expertise were instrumental in shaping our research approach, strengthening our analysis, and refining our academic writing. Their dedication to our learning and development played a significant role in both the success of this project and our growth as researchers.

Finally, we would like to thank our research assistants, Aggeliki Anastasopoulou and Katerina Tsiri, for their assistance with translating interview transcripts and supporting us during the interview process. Their contributions were instrumental in ensuring clear communication and accurate data collection.



Authorship

Chapter	Primary Author	Primary Editor
1.0 Introduction	All	All
2.0 Background Overview	Drew Ortlieb	All
2.1 Consumer and Social Insights on Plant-based Eating in Europe and Greece	Drew Ortlieb	Mason Affricano
2.1.1 Shaping Consumer Intentions	Drew Ortlieb	Mason Affricano
2.1.2 Structured Food environments Influence	Drew Ortlieb	Mason Affricano
2.2 Plant-based Travel in Tourism	Anjolina Ortiz	Tyler Herland
2.2.1 Dietary Influence on Travel and Destination Selection	Anjolina Ortiz	Tyler Herland
2.2.2 Pre-Travel Planning and Digital Information Use	Anjolina Ortiz	Tyler Herland
2.2.3 Food Access and the On-Site Travel Experience	Anjolina Ortiz	Tyler Herland
2.3.1 Webpage Interactivity	Tyler Herland	Drew Ortlieb
2.3.2 Online Product Uncertainty	Tyler Herland	Drew Ortlieb
2.3.1 Website Structural Layout	Tyler Herland	Drew Ortlieb
2.4 Hellenic Vegetarian Association	Drew Ortlieb	Mason Affricano



3.0 Methodological Approach	All	All
3.1 Increasing Awareness and Understanding of Stakeholder Experiences	Mason Affricano	All
3.1.1 Sampling Strategies	Anjolina Ortiz	All
3.1.2 Conducting Interviews with Restaurants	Tyler Herland	All
3.2 Developing Enhancements to the Veggie Map	Tyler Herland	All
3.3 Evaluation of the Enhanced Veggie Map Prototype	Mason Affricano	All
3.3.1 Analysis of Veggie Map Prototype Survey	Tyler Herland	All
4.0 Results	Tyler Herland	All
4.1 Dietary Preferences between Tourists and Greeks	Anjolina Ortiz	All
4.2 Availability of Plant-Based Options	Mason Affricano	All
4.3 Tourism and Seasonal Demand	Tyler Herland	All
4.4 Restaurants Motivations and Barriers	Anjolina Ortiz	All
4.5 Awareness of the Veggie Map	Mason Affricano	All
4.6 Interest using the Veggie Map	Anjolina Ortiz	All
5.1 Introduction	Drew Ortlieb	All
5.2 Platform Selection and Design Justification	Drew Ortlieb	All



5.3 Application of Findings to the Design	Drew Ortlieb	All
5.4 Overall System Design	Drew Ortlieb	All
5.5 Restaurant Data, Search, and Filtering Design	Drew Ortlieb	All
5.6 User Location and Restaurant Detail Design	Drew Ortlieb	All
5.7 Dish Reviews, Reporting, and Photo Features	Drew Ortlieb	All
5.8 Mobile Responsiveness, Reliability, and Final Evaluation	Drew Ortlieb	All
5.9 Finding from Veggie Map Prototype Evaluation	Tyler Herland	All
6.0 Future Research	Anjolina Ortiz	All
7.0 Reflection	Mason Affricano	All
7.1 Limitations	Anjolina Ortiz	All
7.2 Conclusion	Mason Africano	All



Meet the Team

Mason Affricano



Hello my name is Mason and I am a junior studying Biomedical Engineering at WPI. Throughout my time at WPI I have developed technical skills while working with EKG data analysis with an additional focus on biomedical sensors, signals, and circuits. This experience has strengthened my skills in biomedical data analysis, engineering design, problem solving and teamwork.

Tyler Herland

My name is Tyler, and I am a junior studying Electrical and Computer Engineering at WPI. Throughout my time at WPI, I have developed a proficiency in circuit design, signal analysis, power systems, and embedded systems, with an additional focus in microelectronics.



Drew Ortlieb



My name is Drew and I am senior studying Civil Engineering at WPI. I recently completed my Major Qualifying Project focused on Accelerated Bridge Construction, where my team developed design solutions to reduce construction time, limit traffic disruption, and improve project efficiency. This experience helped me strengthen my skills in technical design, problem solving and teamwork.

Anjolina Ortiz

I am a junior studying Biochemistry at WPI. I recently completed a research project focused on modifying fluorescent proteins through genetic mutagenesis, which helped me build strong skills in problem-solving, data analysis, and working through complex challenges.



Table of Contents

Abstract	i
Executive Summary	ii
Acknowledgments	vii
Table of Authorship	viii
Meet The Team	xi
Table of Contents	xii
Table of Figures	xvi
1.0 Introduction	1
2.0 Background	4
2.1 Consumer and Social Insights on Plant-based Eating in Europe	5
2.1.1 Shaping Consumer Intentions	6
2.1.2 The Impact of Structured Food Environments on Consumer Habits	7
2.2 Plant-based Diet Awareness in Tourism	8
2.2.1 Dietary Influence on Travel	8
2.2.2 Food Access and Experience	9



2.2.3 Role of Digital Platforms in Food Awareness	9
2.3 Webpage Interactivity	10
2.3.1 Online Product Uncertainty	10
2.4 Hellenic Vegetarian Association	11
3.0 Methodological Approach	13
3.1 Increasing Awareness and Understanding of Stakeholder Experiences	14
3.1.1 Sampling Strategies	15
3.1.2 Conducting Interviews with Restaurants	16
3.2 Developing Enhancements to the Veggie Map	19
3.3 Evaluation of the Enhanced Veggie Map Prototype	19
3.3.1 Analysis of Veggie Map Prototype Survey	20
4.0 Results	21
4.1 Dietary Preferences between Tourists and Greeks	22
4.2 Availability of Plant-Based Options	24
4.3 Tourism and Seasonal Demand	27
4.4 Restaurants Motivations and Barriers	29
4.5 Awareness of the Veggie Map	30



4.6 Interest in Using the Veggie Map	32
5.0 Design of the Veggie Map	34
5.1 Introduction	35
5.2 Platform Selection and Design Justification	35
5.3 Application of Findings to the Design	37
5.4 Website Design	38
5.5 Restaurant Data, Search, and Filtering Design	40
5.6 User Location and Restaurant Detail Design	41
5.7 Dish Reviews, Reporting, and Photo Features	43
5.8 Mobile Responsiveness, Reliability, and Final Evaluation	47
5.9 Findings from Veggie Map Prototype Evaluation	48
6.0 Recommendations	51
7.0 Reflection	54
7.1 Limitations	55
7.2 Conclusion	57
Bibliography	58
Appendix A: Glossary of Terms	61



Appendix B: Restaurant Customer Survey	62
Appendix C: Survey Consent Form	70
Appendix C.1: Greek Translation of Survey Consent Form	70
Appendix D: Informal Interview Questions	71
Appendix E: Formal Interview Questions	72
Appendix F: Interview Consent Form	73
Appendix G: Veggie Map Prototype Evaluation Survey	74
Appendix H: Five Minute Informal Interview Transcripts	77
Appendix I: Coding and Themes from Informal Interviews	87
Appendix J: Formal Interview Transcripts	88
Appendix J.1: The Mushroom	88
Appendix J.2: The Canteen	91
Appendix J.3: Apenanti Apo Ta Kastrá	93
Appendix K: Extra Graphs Not Used in Analysis	95
Appendix L: Extra Graphs from Veggie Map Prototype Evaluation	102
Appendix M: User Manual	104



Table of Figures

Figure 2.1: Projected growth of the European plant-based food market, 2025–2033 (CAGR).	5
Figure 2.2: Current HellasVeg Veggie Map interface from the HellasVeg website.	11
<i>Figure 3.1: HellasVeg survey flyer</i>	15
<i>Figure 3.2: Map of restaurants visited in Thessaloniki</i>	16
<i>Figure 3.3: Team after interview at Canteen</i>	18
<i>Figure 4.1: The geographic distribution of participants.</i>	22
<i>Figure 4.2: The dietary preferences of survey respondents.</i>	22
<i>Figure 4.3: Motivations for choosing plant-based dishes.</i>	23
Figure 4.4: A vegan dish from Apenanti Apo Ta Kastrá	24
<i>Figure 4.5: Difficulty in accessing conventional restaurants with sufficient vegan/vegetarian main course options.</i>	25
Figure 4.6: Most important features when using a restaurant map.	26
<i>Figure 4.7: How often diners select plant-based main courses.</i>	26
<i>Figure 4.8: Role of Plant-Based Food Availability in Travel Decisions.</i>	27
<i>Figure 4.9: How often dietary preferences shape travel decisions.</i>	28

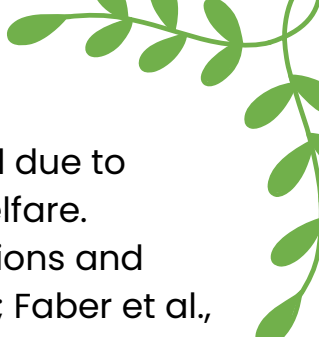
<i>Figure 4.10: Frequency of researching vegan/vegetarian options before travel.</i>	28
<i>Figure 4.11: Respondent Familiarity with the HellasVeg Veggie Map.</i>	31
<i>Figure 4.12: Expected use of the Veggie Map website after launch.</i>	32
<i>Figure 5.1: Main Veggie Map interface showing clustered restaurant markers across Greece.</i>	39
<i>Figure 5.2: Search and filtering panel showing restaurant results.</i>	41
<i>Figure 5.3: Location-based search of the user's position.</i>	42
<i>Figure 5.4: Restaurant detail card.</i>	43
<i>Figure 5.5: Dish review form.</i>	44
<i>Figure 5.6: Report feature.</i>	45
<i>Figure 5.7: Flag Feature.</i>	45
<i>Figure 5.8: Photo tab showing the restaurant photo section and upload option.</i>	46
<i>Figure 5.9: About HellasVeg modal explaining the purpose of the map and HellasVeg.</i>	47
<i>Figure 5.10: Overall user experience ratings for the Veggie Map.</i>	48
<i>Figure 5.11: Likelihood of using or recommending the Veggie Map.</i>	49
<i>Figure 5.12: Contexts for Veggie Map usage (select all that apply).</i>	50
<i>Figure 5.13: Veggie Map Usability in Navigation.</i>	50



Chapter 1: Introduction

Mezze	MEZE
Tzatziki	Tzatziki
Feta	Feta bean salad
Waffle tomato	"Dolmades" (stuffed vine leaves)
Kanitsa	Smoked eggplant
Spanakopita	"Bougata" (stuffed pie)
Feta with honey	Feta wrapped with Kalamaki
Zagari	Greek saganaki
Three Kalamaki	Pastitsada pie
Spanakopita with feta	Shrimp pie with feta

ΠΡΩΙΝΟ - BREAKFAST - BRUNCH	
French toast	Yogurt with honey
Banana Pancakes	Banana Pancakes
Avocado toast	French toast with chocolate sauce
Spinach omelette	Greek omelette
Avocado scramble	Scrambled eggs
Pineapple Pancakes	Pineapple Pancakes
Pancake breakfast	Pancake with chocolate sauce
Donuts	Donuts



Across Europe, interest in plant-based diets has steadily increased due to concerns about health, environmental sustainability, and animal welfare. Research links plant-based diets to reduced greenhouse gas emissions and improved long-term health outcomes (Alexandropoulou et al., 2025; Faber et al., 2024). However, a lack of access, convenience, trust, and visibility within local food environments--defined by the availability, accessibility, and affordability of specific food options--strongly shape dietary choices (Faber et al., 2024). In other words, even when individuals feel motivated to adopt vegetarian or vegan diets, they depend heavily on how easily they can find reliable plant-based options in their communities.

In Greece, traditional cuisine and a growing vegan and vegetarian movement shape plant-based eating practice. In one study, the number of Greek citizens who reported reducing meat consumption has increased by 42% from 2022–2025 (Pinto, 2025; HellasVeg, n.d.). However, consumers who desire plant-based options, and restaurant owners who offer plant-based options often lack a centralized, reliable, and user-friendly way to communicate with one another.

The market for plant-based options does not solely apply to Greek consumers, it applies to tourists as well. With tourism being such a large part of Greek culture, many are looking for an accessible digital tool to find dining options. Individuals often rely on scattered online searches, general mapping platforms, or word-of-mouth recommendations, which frequently provide inconsistent or outdated information (Wang & Strong, 1996; Wright et al., 2019). These limitations create barriers for all consumers trying to locate suitable restaurants and for restaurants that seek visibility within the plant-based community (Perez-Cueto et al., 2022; Faber et al., 2024). As interest in plant-based eating continues to grow across Europe, the need to improve digital access to trustworthy food environment information becomes increasingly important (Rosenfeld et al., 2022; Pinto, 2025).

A potentially important tool used for improving accessibility is a digital map that displays information about vegan and vegetarian restaurants. While research on food environments emphasizes the importance of accessibility and trust in supporting sustainable dietary shifts (Faber et al., 2024), few studies have examined how existing digital platforms contribute to these goals.

The Hellenic Vegetarian Association (HellasVeg) works to promote healthier and more sustainable lifestyles throughout Greece. In 2023, the organization developed a Veggie Map as an interactive digital platform to help users locate vegetarian and vegan-friendly restaurants. However, it remains unclear whether current tools provide ease of use, accuracy, and reliability, or whether restaurants feel adequately represented on these platforms.



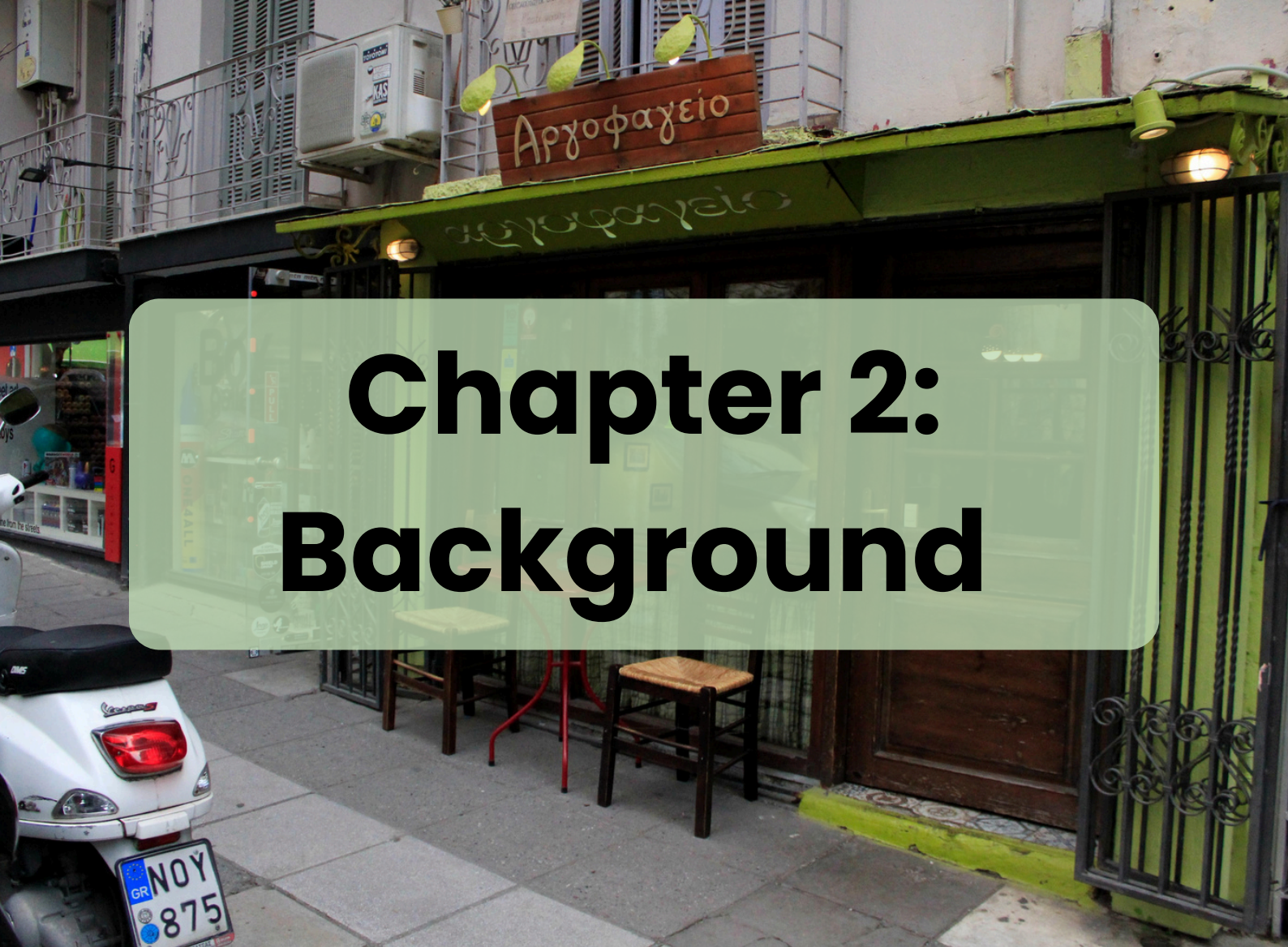


The goal of this project was to evaluate and enhance the HellasVeg Veggie Map to improve awareness of vegan/vegetarian accessibility. The team accomplished this goal through the following objectives:

1. Increase awareness and understanding of vegan/vegetarian benefits and experiences to all stakeholders in Thessaloniki.
2. Develop practical, evidence-based enhancements that strengthen the current platform's functionality, reliability, and overall user experience.
3. Evaluate the usability of the HellasVeg Veggie Map as a web-based information system with owners and consumers.

The findings from this project suggest that vegan and vegetarian options in Thessaloniki are often more available than they appear, but they are not always clearly visible or communicated to consumers. Restaurant interviews showed that many owners can modify existing dishes for vegan or vegetarian customers, while survey responses showed that consumers still experience difficulty finding reliable plant-based options. The project also found that tourism plays an important role in shaping demand, awareness of the Veggie Map remains low, and both consumers and restaurant owners are more likely to engage with the platform when it provides clear, useful, and up-to-date information. These findings informed the team's recommendations for improving the Veggie Map's visibility, usability, and long-term reliability.





Chapter 2: Background

This chapter provides background research on plant-based eating in Europe and Greece to establish its relevance within the scope of this project. Section 2.1 examines consumer and social insights on plant-based eating in Europe and Greece, including factors that influence dietary intentions and the role of food environments. Section 2.2 explores plant-based diet awareness in tourism, focusing on dietary influence on travel, food access and experience, and the role of digital platforms in food awareness. Section 2.3 reviews key principles of website design, including interactivity, structural layout, and online uncertainty in digital platforms. Finally, Section 2.4 introduces how the Hellenic Vegetarian Association works to improve accessibility and awareness of vegan and vegetarian options in Greece.



2.1 Consumer and Social Insights on Plant-Based Eating in Europe

The adoption of plant-based diets has been a growing trend across Europe (see Figure 2.1). In recent years, research findings have shown a clear trend in the increase of plant-based or vegan dietary shifts. For example, the Dutch Lifelines cohort performed three assessments over 15 years and found vegetarian prevalence doubling from 2.02% to 4.11% over the three assessments. Likewise, they also saw flexitarian prevalence rising from 3.50% to 7.16% between the second and third assessment (Zhu et al., 2025). Researchers conducted a similar study in Germany where there has also been an increase in popularity for vegan and vegetarian diets. Researchers completed two rounds of surveys, the first being in 2002 and the second being in 2022 and found an increase in vegetarian and vegan diets from 2.2% to 6.3% (Gimpfl et al., 2025).

Shifting consumer preferences toward sustainable and health-conscious eating drives the European plant-based food market. Plant-based food sales in Europe grew by 1.2 billion USD (Figure 2.1) from 2023–2025. The countries with the largest retailers are Germany, France, and the UK (Market Data Forecast. n.d.). Furthermore, the rise of flexitarian diets and increasing awareness of the environmental impacts has made plant-based foods more accessible than they have in previous years. Studies published in peer-reviewed journals reported significant growth in plant-based eating in the Netherlands and Germany, with vegetarian, vegan, and flexitarian diets becoming more common over the past decade (Zhu et al., 2025). Additionally, researchers at the Vegan Society and Mintel analyzed dietary trends in the United Kingdom and found rapid growth in the popularity of vegan diets between [2014] and [2019] (Gallagher et al., 2021).

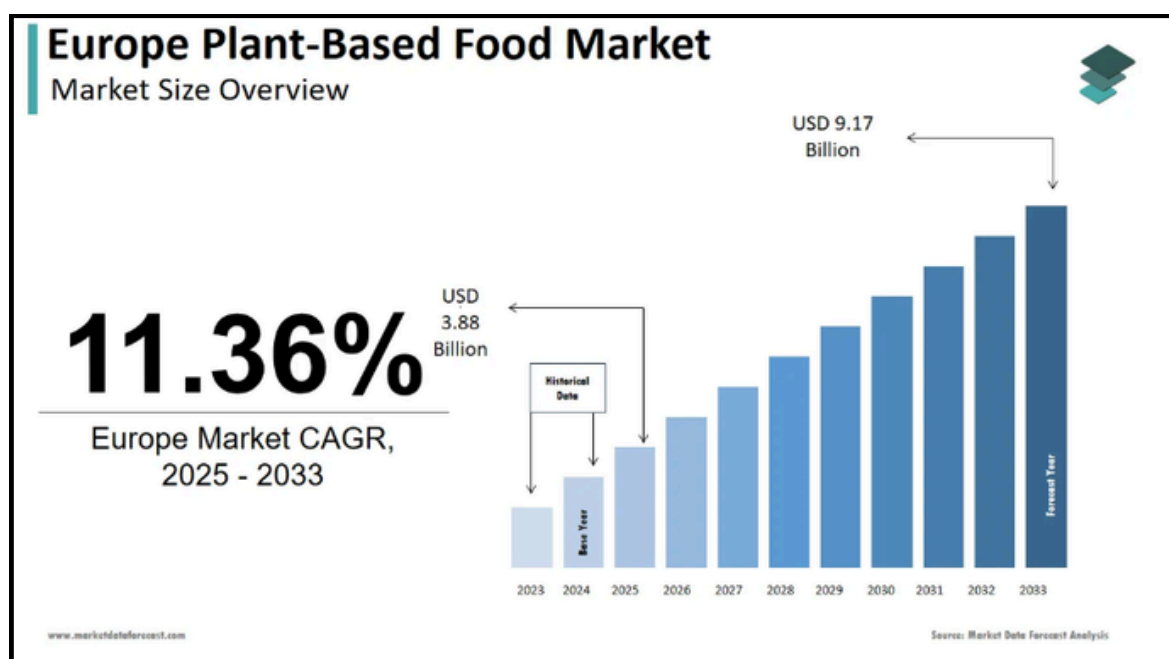


Figure 2.1: Projected growth of the European plant-based food market, 2025–2033 (CAGR).





2.1.1 Shaping Consumer Intentions

Understanding consumer behavior around plant-based eating is essential to grounding the current project within its broader social context, particularly in explaining the gap between awareness and action in Greece. While individuals understand the importance of healthy and sustainable diets, their eating patterns often do not reflect this knowledge. Alexandropoulou et al. (2025) found that 94.6% of Greek adults identified as flexitarian, indicating openness to plant-based meals but not restricted to only to this type of meal, yet 86.8% did not meet the recommended daily intake of fruits and vegetables. This is further supported by a study where around 10% of Greek civilians reported reducing their meat consumption to once per week, with over half of those civilians' reporting health and animal welfare as the primary reasons for this change (HellasVeg et al. 2024). These findings suggest that the relatively low adoption of plant-based eating in Greece may not be driven by a lack of information, but rather by difficulties in translating awareness into action. The high prevalence of flexitarian identification among Greek adults indicates a population that may be receptive to choosing plant-based options when those options are convenient, visible, and easy to access.

Across Europe, researchers consistently show that a favorable food environment supports consumer motivation to produce behavioral change (Faber et al., 2024; Perez-Cueto et al., 2022). As demand within the European plant-based market continues to grow (see Figure 2.1), the need for accessible, reliable infrastructure that supports plant-based consumption becomes increasingly important. Expanding market size reflects not only consumer interest but also the necessity of systems that facilitate practical access to plant-based options. Faber et al. (2024) found that perceived barriers including price, availability, unfamiliarity, and trust significantly mediated consumers' intentions to consume plant-based meat and cheese alternatives across ten European countries. For example, many participants perceived plant-based alternatives as more expensive than conventional meat products, while others reported limited availability of plant-based options in restaurants and grocery stores. Unfamiliarity with plant-based products and uncertainty about taste or quality also reduced consumers' willingness to try them. Additionally, some consumers expressed concerns about the processing, labeling, or nutritional value of plant-based alternatives, which reduced trust in these products (Faber et al., 2024; Perez-Cueto et al., 2022). These findings demonstrate that motivated consumers may fail to change their behavior when they perceive plant-based options as expensive, unfamiliar, or difficult to access within their local food environments (Faber et al., 2024).





In a study done by Perez-Cueto et al. (2022), results showed that barriers to eating plant-based foods vary by dietary identity. They also identified cultural and sensory concerns, such as beliefs that meat should be central to meals and concerns about taste, as stronger barriers than informational factors. This evidence suggests that structural and perceptual influences, rather than knowledge deficits alone, shape dietary decision-making. Taken together, this research indicates that reducing structural barriers and improving practical accessibility may play a critical role in supporting plant-based food choices. For example, increasing the visibility and availability of plant-based options in restaurants and digital food platforms may help reduce perceived barriers and make plant-based choices easier for consumers to adopt in everyday dining situations.

2.1.2 The Impact of Structured Food Environments on Consumer Habits

Hollands et al. (2019) demonstrate that modifying food environments can shift consumer behavior without requiring changes in individual beliefs or motivations. Parkin and Attwood (2022) found that participants were significantly more likely to choose a vegetarian meal when 75% of menu options were vegetarian compared to menus where only 50% were vegetarian. This effect occurred even without educational learning, indicating that increasing the proportion of plant-based options can directly influence decision-making. In a similar study done in the UK the number of vegans quadrupled between 2014 and 2019 (Gallagher et al. 2021). When surveying respondents, researchers found that the two most significant reasons for this increase were the convenience and quality of the vegan options. In this study, 51.2% of participants stated that dietary change was due to health reasons and 28.2% stated that the dietary change was due to convenience. Evidence from restaurant settings further supports this conclusion. Rosenfeld et al. (2022) analyzed over 167,000 restaurant purchases and found that the structure and presentation of menu options significantly influenced consumer purchasing patterns. Specifically, when plant-based options were easier to notice and compare, customers were more likely to purchase them. Examples of this include when menus integrated them with the dishes rather than hiding them in a separate section, or when menus described them with clearer names and categories.

Together, these findings suggest that availability and environmental structure exert measurable influence over consumer behavior. Rather than relying on individuals to change their preferences independently, modifying the surrounding food environment alters the practical ease of selecting plant-based options. This reinforces the idea that structural accessibility plays a central role in shaping dietary choices. Restaurants therefore serve as influential intervention points, where the design and availability of options can directly affect behavior at the moment of decision.



2.2 Plant-Based Diet Awareness in Tourism

Recent shifts in global dietary patterns show growing interest in reducing meat consumption rather than fully adopting vegan or vegetarian diets. Many consumers now identify as “flexitarian,” meaning they intentionally reduce meat intake for environmental, health, religious, or ethical reasons without eliminating it entirely (Dagevos & Voordouw, 2013). This shift creates an opportunity for tourism to influence dietary behavior by increasing awareness and accessibility of plant-based options.

Health awareness plays a significant role in this transition. Research shows that consumers associate diets higher in plant-based foods with lower risks of cardiovascular disease, obesity, and other chronic conditions (Satija & Frank, 2018). However, many meat-eaters do not actively seek plant-based options unless factors such as appealing presentation, price, or convenience encourage them to do so (Hartmann & Siegrist, 2017). This suggests that increasing visibility and appeal of plant-based meals may influence consumer behavior more effectively than targeting only committed vegetarians or vegans.

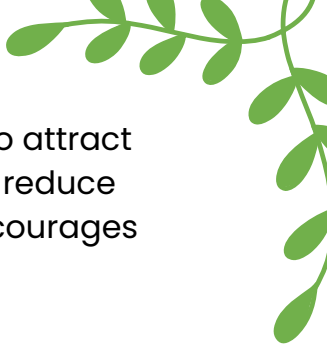
In the context of tourism, food represents a central component of travel experience. While previous research emphasizes the needs of vegetarian and vegan travelers, a broader perspective considers how food environments influence the behavior of all travelers. Exposure to diverse and well-presented plant-based options during travel can encourage experimentation and reduce resistance to dietary change (Voinea et al., 2025). As a result, destinations that promote plant-based dining not only accommodate dietary restrictions but also shape consumer awareness and preferences.

2.2.1 Dietary Influence on Travel

Dietary preferences play a major role in making travel decisions, but this influence varies across consumer groups. Yeşilçimen and Akin (2025) found that vegetarian tourists rank food availability as the primary factor influencing destination choice. In contrast, meat-eaters rarely choose destinations based on plant-based options. Instead, they respond to factors such as price, taste, and familiarity when deciding what to eat (Tan et al., 2025).

These differences highlight an important gap in current research. While plant-based travelers actively seek information, meat-eaters typically encounter plant-based options passively through menus and recommendations. Studies show that menu design and food presentation can significantly influence consumer choices by increasing the likelihood of selecting plant-based meals (Volgger et al., 2025). For example, descriptive labeling, emphasizing taste, and popular dishes can make plant-based options more appealing to a broader audience.





Restaurants and destinations must therefore balance menu offerings to attract diverse consumers. Increasing plant-based options does not necessarily reduce demand for meat-based dishes, instead it expands food options and encourages a gradual dietary shift.

2.2.2 Food Access and Experience

The presence of plant-based options directly influences dining behavior and overall satisfaction of travel experiences. Ottenbacher et al. (2025) discovered that vegan travelers face dining difficulties because restaurants provide too few menu choices. Positive dining experiences play a key role in shaping future behavior. When consumers enjoy plant-based meals they become more likely to choose similar options again, both during travel and everyday life (Wang et al., 2025). This suggests that exposure and experience can drive long-term dietary change.

Improving access to clear, user-friendly information reduces perceived risk and encourages experimentation. Features such as menu transparency, reviews focused on the taste of specific dishes, and recommendations can increase consumer confidence. As a result, digital tools that highlight plant-based options can support gradual shifts toward reduced meat consumption while enhancing overall travel satisfaction.

2.2.3 Role of Digital Platforms in Food Awareness

Digital platforms play a critical role in shaping dining decisions, especially during travel. When it comes to food, plant-based travelers demonstrate higher levels of pre-travel planning. Tourists frequently rely on online reviews, maps, and social media to choose where to eat (Zouni & Klouvidaki, 2020). Ottenbacher et al. (2025) note that vegans actively research food options before traveling using online resources and community-based platforms. While vegetarian and vegan travelers use these tools to identify suitable options, meat-eaters use them more broadly to evaluate quality, popularity, and convenience.

Another study found that plant-based travelers heavily rely on digital resources to plan their food options before traveling. Their survey included 218 vegan participants and revealed that 87.2% use the internet as their primary source of information about vegan options at their chosen destinations (Zouni & Klouvidaki, 2020). Internet searches consisted of accommodations, restaurants, and food stores through Facebook, Google, and vegan websites. In addition, this study found that 54.6% of travelers were concerned about a lack of vegan options available at their destination (Zouni & Klouvidaki, 2020). This suggests that vegan travelers feel more confident when food information is clearly accessible online, and a lack of accessibility to vegan options can negatively affect their travel experience. Such websites provide information that helps these travelers navigate the uncertainty that accompanies dietary restrictions.



This creates an opportunity for tools like the HellasVeg Veggie Map to influence a wider audience. Rather than functioning only as a niche resource, such platforms can increase awareness of plant-based options by integrating features that appeal to all users. Research shows that consumers respond positively to visual elements such as clear labeling, photos, and ratings which reduce uncertainty and increase willingness to try new foods (Vermeir and Roose, 2020). Additionally, providing information about taste, popular dishes, and health benefits can encourage users to consider plant-based meals even when they do not actively seek them.

2.3 Webpage Interactivity

With the established idea that website layout is an integral factor in consumer behaviors, key factors also hold weight and factor into consideration. While users are drawn to certain parts of the screen, the visuals and setup of the tasks also heavily contribute to the user's experience. Adding interactive and engaging features to a website improves consumer experience by creating memorability and ease of use. Țichindelean et al. (2021) conducted a study that explored how well highlighted areas led to both increased user interaction and user attention and determined that users lengthened engagement with these highlighted tasks “directly correlates with a higher preference.” From a web-developers perspective, it is important not just to make the tasks easy to see and understand, but the tasks must also contain a level of notability that sticks in the minds of users to add familiarity (Parkin, B., and S. Attwood). With this added dimension of notability, websites can better cater towards consumers by drawing attention in an engaging and streamlined manner.

2.3.1 Online Product Uncertainty

While there are numerous factors that can maximize a website's potential, there is an additional factor, or lack thereof, that hinders website performance: Online product uncertainty. For example, product uncertainty means that when customers have less evidence that a website or service is high quality, then the less likely they are to invest or engage in that website. From a web design standpoint, this factor plays a significant role in drawing in consumers, as a digital service strips users from physically interacting with a restaurant firsthand, a key contributor to determining quality. Websites with well-designed interfaces reduce the negative aspects that product uncertainty has on consumer satisfaction. One study indicated that the correlation between website design and consumer satisfaction was “statistically significant,” and that a properly formatted website can promote user satisfaction when users cannot evaluate products directly (Luo, Ba & Zhang, 2012).



For websites trying to address vegan and vegetarian accessibility, these findings play a significant role, as consumers will be more apt to use a website that is proven, trusted, and consistent at easing their search for vegan and vegetarian dining options. Tied in with the findings on website efficiency and layout, it becomes glaringly evident that every decision about a website's functionality and appearance is vital to creating an effective tool for consumers to access.

2.4 Hellenic Vegetarian Association

The Hellenic Vegetarian Association's mission (HellasVeg) is to create a more improved quality of life for vegetarians around Greece. Their mission is to encourage people to reduce meat consumption for animal welfare, health, and environmental reasons. They accomplish this by attending festivals, providing recipes for people interested in trying a plant-based diet on their own, and through their Veggie Map. The Veggie Map (see Figure 2.2), which the organization created, currently provides a multitude of functional features, like an easy to navigate interface and a finished appearance that has been helping vegetarians find guidance in exploring places to eat.

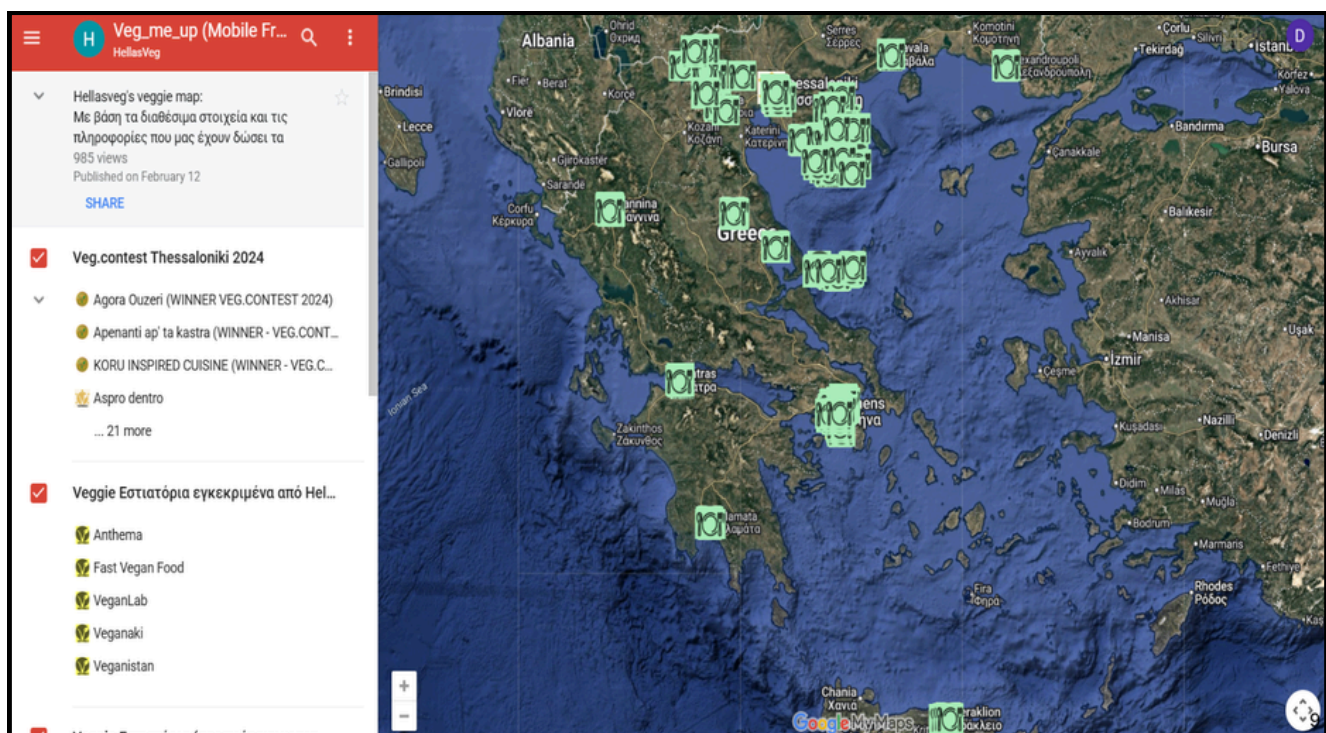


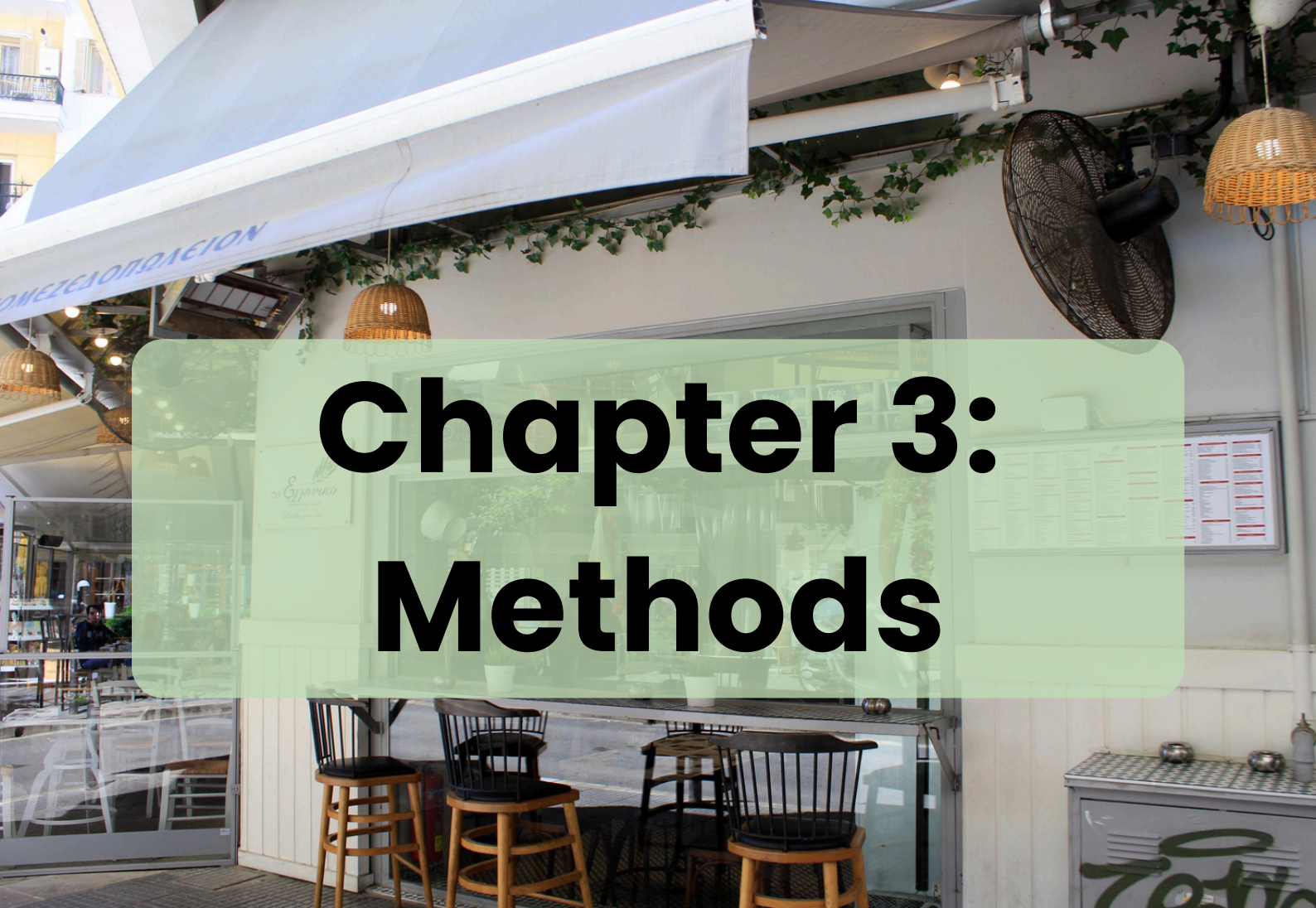
Figure 2.2: Current HellasVeg Veggie Map interface from the HellasVeg website.





The growing popularity of vegetarian, vegan, and flexitarian diets across Europe demonstrates an increasing demand for accessible plant-based dining options. Research throughout the chapter shows that consumers are more likely to choose plant-based meals when restaurants and digital platforms make these options visible, convenient, and easy to evaluate. Online tools also play an important role in reducing uncertainty by providing reviews, menu information, and clear navigation that helps travelers and local customers make informed dining decisions. As interest in plant-based eating continues to expand in Greece and throughout Europe, digital resources such as the HellasVeg Veggie Map must continue improving usability, accessibility, and reliability to better support consumer needs and encourage greater engagement with plant-based dining options.





Chapter 3: Methods

The goal of this project was to evaluate and enhance the HellasVeg Veggie Map to improve awareness of vegan and vegetarian accessibility. The team addressed this goal through the following objectives:

1. Increase awareness and understanding of vegan and vegetarian benefits and experiences to all stakeholders in Thessaloniki.
2. Develop practical, evidence-based enhancements that strengthen the current platform's functionality, reliability, and overall user experience.
3. Evaluate the usability of the HellasVeg Veggie Map as a web-based information system with owners and consumers.

The project examined how Greek consumers and restaurant stakeholders in Thessaloniki interact with, perceive, and rely upon the Veggie Map as an online tool for discovering and promoting dining options. Data collection took place over a seven-week period in Thessaloniki, Greece and focused specifically on plant-based dining establishments.

The project focused on strengthening web-based access to restaurant information rather than altering restaurant operations. The team evaluated the Veggie Map as a digital system, including its structure, search functionality, information clarity and credibility, and accessibility. The team analyzed qualitative and quantitative data to inform design decisions and develop actionable recommendations, improving the platform's effectiveness as a centralized digital resource for plant-based dining in Greece.



3.1 Increasing Awareness and Understanding of Stakeholder Experiences

To examine dietary preferences, restaurant selection habits, and awareness of plant-based dining options, our team designed and distributed an online cross-sectional survey using Qualtrics (see Appendix B). Qualtrics is a survey platform available through WPI that complies with data privacy regulations in Greece. Our target population consisted of residents and visitors in Thessaloniki.

Our team selected a cross-sectional survey design because it allows us to efficiently collect standardized data from participants within a limited timeframe. This method also allows us to compare attitudes and behaviors between meat eaters and non-meat eaters at a single point in time, which aligned with our goal of examining differences in plant-based dining behaviors and restaurant information use. Additionally, the online survey format increased accessibility by allowing participants to complete the survey remotely and anonymously.

We structured the survey using branching logic to separate participants into two groups: meat eaters and non-meat eaters (vegans and vegetarians). This structure permits each group to answer questions relevant to their dining experiences and perspectives while improving survey efficiency and reducing irrelevant questions for respondents. Branching logic also supports data collection during man-on-the-street surveying, where we could not immediately identify participants' dietary preferences. After participants completed the dietary and travel related questions, we introduced them to the Veggie Map developed in React and collected feedback on website features, usability, and potential improvements.

We administered the survey to individuals living in Thessaloniki through a QR code (see Figure 3.1) and online social media platforms such as Facebook, Reddit, and Discord groups focused on plant-based communities, such as "Vegans in Greece" and "Vegan Thessaloniki," allowing the participants to only complete it once. This cross-sectional approach enabled our team to capture a snapshot of current awareness, experiences, and perceptions related to vegetarian and vegan dining options and the HellasVeg Veggie Map. Through this survey, we examined how familiar consumers were with plant-based dining resources, what challenges they encountered when locating vegetarian or vegan options, and what information or tools could improve awareness and accessibility.





Figure 3.1: HellasVeg survey flyer

3.1.1 Sampling Strategies

Our team divided into pairs and surveyed individuals through in-person outreach and QR code distribution at restaurants throughout Thessaloniki. During in-person surveying, we approached participants at the White Tower because the area attracts both residents and visitors throughout the day. From March 30 to April 8, our team collected 66 responses over a seven-day period. These responses allowed us to identify and compare trends between meat eaters and non-meat eaters related dining habits, accessibility challenges, and perceptions of plant-based dining options.

To expand survey outreach, our team also visited 48 centrally located restaurants and asked owners and managers to display a flyer containing a QR code linked to our online survey (see Figure 3.1). This method allowed individuals to complete the survey at their convenience after visiting participating restaurants. Because we did not record where participants accessed the survey, we could not distinguish responses gathered through restaurant QR codes from responses collected during in-person surveying.

3.1.2 Conducting Interviews with Restaurants

To complement our survey data and gain qualitative insights into restaurant perspectives, our team also conducted short informal interviews with restaurant owners, managers, or employees at various restaurants in Thessaloniki (see Appendix D). Our team visited 48 restaurants across the city and conducted informal interviews with nine locations. We also conducted three formal in-person interviews with restaurant owners. Figure 3.2 showcases a map of all 48 restaurants the team visited in Thessaloniki. On the map, each green pin represents a restaurant that was visited, and each red pin represents a restaurant where the team managed to conduct an interview.

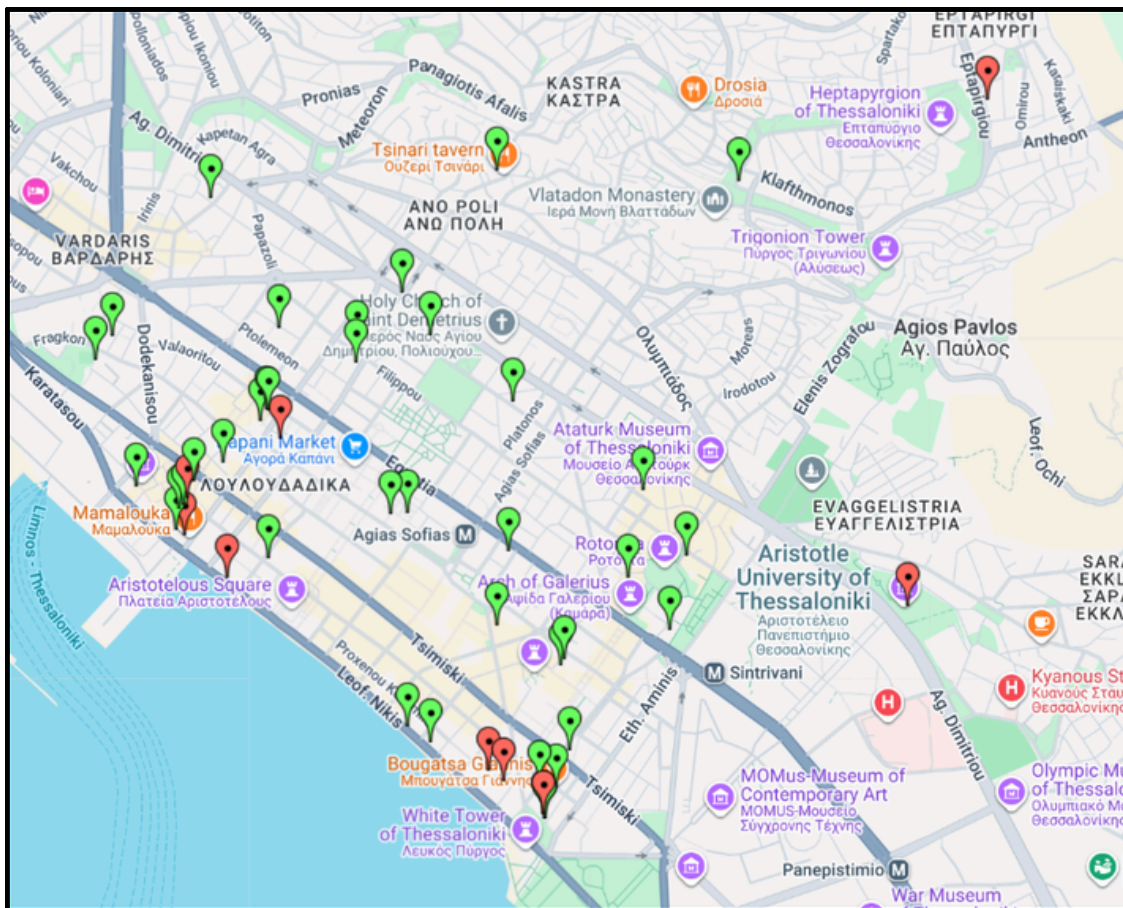


Figure 3.2: Map of restaurants visited in Thessaloniki

Table 3.1 identifies the restaurants that participated in both informal and formal interviews and distinguishes between the two interview formats. Figure 3.2 displays the geographic distribution of the restaurants our team visited and interviewed.

Table 3.1: Restaurants Participating in Informal and Formal Interviews

Restaurant Name	Interview Type	Date Conducted
ΑνφανΓκατέ	Informal	March 30, 2026
Canteen All day Bar Restaurant	Informal	March 30, 2026
Η Ρούγα	Informal	March 31, 2026
Μαμαλούκα	Informal	April 3, 2026
Merry Berry	Informal	April 3, 2026
Όλυμπος Νάουσα	Informal	April 3, 2026
Χαρούπι	Informal	April 3, 2026
Ζύθος λαδάδικα	Informal	April 6, 2026
Ζύθος ντορέ	Informal	April 6, 2026
The Mushroom	Formal	April 14, 2026
Canteen All day Bar Restaurant	Formal	April 15, 2026
Apenanti Apo Ta Kastrá	Formal	April 17, 2026

Our team used brief informal interviews because staff availability varied during operating hours, and owners or managers could not always participate in longer discussions. During each visit, our team introduced the project, requested permission to photograph the restaurant interior and exterior, and conducted a short interview when staff availability allowed. Instead of recording audio during informal interviews, we documented participant responses through written notes because several participants preferred not to participate in recorded conversations. We photographed each restaurant using a digital camera and uploaded updated images to the Veggie Map to improve the platform's visual accuracy and reliability.

The informal interviews consisted of five questions related to consumer behavior, motivations, and experiences with plant-based options, along with two questions focused on HellasVeg and Veggie Map. Through these interviews, we aimed to increase restaurant awareness of the HellasVeg Veggie Map while gathering feedback that could improve the map's accessibility and usability.

In addition to the informal interviews, the team secured four in person, formal interviews with restaurant owners. Our sponsor, HellasVeg, assisted us in organizing and scheduling these interviews to take advantage of their extensive networking with local restaurant owners and minimize time commitments on the team's end. These formal interviews contained ten questions regarding vegan and vegetarian dining experiences from a business perspective (see Appendix E). The team recorded the interviews using a microphone and transcribed them, using the help of a Greek/English translator, Aggeliki Anastasopoulou, when needed.



Figure 3.3: Team after interview at Canteen

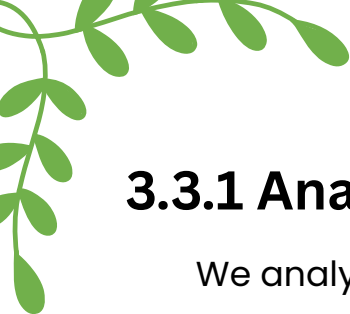
We analyzed the interviews by developing a coding scheme to organize the information we collected. First, we reviewed the written notes and highlighted key ideas and phrases. Some of the ideas we were looking for were knowledge regarding HellasVeg and the Veggie Map, experiences when serving plant-based dishes, and the availability of their plant-based dishes. We then created a coding table (see Appendix I) to capture recurring concepts across interviews, which we grouped into broader themes. Through analysis we identified common challenges, needs, and opportunities to improve the HellasVeg Veggie Map.

3.2 Developing Enhancements to the Veggie Map

Our team began developing enhancements to the Veggie Map during the preparation term by collaborating with HellasVeg and reviewing their existing map. Through these early discussions, we identified limitations in the original platform and transitioned the map data to a new platform with greater functionality. We also transferred existing data into the updated system and implemented initial improvements before arriving on-site. We used the survey data and coded interview responses we collected to further refine the map and target additional areas for improvements. By analyzing consumer feedback, usage patterns, and restaurant perspectives, we determined which features of the current platform required updates to enhance usability, reliability, and overall user experience. This evidence-based approach allowed us to prioritize practical enhancements such as highlighting specific dishes, including dish reviews and pricing information, updating images, and improving navigation and search functions. Our process involved combining insights from two primary sources; the survey data provided information on consumer awareness, preferences, and challenges when using the current Veggie Map, while the codes and themes derived from restaurant interviews offered qualitative insight regarding content accuracy, gaps in platform functionality, and presentation. This method ensured that we grounded every enhancement in real-world feedback and focused on improving the platform in ways that users and stakeholders would find most valuable.

3.3 Evaluation of the Enhanced Veggie Map Prototype

To evaluate the usability of the HellasVeg Veggie Map, our team published the improved version of the map on the HellasVeg website and created a corresponding evaluation survey on Qualtrics. We also returned to the White Tower, where previous outreach had been successful, and invited participants to explore the map on an iPad before completing a short survey (see Appendix G) evaluating usability, functionality, and overall user experience. We also shared the map link and survey link in Facebook groups focused on plant-based communities, such as “Vegans in Greece” and “Vegan Thessaloniki” to expand outreach, increase awareness of the map, and encourage additional survey participation. In our first initial survey, we included an optional text box where participants could provide their contact information if they wished to participate in the evaluation for the final prototype of the Veggie Map. We focused on assessing usability, functionality, and overall user experience to examine how effectively the map supported our goal of improving awareness among our target audience. This process allowed us to identify strengths, uncover usability barriers, and refine the platform based on direct user input.



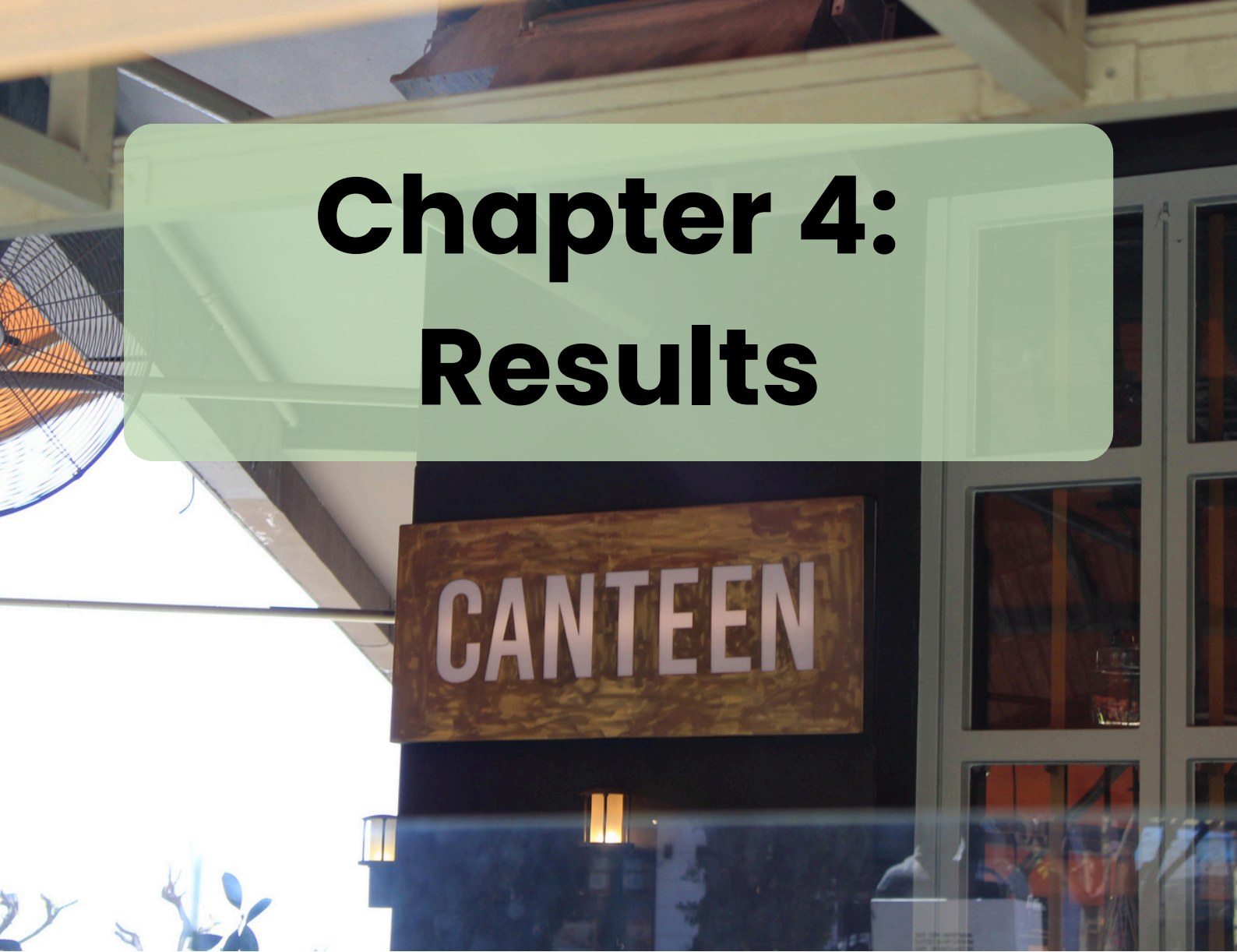
3.3.1 Analysis of Veggie Map Prototype Survey

We analyzed responses from the prototype evaluation survey to assess usability, functionality, and overall user experience of the enhanced Veggie Map. We exported quantitative data from Likert-scale and multiple-choice questions (see Appendix G) from Qualtrics and summarized using descriptive statistics, allowing our team to evaluate trends in overall satisfaction, speed of finding options, ease of navigation, and perceived value for different user scenarios. For questions permitting multiple selections, we calculated the frequency of each option to determine which features participants found most helpful. The team reviewed open-ended responses from short-answer questions and coded them to capture recurring ideas, suggestions, and observations. Combining quantitative analyses allowed our team to systematically evaluate how the prototype supported user needs and to identify evidence-based enhancements, directly evaluating the usability of the HellasVeg Veggie Map.



Chapter 4:

Results



This chapter presents findings from survey responses and semi-structured interviews with consumers and restaurant owners in Thessaloniki. The results are organized around six key findings that emerged during analysis: dietary preferences differed between tourists and Greek residents; plant-based options were often available but not always clearly labeled or visible; tourism and seasonal demand influenced vegan and vegetarian offerings; restaurants were motivated by customer demand but limited by operational barriers; awareness of the HellasVeg Veggie Map was low among both restaurants and consumers; and interest in using the Veggie Map depended on whether the platform provided clear value to users and restaurant owners. Together, these findings show that the main challenge is not only the availability of vegan and vegetarian options, but also the visibility, communication, and promotion of those options.



4.1 Dietary Preferences between Tourists and Greeks

Our team surveyed 66 participants, including tourists and residents in Greece, and found that 54% of respondents came from outside of Greece, while 28% resided in Thessaloniki and 16% lived elsewhere in Greece (see Figure 4.1). This distribution indicates that our sample leaned slightly towards international perspectives. The presence of both local and international participants provides for a broader picture of dietary patterns within Greece’s food environment, particularly in locations where tourists and residents interact.

Figure 4.2 reveals that most respondents (59%) regularly consume meat, while smaller portions identify as flexitarian (18%), vegan (15%), or vegetarian (8%). These results demonstrate that meat consumption remains the dominant dietary pattern among participants. However, they also indicate a substantial share of the participants actively reduces or avoids meat, as 41% of respondents identify as flexitarian, vegan, or vegetarian. Taken together, these findings align with existing research that shows a gradual shift toward flexitarians and reduced meat diets across Europe, where consumers increasingly reduce rather than eliminate meat consumption (Zhu et al., 2025).

The relatively high percentage of flexitarians suggests an important behavioral pattern within the data. Many participants adopt a flexible approach to eating, allowing for occasional plant-based choices without fully eliminating meat. The contrast between the high rate of meat consumption (77% including flexitarians) and the smaller share of strictly plant-based diets (23% vegan and vegetarian combined) reflects a pattern consistent with broader European dietary trends, where consumers increasingly reduce meat intake rather than fully removing it from their diets (Zhu et al., 2025). This suggests that many respondents show openness to plant-based eating but continue to rely primarily on meat in their everyday food choices.

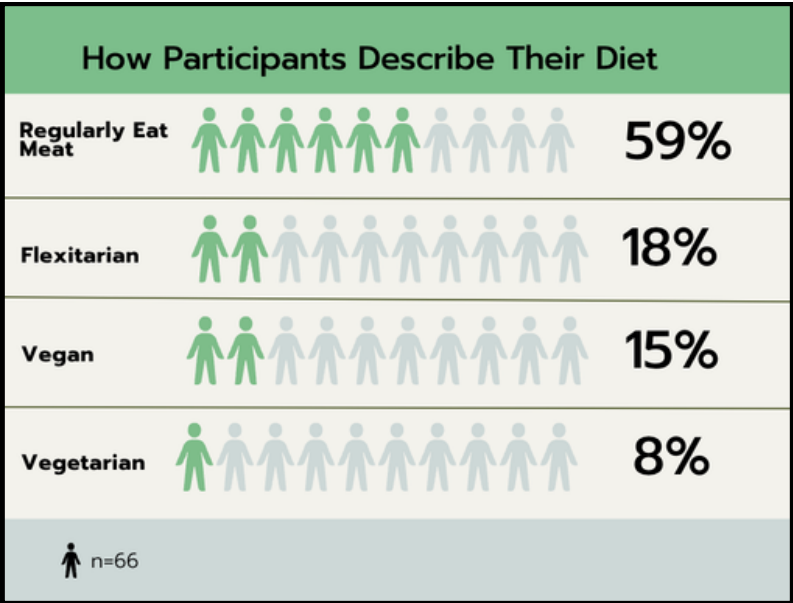


Figure 4.1: The geographic distribution of participants.

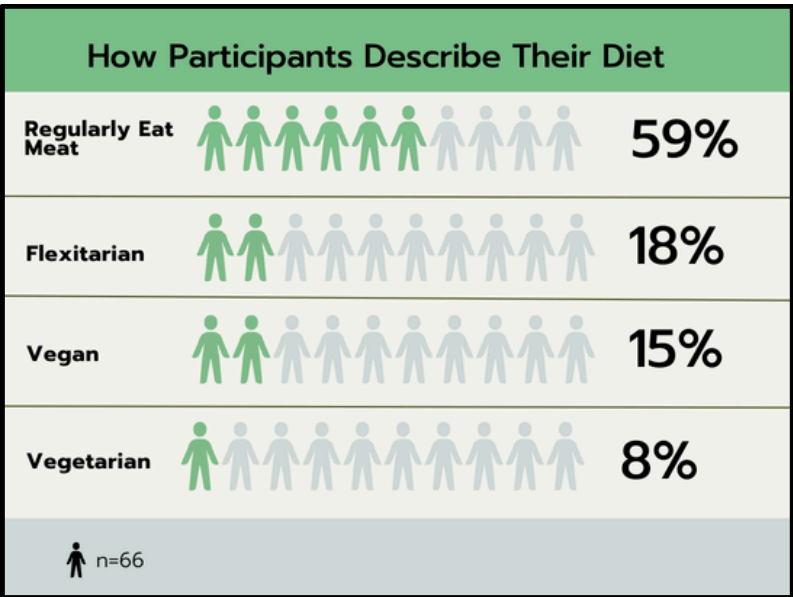


Figure 4.2: The dietary preferences of survey respondents.

To better understand this gap between interest and behavior, our team examined what motivates meat eating respondents to choose plant-based dishes by asking: “What would most encourage you to try a vegetarian or vegan dishes?”. Among those who responded, taste and appearance drive most decisions (51%), followed by recommendations from friends or reviews (25%).

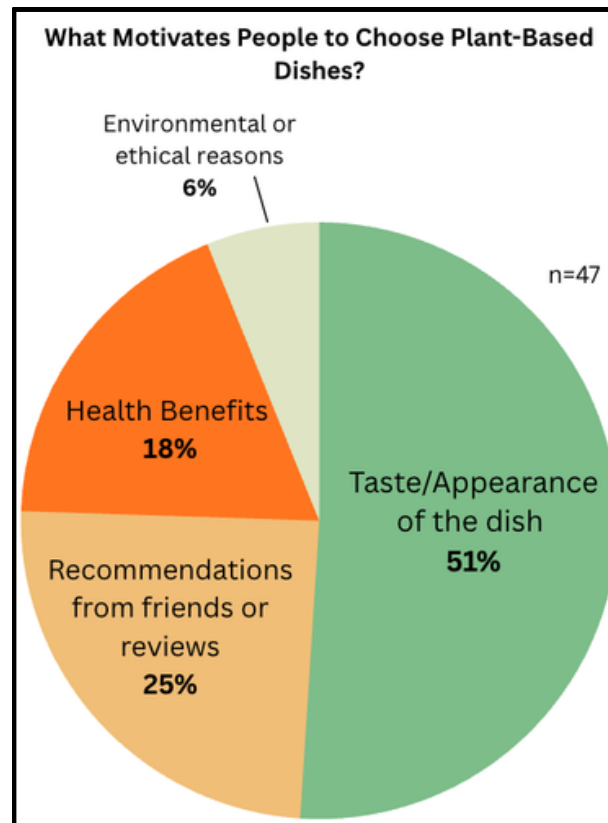


Figure 4.3: Motivations for choosing plant-based dishes.

Among respondents who did answer, the results indicate that sensory appeal and social influence drive most decisions rather than sustainability or ethical considerations. This finding aligns with previous research showing that consumers more often adopt plant-based meals when taste, familiarity, and convenience outweigh ideological motivations (Hartmann & Siegrist, 2017; Faber et al., 2024).

This pattern directly informs the role of the Veggie Map, as the platform can increase exposure to appealing plant-based options by highlighting taste descriptions, user reviews, and visually attractive menu items. These findings indicate that the Veggie Map should prioritize sensory and social information, since respondents more often base their choices on taste, appearance, and recommendation than on ethical motivations.

Overall, the findings indicate that while plant-based eating has a visible presence within the sample, most participants still rely on meat as a central part of their diet. At the same time, the strong representation of flexitarians and plant-based consumers indicates a meaningful opportunity to influence food choices, particularly by targeting those who already demonstrate partial engagement with plant-based eating.

4.2 Availability of Plant-Based Options

The team uncovered a pattern of how restaurants relied on the flexibility of their menus rather than a couple of options specifically indicated as veggie. Four of the nine restaurants (44%) claimed that they could modify their dishes into vegan and vegetarian options by simply removing non-vegan or non-vegetarian ingredients. Even restaurants whose menus only contained 10%-15% labeled veggie dishes stated almost their entire menu was “easily modified” meaning they could turn the majority of their dishes into vegan friendly options. Similarly, four of the nine (44%) stated that they used menu labels such as a small leaf icon next to the menu item to indicate that it was a vegan and vegetarian option. The icon commonly used was a small leaf icon or even a highlighted “V” to indicate whether it was vegan or vegetarian. Only three out of nine (33%) reported that they had limited vegan or vegetarian options on their menu. Of these three restaurants, two of them reported that their menus could be accommodating vegans and vegetarians. Some common examples were salads, vegan moussaka, pasta dishes, and various appetizers. This illustrates that even though some restaurants may appear to have limited plant-based options, they still could provide much more plant-based availability within their menu.



Figure 4.4: A vegan dish from Apenanti Apo Ta Kastrá



One finding from our interviews with restaurant owners supports the idea that vegan and vegetarian options are more abundant than initially expected. Before we arrived in Thessaloniki, the team was under the impression that availability was the limiting factor of plant-based options. After arrival we discovered the availability of veggie dishes varied across restaurants, the team found that two restaurants (22%) claimed they had more substantial plant-based options and described their menus as offering a “big selection of vegan options” with no challenges serving vegan customers. This told our team that the availability of vegan and vegetarian options was not an issue, as many restaurants have a variety of labeled plant-based options. Even restaurants that don’t have many labeled options still have menu items that can be modified for vegan and vegetarian consumers.

What our team found particularly interesting is that in our initial consumer survey, we specifically asked vegans and vegetarians if they have experienced difficulties with finding plant based main course options. All ten respondents (100%) stated they experienced some level of difficulty when trying to access these options, which alludes to the idea that the lack of clearly labeled vegan options could be seen as a lack of availability. This finding recommends that the Veggie Map should not only include the specifically labeled plant-based options, but the dishes that could be modified as well. This could increase traction and increase the usability of the Veggie Map as a whole.

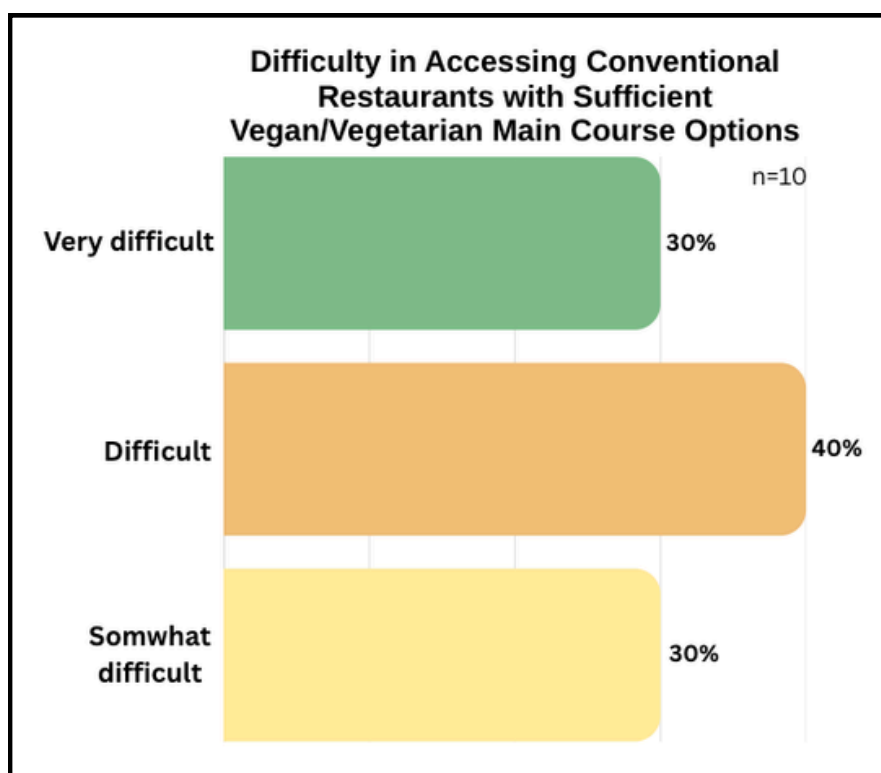


Figure 4.5: Difficulty in accessing conventional restaurants with sufficient vegan/vegetarian main course options.



To determine how consumers respond to this availability, we analyzed survey data on dining preferences and decision-making. The survey asked respondents to list the most important features to them when using a restaurant map (see Appendix B). Forty-two percent of respondents identified general ratings and reviews for food and service as the most important feature on a restaurant map (see Figure 4.5). Menu availability ranked second, with 27% of respondents selecting it as their top priority. Fewer respondents chose filter options such as cuisine type or price (15%). These results indicate that consumers focus primarily on overall dining quality and usability features rather than specific dietary considerations.

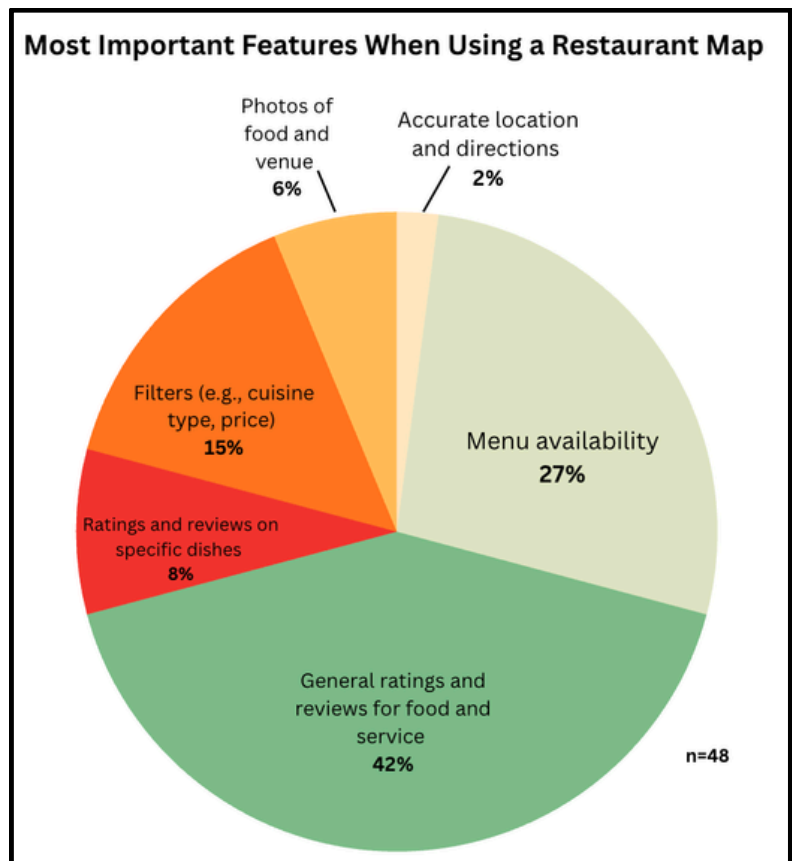


Figure 4.6: Most important features when using a restaurant map.

The consumer behavior we observed further reflects this pattern. We asked meat-eaters and flexitarians how often they select plant-based main courses. As illustrated in Figure 4.6, almost 50% of respondents selected that they occasionally select plant based main course options. As a result, these consumers should also be considered key stakeholders when designing and improving the Veggie Map.

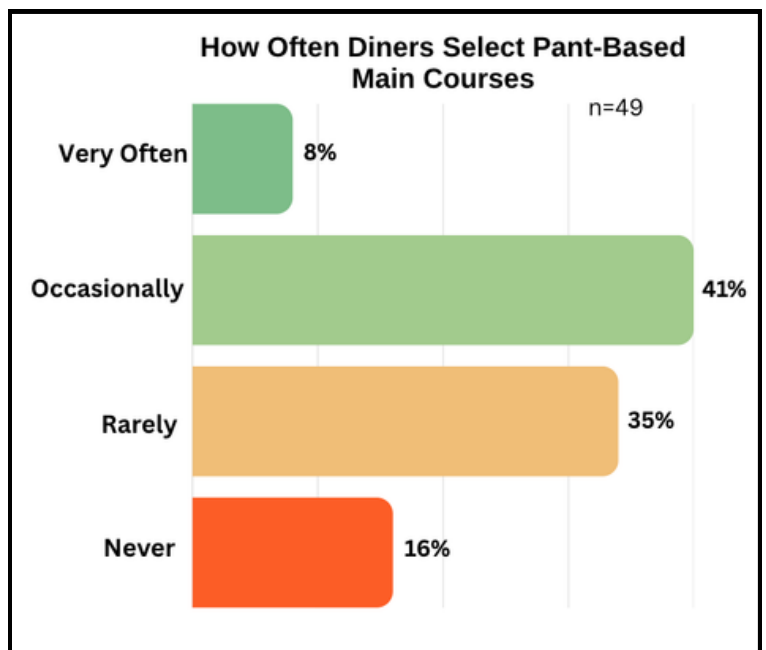


Figure 4.7: How often diners select plant-based main courses.

Overall, these findings reveal a gap between the actual availability of plant-based options in restaurants and consumer perception of that availability. While many restaurants in Thessaloniki offer flexible menus and modifiable dishes that can accommodate vegan/vegetarian diets, these options are often not clearly communicated through labeling or menu design. As a result, consumers have experienced difficulties finding plant-based options. Together, these insights suggest that improving visibility and communication could be the most effective way to improve accessibility. This means the Veggie Map should emphasize both explicitly labeled and modifiable options to better align restaurant offerings with user expectations and behaviors.

4.3 Tourism and Seasonal Demand

The impact of tourism on vegan and vegetarian availability also emerged as a key finding. During interviews, five of the nine (55.6%) restaurants stated that tourists were the primary customers of vegan and vegetarian options. One restaurant said, “We get a lot of vegans and vegetarians year-round, large groups, mostly tourists” while another specifically stated “tourists are a very large part of my customers.”

Our team also identified seasonal variations in restaurants menus across Thessaloniki. Three restaurants reported that they adjust their menus based on seasonality, ingredient availability, and tourists demand. One restaurant created a separate vegetarian and vegan menu specifically for tourist season due to increased popularity, while another reported a steady increase in vegan demand since 2020, which aligns with broader research showing rising consumer interest in plant-based diets across Europe in recent years (Zhu et al., 2025, Gimpfl et al., 2025). These findings demonstrate that tourism plays a central role in shaping plant-based demand at Thessaloniki restaurants, and that many restaurants adjust their menus to best suit the demands of consumers.

Survey data from 37 participants who identified as visitors from another country shows that 27% reported plant-based availability influences their travel decisions, while 73% reported that it does not (see Figure 4.7). This finding shows that most international visitors in the sample do not prioritize plant-based dining options when selecting travel destinations, despite growing interest in plant-based food trends across Europe.

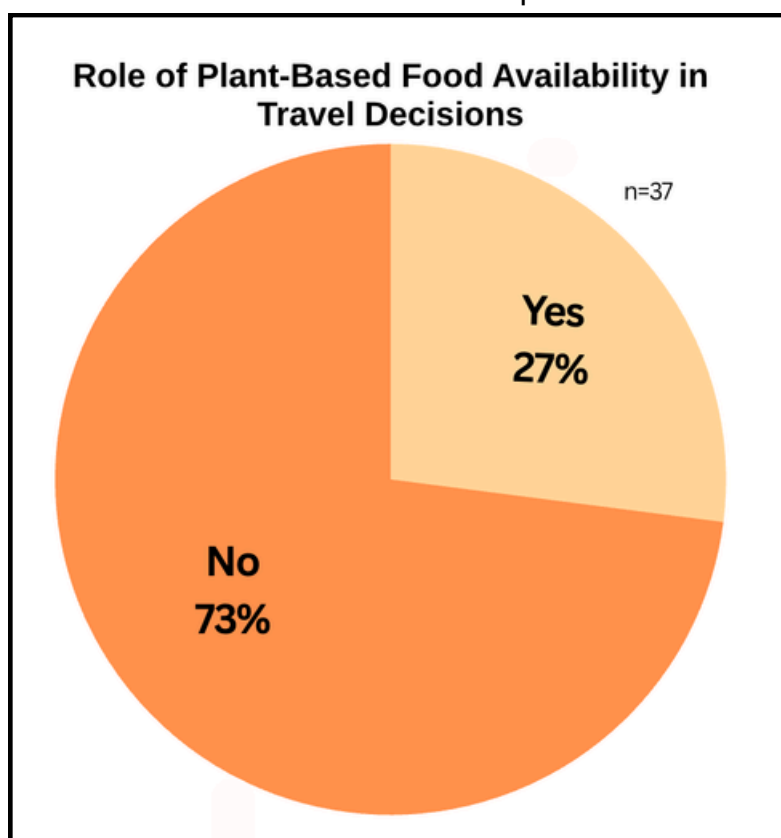


Figure 4.8: Role of Plant-Based Food Availability in Travel Decisions.



Further survey results reinforce this pattern. Figure 4.8 shows participants' responses to the question on how often dietary preferences influence their travel decisions (see T.1 in Appendix B). Only 2% of participants reported that dietary preferences always influence their travel decisions, while most selected "sometimes" (26%) or "rarely" (30%). These results indicate that dietary preferences play a limited role in most participants' travel decision-making.

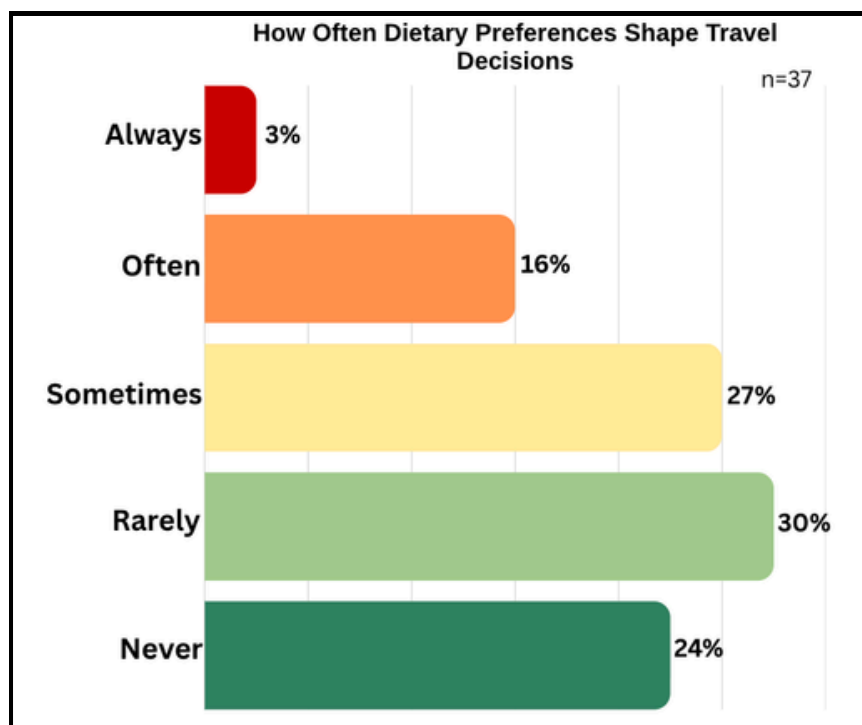


Figure 4.9: How often dietary preferences shape travel decisions.

At the same time, Figure 4.9 highlight lower levels of pre-trip research than expected. Responses to the question, "Before traveling, how often do you research vegan and vegetarian food options at your destination?", support this finding (see T3 in Appendix B). Only 15% of participants reported always researching vegan and vegetarian options, while a large portion reported "rarely" (30%) or "never" (21%) research eating options before traveling.

This pattern differs with prior research, which shows that vegan travelers actively plan and rely heavily on digital tools. This difference suggests that our sample likely includes a broader group of travelers, including flexitarians or meat eaters rather than strictly plant-based tourists.

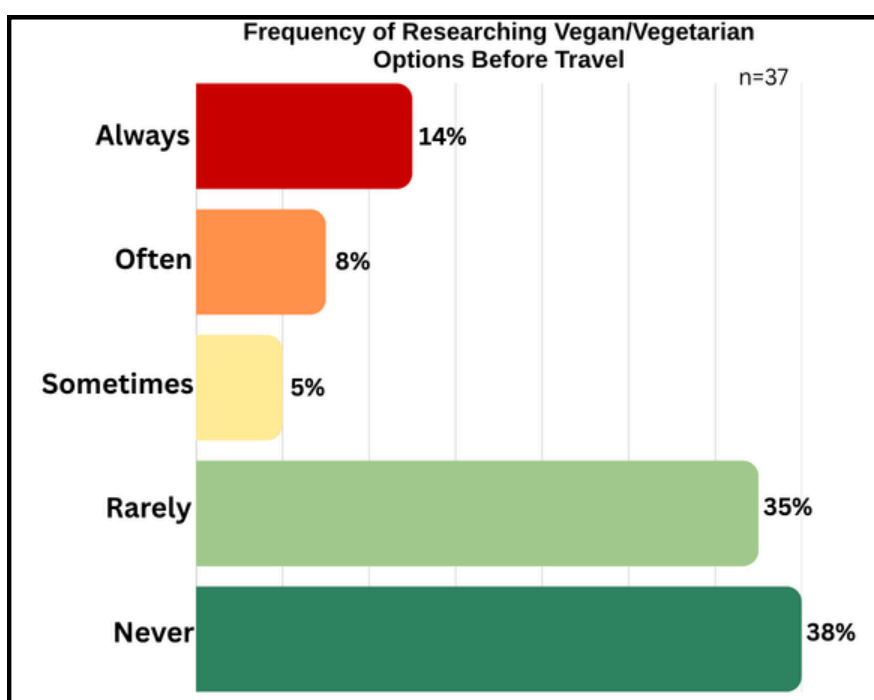
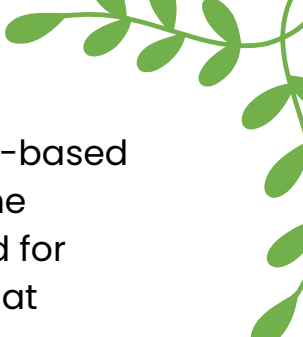


Figure 4.10: Frequency of researching vegan/vegetarian options before travel.





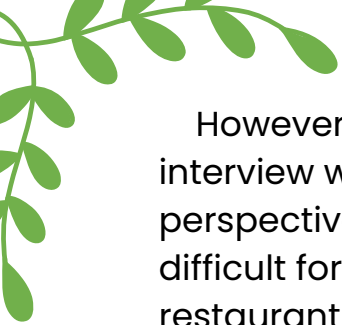
These findings highlight that tourism drives the demand for plant-based options. Restaurants consistently described the tourist season as the summer months. During this season, there was the highest demand for vegetarian and vegan options. This reliance on tourism suggests that restaurants are less likely to offer consistent plant-based options year-round. Many of the restaurants we interviewed specifically stated they change their menus multiple times a year for various reasons, but tourists remain one prominent reason. This, in turn, reduces reliability of the Veggie Map if restaurant owners are not constantly checking if their information is up to date. These findings also suggest that plant-based dining is still not as popular with local consumers as we initially thought. For HellasVeg, this indicates they should be marketing their Veggie Map to tourists rather than locals, as it may have more value and engagement.

4.4 Restaurants Motivations and Barriers

Interviews with restaurant owners revealed that restaurants had varying levels of motivation to offer vegan and vegetarian dishes. In response to questions about restaurant motivation and customer demand for vegan and vegetarian options, two of the nine restaurants (22.2%) said plant-based options were not a major menu priority and that demand for these choices remained limited. The manager from Canteen said, “I would like to make a vegan and vegetarian only menu but there isn’t enough business to be sustainable for solely vegans.” This response highlights how demand may impact restaurant menu decision-making.

Comparatively, two restaurants (22.2%) said that their motivation for serving plant-based options was beneficial for attracting plant-based consumers, particularly tourists. In the interview with the owner from Το Μανιτάρι, they explained, “At first we wanted to please our guests because they were asking for a vegan or vegetarian plate...we wanted to have a special catalog for their choices.” We also found that customer requests and satisfaction drive initial adoption. Two restaurants (22.2%) reported that preparing vegan and vegetarian dishes is not difficult and is easy to accommodate. One restaurant stated, “Making vegan products isn’t hard; we already have all the ingredients available to use in other dishes.” Similarly, the manager at Canteen described how the restaurant adapts to trends and preferences, “We try to go with what people prefer...if they prefer vegan, we kind of have this on the menu.” These responses highlight that some kitchens integrate vegan options because they already work with flexible ingredients and diverse menus.





However, operational constraints often limit broader adoption. The interview with Το Μανιτάρι, reinforced this challenge from a kitchen perspective, “We would like to make more dishes. Yes, it’s a little bit difficult for the kitchen because we’re not a totally vegan or vegetarian restaurant...we want to have the balance in the kitchen.” These responses indicate that restaurants hesitate to expand vegan offerings without consistent demand, especially when changes could disrupt workflow or menu balance. Finally, three of the nine restaurants (33.3%) did not provide a clear motivation for offering vegan and vegetarian options. A few restaurants indicated limited engagement with the topic, while others focused more broadly on their overall menu rather than dietary categories.

The findings from the restaurant interviews reveal a spectrum of motivations shaped by demand, customer preferences, and operational capacity. Restaurants show the strongest motivation when plant-based options align with customer interest and existing kitchen practices, while limited demand and workflow concerns create the most significant barriers.

4.5 Awareness of the Veggie Map

Results from surveys and interviews indicate that the HellasVeg Veggie Map is not very widely known, and that overall awareness of the Veggie Map is relatively low, even among non-meat eaters. We conducted nine short interviews with restaurants in Thessaloniki and found that eight of the nine (89%) had no prior knowledge of HellasVeg or the Veggie Map. These participants explicitly stated that they had “not heard of HellasVeg before,” and multiple did not even realize the Veggie Map listed their restaurant. One restaurant owner stated, “I was not aware there is one,” when asked about the Veggie Map. Similarly, another participant noted, “we don’t use platforms...we just use our own platform,” highlighting their limited engagement with external promotional tools.

The only restaurant to report familiarity with HellasVeg was Merry Berry, explaining that they knew the organization through a supplier relationship and personal connections. Overall, these responses suggest that most restaurants rely on internal promotion or word-of-mouth rather than external platforms. For example, the owner from Το μανιτάρι (The Mushroom) explained that “from mouth to mouth it went well and we kept it,” emphasizing they preferred informal marketing over structured tools like the Veggie Map.



In addition, the project team measured awareness among consumers through the survey by providing them with a brief description of the Veggie Map and asking them whether they had previously heard of it. Figure 4.10 shows that 84% of total respondents had never heard of the Veggie Map, which reinforces the findings from restaurant interviews. The lack of awareness among participants suggests that the Veggie Map is not effectively reaching restaurants or consumers, even if they are connected to HellasVeg.

Together, these results demonstrate that the HellasVeg Veggie Map has low visibility among both restaurants and consumers, which suggests a clear need for stronger promotion and outreach efforts.

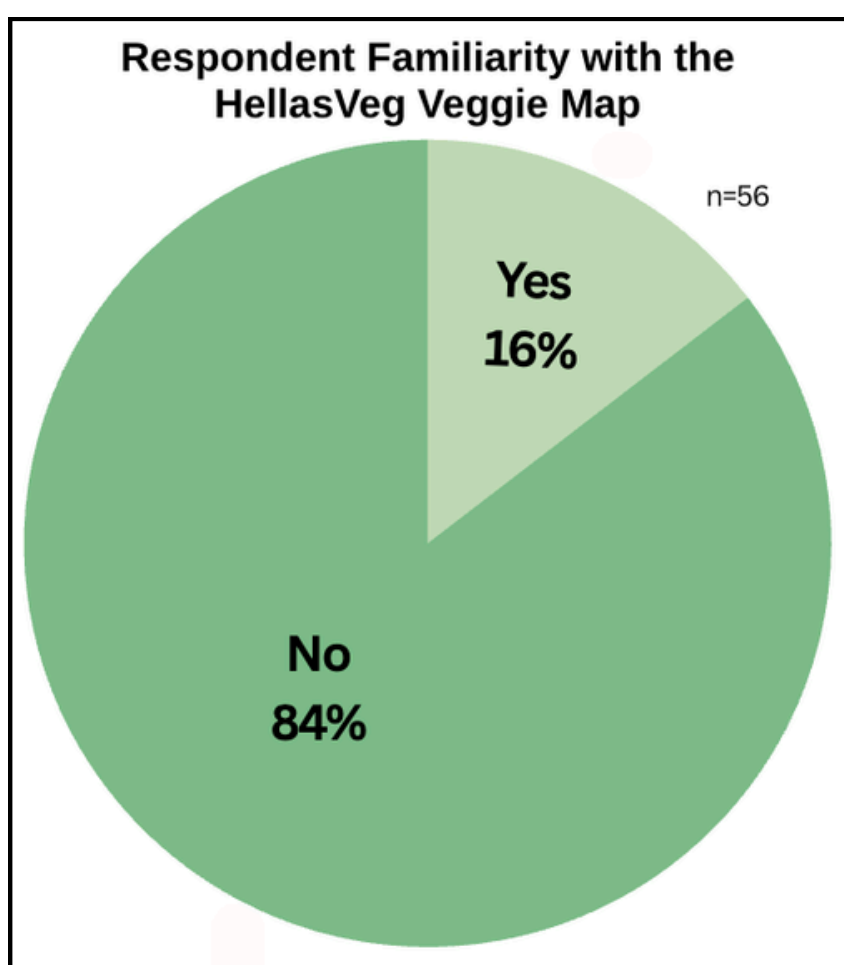


Figure 4.11: Respondent Familiarity with the HellasVeg Veggie Map.

4.6 Interest in Using the Veggie Map

In our initial consumer survey, we asked meat eaters and non-meat eaters how likely they would be to use the Veggie Map after launch (see Figure 4.11). Most respondents fall into the “somewhat likely” category (53%), followed by “not likely” (30%), and “very likely” (16%). Of the meat eaters surveyed, 66% show a willingness to engage with the Veggie Map. This is a key finding, as it reveals a strong potential to broaden the audience and outreach of the Veggie Map. This suggests that the new Veggie Map has the potential to improve the awareness of plant-based options, as more outreaches would translate to more online traffic to the Veggie Map, making it more appealing for restaurants.

For non-meat eaters we see that seven out of eight vegans and vegetarians (87%) would be likely to use our Veggie Map after its release which highlights that they have a strong interest in using this as a tool. The strong interest indicates that vegans and vegetarians are trying to seek out resources that make plant-based dining easier. This tells us that there is difficulty finding plant-based options which is something our Veggie Map addresses.

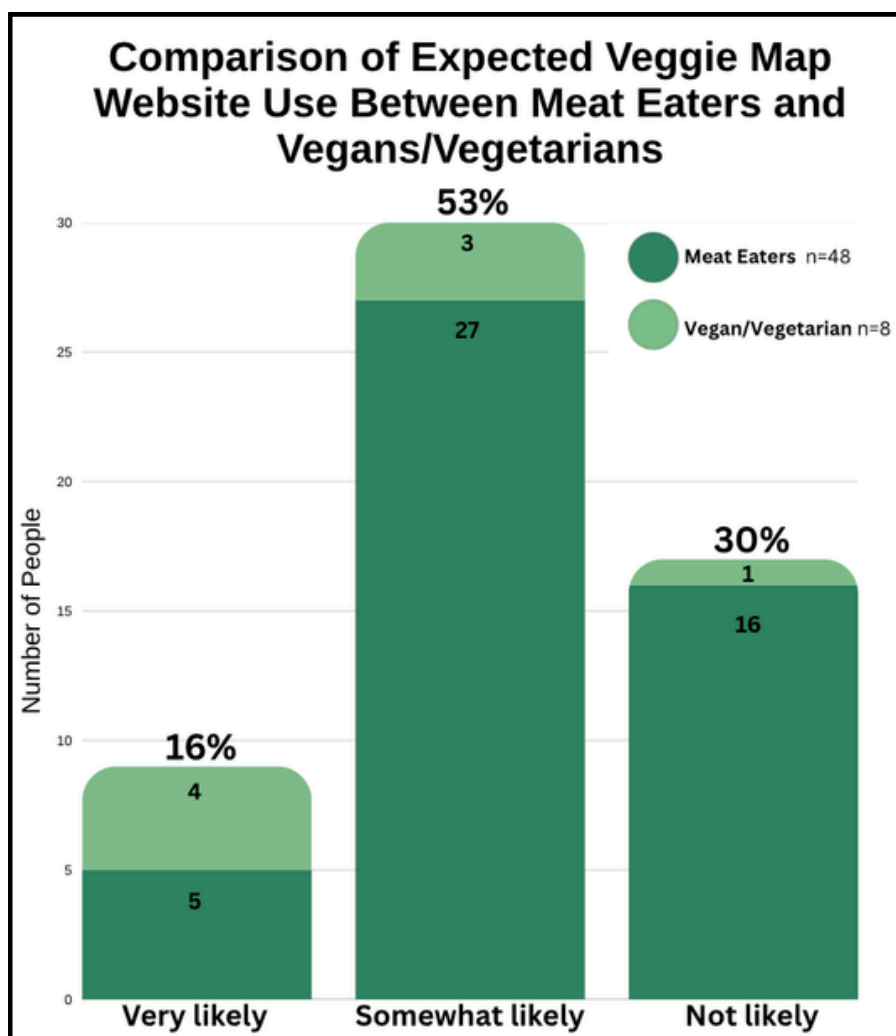
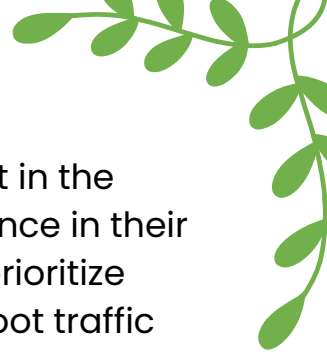


Figure 4.11: Expected use of the Veggie Map website after launch.





The interviews with restaurant owners show that limited interest in the Veggie Map was often connected to restaurants' existing confidence in their visibility, foot traffic, and customer base. Several owners did not prioritize active engagement with the map because they already rely on foot traffic or existing popularity. For example, Χαρούπι stated, "It isn't really that big for us as the majority of our consumers find us by just coming in and not searching us up, so they find out here if they have something to eat or not." Similarly, Η Πούγα explained, "We are not interested in doing anything with the map, just having the name of the restaurant does a good amount for us since we already have so much traction in the restaurant." These responses reflect a lower perceived need to adopt new promotional tools, which aligns with the portion of users who reported low likelihood of using the platform.

Multiple restaurants showed conditional interest, especially when the map could highlight specific offerings. Merry Berry emphasized visibility of options, "I would say really make sure they know how many dishes we offer as well as our healthy options including gluten free and sugar free." Μαμαλούκα added, "I would highlight dishes to increase traction to our restaurant." Ζύθος λαδάδικα focused on promotion of new items, "I would like to promote new dishes, vegan pasta is very traditional. Both travelers and locals enjoy it." These responses suggest that restaurants may see value in the platform when it directly supports marketing and product visibility. The owners of Απέναντι από τα Κάστρα responded, "Very!! I have the energy and desire to cook, and I like to explore more on that." These comments indicate high motivation among restaurant owners to engage, experiment, and update owner listings.

Finally, in our restaurant interviews we discovered that owners believe tourists and locals have different dietary preferences.

Overall, the availability of vegan and vegetarian dishes varied widely across restaurants, ranging from limited dedicated items to more flexible, modifiable menus. Additionally, the team identified tourism as a significant driver of vegan and vegetarian demand, introducing a seasonal dynamic that influences menu offerings and the consistency of plant-based options throughout the year. Restaurant motivations to provide vegan and vegetarian options also differed, but the team generally characterized the motivations as reactive and driven by customer demand and availability. Finally, the team found awareness and engagement with the HellasVeg Veggie Map to be limited among restaurant owners, indicating a potential barrier to the platform's effectiveness.





Chapter 5: Design

5.1 Introduction

The team re-designed the existing Veggie Map with the goal of creating a more effective digital resource for locating vegetarian and vegan dining options in Greece. As discussed in the findings chapter, users valued clear restaurant information, easy navigation, and tools that enabled them to quickly identify relevant food options. In addition, HellasVeg wanted a platform that would go beyond a static restaurant directory by supporting search, filtering, and user contributions. This led the team to focus the design process on usability, flexibility, affordability, and long-term practicality. The team developed the final product as a browser-based interactive map that combines restaurant data, location-based searching, user-submitted dish reviews, reporting tools, and a mobile-friendly interface. Rather than functioning only as a list of restaurants, the team designed the Veggie Map to serve as an interactive platform that helps users make dining decisions in real time while also giving HellasVeg a resource that can continue to grow after the completion of the project.

5.2 Platform Selection and Design Justification

At the beginning of the project, HellasVeg was using Google My Maps to integrate the Veggie Map into its website. While Google My Maps offered a simple and straightforward starting point, it had significant limitations in terms of customization and advanced functionality. From a design perspective, the platform was easy to use, but it lacked the flexibility needed to create a more interactive and user-focused map. Several of the improvements that HellasVeg requested, including stronger search functions, custom filters, better restaurant detail displays, and review-based interaction, were either impossible or highly limited within Google My Maps. Due to these restrictions, the team determined that a different platform was necessary to meet the goals of the project and respond to the needs that we identified through sponsor discussions and user and restaurant research.





Following meetings with the sponsor and advisors, as well as additional research into web development platforms, the team considered WordPress and React as the two most realistic alternatives to developing the new Veggie Map. WordPress was initially attractive because it could support an interactive map with less custom coding, especially when paired with mapping plugins. This was appealing at the start of the project because the team had limited experience in website development and wanted a platform that would allow progress without requiring advanced programming knowledge. However, after further examination, WordPress presented important drawbacks. The first was cost, as WordPress hosting and advanced mapping plugins would place the project near the upper limit of HellasVeg's available annual budget. This would make future improvements more difficult and could restrict long-term maintenance. The second drawback was flexibility. Although WordPress offers more customization than Google My Maps, it still imposed design and feature constraints compared to a fully custom-coded system. For these reasons, the team selected React as the foundation for the Veggie Map. React offers the greatest level of control over the website's appearance, functionality, and structure while avoiding recurring software costs. Although the team had limited prior experience with JavaScript and React, the benefits of flexibility, sustainability, and long-term customization justified our decision to use it.



5.3 Application of Findings to the Design

The findings of the project strongly influenced the design of the Veggie Map. Research and fieldwork showed that users value convenience, clarity, and quick access to useful restaurant information. Many users would likely use the map while actively deciding where to eat, so the interface needed to make the most useful features easy to find and use. This included searching for restaurants, filtering by vegan or vegetarian options, using the location feature, opening restaurant details, viewing dish reviews and photos, and reporting outdated or incorrect information. These needs shaped the placement of tools such as the search bar, filters, and restaurant detail panel. The search bar was one of the most prominent elements of the interface because findings suggested that the ability to quickly locate a relevant restaurant was one of the most important expectations users had for the map. Likewise, the team included filtering tools so users could narrow results instead of manually scanning all available locations. The findings also suggested that users needed more than a simple restaurant name and location. Many people wanted to know whether a restaurant had a variety of vegetarian or vegan options and what kinds of dishes were available. This led to the inclusion of restaurant detail cards, dish reviews, vegan and vegetarian labels, hours, and reporting functions. In this way, the team directly tied the design to the findings, with each major feature intended to respond to needs we identified during the research process.



5.4 Website Design

The team designed the Veggie Map as a browser-based web application so that users could access it easily without requiring users to download a separate mobile app. This was an important decision because many users may encounter the map while already traveling or while searching online for food options. A web-based platform therefore provides the most practical balance of accessibility and usability. The team built the front end of the system using React and Vite, which allowed us to organize the application into reusable components while still maintaining good performance. The team implemented the mapping system itself using React Leaflet and Leaflet, which enabled the display of restaurant markers on an interactive map with support for zooming, panning, and marker selection.

The application uses Firebase Firestore as its backend database. The first step in the process involves loading restaurant data from Firestore and then transforming the data into a structure so that the program can display the data on the map. The program then uses this data in conjunction with a search request that involves Veggie Map locations. The program stores approved dish reviews separately and links them back to their associated restaurants, while simultaneously storing issue reports and flagged concerns in separate pending collections. This separation between restaurant data, public review data, and pending moderated content supports a clearer organization of information and makes the system easier to maintain over time. The design therefore reflects both user-facing goals and back-end practicality that increases the map's ability to function effectively while still allowing future updates and moderation.



To improve readability in dense areas where many restaurants are in the same location, the design also includes marker clustering, which groups nearby restaurants together at lower zoom levels and separates them as the user zooms in. Figure 5.1 shows the main Veggie Map interface at a national scale, where clustered restaurant markers help users understand the distribution of vegetarian and vegan-friendly locations across Greece without overcrowding the map. This prevents the map from becoming overcrowded and makes it easier to use in cities where many restaurants are close together.

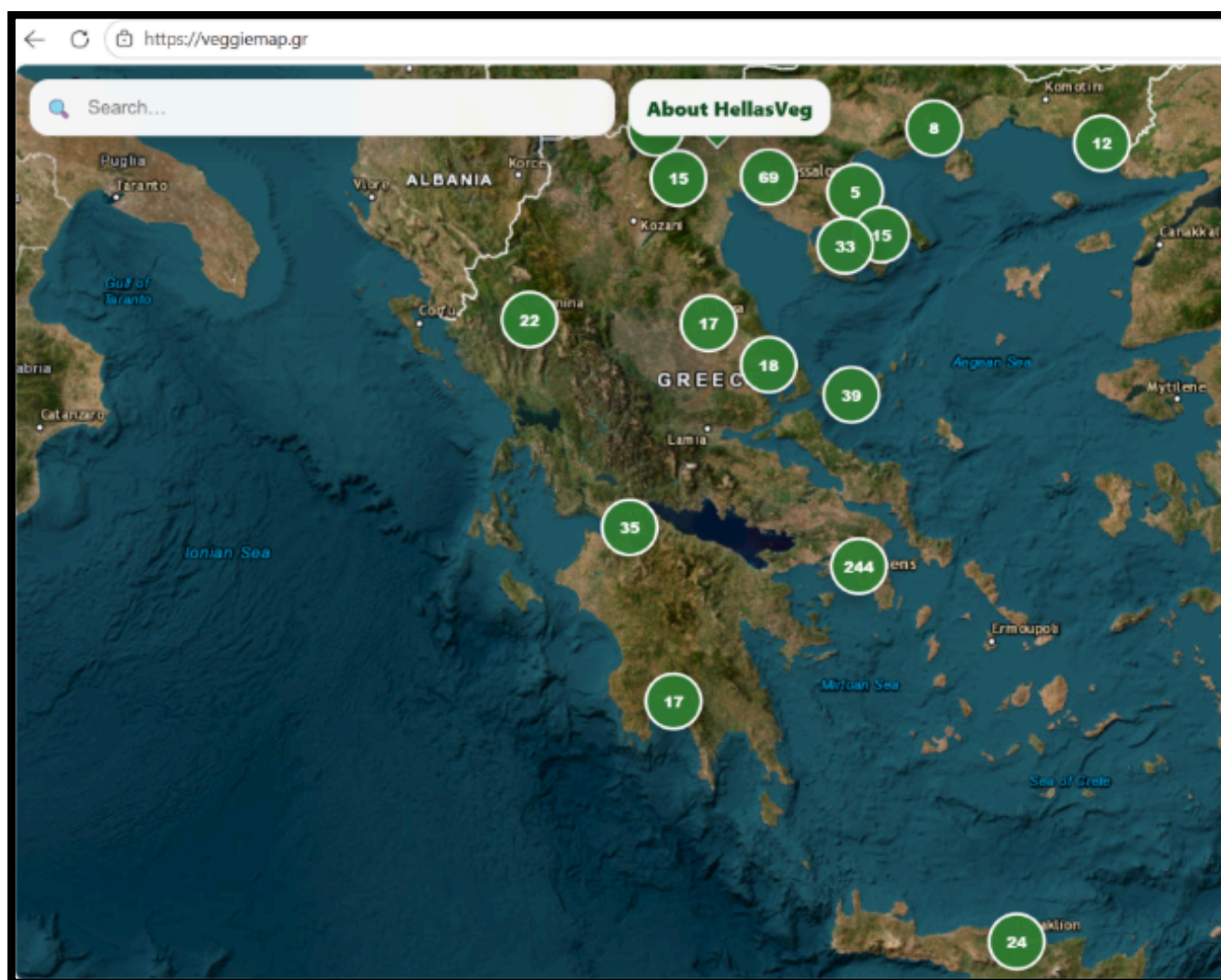


Figure 5.1: Main Veggie Map interface showing clustered restaurant markers across Greece.

5.5 Restaurant Data, Search, and Filtering Design

A major design goal of the Veggie Map was to create a restaurant information structure that was both flexible and useful. Each restaurant needed sufficient information to appear meaningfully on the map while permitting the presentation of additional restaurant details when available. At a minimum, displaying each restaurant in the correct location requires a name and geographic coordinates. To provide additional restaurant details, the data structure supports fields such as category, address, city, website or map link, phone number, hours, price information, percent vegan, description, and photos. This approach was important because not every restaurant has the same amount of available information, and the map needed to remain functional even when restaurant entries included less information than others. Permitting optional fields facilitated the system's ability to display richer restaurant profiles where possible without excluding restaurants that only have the most essential data.

Search and filtering were central to the overall design because they transformed the map from a passive visual tool into an active decision-making resource. Users can search broadly across all available information or narrow the search to restaurant names, city or region information, or dish review content. This makes the search feature more useful than a simple name lookup and allows users to engage with the map based on the kind of information they already know. The design also includes category filters so that users can focus on veggie or vegan-friendly locations more quickly. The team intentionally designed these tools to be visually clear and easy to use, since the findings indicated that users needed quick access to relevant results rather than a complicated interface. As shown in Figure 5.2, the search panel allows users to browse all restaurant results, use their current location, search for different categories of information, and filter restaurants based on veggie or vegan-friendly classifications. Together, the restaurant's data structure, search system, and filtering tools form the foundation of the user experience and make the Veggie Map significantly more functional than the static map it replaced.



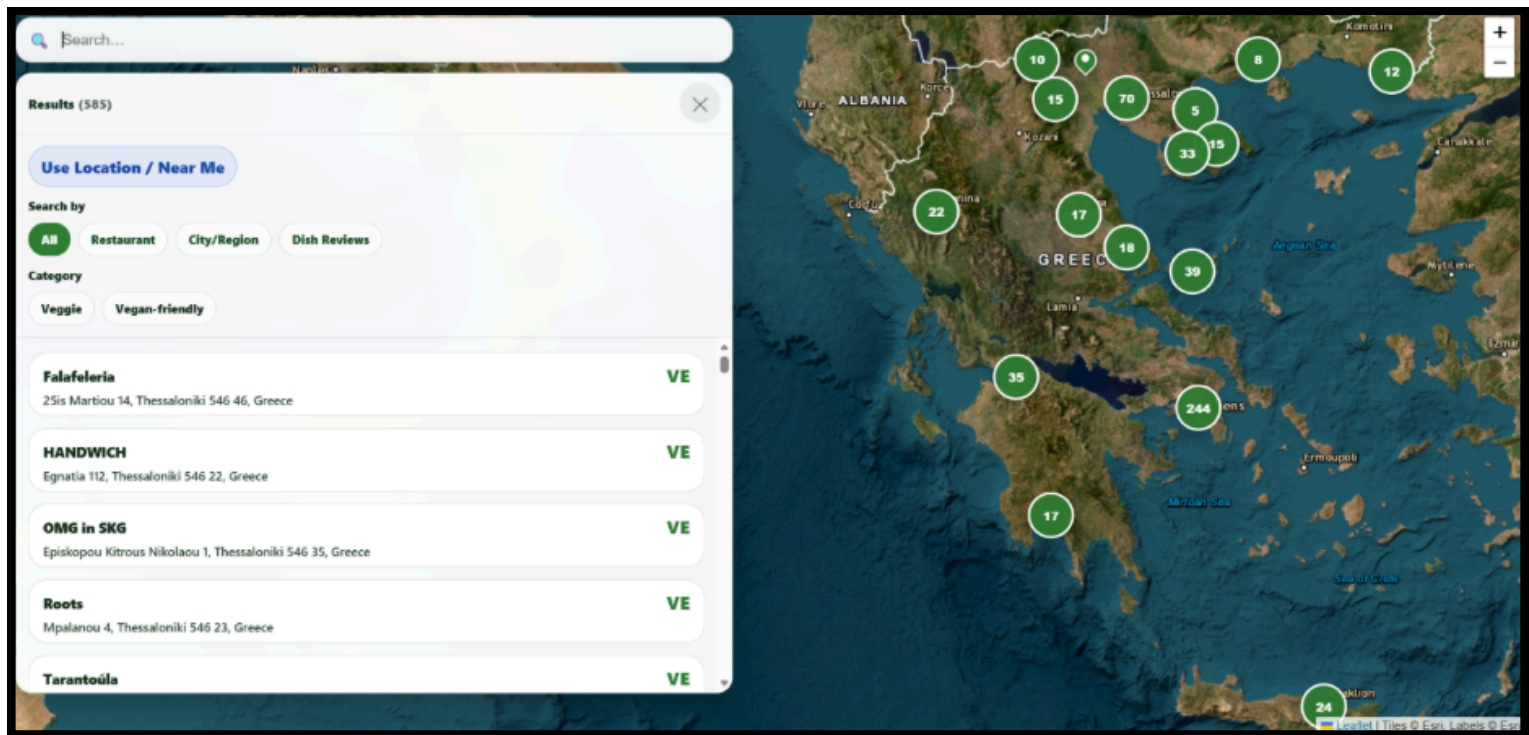


Figure 5.2: Search and filtering panel showing restaurant results.

5.6 User Location and Restaurant Detail Design

One of the important improvements included in the final design is the ability for users to search relative to their own current location. The map includes a “Use Location” feature that allows the program to display a user’s current position during the active session. Once this location is available, the user can activate a nearby search mode and limit restaurant results within a selected radius. Figure 5.3 illustrates the location-based search feature, where the user's position appears on the map as a blue pin, and a search radius helps identify nearby restaurant options. Users can make their search radius as small as one kilometer or as large as 50 kilometers. This feature was especially valuable because many intended users, particularly tourists or people in unfamiliar areas, may want to find nearby vegetarian or vegan options rather than simply browse all restaurants in a city. At the same time, the design considered privacy by using location only for the current session rather than as a permanently stored feature.



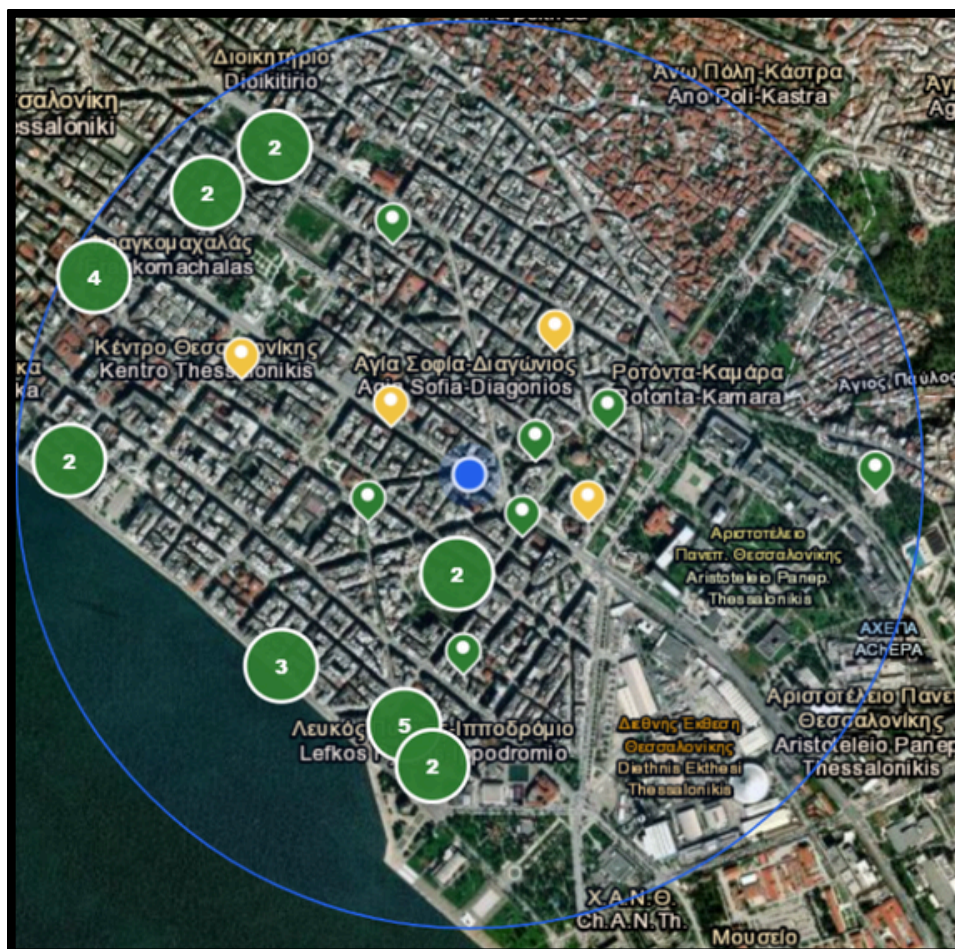


Figure 5.3: Location-based search of the user's position.

When a map user selects a restaurant, the system opens a detailed card that serves as the main space for restaurant-specific information. This card ensures the map is visually clean while moving richer information into a separate view. The detail card (see Figure 5.4) includes a photo area at the top when an image is available, followed by the restaurant name, category, and tabbed sections for overview, dish reviews, and photos. The overview tab presents practical information such as open hours, percent vegan information, category, rating summary, address, and a short description when available. Figure 5.4 illustrates the restaurant detail card, which keeps the map visible while presenting key restaurant information, navigation options, and reporting tools in a separate panel. The detail card also includes buttons for opening an external map link, reporting a problem with the restaurant's entry, and closing the detail view. This tab-based design keeps the interface organized and prevents the user from becoming overwhelmed by too much information at once, while still allowing access to multiple layers of useful content.



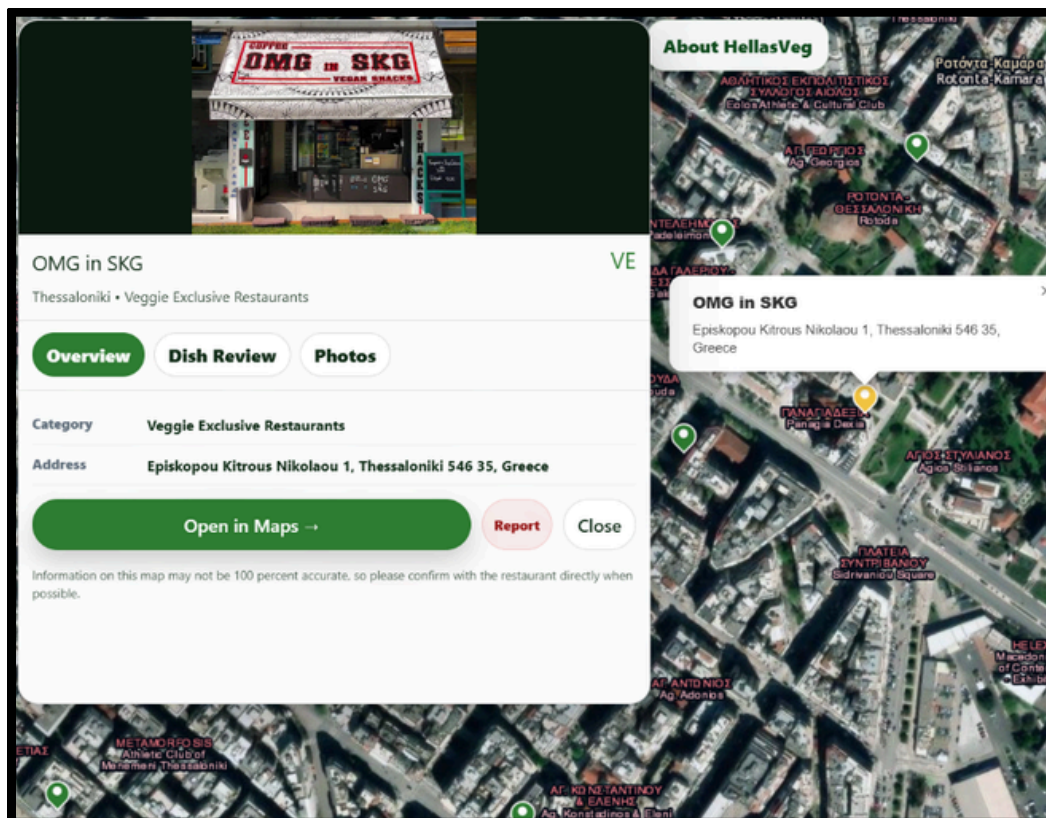


Figure 5.4: Restaurant detail card.

5.7 Dish Reviews, Reporting, and Photo Features

One of the most significant additions to the new Veggie Map was the dish review system. Rather than limiting the platform to basic restaurant listings, the design permits users to submit reviews for specific dishes. This was an important feature because a restaurant's value to vegetarian or vegan users often depends less on the restaurant name itself and more on what a customer can actually order there. When adding a dish review, users can enter a dish name, choose a rating, identify whether the dish is vegetarian or vegan, and write a short comment about their experience. Figure 5.5 displays the dish review form, including the dish name field, rating selection, vegetarian or vegan classification, written review box, and optional food photo upload. The program displays these reviews in a structured format that emphasizes the most useful information, including the dish name, dietary type, rating, and written feedback. To maintain consistent dish names and minimize misspellings, the system allows users to select from previously submitted dish names. This feature reduces duplication over time and keeps the review system organized, which in turn enables the map to provide more practical and experience-based information than a standard restaurant database.

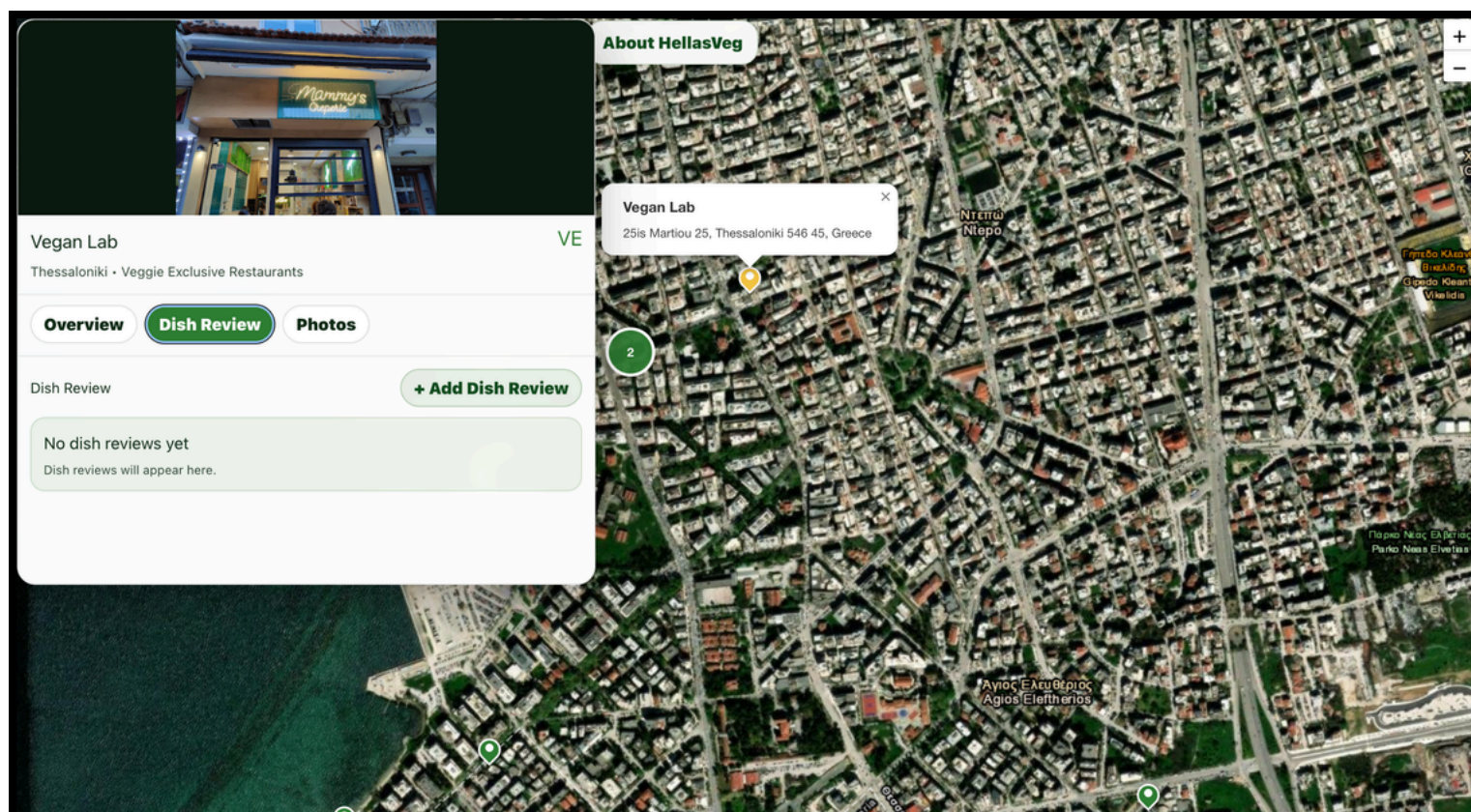


Figure 5.5: Dish review form.

In addition to dish reviews, the Veggie Map design includes reporting and flagging tools as demonstrated in Figure 5.6 and 5.7 to improve data reliability. Users can report issues such as restaurant closures, location changes, seasonal menu changes or other problems through a reporting form. The system treats these reports separately as pending issues rather than immediately changing the live map. Users can also flag individual reviews if they believe the review is inaccurate or inappropriate. These flags then go to the HellasVeg team who can delete the flagged review if necessary. These features were important because the map includes community-generated content, which means the design needed a mechanism to support participation while still protecting quality and trustworthiness.



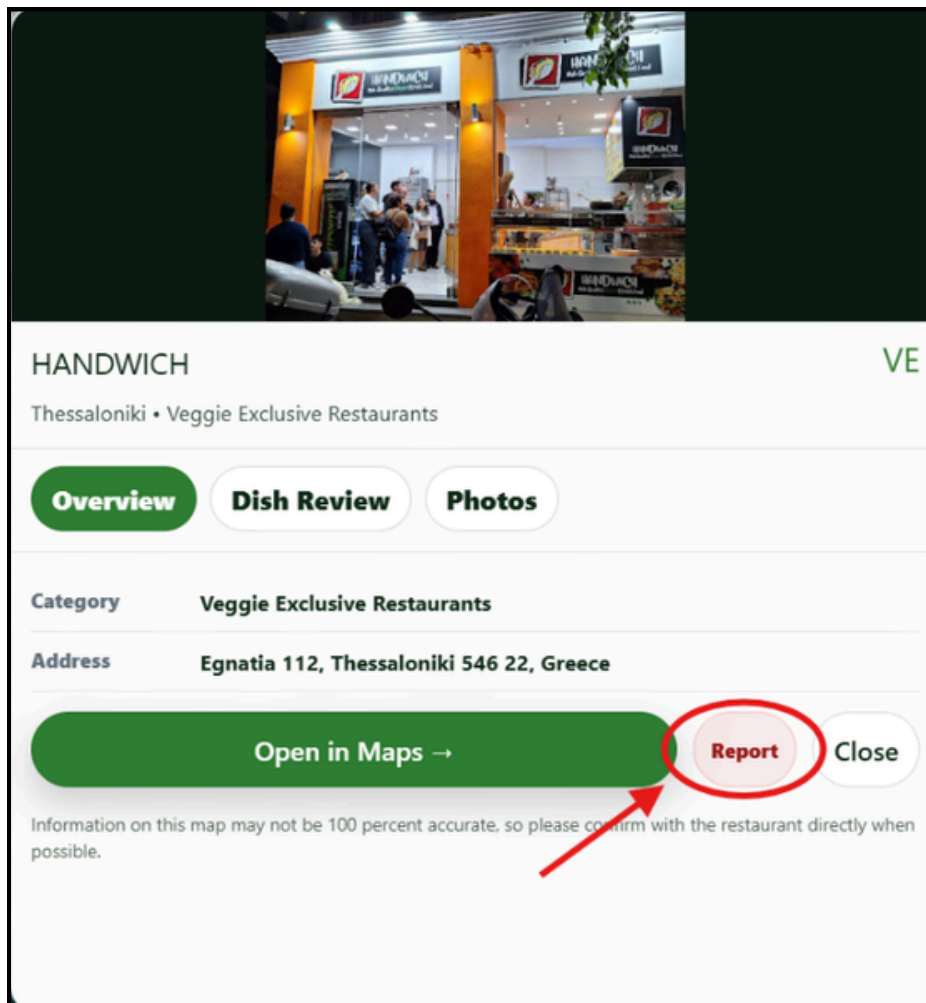


Figure 5.6: Report feature.

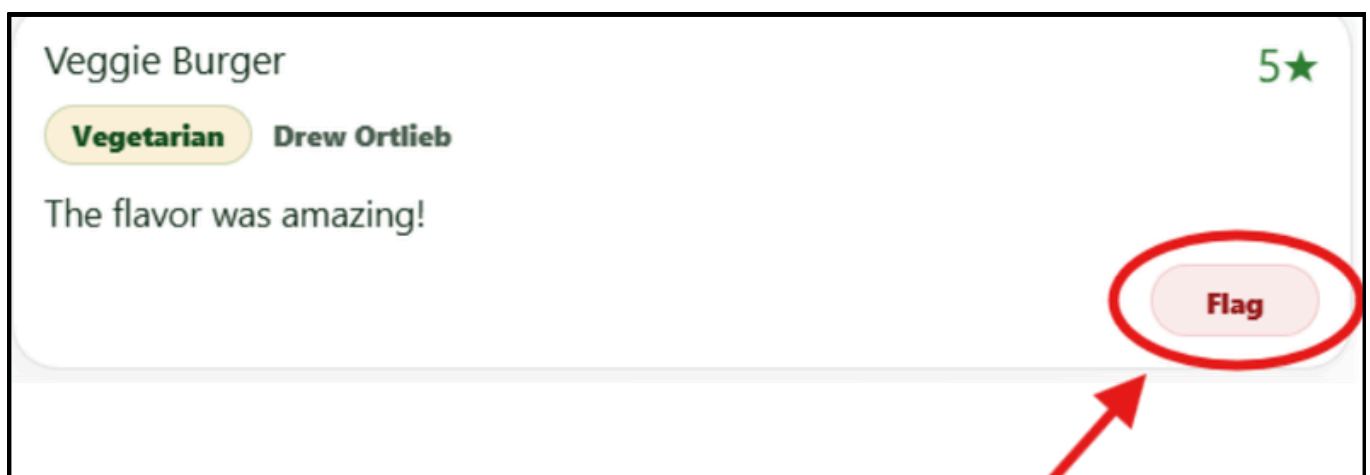


Figure 5.7: Flag Feature.

Additionally, the new Veggie Map includes a photo feature, which lets restaurants display images through stored URLs, and allows users to upload additional local photos. Figure 5.8 points to the photo tab, where users can view approved restaurant photos or upload a new photo for review. The final version of the Veggie Map included tools for dish reviews, user reports, flagged content, and restaurant photos to make the platform more interactive and reflective of real user experiences. During development, uploaded photos were handled through a low-cost storage approach that supported the project's scope and avoided unnecessary hosting expenses. However, a future improvement would be to move all uploaded images into permanent shared cloud storage, so photos remain consistently accessible across devices and can be managed more easily over time. Together, these features strengthened the Veggie Map by allowing users to contribute information, share visual content, and help keep restaurant information accurate.

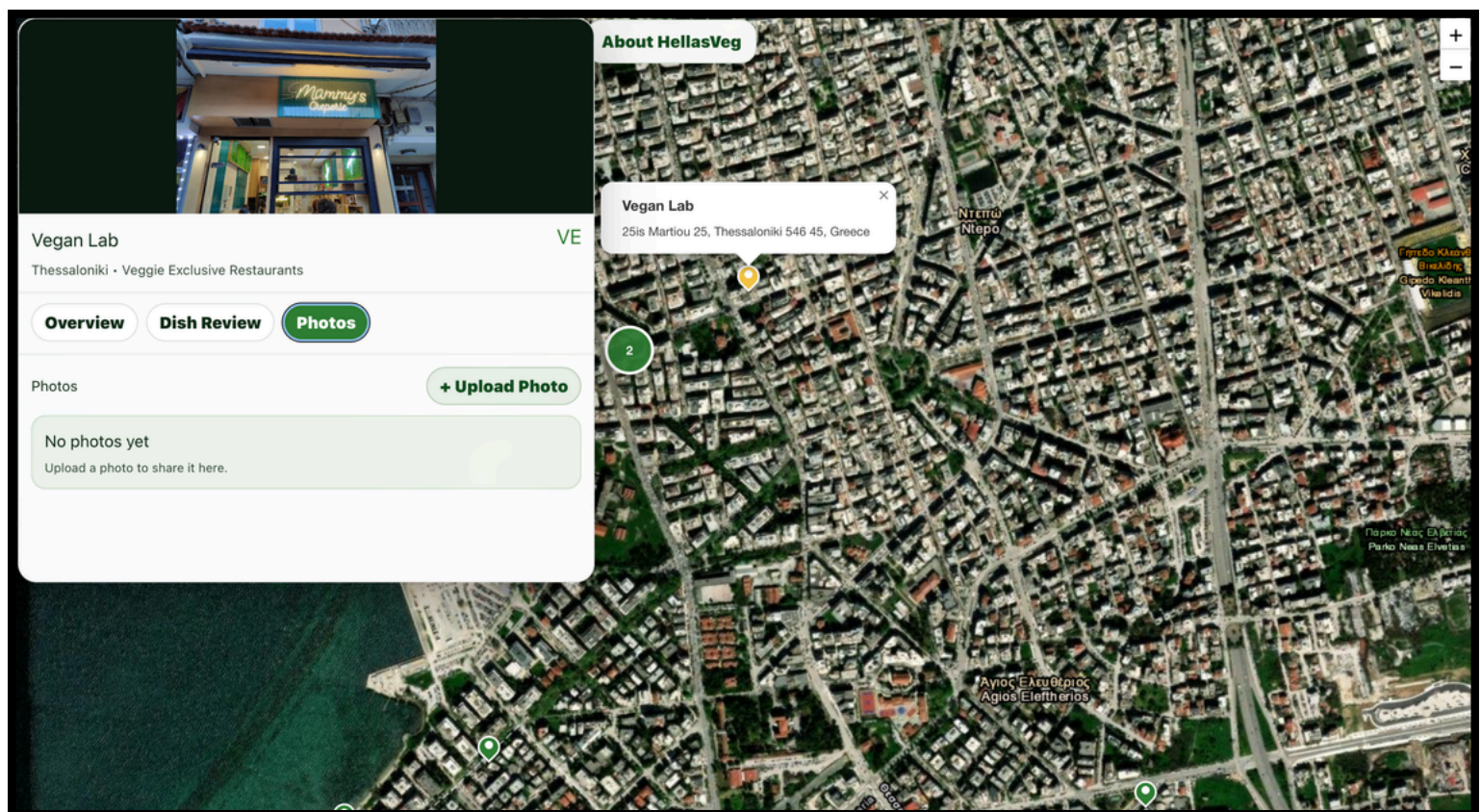


Figure 5.8: Photo tab showing the restaurant photo section and upload option.

5.8 Mobile Responsiveness, Reliability, and Final Evaluation

Mobile usability was a major priority throughout the design process because many users will access the Veggie Map from their phones while navigating a city and deciding where to eat. Consequently, the team designed the desktop and mobile interfaces differently while preserving the same core functionality. On the desktop, the map uses a top search area and floating panels, while on a mobile device, the design shifts the visual interface of the Veggie Map to a more compact system with a floating search entry point and a sheet-style search panel. Hence, the program displays restaurant details in a mobile-friendly card layout that remains scrollable and readable on smaller screens. These changes were necessary because an interface that works well on a larger screen does not automatically translate to a phone. By adapting the layout to smaller devices, the Veggie Map supports practical real-world use rather than only desktop browsing.

The final implementation of the Veggie Map has several key strengths. The final design includes an About HellasVeg section, shown in Figure 5.9, which explains the purpose of the organization, connects users to the HellasVeg website, and acknowledges the Worcester Polytechnic Institute student team that developed the new version of the map. It replaces the limited functionality of Google My Maps with a more customizable and interactive system, gives users stronger search and filtering tools, supports dish-specific feedback, and includes location-based features that improve real-time usefulness. These new features provide a clearer structure for moderation by separating restaurant data, approved reviews, and pending reports.

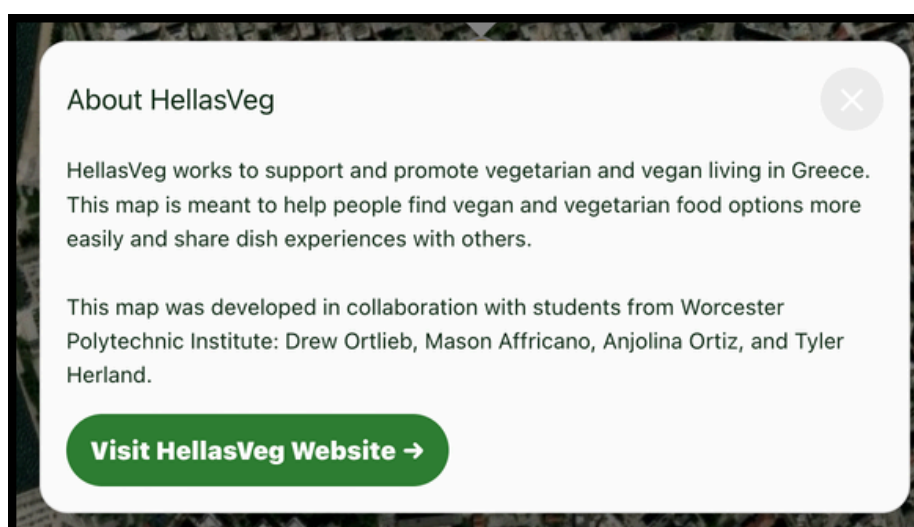


Figure 5.9: About HellasVeg modal explaining the purpose of the map and HellasVeg.

5.9 Findings from Veggie Map Prototype Evaluation

After conducting the Veggie Map prototype evaluation, our team analyzed the data we received through an online survey in Qualtrics that asked consumers to evaluate the new Veggie Map to indicate areas of improvement and future research. With 31 responses, the team found respondents to have strong positive feedback in attitude towards the Veggie Map. Respondents showed satisfaction for both Veggie Map usability and convenience. This revealed a strong potential for future growth of the Veggie Map's outreach.

Figure 5.10 shows respondents' satisfaction with the Veggie Map after viewing the platform. Participants were asked to rate how enjoyable their experience was, with response options ranging from "very unenjoyable" to "very enjoyable." Fifty-eight percent of respondents rated the Veggie Map experience as very enjoyable, and none reported that the experience was unenjoyable or very unenjoyable. These findings suggest that users generally had a positive experience with the Veggie Map, which is important because user satisfaction may influence whether people return to the platform or recommend it to others.

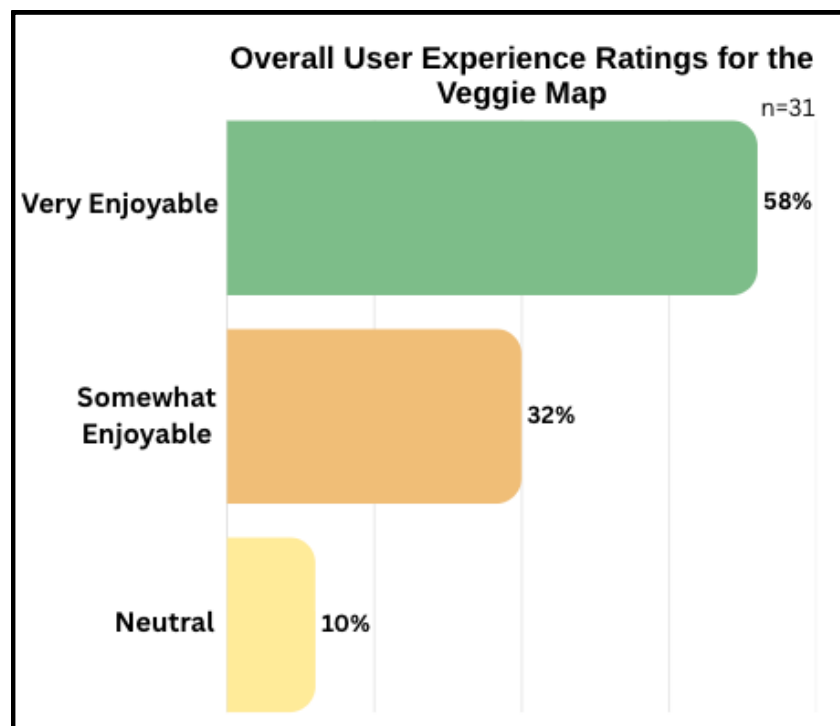


Figure 5.10: Overall user experience ratings for the Veggie Map.



The team also uncovered a pattern regarding respondents' likelihood to use or recommend the Veggie Map. Figure 5.11 displays a graph from a question asking how likely respondents are to use the Veggie Map or recommend it to others. A substantial portion of respondents listed themselves as "Extremely Likely" to use or recommend the Veggie Map, taking up 45% of respondents. The second most common response was "Somewhat Likely", which consisted of 29% of respondents. This means that 74% of respondents showed interest in future use or distribution of the Veggie Map, suggesting that the Veggie Map has potential to be a service with a large outreach. With numerous consumers having a willingness to spread the word of the Veggie Map, the platform demonstrates a potential to greatly improve access and awareness surrounding vegan and vegetarian dining.

The team also uncovered further evidence of the expandability of the Veggie Map through the demographics of the Veggie Map prototype evaluation. In question Q2 of the Veggie Map prototype evaluation survey (see Appendix M), twenty-one (66%) described their diet as regularly eating meat. The team found this to be a key component to Figure 6.2, as this means that many of the respondents showing interest in using or recommending the Veggie Map are meat eaters. The team found this crucial, as this greatly expands the potential audience of the Veggie Map to all consumers and not just those who are looking to avoid meat consumption. By expanding the map's visibility, the Veggie Map would serve its key purpose of promoting awareness of vegan and vegetarian accessibility to both consumers and restaurant owners, as it would reach a portion of the stakeholders that did not have previous knowledge of the map.

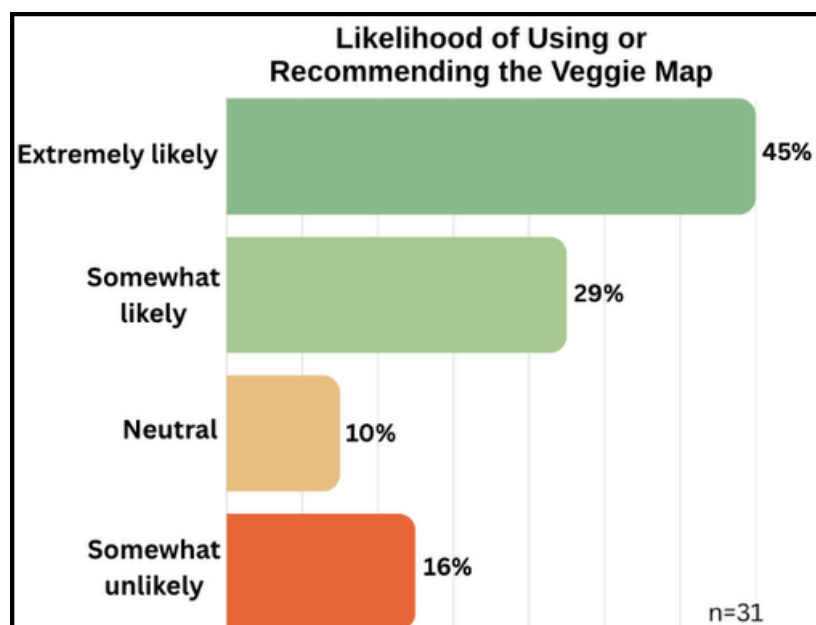


Figure 5.11: Likelihood of using or recommending the Veggie Map.

In addition to this, the team found a distinct pattern regarding the situational usability of the Veggie Map. The team asked respondents to select all situations where they felt they might use the Veggie Map. An overwhelming number of responses catered towards tourism and traveling-based situations. Out of 31 respondents, 24 (77%) of them listed trying a new restaurant as a situation where they would use the Veggie Map, with 23 (74%) also listing traveling and 17 (58%) listing finding options in an unfamiliar area. This could mean that the Veggie Map would benefit by further catering towards the tourism industry and trying to attract tourists, rather than locals, to the platform.

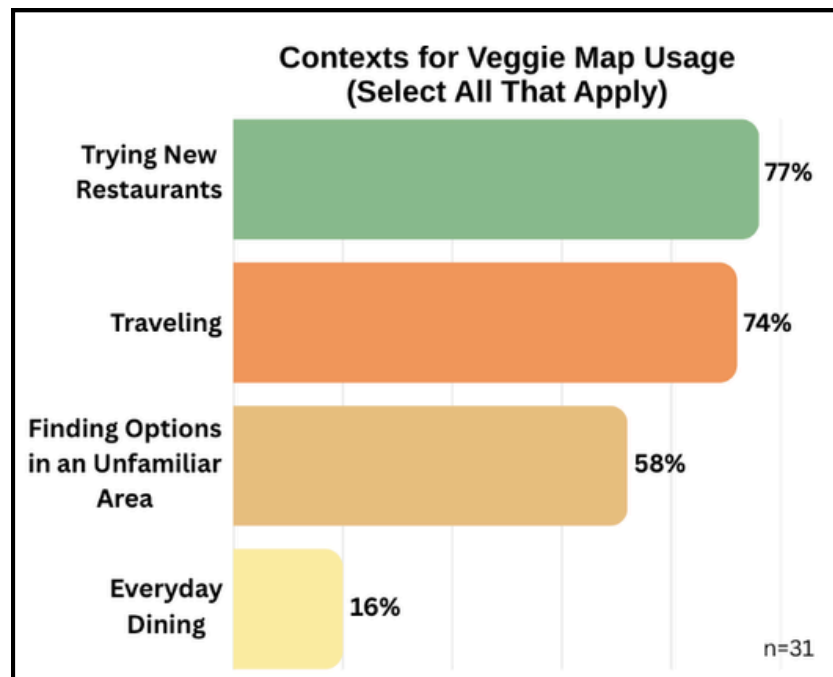


Figure 5.12: Contexts for Veggie Map usage (select all that apply).

The team also uncovered strong trends catering towards an improvement in the new Veggie Map's accessibility and usability. In Figure 5.13, we prompted respondents to rate how easily they could navigate the new Veggie Map. Rating from very easy to very difficult, 29 out of 31 (93%) respondents reported navigating the map either easily or very easily. No respondents reported strong levels of difficulty. This indicates a strong trend is stakeholders finding the new Veggie Map easy to navigate. By allowing stakeholders to easily navigate to restaurants, the new Veggie Map promotes an increase in accessibility, as users can now find vegan and vegetarian options in an efficient and convenient manner. This reflects previous literature and findings, as our research indicated that optimizing website design with the consumer in mind would increase ease of use.

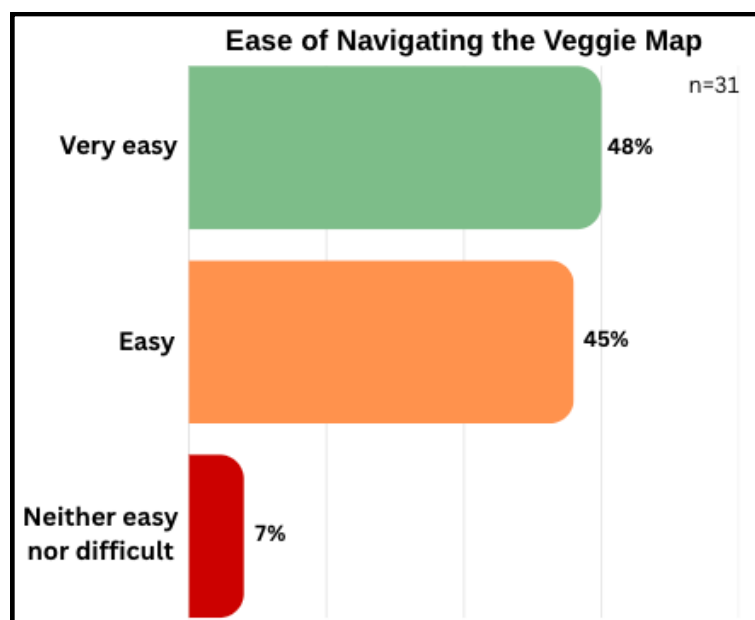


Figure 5.13: Veggie Map Usability in Navigation.

BEING



Açaí

coconut milk, banana, honey or agave syrup with chocolate chip granola, seasonal fruit and coconut

Açaí Parana

coconut milk, banana, peanut butter, honey, or agave syrup with chocolate chip granola, seasonal fruit and coconut

coconut milk, banana, strawberries, honey, or agave syrup with chocolate chip granola, seasonal fruit and coconut

Butterfly

coconut milk, banana, blue pea butterfly powder, almond butter, honey or agave syrup with chocolate chip granola, seasonal fruit and coconut

Choco Nut

coconut milk, banana, cacao, hazelnut butter, honey or agave syrup with chocolate chip granola, seasonal fruit and coconut

Black Power

coconut milk, banana, active charcoal, honey or agave syrup with chocolate chip granola, seasonal fruits and coconut

energy bowls

Chapter 6: Future Research



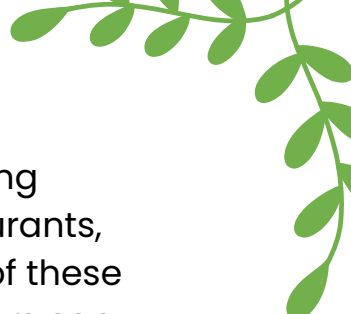


Our team found awareness of HellasVeg and their Veggie Map to be extremely low. While we were collecting data on consumer habits, we found that 84% of consumers who took our survey had no knowledge of HellasVeg or the Veggie Map. However, we reported that 69% of respondents said they would be interested in using the Veggie Map after its release. This implies that if more consumers were aware of the Veggie Map, there could be significantly more user traffic at these restaurants. Without restaurant involvement, the map could very easily stay incomplete, as HellasVeg is relying on many of them to actively engage with the website to keep their menu dishes current. Likewise, restaurants will not see a need to keep the platform up to date unless they see value-added to their business from the map. Without an increased awareness of the Veggie Map, the website will not be a useful tool for both the consumer and the restaurant. To address this issue, the Veggie Map will need to have groundbreaking features and reliability that will draw consumers to the map because there are no better options available.

A future HellasVeg IQP team could work to increase awareness of the Veggie Map to make it a valuable tool for consumers and restaurant owners. The team could achieve this through numerous methods; one example of improving awareness would be through social media. Currently, HellasVeg has minimal marketing from a social media lens, and the online representation of the Veggie Map is relatively sheltered. By adding a social media page dedicated to the Veggie Map, future teams could greatly expand the visibility of the Veggie Map to stakeholders, thus improving its awareness. Additionally, HellasVeg could look into researching techniques regarding visibility in Google searches. By formatting the website in a way that Google pushes it more in its search algorithm, the team could set the Veggie Map to be found easier when stakeholders search the internet for restaurant information. This would in turn increase the awareness other methods of improving the awareness of the Veggie Map could take on a more local, interpersonal approach. Future teams could spread the word of the Veggie Map through networking, advertising, and showcasing at relevant conventions.

At the same time, future research should focus on refining and expanding the Veggie Map's features to improve usability and engagement. The HellasVeg team can test advanced filters, personalized recommendations, and integrated review systems to determine which features most effectively support user decision-making. In addition, they could introduce new functionality, such as saving favorite locations, sharing recommendations, and integrating navigation tools, to better support real-world use, especially in travel scenarios highlighted by the Veggie Map prototype evaluation results. Researchers can also evaluate the impact of real-time updates, like business hours. By combining geographic analysis with feature development, future research can strengthen the Veggie Map's practicality, increase long-term engagement, and enhance its value for both travelers and everyday users.

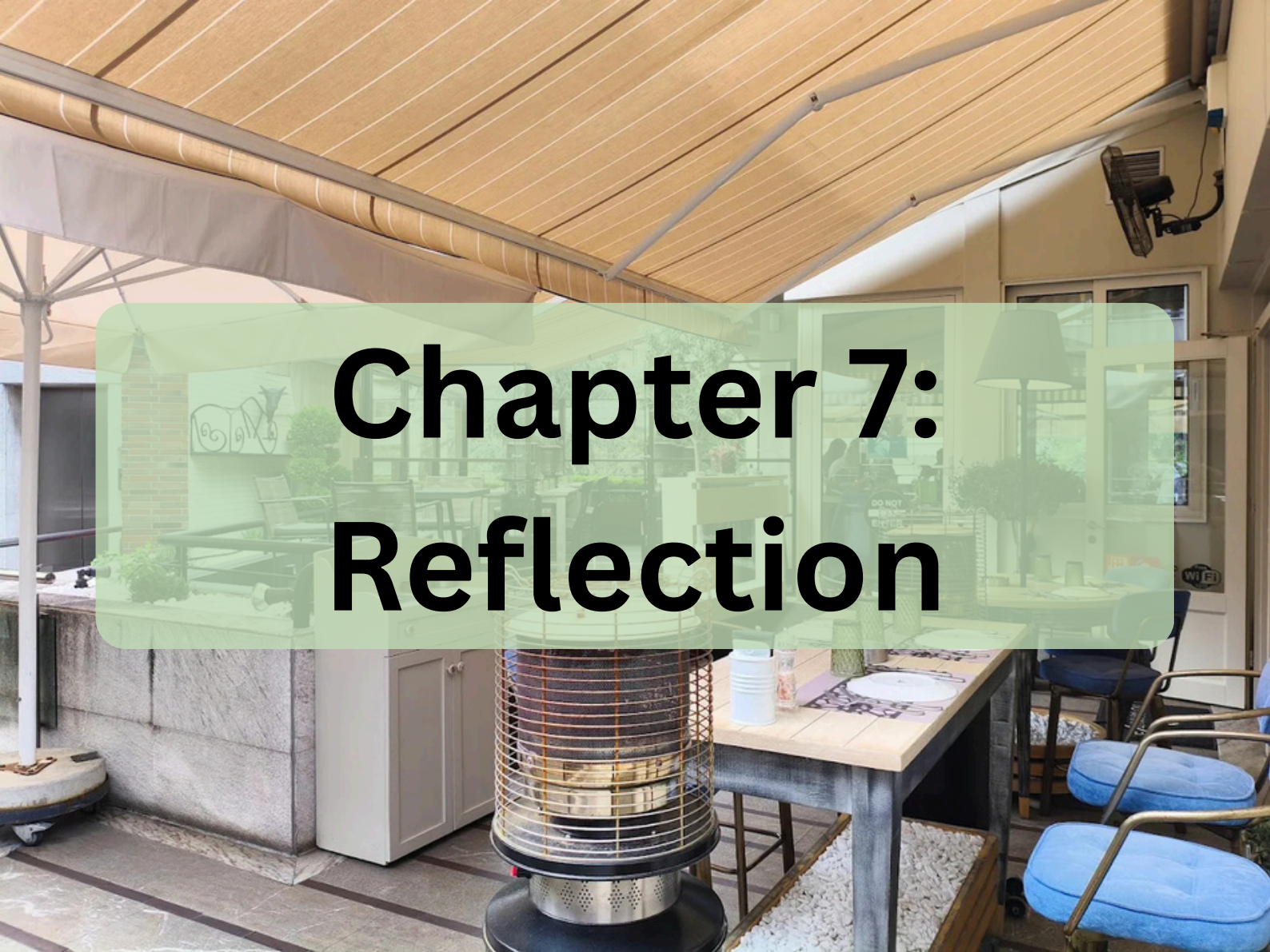




From our teams' own personal observations, we found a strong presence of vegan and vegetarian options at takeaway restaurants, which presents a clear opportunity for the Veggie Map. Many of these establishments already offer plant-based meals that customers can quickly grab on the go, yet these options often remain less visible to potential users. Including takeaway locations with vegan and vegetarian offerings on the Veggie Map would highlight this accessibility and reinforce the platform's goal of promoting plant-based diets in a practical, everyday context.

Expanding the Veggie Map to feature takeaway options would also broaden its appeal to a wider audience. Not every user wants to sit down for a full restaurant experience, and many prefer quick, convenient meals during busy days. By showcasing both dine-in and takeaway choices, the Veggie Map can better meet diverse user needs and attract individuals who value flexibility while still seeking plant-based options.





Chapter 7: Reflection

Our team initially assumed that the limited availability of plant-based options was the main barrier to increasing accessibility, but our findings illustrated that communication and restaurant transparency both played a more significant barrier in increasing accessibility of plant-based options. These findings have displayed to us the importance of addressing both the consumer and the restaurant in accomplishing our project goal. To create a successful Veggie Map, our team must provide accurate and accessible information to both consumers and restaurants. This will allow the Veggie Map to stay sustainable in the future.



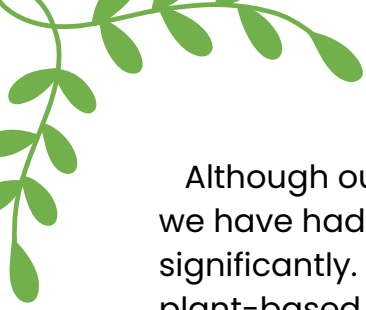
7.1 Limitations

This project faced several limitations that influenced the scope and interpretation of the findings. The team conducted data collection over a seven-week period and relied on a sample drawn primarily from a high-traffic area, the White Tower in Thessaloniki. This approach helped the team reach a diverse group of participants, but it also introduced sampling bias by overrepresenting tourists and individuals who frequent central locations. Consequently, the findings may not fully reflect the perspectives of residents in less central neighborhoods or individuals who dine in different contexts. Additionally, the sample included a majority of meat eaters, which reflects real world demographics but limits deeper insight into strictly vegan and vegetarian populations. During our man on the street surveying, the team could not identify dietary preferences in advance, so participant selection did not specifically target plant-based consumers. This made it more difficult to capture detailed perspectives from individuals who regularly rely on vegan or vegetarian dining options. The sample size, while sufficient for suggesting trends, also limits the ability to generalize findings to the entire population of Greece.

The project also relied heavily on self-reported survey data and short informal interviews, which introduced potential response bias. Participants may have overstated or understated their behaviors, preferences, or awareness of plant-based dining. The team conducted brief interviews with restaurant staff during operating hours, which limited the depth of responses and prevented longer, more detailed discussions.

From a technical perspective, the final Veggie Map design has several limitations that should be considered for future development. The team developed the platform within a limited timeframe, which required prioritizing core functionality over more advanced features. Photo uploads were not fully stored in a permanent shared backend, which may limit how consistently uploaded images can be accessed across different devices or managed over time. The system also relies on manual moderation for reviews, reports, flags, and photos, which could become labor-intensive as user submissions increase. Long-term restaurant accuracy will also depend on continued maintenance, because restaurant hours, locations, menus, and vegan or vegetarian options may change over time. Additionally, the platform was not fully tested under larger data loads, so future work should evaluate performance and usability as the database grows. Even with these limitations, the final design provides a strong foundation for future development and aligns well with the broader goals of the project. Overall, the team designed the Veggie Map not simply as a map, but as a more useful digital resource to help users find vegetarian and vegan dining options in Greece while giving HellasVeg a platform that can continue to grow and improve over time.





Although our team has collected meaningful findings throughout this study, we have had to overcome some barriers that may affect their strength significantly. The team created the Veggie Map to improve the accessibility of plant-based options all over Greece, not just Thessaloniki. And although we have collected substantial findings while in Thessaloniki, we were not able to collect any restaurant data from other places which would have strengthened our findings significantly. This also means that our team only applied improvements to the Veggie Map, such as updated locations and images to the restaurants that the team could access throughout Thessaloniki. Additionally, our team has no prior experience with computer science or developing software, which presented a significant learning curve with this project. We did not understand the coding technology enough to delegate the work of coding the map in an efficient manner, so one team member had to take on the full workload of the coding process. Our team made these limitations clear with both our sponsor and the advisors, to give them a realistic expectation of the team's technical experience. Although we were still able to deliver an improved Veggie Map, a team with more computer science expertise could further improve it.



7.2 Conclusion

The goal of our project was to evaluate and enhance the HellasVeg Veggie Map to improve awareness of vegan and vegetarian lifestyle benefits to better serve both the consumer and the restaurant owners in Greece. Through a combination of survey data and semi structured interviews, our team's findings illustrated opportunities for increasing awareness for plant-based consumers.

Overall, the findings suggest that the main limitation of the Veggie Map was not the lack of plant-based options, but the visibility and engagement of the map itself. While many restaurants claimed they had limited plant-based options, our team found that availability was much higher due to the ability to modify dishes. When comparing survey responses to restaurant interview data, we found that owners were not successfully communicating the flexibility of their dishes to consumers. We also found tourism-shaped plant-based demand as restaurants consistently stated that tourists were the primary consumers of vegan and vegetarian options. This forces many restaurants to adapt their menus for tourist season rather than keeping consistent plant-based options year-round. The low level of awareness and engagement with the HellasVeg Veggie Map suggests that the platform struggles to be a reliable resource for consumers, and restaurants are unlikely to maintain or update their listings if they serve no benefit to them. Enhancing the platform to show modifiable dishes and expanding the network of motivated restaurants could help bridge the communication gap identified in this study. Additionally, emphasizing features that support restaurant visibility and marketing may encourage greater participation from business owners.

Efforts should focus on increasing awareness and improving communication of available options between owners and consumers. By addressing these factors, the Veggie Map has the potential to play a meaningful role in supporting the growth of plant-based dining in Greece.



Bibliography

- Alexandropoulou, I., Gkouvi, A., Kontouli, K. M., Papadopoulou-Maniki, S., Giannioti, A., Bogdanos, D. P., Vassilakou, T., Mouchtouri, V. A., Goulis, D. G., & Grammatikopoulou, M. G. (2025). Sustainable healthy diet practices: A cross-sectional analysis of an adult Greek sample. *Nutrition Journal*, 24(1), Article 32. <https://doi.org/10.1186/s12937-025-01096-7>
- Białek-Drawta, A., Stoń, W., Staśkiewicz-Bartecka, W., Grajek, M., Krupa-Kotara, K., & Kowalski, O. (2024). The psychosocial aspects of vegetarian diets: A cross-sectional study of the motivations, risks, and limitations in daily life. *Nutrients*, 16. <https://doi.org/10.3390/nu16152504>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Cook, B., Leite, J., Rayner, M., Stoffel, S., Van Rijn, E., & Wollgast, J. (2023). Consumer interaction with sustainability labelling on food products: A narrative literature review. *Nutrients*, 15. <https://doi.org/10.3390/nu15173837>
- Creswell, J. W., & Creswell, J. D. (2023). *Research design: qualitative, quantitative, and mixed methods approaches* (6th ed.). SAGE Publications.
- Demartini, E., Vecchiato, D., Finos, L., Mattavelli, S., & Gaviglio, A. (2022). Would you buy vegan meatballs? The policy issues around vegan and meat-sounding labelling of plant-based meat alternatives. *Food Policy*, 108, Article 102310. <https://doi.org/10.1016/j.foodpol.2022.102310>
- Faber, I., Rini, L., Schouteten, J. J., Bom Frøst, M., De Steur, H., & Perez-Cueto, F. J. A. (2024). The mediating role of barriers and trust on the intentions to consume plant-based foods in Europe. *Food Quality and Preference*, 114, Article 105101. <https://doi.org/10.1016/j.foodqual.2024.105101>
- Fragkos, E. (2025, July 28). Need to reduce the EU's promotion of veganism. European Union Parliamentary Question. https://www.europarl.europa.eu/doceo/document/E-10-2025-003113_EN
- Hargreaves, S. M., et al. (2021). Vegetarian Diet: An overview through the perspective of quality of life domains. *International Journal of Environmental Research and Public Health*, 18(8), 4067. <https://doi.org/10.3390/ijerph18084067>
- Hazekamp, A., et al. (2025, July 9). Promoting the consumption of plant-based foods, introducing EU-wide vegan and vegetarian labels, and clarifying the wording of labelling. European Union Parliamentary Question. https://www.europarl.europa.eu/doceo/document/E-10-2025-002799_EN
- HellasVeg. (n.d.). HellasVeg – Hellenic Vegetarian Association. Retrieved February 16, 2026, from <https://hellasveg.gr/en/hellasveg-en/>
- Hollands, G. J., Shemilt, I., Marteau, T. M., Jebb, S. A., Kelly, M. P., Nakamura, R., Suhrcke, M., & Ogilvie, D. (2013). Altering micro-environments to change population health behaviour: towards an evidence base for choice architecture interventions. *BMC Public Health*, 13(1), Article 1218. <https://doi.org/10.1186/1471-2458-13-1218>
- Kaczorowska, J., Rejman, K., Halicka, E., Szczybyło, A., & Górską-Warsewicz, H. (2019). Impact of food sustainability labels on the perceived product value and price expectations of urban consumers. *Sustainability*, 11(24), Article 7240. <https://doi.org/10.3390/su11247240>

- Kansanen, I. (2013). *Vegan travel – The ways how vegan diet influences travel experience*. (Bachelor's thesis at HAAGA-HELIA University of Applied Sciences).
- Luo, J., Ba, S., & Zhang, H. (2012). The effectiveness of online shopping characteristics and well-designed websites on satisfaction. *MIS Quarterly*, 36(4), 1131–1144. <https://doi.org/10.2307/41703501>
- Moser, C. A., & Kalton, G. (1972). *Survey methods in social investigation* (2d ed.). Basic Books.
- Moses, E., Fedosejev, A., Prusty, N., Horton, A., Vice, R., Holmes, E., & Bray, T. (2016). *React, building modern web applications* (1st ed.). Packt Publishing.
- Ottenbacher M, Busam S, Harrington RJ, Allhoff J (2025). The factors impacting on the travel experience of a vegan lifestyle. *International Hospitality Review*, 39(1) 86–104. <https://doi.org/10.1108/IHR-02-2023-0016>
- Parkin, B. L., & Attwood, S. (2022). Menu design approaches to promote sustainable vegetarian food choices when dining out. *Journal of Environmental Psychology*, 79, Article 101721. <https://doi.org/10.1016/j.jenvp.2021.101721>
- Perez-Cueto, F. J. A., Rini, L., Faber, I., Rasmussen, M. A., Bechtold, K.-B., Schouteten, J. J., & De Steur, H. (2022). How barriers towards plant-based food consumption differ according to dietary lifestyle: Findings from a consumer survey in 10 EU countries. *International Journal of Gastronomy and Food Science*, 29, Article 100587. <https://doi.org/10.1016/j.ijgfs.2022.100587>
- Market Data Forecast. (2025). Europe plant-based food market size, share, and industry analysis, 2025–2033. Retrieved February 19, 2026, from <https://www.marketdataforecast.com/market-reports/europe-plant-based-food-market>
- Pinto, R. (2025, May 23). Greece: Consumer study shows increasing interest for plant-based foods. European Vegetarian Union. <https://www.euroveg.eu/greece-consumer-study-shows-increasing-interest-for-plant-based-foods/>
- Rosenfeld, D. L., Bartolotto, C., & Tomiyama, A. J. (2022). Promoting plant-based food choices: Findings from a field experiment with over 150,000 consumer decisions. *Journal of Environmental Psychology*, 81, Article 101825. <https://doi.org/10.1016/j.jenvp.2022.101825>
- Țichindelean, M., Țichindelean, M. T., Cetină, I., & Orzan, G. (2021). A comparative eye-tracking study of usability—Towards sustainable web design. *Sustainability*, 13(18), 10415. <https://doi.org/10.3390/su131810415>
- European Parliament and Council of the European Union. (2011). Regulation (EU) No 1169/2011 on the provision of food information to consumers. <https://www.legislation.gov.uk/eur/2011/1169/contents>
- Visser, L. (2023). *ChatGPT for web design: Create amazing websites* [Video]. Packt Publishing.
- Volgger, M., Taplin, R., Filimonau, V., Kim, B., & Cozzio, C. (2026). Reducing meat consumption among hospitality patrons: A simulation-based experiment on menu design. *International Journal of Hospitality Management*, 133, 104496. <https://doi.org/10.1016/j.ijhm.2025.104496>
- Wang, R. Y., & Strong, D. M. (1996). Beyond Accuracy: What Data Quality Means to Data Consumers. *Journal of Management Information Systems*, 12(4), 5–33. <https://doi.org/10.1080/07421222.1996.11518099>
- World Animal Protection. (2026, January 12). EU delays decision on plant-based food labels. World Animal Protection. <https://www.worldanimalprotection.org/latest/news/eu-plant-based-food-labels-delay>

- Wright, L. B., Haug, J. C., & Huckabee, A. (2019). *Blueprint for retail website design: Attracting and retaining millennial online shoppers*. *Journal of Internet Commerce*, 18(2), 170–196.
<https://doi.org/10.1080/15332861.2019.1584844>
- Yang, J., et al. (2025). Perceived motivators and barriers to consuming a plant-based diet: A qualitative research study. *BMC Nutrition*, 11(1), Article 2. <https://doi.org/10.1186/s40795-025-01100-7>.
- Yeşilçimen, P., & Akin, H. B. (2025). The impact of eating behavior on destination choice: The case of vegetarianism. *Journal of Multidisciplinary Academic Tourism*, 10(1), 35–47.
<https://doi.org/10.31822/jomat.2025-10-1-35>
- Zouni, G., & Klouvidaki, M. I. (2020). Travel behaviour of vegetarians and vegans: Investigation and marketing proposals to facilitate the development of vegan food tourism. In *Restarting tourism*, 268–277. University of Piraeus & Hellenic Open University.

Appendix A: Glossary of Terms

Flexitarian: a person who has a primarily vegetarian diet but occasionally eats meat or fish.

Food environment: The physical, social, economic, and cultural context in which individuals' access, choose, and consume food, including the availability, affordability, accessibility, and marketing of food options.

Plant-based: (of food or a diet) consisting largely or solely of vegetables, grains, pulses, or other foods derived from plants, rather than animal products.

Plant-curious: an individual interested in increasing their intake of plant-based foods—such as fruits, vegetables, legumes, and whole grains—without committing to a strictly vegetarian or vegan diet.

Vegan: an individual who avoids the consumption of all animal-derived products, including meat, poultry, fish, dairy, eggs, and honey, and whose diets consist entirely of plant-based foods such as fruits, vegetables, legumes, nuts, seeds, and whole grains.

Vegetarian: an individual who avoids the consumption of meat, poultry, and fish, while typically including plant-based foods such as fruits, vegetables, legumes, nuts, seeds, and whole grains—and in many cases dairy products and/or eggs.

Appendix B: Restaurant Customer Survey

Q1/ Ερ.1: Do you consent to this survey? / Συναινείτε στη συμμετοχή σας σε αυτή την έρευνα;

- Yes/ Ναι
- No/ Όχι

DIET QUESTIONS/ ΕΡΩΤΗΣΕΙΣ ΔΙΑΤΡΟΦΗΣ

Q2/Ερ.2: How would you describe your diet? / Πώς θα περιγράφατε τη διατροφή σας;

- Regularly eat meat/ Τρώω τακτικά κρέας
- Actively trying to reduce meat consumption (Flexitarian)/ Προσπαθώ ενεργά να μειώσω την κατανάλωση κρέατος
- Vegetarian/ Χορτοφάγος
- Vegan/ Αυστηρός Χορτοφάγος

Q3/Ερ.3: Where do you currently live? / Πού μένετε αυτή τη στιγμή;

- Thessaloniki/ Θεσσαλονίκη
- Somewhere else in Greece/ Κάπου αλλού στην Ελλάδα
- Another country/ Σε άλλη χώρα

TRAVEL QUESTIONS/ ΕΡΩΤΗΣΕΙΣ ΓΙΑ ΤΑΞΙΔΙΑ

The following questions are about how your dietary preferences (e.g. vegan, vegetarian, etc.) affect your travel experiences. / Οι παρακάτω ερωτήσεις αφορούν το πώς οι διατροφικές σας προτιμήσεις (π.χ. vegan, vegetarian κ.λπ.) επηρεάζουν τις ταξιδιωτικές σας εμπειρίες.

T.1 How often does your dietary preference influence your choice of travel destination? / Πόσο συχνά η διατροφική σας προτίμηση επηρεάζει την επιλογή του ταξιδιωτικού σας προορισμού;

- Always/ Πάντα
- Often/ Συχνά
- Sometimes/ Μερικές φορές
- Rarely/ Σπάνια
- Never/ Ποτέ

T.2 Have you ever chosen a destination specifically because it offers good vegan/vegetarian food options? / Έχετε επιλέξει ποτέ έναν προορισμό ειδικά επειδή προσφέρει καλές επιλογές χορτοφαγικής διατροφής;

- Yes/ Ναι
- No/ Όχι

T.3 Before traveling, how often do you research vegan and vegetarian food options at your destination? / Πριν ταξιδέψετε, πόσο συχνά αναζητάτε για χορτοφαγικές επιλογές στον προορισμό σας;

- Always/ Πάντα
- Often/ Συχνά
- Sometimes/ Μερικές φορές
- Rarely/ Σπάνια
- Never/ Ποτέ

MEAT EATER QUESTIONS/ ΕΡΩΤΗΣΕΙΣ ΓΙΑ ΚΡΕΑΤΟΦΑΓΟΥΣ

The following questions are about dining experiences with vegan/vegetarian options. Please answer to the best of your ability. / Οι παρακάτω ερωτήσεις αφορούν εμπειρίες εστίασης με επιλογές χορτοφαγικής διατροφής.

Q4/Ερ.4: How often do you intentionally look to dine in restaurants with vegan/vegetarian options to accommodate people in your group? / Πόσο συχνά αναζητάτε σκόπιμα εστιατόρια με vegan/vegetarian επιλογές για να εξυπηρετήσετε άτομα της παρέας σας;

- Very Often/ Πολύ συχνά
- Occasionally/ Περιστασιακά
- Rarely/ Σπάνια
- Never/ Ποτέ

Q5/Ερ.5: When choosing a restaurant, how important are vegetarian/vegan options to you (even if you eat meat)? / Όταν επιλέγετε ένα εστιατόριο, πόσο σημαντικές είναι για εσάς οι vegetarian/vegan επιλογές (ακόμα και αν τρώτε κρέας);

- Extremely important/ Εξαιρετικά σημαντικές
- Very important/ Πολύ σημαντικές
- Slightly important/ Λίγο σημαντικές
- Not at all important/ Καθόλου σημαντικές

Q6/Ερ.6: How often do you choose vegan/vegetarian main dishes when dining in a restaurant? / Πόσο συχνά επιλέγετε vegan/vegetarian κυρίως πιάτα όταν τρώτε σε ένα εστιατόριο;

Very Often/ Πολύ συχνά

- Occasionally/ Περιστασιακά
- Rarely/Σπάνια
- Never/ Ποτέ

Q7/Ερ.7: What would most encourage you to try a vegetarian or vegan dish? / Τι θα σας ενθάρρυνε περισσότερο να δοκιμάσετε ένα vegetarian (χορτοφαγικό) ή vegan (αυστηρώς χορτοφαγικό) πιάτο;

- Taste/appearance of the dish/ Γεύση/εμφάνιση του πιάτου
- Recommendation from friends or reviews/ Σύσταση από φίλους ή κριτικές
- Health benefits/ Οφέλη για την υγεία
- Environmental or ethical reasons/ Περιβαλλοντικοί ή ηθικοί λόγοι
- Lower price/ Χαμηλότερη τιμή

Q8/Ερ.8: When looking at a menu, what information do you find most helpful? /

Κοιτάζοντας ένα μενού, ποιες πληροφορίες βρίσκετε πιο χρήσιμες;

- Clear labeling of vegetarian/vegan items/ Σαφής σήμανση των vegetarian/vegan επιλογών
- Ingredient lists/ Λίστες συστατικών
- Photos of dishes/ Φωτογραφίες των πιάτων
- Nutritional information/ Διατροφικές πληροφορίες
- Popular or recommended items/ Δημοφιλή ή προτεινόμενα πιάτα

Q9/Ερ.9: When using a restaurant map, what feature is most important to you? / Όταν χρησιμοποιείτε έναν χάρτη εστιατορίων, ποιο χαρακτηριστικό είναι πιο σημαντικό για εσάς;

- Accurate location and directions/ Ακριβής τοποθεσία και οδηγίες
- Menu availability/ Διαθεσιμότητα μενού
- General ratings and reviews for food and service/ Γενικές βαθμολογίες και κριτικές για φαγητό και εξυπηρέτηση
- Ratings and reviews on specific dishes/ Βαθμολογίες και κριτικές για συγκεκριμένα πιάτα
- Filters (e.g., cuisine type, price)/ Φίλτρα (π.χ. είδος φαγητού, τιμή)
- Photos of food and venue/ Φωτογραφίες φαγητού και χώρου

Q10/Ερ.10: What type of filters would you be most likely to use on a restaurant map? /

Ποιον τύπο φίλτρων θα ήταν πιο πιθανό να χρησιμοποιήσετε σε έναν χάρτη εστιατορίων;

- Price range/ Εύρος τιμών
- Cuisine type/ Είδος κουζίνας
- Availability of vegetarian/vegan options/ Διαθεσιμότητα vegetarian/vegan επιλογών
- Dietary needs (e.g., gluten-free)/ Διατροφικές ανάγκες (π.χ. χωρίς γλουτένη)
- View scoring/ Βαθμολογία

Q11/Ερ.11: How likely are you to use a map specifically highlighting vegetarian/vegan options? /

Πόσο πιθανό είναι να χρησιμοποιήσετε έναν χάρτη που επισημαίνει ειδικά vegetarian/vegan επιλογές;

- Very likely/ Πολύ πιθανό
- Somewhat likely/ Μάλλον πιθανό
- Neutral/ Ουδέτερα
- Unlikely/ Μάλλον απίθανο
- Very unlikely/ Πολύ απίθανο

Q12/Ερ.12: What additional features would make a restaurant map more useful to you? /

Ποιο επιπλέον χαρακτηριστικό θα έκανε έναν χάρτη εστιατορίων πιο χρήσιμο για εσάς;

- User reviews focused on taste/ Κριτικές χρηστών εστιασμένες στη γεύση
- "Best dish" recommendations/ Προτάσεις για το «καλύτερο πιάτο»
- Real-time availability or wait times/ Διαθεσιμότητα σε πραγματικό χρόνο ή χρόνοι αναμονής
- Integration with navigation apps/ Σύνδεση με εφαρμογές πλοήγησης
- Social sharing or friend recommendations/ Κοινοποίηση σε κοινωνικά δίκτυα ή προτάσεις φίλων

Q13/Ερ.13: When traveling, how do you typically choose where to eat? / Όταν ταξιδεύετε, πώς επιλέγετε συνήθως πού θα φάτε;

- Online reviews (Google, TripAdvisor, etc.)/ Online κριτικές (Google, TripAdvisor, κ.λπ.)
- Social media (Instagram, TikTok)/ Μέσα κοινωνικής δικτύωσης (Instagram, TikTok)
- Recommendations from locals/friends/ Συστάσεις από ντόπιους/φίλους
- Walking around and exploring/ Περπατώντας και εξερευνώντας
- Food or restaurant apps/maps/ Εφαρμογές/χάρτες φαγητού ή εστιατορίων

Q14/Ερ.14: While traveling, how interested are you in trying vegetarian or vegan restaurants? / Κατά τη διάρκεια ενός ταξιδιού, πόσο σας ενδιαφέρει να δοκιμάσετε vegetarian ή vegan εστιατόρια;

- Very interested/ Πολύ
- Somewhat interested/ Αρκετά
- Neutral/ Ουδέτερα
- Not very interested/ Όχι ιδιαίτερα
- Not interested at all/ Καθόλου

We are working with HellasVeg to create a new and improved "Veggie Map". The Veggie Map is an online mapping system that would highlight and help consumers find vegan and vegetarian dining options in Greece. Please take a look at the Veggie Map [here](#) and answer the following questions regarding your opinion on the Veggie Map concept. / Συνεργαζόμαστε με τη HellasVeg για τη δημιουργία ενός νέου και βελτιωμένου "Veggie Map". Πρόκειται για ένα διαδικτυακό σύστημα χαρτογράφησης που θα αναδεικνύει και θα βοηθά τους καταναλωτές να βρίσκουν vegan και vegetarian επιλογές εστίασης στην Ελλάδα. Παρακαλούμε δείτε τον χάρτη [εδώ](#) και απαντήστε στις ακόλουθες ερωτήσεις.

Q15/Ερ.15: Have you previously heard of the HellasVeg Veggie Map? / Είχατε ακούσει στο παρελθόν για τον Veggie Map της HellasVeg;

- Yes/ Ναι
- No/ Όχι
- Not sure/ Δεν είμαι σίγουρος-η

Q16/Ερ.16: Which features of the Veggie Map would you find most important? / Ποια χαρακτηριστικά του Veggie Map θεωρείτε πιο σημαντικά;

- Customer reviews/ Κριτικές πελατών
- Featured/promoted listings/ Προβεβλημένες καταχωρήσεις
- Event promotion/ Προώθηση εκδηλώσεων
- Multi-language support/ Υποστήριξη πολλών γλωσσών
- Search Filters (Region, Cuisine, Price, etc)/ Φίλτρα αναζήτησης (περιοχή, κουζίνα, τιμή κ.λπ.)
- Other (Describe Below)/ Άλλο (Περιγράψτε παρακάτω)

Q17/Ερ.17: After the Veggie Map website is launched, how likely is it that you would use it? / Μετά την κυκλοφορία της ιστοσελίδας του Veggie Map, πόσο πιθανό είναι να τον χρησιμοποιήσετε;

- Very likely/ Πολύ πιθανό
- Somewhat likely/ Μάλλον πιθανό
- Not likely/ Μάλλον απίθανο

Q18/Ερ.18: How easy is it to navigate the Veggie Map? / Πόσο εύκολη είναι η πλοήγηση στον Veggie Map;

- Extremely difficult/ Εξαιρετικά δύσκολη
- Somewhat difficult/ Σχετικά δύσκολη
- Neither easy nor difficult/ Ούτε εύκολη ούτε δύσκολη
- Somewhat easy/ Σχετικά εύκολη
- Extremely easy/ Εξαιρετικά εύκολη

Q19/Ερ.19: How visually appealing is the Veggie Map? / Πόσο ελκυστικός οπτικά είναι ο Veggie Map;

It looks perfect, everything is organized, sleek, and visually appealing/ Φαίνεται τέλειος, οργανωμένος και κομψός.

- It looks okay, but some areas are hard to look at/ Φαίνεται εντάξει, αλλά ορισμένα σημεία είναι δύσχρηστα.
- It looks okay, but it does not feel sleek and organized/ Φαίνεται εντάξει, αλλά δεν δίνει την αίσθηση του κομψού και οργανωμένου.
- It does not look good, the map is hard to look at/ Δεν φαίνεται καλός, ο χάρτης είναι δύσκολος στην ανάγνωση
- It does not look good, the text boxes and pin markers are visually unappealing/ Δεν φαίνεται καλός, τα πλαίσια κειμένου και οι δείκτες δεν είναι καλαίσθητα.
- It looks terrible, it is unorganized and hard to look at/ Φαίνεται απαίσιος, είναι ανοργάνωτος και κουραστικός.

Q20/Ερ.20: If you would like to learn more about the Veggie Map and participate in beta testing for the map's development, please enter your email or phone number below. If not, feel free to ignore this question. / Αν θέλετε να μάθετε περισσότερα ή να συμμετάσχετε στη δοκιμαστική φάση (beta testing), εισάγετε το email ή το τηλέφωνό σας.

Text box to submit email/ phone number/ [Πλαίσιο κειμένου για υποβολή email/ τηλεφώνου]

NOT MEAT EATER/ ΓΙΑ ΜΗ ΚΡΕΑΤΟΦΑΓΟΥΣ (Vegetarians/Vegans)

The following questions focus on vegan/vegetarian dining experiences in Thessaloniki. /Οι παρακάτω ερωτήσεις εστιάζουν στην εμπειρία χορτοφαγικής εστίασης στη Θεσσαλονίκη.

Q4/Ερ.4: When dining out, do you mainly choose vegan/vegetarian restaurants or restaurants that have vegan/vegetarian main course options? / Όταν βγαίνετε για φαγητό, επιλέγετε κυρίως αμιγώς vegan/vegetarian εστιατόρια ή συμβατικά εστιατόρια που έχουν κάποιες vegan/vegetarian επιλογές κυρίως πιάτων;

- vegan or vegetarian restaurants (VG)/ Vegan ή vegetarian εστιατόρια (VG)
- vegan/vegetarian friendly restaurants (VF)/ Εστιατόρια φιλικά προς
- vegans/vegetarians (VF)

Q5/Ερ.5: How do you choose a restaurant to dine in? / Πώς επιλέγετε ένα εστιατόριο;

- Word of mouth/ Από στόμα σε στόμα
- Social media / Μέσα κοινωνικής Δικτύωσης
- Google Maps
- Apps/ Εφαρμογές
- Websites or Online Guides/ Ιστοσελίδες ή Online οδηγούς
- Other/ Άλλο

Q6/Ερ.6: How clearly do restaurants label vegetarian/vegan dishes? / Πόσο ξεκάθαρα επισημαίνουν τα εστιατόρια τα vegetarian/vegan πιάτα;

- Very clearly/ Πολύ ξεκάθαρα
- Somewhat clear/ Αρκετά
- Neutral/ Ουδέτερα
- Poorly/ Ανεπαρκώς
- Not at all/ Καθόλου

Q7/Ερ.7: How difficult is it to find a conventional restaurant with adequate vegan/vegetarian main course options? / Πόσο δύσκολο είναι να βρείτε ένα συμβατικό εστιατόριο με επαρκείς vegan/vegetarian επιλογές κυρίως πιάτων;

- Very difficult/ Πολύ δύσκολο
- Difficult/ Δύσκολο
- Somewhat difficult/ Κάπως δύσκολο
- Rarely difficult/ Σπανίως δύσκολο
- Never difficult/ Καθόλου δύσκολο

Q8/Ερ.8: Do menu descriptions accurately reflect ingredients? / Οι περιγραφές του μενού αντικατοπτρίζουν με ακρίβεια τα συστατικά;

- Strongly agree/ Συμφωνώ απόλυτα
- Somewhat agree/ Κάπως συμφωνώ
- Neutral/ Ουδέτερα
- Somewhat disagree/ Κάπως διαφωνώ
- Strongly disagree/ Διαφωνώ απόλυτα

Q9/Ερ.9: In your experience, does the restaurant staff understand the difference between vegetarians and vegans? / Σύμφωνα με την εμπειρία σας, το προσωπικό των εστιατορίων κατανοεί τη διαφορά μεταξύ vegetarian και vegan;

- Strongly Agree/ Συμφωνώ απόλυτα
- Somewhat agree/ Κάπως συμφωνώ
- Neither agree nor disagree/ Ούτε συμφωνώ ούτε διαφωνώ
- Somewhat disagree/ Κάπως διαφωνώ
- Strongly disagree/ Διαφωνώ απόλυτα

Q10/Ερ.10: Do you think vegan/vegetarian options are easily accessible in Thessaloniki? / Πιστεύετε ότι οι vegan/vegetarian επιλογές είναι εύκολα προσβάσιμες στη Θεσσαλονίκη;

- Strongly agree/ Συμφωνώ απόλυτα
- Somewhat agree/ Κάπως συμφωνώ
- Neutral/ Ουδέτερα
- Somewhat disagree/ Κάπως διαφωνώ
- Strongly disagree/ Διαφωνώ απόλυτα

Q11/Ερ.11: How do you feel vegan/vegetarian dishes are priced compared to meat-based dishes? / Πώς κρίνετε τις τιμές των vegan/vegetarian πιάτων σε σύγκριση με τα πιάτα με κρέας;

- Much cheaper/ Πολύ φθηνότερες
- Slightly cheaper/ Ελαφρώς φθηνότερες
- About the same/ Περίπου ίδιες
- Slightly more expensive/ Ελαφρώς ακριβότερες
- Much more expensive/ Πολύ ακριβότερες
- Do not know/ Δεν γνωρίζω

Q12/Ερ.12: What information is most important for you when finding a place to eat? /

Ποιες πληροφορίες είναι πιο σημαντικές για εσάς όταν ψάχνετε μέρος για φαγητό;

- Consumer Reviews/ Κριτικές Καταναλωτών
- Photos/ Φωτογραφίες
- Locations & Contact Info/ Τοποθεσία & Επικοινωνία
- Certification/Verification Badge/ Σήμα Πιστοποίησης
- Updated Menu/ Ενημερωμένο Μενού

Q13/Ερ.13: Are you overall satisfied with vegan/vegetarian restaurant options in

Greece?/ Είστε συνολικά ικανοποιημένοι με τις επιλογές vegan/vegetarian εστιατορίων στην Ελλάδα;

- Strongly agree/ Συμφωνώ απόλυτα
- Somewhat agree/ Κάπως συμφωνώ
- Neutral/ Ουδέτερα
- Somewhat disagree/ Κάπως διαφωνώ
- Strongly disagree/ Διαφωνώ απόλυτα

Q14/Ερ.14: While traveling, how important is it for you to find vegetarian or vegan main course dishes in restaurants?/ Κατά τη διάρκεια ενός ταξιδιού, πόσο σημαντικό είναι για εσάς να βρίσκετε vegetarian ή vegan κυρίως πιάτα στα εστιατόρια;

- Very important/ Πολύ σημαντικό
- Somewhat important/ Κάπως σημαντικό
- Neutral/ Ουδέτερα
- Not very important/ Όχι τόσο σημαντικό
- Not important at all/ Καθόλου σημαντικό

We are working with HellasVeg to create a new and improved "Veggie Map". The Veggie Map is an online mapping system that would highlight and help consumers find vegan and vegetarian dining options in Greece. Please take a look at the Veggie Map [here](#) and answer the following questions regarding your opinion on the Veggie Map concept. / Συνεργαζόμαστε με τη HellasVeg για τη δημιουργία ενός νέου και βελτιωμένου «Veggie Map». Ο Veggie Map είναι ένα διαδικτυακό σύστημα χαρτογράφησης που θα αναδεικνύει και θα βοηθά τους καταναλωτές να βρίσκουν vegan και vegetarian επιλογές εστίασης στην Ελλάδα. Παρακαλούμε ρίξτε μια ματιά στον Veggie Map εδώ και απαντήστε στις παρακάτω ερωτήσεις σχετικά με την άποψή σας για την ιδέα του χάρτη.

Q15/Ερ.15: Have you previously heard of the HellasVeg Veggie Map? / Είχατε ακούσει στο παρελθόν για τον Veggie Map της HellasVeg;

- Yes/Ναι
- No/ Όχι
- Not sure/ Δεν είμαι σίγουρος/-η

Q16/Ερ.16: Which features of the Veggie Map would you find most important? / Ποια χαρακτηριστικά του Veggie Map θα θεωρούσατε πιο σημαντικά;

- Customer reviews/ Κριτικές πελατών
- Featured/promoted listings/ Προβεβλημένες καταχωρήσεις
- Event promotion/ Προώθηση εκδηλώσεων
- Multi-language support/ Υποστήριξη πολλαπλών γλωσσών
- Search Filters (Region, Cuisine, Price, etc)/ Φίλτρα αναζήτησης (Περιοχή, Κουζίνα, Τιμή, κ.λπ.)
- Other (Describe Below)/ Άλλο (Περιγράψτε παρακάτω)

Q17/Ερ.17: After the Veggie Map website is launched, how likely is it that you would use it? / Μετά την κυκλοφορία της ιστοσελίδας του Veggie Map, πόσο πιθανό είναι να τον χρησιμοποιήσετε;

- Very likely/ Πολύ πιθανό
- Somewhat likely/ Μάλλον πιθανό
- Not likely/ Δεν είναι πιθανό

Q18/Ερ.18: How easy is it to navigate the Veggie Map? / Πόσο εύκολη είναι η πλοήγηση στον Veggie Map;

- Extremely difficult/ Εξαιρετικά δύσκολη
- Somewhat difficult/ Κάπως δύσκολη
- Neither easy nor difficult/ Ούτε εύκολη ούτε δύσκολη
- Somewhat easy/ Κάπως εύκολη
- Extremely easy/ Εξαιρετικά εύκολη

Q19/Ερ.19: How visually appealing is the Veggie Map? / Πόσο ελκυστικός οπτικά είναι ο Veggie Map;

- It looks perfect, everything is organized, sleek, and visually appealing/ Φαίνεται τέλειος· όλα είναι οργανωμένα, κομψά και οπτικά ελκυστικά.
- It looks okay, but some areas are hard to look at/ Φαίνεται εντάξει, αλλά ορισμένα σημεία είναι κουραστικά στο μάτι.
- It looks okay, but it does not feel sleek and organized/ Φαίνεται εντάξει, αλλά δεν δίνει την αίσθηση του κομψού και οργανωμένου.
- It does not look good; the map is hard to look at/ Δεν φαίνεται καλός· ο χάρτης είναι δύσκολος στην ανάγνωση.
- It does not look good; the text boxes and pin markers are visually unappealing/ Δεν φαίνεται καλός· τα πλαίσια κειμένου και οι δείκτες (pins) δεν είναι καλαίσθητα
- It looks terrible, it is unorganized and hard to look at/ Φαίνεται απαίσιος· είναι ανοργάνωτος και πολύ κουραστικός στο μάτι.

Q20/Ερ.20: If you would like to learn more about the Veggie Map and participate in beta testing for the map's development, please enter your email or phone number below. If not, feel free to ignore this question. / Εάν θέλετε να μάθετε περισσότερα για τον Veggie Map και να συμμετάσχετε στη δοκιμαστική φάση (beta testing) για την ανάπτυξη του χάρτη, παρακαλούμε εισάγετε το email ή τον αριθμό τηλεφώνου σας παρακάτω. Εάν όχι, μπορείτε να αγνοήσετε αυτή την ερώτηση.

Text box to submit email/ phone number/ [Πλαίσιο κειμένου για υποβολή email/τηλεφώνου]

Appendix C: Survey Consent Form

We are a group of students from Worcester Polytechnic Institute in Worcester, Massachusetts, USA and we are working on a collaborative project with HellasVeg to better understand and improve access to vegetarian and vegan restaurant information in Greece. The Hellenic Vegetarian Association, also known as HellasVeg, is an organization whose founding cause is to highlight and promote the vegetarian way of life, to everyone, without exclusions and dogmatism, and to inspire them in taking part of the responsibility that today's person should carry for himself, the planet, and our ecosystem. The purpose of this survey is to learn more about current experiences, challenges, and perspectives related to plant-based dining and how tools like the Veggie Map could better support the community. We will be asking questions about experiences, eating habits, and design considerations. This survey will take approximately 5 minutes to complete. Your participation is completely voluntary, and you may withdraw, or skip it at any time. Please remember that your answers will remain anonymous. No names or identifying information will appear on the questionnaires or in any of the project reports or publications. Your participation is greatly appreciated. Should you have any questions or concerns, we can be reached at gr-hellasveg-D26 or through our advisors Melissa Butler, (mbutler@wpi.edu) Robert Kinicki, (rek@wpi.edu) For more information about this research or about the rights of research participants, please contact irb@wpi.edu . You can learn more about HellasVeg at <https://hellasveg.gr/> or <https://www.instagram.com/hellasveg/> or contact us at info@hellasveg.gr .

Appendix C.1: Greek Translation of Survey Consent Form

Είμαστε μια ομάδα φοιτητών από το Worcester Polytechnic Institute (WPI) του Worcester της Μασαχουσέτης, ΗΠΑ και συμμετέχουμε εθελοντικά σε ένα πρότζεκτ σε συνεργασία με τη HellasVeg, με σκοπό την καλύτερη κατανόηση και τη βελτίωση της πρόσβασης σε πληροφορίες για χορτοφαγικά (vegetarian) και αυστηρά χορτοφαγικά (vegan) εστιατόρια στην Ελλάδα. Ο Σύλλογος Ελλήνων Χορτοφάγων, γνωστός και ως HellasVeg, είναι ένας οργανισμός με ιδρυτικό σκοπό την ανάδειξη και προώθηση του χορτοφαγικού τρόπου ζωής προς όλους, χωρίς αποκλεισμούς και δογματισμούς, και η παροχή έμπνευσης για την ανάληψη της ευθύνης που οφείλει να έχει ο σημερινός άνθρωπος για τον εαυτό του, τον πλανήτη και το οικοσύστημά μας. Σκοπός αυτής της έρευνας είναι η συλλογή πληροφοριών για τις τρέχουσες εμπειρίες, τις προκλήσεις και τις απόψεις σχετικά με τη χορτοφαγική διατροφή και πώς εργαλεία όπως το Veggie Map θα μπορούσαν να υποστηρίξουν καλύτερα την κοινότητα. Θα σας υποβάλουμε ερωτήσεις σχετικά με τις εμπειρίες σας, τις διατροφικές σας συνήθειες, καθώς και τη γνώμη σας πάνω σε σχεδιαστικά ζητήματα. Η συμπλήρωση του ερωτηματολογίου θα διαρκέσει περίπου 5 λεπτά. Η συμμετοχή σας είναι εντελώς εθελοντική και μπορείτε να αποχωρήσετε ανά πάσα στιγμή. Παρακαλούμε να θυμάστε ότι οι απαντήσεις σας θα παραμείνουν ανώνυμες. Κανένα όνομα ή στοιχείο ταυτοποίησης δεν θα εμφανίζεται στα ερωτηματολόγια ή σε οποιαδήποτε από τις εκθέσεις ή δημοσιεύσεις του προτζεκτ. Η συμμετοχή σας εκτιμάται ιδιαίτερα. Εάν έχετε ερωτήσεις ή προβληματισμούς, μπορείτε να επικοινωνήσετε μαζί μας στο gr-hellasveg-D26 ή μέσω των συμβούλων μας, Melissa Butler (mbutler@wpi.edu) και Robert Kinicki (rek@wpi.edu). Για περισσότερες πληροφορίες σχετικά με αυτή την έρευνα ή τα δικαιώματα των συμμετεχόντων στην έρευνα, παρακαλούμε επικοινωνήστε με το irb@wpi.edu. Μπορείτε να μάθετε περισσότερα για τη HellasVeg στο <https://hellasveg.gr/> ή στο <https://www.instagram.com/hellasveg/> ή να επικοινωνήσετε μαζί μας στο info@hellasveg.gr .

Appendix D: Informal Interview Questions

Q1.M Have you heard of the HellasVeg Veggie Map or something similar to Happy Cow?

Q2.B What motivates you to offer vegetarian or vegan options at your restaurant?

Q3.B What challenges, if any, do you face in providing vegetarian or vegan menu items (e.g., sourcing ingredients, training staff, customer perception)?

Q4.B What type of information about your restaurant would you like to display to attract vegan/vegetarian customers?

Q5.M If there was a simplified way of uploading your dishes to the Veggie Map, would you do it?

Appendix E: Formal Interview Questions

Warm up (WU-O)

WU-O1. How long have you been in business?

WU-O2. How long have you been offering vegetarian and vegan options?

Food Environment (FE-O)

FE-O1. What motivates your restaurant to offer vegetarian or vegan options?

FE-O2. How would you describe the demand for plant-based options in Thessaloniki?

FE-O3. What kind of challenges does your restaurant face in offering vegetarian or vegan menu items?

Marketing & Information Tools (R-O)

R-O1. What platforms or tools do you currently use to promote your restaurant to vegetarian or vegan customers?

R-O2. How important are online reviews in attracting customers interested in plant-based options?

R-O3. Are you currently enrolled in Happy Cow? Why?

R-O4. If you used Happy Cow to update info, was it helpful in any way?

Veggie Map Use & Engagement (VM-O)

VM-O1. How likely would you be to claim or manage your restaurant's profile on a veggie-focused map?

VM-O2. What would encourage you to regularly update menu information or respond to customer reviews?

Appendix F: Interview Consent Form

We are students from Worcester Polytechnic Institute, Massachusetts, USA working with HellasVeg to better understand and improve access to vegetarian and vegan restaurant information in Greece. We are conducting interviews to learn more about current experiences, challenges, and perspectives related to plant-based dining and how tools like the Veggie Map could better support the community. This interview will take approximately 30 minutes. Your participation is completely voluntary, and you may stop the interview at any time or refuse to answer any questions that we ask. This interview is confidential—no names or identifying information will appear in any project reports or publications unless you have explicitly agreed to have your name published.

With your permission, we will be recording this interview and using the recording for transcription purposes

Should you have any questions or concerns upon completion of this interview, we can be reached at gr-hellasveg-D26 or through our advisors Melissa Butler, (mbutler@wpi.edu) Robert Kinicki, (rek@wpi.edu). For more information about this research or about the rights of research participants, please contact Ruth McKeogh irb@wpi.edu.

Do you consent to this interview?

Do you consent to having this interview recorded?

Appendix G: Veggie Map Prototype

Evaulation Survey

Before completing this survey, please review the enhanced HellasVeg Veggie Map using the link below. Take some time to explore the platform, including searching for restaurants, viewing filters, and checking restaurant details. Your responses will help us evaluate usability, functionality, and overall user experience to improve the map. // Πριν ολοκληρώσετε αυτή την έρευνα, παρακαλούμε ελέγξτε τον αναβαθμισμένο χάρτη Veggie Map της HellasVeg χρησιμοποιώντας τον παρακάτω σύνδεσμο. Αφιερώστε λίγο χρόνο για να εξερευνήσετε την πλατφόρμα, αναζητώντας εστιατόρια, δοκιμάζοντας τα φίλτρα και ελέγχοντας τις λεπτομέρειες των καταστημάτων. Οι απαντήσεις σας θα μας βοηθήσουν να αξιολογήσουμε τη χρηστικότητα, τη λειτουργικότητα και τη συνολική εμπειρία χρήστη για τη βελτίωση του χάρτη.

[CLICK HERE TO VIEW THE VEGGIE MAP](#) / ΚΑΝΤΕ ΚΛΙΚ ΕΔΩ ΓΙΑ ΝΑ ΔΕΙΤΕ ΤΟΝ VEGGIE MAP

This section asks about your general impressions of using the Veggie Map including enjoyment, ease of navigation, and the speed at which you could find vegan or vegetarian options. // Αυτή η ενότητα αφορά τις γενικές σας εντυπώσεις από τη χρήση του Veggie Map, συμπεριλαμβανομένης της ικανοποίησης, της ευκολίας πλοήγησης και της ταχύτητας με την οποία εντοπίσατε vegan ή χορτοφαγικές επιλογές.

Overall Experience/ Συνολική Εμπειρία

Q1.OE How would you describe your overall experience using the Veggie Map? / Ε1.ΣΕ Πώς θα περιγράφατε τη συνολική εμπειρία χρήσης του Veggie Map;

- Very Enjoyable/ Πολύ ευχάριστη
- Somewhat Enjoyable/ Σχετικά ευχάριστη
- Neutral/ Ουδέτερη
- Somewhat Unenjoyable/ Σχετικά δυσάρεστη
- Very Unenjoyable/ Πολύ δυσάρεστη

Q2.OE How easy was it to navigate the Veggie Map? / Ε2.ΣΕ Πόσο εύκολη ήταν η πλοήγηση στον Veggie Map;

- Very easy/ Πολύ εύκολη
- Easy/ Εύκολη
- Neither easy nor difficult/ Ούτε εύκολη ούτε δύσκολη
- Difficult/ Δύσκολη
- Very difficult/ Πολύ δύσκολη

Q3.OE How quickly could you find vegan/vegetarian options? / Ε3.ΣΕ Πόσο γρήγορα μπορέσατε να βρείτε vegan/χορτοφαγικές επιλογές;

- Very quickly/ Πολύ γρήγορα
- Somewhat quickly/ Σχετικά γρήγορα
- Neutral/ Ουδέτερα
- Somewhat slowly/ Σχετικά αργά
- Very slowly/ Πολύ αργά

These questions focus on specific features of the Veggie Map, such as search functions, filters, and map layout. We also ask whether you experienced any confusion or difficulty and for your suggestions for improvement. / Αυτές οι ερωτήσεις εστιάζουν σε συγκεκριμένες λειτουργίες του Veggie Map, όπως η αναζήτηση, τα φίλτρα και η διάταξη του χάρτη. Επίσης, σας ρωτάμε αν αντιμετωπίσατε κάποια σύγχυση ή δυσκολία και ζητάμε τις προτάσεις σας για βελτίωση.

Usability & Features/ Χρηστικότητα & Λειτουργίες

Q4.UF Which features did you find most helpful? (Select all that apply) / Ε4.ΧΛ Ποιες λειτουργίες βρήκατε πιο χρήσιμες; (Επιλέξτε όλα όσα ισχύουν)

- Search function/ Λειτουργία αναζήτησης
- Filters (vegan, vegan-friendly, region, etc.)/ Φίλτρα (vegan, vegan-friendly, περιοχή, κ.λπ.)
- Map layout/ Διάταξη χάρτη
- Restaurant details/ Λεπτομέρειες εστιατορίων
- Other: (fill text box below) / Άλλο: (συμπληρώστε στο πλαίσιο κειμένου παρακάτω)

Q6.UF What is ONE improvement that would make the Veggie Map better? / Ε6.ΧΛ Ποια είναι η ΜΙΑ βελτίωση που θα έκανε τον Veggie Map καλύτερο;

Short answer response/ Σύντομη απάντηση

This section evaluates the perceived usefulness of the Veggie Map for everyday dining and travel, your confidence in using it in a new city, and how likely you are to continue using or recommend it./ Αυτή η ενότητα αξιολογεί την αντιλαμβανόμενη χρησιμότητα του Veggie Map για την καθημερινή εστίαση και τα ταξίδια, την αυτοπεποίθησή σας στη χρήση του σε μια νέα πόλη, καθώς και το πόσο πιθανό είναι να συνεχίσετε να τον χρησιμοποιείτε ή να τον προτείνετε.

Value & Future Use/ Αξία & Μελλοντική Χρήση

Q7.V How confident would you feel using the Veggie Map in a new city? / Ε7.Α Πόσο σίγουροι θα νιώθατε χρησιμοποιώντας τον Veggie Map σε μια νέα πόλη;

- Not confident at all/ Καθόλου σίγουροι
- Slightly confident/ Λίγο σίγουροι
- Neutral/ Ουδέτερα
- Confident/ Σίγουροι
- Very confident/ Πολύ σίγουροι

Q8.V How helpful do you think the Veggie Map is for travelers or people unfamiliar with an area? / Ε8.Α Πόσο χρήσιμο πιστεύετε ότι είναι ο Veggie Map για ταξιδιώτες ή άτομα που δεν γνωρίζουν μια περιοχή;

- Definitely helpful/ Σίγουρα χρήσιμος
- Probably helpful/ Μάλλον χρήσιμος
- Not sure/ Δεν είμαι βέβαιος/η
- Probably not helpful/ Μάλλον όχι χρήσιμος
- Definitely not helpful/ Σίγουρα όχι χρήσιμος

Q9.V How likely are you to use or recommend the Veggie Map? / Ε9.Α Πόσο πιθανό είναι να χρησιμοποιήσετε ή να προτείνετε τον Veggie Map;

- Very Unlikely/ Πολύ απίθανο
- Unlikely/ Απίθανο
- Neutral/ Ουδέτερα
- Likely/ Πιθανό
- Very Likely/ Πολύ πιθανό

Q10.V In what situations would you use the Veggie Map? (Select all that apply) / Ε10.Α Σε ποιες περιπτώσεις θα χρησιμοποιούσατε τον Veggie Map; (Επιλέξτε όλα όσα ισχύουν)

- Traveling/ Ταξίδια
- Everyday Dining/ Καθημερινή έξοδος για φαγητό
- Trying a new restaurant/ Δοκιμή ενός νέου εστιατορίου
- Finding options in an unfamiliar area/ Εύρεση επιλογών σε μια άγνωστη περιοχή
- Other: (Enter in text box below)/ Άλλο: (Συμπληρώστε στο πλαίσιο κειμένου παρακάτω)

Q11.V What stood out most to you about the Veggie Map? / Ε11.Α Τι σας έκανε τη μεγαλύτερη εντύπωση στον Veggie Map;

Short answer response/ Σύντομη απάντηση

Appendix H: Five Minute Informal Interview Transcripts

Restaurant Name:	Χαρούπι
Question 1: Have you heard of the HellasVeg Veggie Map?	No, I did not know there was a map or that we were on a map.
Question 2: How many vegan/vegetarian dishes are you offering?	Our menu is not very vegan and vegetarian, but many dishes could be made into vegan and vegetarian options as needed. Overall, about 10-15% of our menu is vegan and vegetarian.
Question 3: Are most of your consumers tourists?	We have found that most of our vegan and vegetarian customers are tourists and are here seasonal. Due to this we tend to change our menu up to four times a year to meet their needs and to keep up with seasonal dishes.
Question 4: If you could add something to the map about your company to help, bring in vegan/vegetarians, what would it be?	It isn't really that big for us as the majority of our consumers find us by just coming in and not searching us up, so they find out here if they have something to eat or not.
Question 5: What motivates you to offer vegetarian or vegan options at your restaurant?	Not much really motivates us to have vegan and vegetarian dishes as it is not a big portion of our consumers.

Restaurant Name:	Merry Berry
Question 1: Have you heard of the HellasVeg Veggie Map?	Yes, we buy products from HellasVeg and use them in our cakes.
Question 2: How many vegan/vegetarian dishes are you offering?	We offer a large quantity. I would say roughly 50% of our main dishes are vegan/vegetarian and over 90% of our desserts.
Question 3: If you could add something to the map about your company to help, bring in vegan/vegetarians, what would it be?	I would say really make sure they know how many dishes we offer as well as our healthy options including gluten free and sugar free
Question 4: What motivates you to offer vegetarian or vegan options at your restaurant?	The tourists are a very large quantity of my customers so having these options available can help businesses.

Restaurant Name:	Canteen
Question 1: Have you heard of the HellasVeg Veggie Map?	HellasVeg sounds familiar but I have not heard of the Veggie Map
Question 2: How many vegan/vegetarian dishes are you offering?	Our menu has many vegan products inside. We use leaf icons next to the item to indicate their veggie dishes. Almost every dish can be easily modified to be veggie or vegan.
Question 3: If you could add something to the map about your company to help, bring in vegan/vegetarians, what would it be?	I would like to make a vegan/vegetarian only menu but there isn't enough business to be sustainable for solely vegans.
Question 4: What motivates you to offer vegetarian or vegan options at your restaurant?	We do have lots of vegan customers after 2020 and are steadily increasing still. Pretty sure that we competed in the veggie competition.

Restaurant Name:	ΑνφανΓκατέ
Question 1: Have you heard of the HellasVeg Veggie Map?	I haven't heard of the Veggie Map or HellasVeg
Question 2: How many vegan/vegetarian dishes are you offering?	The menus can be easily modified to be vegan, but we don't get a lot of vegan customers at the moment, but we get more during tourist season. There are more tourists that are
Question 3: If you could add something to the map about your company to help, bring in vegan/vegetarians, what would it be?	I would like to showcase some of their traditional dishes.
Question 4: What motivates you to offer vegetarian or vegan options at your restaurant?	Making vegan products isn't hard; we already have all the ingredients available to use in other dishes.

Merry Berry	Merry Berry
Question 1: Have you heard of the HellasVeg Veggie Map?	Yes, we buy products from HellasVeg and use them in our cakes.
Question 2: How many vegan/vegetarian dishes are you offering?	We offer a large quantity. I would say roughly 50% of our main dishes are vegan/vegetarian and over 90% of our desserts.
Question 3: If you could add something to the map about your company to help, bring in vegan/vegetarians, what would it be?	I would say really make sure they know how many dishes we offer as well as our healthy options including gluten free and sugar free.
Question 4: What motivates you to offer vegetarian or vegan options at your restaurant?	The tourists are a very large quantity of my customers so having these options available can help businesses.

Restaurant Name:	Ζύθος λαδάδικα
Question 1: Have you heard of the HellasVeg Veggie Map?	No, I have not heard of HellasVeg
Question 2: How many vegan/vegetarian dishes are you offering?	Most of the appetizers are vegan, there are also salads, and 3 pasta dishes are vegan. There is 1 page of seasonal dishes. We have symbols for vegan/vegetarian dishes.
Question 3: If you could add something to the map about your company to help, bring in vegan/vegetarians, what would it be?	I would like to promote new dishes; vegan pasta is very traditional. Both travelers and locals enjoy it.
Question 4: What motivates you to offer vegetarian or vegan options at your restaurant?	N/A

Restaurant Name:	Ζύθος ντορέ
Question 1: Have you heard of the HellasVeg Veggie Map?	I have not heard of HellasVeg
Question 2: How many vegan/vegetarian dishes are you offering?	There are not a lot of vegan customers even though there are lots of veggie options. Most of the options are appetizers. The menu has icons that easily indicate vegan/vegetarian options. The menu is changed two times a year mostly
Question 3: If you could add something in the map about your company to help, bring in vegan/vegetarians, what would it be?	He would like to show some traditional dishes, mostly appetizers.
Question 4: What motivates you to offer vegetarian or vegan options at your restaurant?	Not a tourist restaurant but they have been here for 40 years and enjoy serving locals.

Restaurant Name:	Η Πούγα
Question 1: Have you heard of the HellasVeg Veggie Map?	I have not heard of HellasVeg
Question 2: How many vegan/vegetarian dishes are you offering?	We have a big selection of vegan and vegetarian options. This is a popular restaurant, one of the most famous/well known in Thessaloniki. We have no challenges with serving those who are vegan or getting items
Question 3: If you could add something on the map about your company to help, bring in vegan/vegetarians, what would it be?	We are not interested in doing anything with the map, just having the name of the restaurant does a good amount for us since we already have so much traction in the restaurant.
Question 4: What motivates you to offer vegetarian or vegan options at your restaurant?	N/A

Restaurant Name:	Μαμαλούκα
Question 1: Have you heard of the HellasVeg Veggie Map?	No idea who HellasVeg is.
Question 2: How many vegan/vegetarian dishes are you offering?	We have 10-15 vegan options. Not a lot of vegan customers. We change the menu 2 times a year, well it's the same menus but there are more fish options in summer.
Question 3: If you could add something to the map about your company to help, bring in vegan/vegetarians, what would it be?	I would highlight dishes to increase traction to our restaurant.
Question 4: What motivates you to offer vegetarian or vegan options at your restaurant?	N/A

Restaurant Name:	Όλυμπος Νάουσα
Question 1: Have you heard of the HellasVeg Veggie Map?	I have not heard of HellasVeg.
Question 2: How many vegan/vegetarian dishes are you offering?	Salads can be vegan, and a bunch of appetizers can be used as well. Appetizers are mostly pescatarian, but they can all be modified. We only have 1 vegan or vegetarian main dish.
Question 3: If you could add something to the map about your company to help, bring in vegan/vegetarians, what would it be?	The menu is changed based on the season and during fasting periods or orthodox Easter menus get modified.
Question 4: What motivates you to offer vegetarian or vegan options at your restaurant?	We get a lot of vegans and vegetarians year-round, large groups, mostly tourists. Greeks are mostly flexitarian. Our tasting menus are accommodating, and we have vegan wines. We try to be very welcoming and friendly even though they look very fancy. This is a 100-year-old building.

Appendix I: Coding and Themes from Informal Interviews

Theme	Code	Description	Count (n)	Frequency (%)
Awareness of Veggie Map	No awareness	Has not heard of HellasVeg and the Veggie Map	7	77.70%
	Partial awareness	Recognizes HellasVeg but not the map	1	11.10%
	Active engagement	Uses HellasVeg products/services	1	11.10%
Availability of Vegan/Vegetarian Options	Limited explicit options	~10–15% or few dedicated items	3	33.30%
	High availability	Large % of menu vegan/vegetarian	2	22.20%
	Modifiable dishes	Items can be adapted to vegan	4	44.40%
	Use of labeling/icons	Menu uses symbols for veg items	4	44.40%
Influence of Tourism	Tourist-driven demand	Veg demand primarily from tourists	5	55.60%
	Seasonal variation	Demand/menu changes by season	3	33.30%
	Growth in vegan demand	Increasing vegan customers	1	11.10%
Motivation to Offer Vegan Options	Low intrinsic motivation	Not a priority / low interest	2	22.20%
	Business-driven motivation	Driven by profit or demand	2	22.20%
	Ease of preparation	Easy due to existing ingredients	2	22.20%
	No stated motivation	No clear answer provided	3	33.30%

Appendix J: Formal Interview Transcripts

Appendix J.1: The Mushroom

Drew

So, we are students from WPI, Worcester Polytechnic Institute, in Worcester, Massachusetts, working with HellasVeg to better understand and improve access to vegetarian and vegan restaurants throughout Greece. We're going to be conducting these interviews to learn more about current experiences, challenges, and perspectives related to plant-based dining and how tools like a Veggie Map can support the community. This interview will approximately take like 15 to 30 minutes. Your participation is completely voluntary, and you may stop at any time or refuse to answer any questions. This interview is confidential. No names or identifying information will appear in any project reports or publications. Should you have any questions or concerns, you can reach out to gr-hellasvegd26, which is our e-mail alias, or our advisors, Melissa Butler and Robert Kinicki, and I can give you their emails if you need.

Speaker 2

Okay.

Drew

So, do you consent to this interview?

Speaker 2

Yes, of course.

Drew

Perfect. Do you consent to having this interview recorded as you previously stated? Perfect. Did you understand it all?

Speaker 2

Oh, okay.

Drew

Perfect, perfect. All right. So we'll get started with the first questions. So first off, how long have you been in business?

Speaker 2

The restaurant is from 2010.

Drew

Okay.

Speaker 2

It's 16 years.

Drew

16 years, wow. Have you been here the whole time?

Speaker 2

Me, no, it was my husband, the owner. I was working at another place in a big company, like I was HR. And I came here from 2017.

Drew

Perfect. And how long have you been offering vegetarian and vegan options?

Speaker 2

I believe in 2014. I think it was 2014. that we made the catalog and we had the gluten-free and vegan and vegetarian and we were in the market.

Drew

Perfect. And what motivates you to offer vegan/vegetarian dishes?

Speaker 2

At first we wanted to please our guests because they were asking for a vegan or vegetarian plate. And then we wanted to make them feel better to have their own catalog, not just to prepare a place for them because they asked it or because we could do this. But we wanted to have a special catalog for their choices, if I'm saying it right. And we decided to make this and this, make them more happy and more, they appreciate it, the fact that they have their own catalog. And mouth to mouth because we didn't make marketing we should have marketing for this but we didn't and from mouth to mouth it went well and we kept it.

Drew

Okay yeah that makes a lot of sense.

Speaker 2

My English are not so good.

Drew

You're doing very good. Now, have these mainly been like tourists customers per se, or more like Greece?

Speaker 2

Both, both, yes.

Drew

Pretty even split?

Speaker 2

More foreigners, but in Greece we have... They have...

Speaker 3 (Translator)

They started having more and more vegetarian people.

Speaker 2

Yes, from Greece, they want to... They are vegetarian and vegan, yes.

Drew

Oh, that's perfect, that's perfect. So how would you kind of describe the demand for plant-based options? As you said, it's kind of been growing. Is that what you're saying?

Speaker 2

Yes, yes, of course. And we can hear it more often that they want a vegan plate, a vegetarian plate.

Drew

And what kind of challenges does the restaurant face in offering vegetarian and vegan menu items?

Speaker 2

I think the base is the customers, it's the clients that we want to be pleased and happy when they come here. We do it just for it. And because a restaurant called The Mushroom, we don't have only mushrooms, but it was just the name. They asked it, they thought that we have many plates with mushrooms and so we played with this, with the name and the catalog. Yeah.

Drew

That makes a lot of sense. So kind of off to like more like marketing stuff. I know you mentioned that it's mainly been just word of mouth.

Speaker 2

We have marketing, but not at start.

Drew

Okay, yep.

Speaker 3 (Translator)

Not at the beginning. They started having marketing team.

Speaker 2

Later, later, yes.

Drew

So what are you currently doing for marketing now?

Speaker 2

For vegetarian and vegan. Not more, we're just advertising that we have not much things about attracting people for vegan or vegetarian.

Drew

Yeah, it makes a lot of sense. How important are online reviews in attracting customers based in like more vegetarian or vegan people?

Speaker 2

Excuse me, can you repeat once more?

Drew

Reviews. How important are online reviews?

Speaker 2

Yes, very, very important. Yes, very important and they write too many times we have reviews for vegan and vegetarians and they say very well we have uh five star reviews.

Drew

Yep so they take a look at that a lot then.

Speaker 2

Yes of course of course.

Drew

Um so have you ever heard of like Happy Cow?

Speaker 2

Happy Cow I think yes but can you help me?

Drew

It's a it's like a vegan/vegetarian like mapping system like kind of similar. So um I guess that's really all the only question. We didn't know. We're trying to gauge like how much like per se like managers or owners know of online services that help promote vegan, vegetarian, and people. So no, that helps. So if you had like a Veggie Map, would you be likely to like upload dishes to it to help like keep it updated and promote it? Or would you kind of be not as inclined to?

Speaker 2

We would like to make more dishes. Yes, it's a little bit difficult for the kitchen because we're not a totally vegan or vegetarian restaurant. So it's kind of a bit difficult for the kitchen. So we are not promoting that for this reason because we want to have it normal. Not to have too many vegan and vegetarian people when they people that no imbalance yes because we want to have the balance in the kitchen notes.

Drew

That makes a lot of sense. I think that's all the questions we got. Anyone else have any more?

Speaker 2

Thank you I hope I helped it.

Drew

Yes, thank you very much, yes. Very, very helpful

Appendix J.2: The Canteen

Mason

So how long has this been in business?

Speaker 2

This specific store this specific restaurant has been in business since 2013.

Mason

And how long have you been offering vegetarian to vegan options?

Speaker 2

We tried, we started, I think it was the earliest 2015, 16. It's been almost a decade now, more than a decade.

Mason

And what motivates you to offer those kinds of dishes?

Speaker 2

So we always, first of all, if you didn't notice, you're gonna read the, what is it? If you'd excuse me for a second... I'm sorry for interruption. What was the last question?

Mason

What motivates you to offer...

Speaker 2

So if you didn't notice, if you read our menu, we are kind of... not a national cuisine, we kind of have a European cuisine. So we try to go with what Europeans and most people in the European Union prefers. We always try to stay updated, so we kind of try to go with the flow. So since this kind of is like a trend, basically, and people prefers it, We try to be and stunned by this. We don't like discrimination so if people prefer something like this we kind of try to be like go with the people, go with what people prefers and you know be there with them. If they prefer vegan, we kind of have this on the menu. We kind of okay with this.

Mason

No, that's perfect. So you say that it's probably increased then the demand lately?

Speaker 2

It's increasing the demand lately. Yes, true. Each person for their own personal reasons, but yes, lately it has increased quite a lot. Last five years.

Mason

Yeah, yeah, yeah. And would you say this is more Greeks or more like tourists, for example?

Speaker 2

In Thessaloniki, specifically in this area, we kind of have a lot of tourists. But also locals, Greeks, I know, but locals kind of tend to prefer, but this is also a trend in the last five years that kind of prefer vegan food. That doesn't mean that they are kind of vegetarian only, but they also like vegan food. So it's kind of a mix.

Mason

Perfect. So what kind of challenges does your restaurant face in offering these vegan vegetarian dishes, if any?

Speaker 2

We kind of have a very good chef. So food wise, we don't have any challenges. We try to include and we definitely will include in every menu because we change menu two times per year. We have the seasonal menu. We always include vegan options. Why we choose that? We choose that not as a personal preference. This is the demand of the people that come see us. Some of them is personal choice, some of them have medical issues, some of them are kids, and some of them prefer it, just prefer it, because it's good food. These are the reasons that we mainly step on and we include our vegan foods in our menu. But again, because we have a European kitchen, we have staff from different countries, not only Greece, our menu do not depend on the vegan food. We have options. There is one to two options per category.

Mason

Perfect, yeah, yeah. So what platforms or tools do you currently use to promote your restaurant to vegan vegetarian customers?

Speaker 2

Speaking about our restaurant, we don't use platforms. We just use our own platform, which is Cantinaskg.com. and this is the only platform we use in general not about vegan in general we don't prefer to use other platforms to promote us we have our own and we try to sound by ourselves so if you go on our platform in our site you can view everything and read everything.

Mason

You don't do any social media or anything like that.

Speaker 2

We try lately to do social media that's true we have our Instagram and our Facebook. But we promote everything, not just vegan. Yes, we not promote just vegan. We promote everything. This is exactly as our site. We do the same there, we do the same on social media. We promote our restaurant. Sometimes we promote our vegan dishes, sometimes not.

Mason

Perfect. So how important are online reviews in attracting customers, which you say?

Speaker 2

Sorry.

Mason

No worries at all. How important are online reviews in attracting customers interested in the plant-based diet?

Speaker 2

So lately, you know that a lot of people are watching either Reels, either reading sites, either reading comments, either reading everything that has to do with internet and restaurant. The people that comes here from other countries do promoting and it is definitely good.

Mason

Yeah. Perfect. All right, so now we're going to do some more based on the Veggie Map. I know previously you hadn't heard of the Veggie Map. And you guys are on it. So I just kind of wanted to ask a question. So from your point of view, what would you want to promote to vegan and vegetarian consumers to try to draw them in on Veggie Map?

Speaker 2

What do we want to promote? You mean dishes from our menu?

Mason

It could be anything. Would that be like what best suit you? Like being able to see the dishes that you have and...

Speaker 2

Exactly, exactly. From what we want is the dishes to speak for themselves. As I told you, we don't have too many options in vegans, but we do have at least one or two per category. That means that what we want to do is to have some photos, have some people try them vegan or not. Because what we want to promote is the quality and the service of our food. After they tried, they can decide for themselves if they like it or not.

Mason

Perfect. And would you per say be encouraged to update your dishes that you have on your website or would you not take that kind of time?

Speaker 2

Again, can you please repeat the question?

Mason

Repeat the question. Yeah. So like would you be encouraged to like update like dishes that you're serving because obviously you change your menu weekly on like a website like a Veggie Map.

Speaker 2

We don't change it quickly. We change it two times per year. Yeah. It's a seasonal menu and yes we do update it, both on our sites on our site and our social media and we will put to update it on your map too because we're gonna change everything it's not just a plate, also we're gonna take the menu and put in a whole new one so the plates and especially the vegan based will be completely different. What I want to say is that except the vegan choices we do have, which are very vegan, there are other options, a vegan that may choose, like salads. We don't mention them as vegan, but they are. Most of them at least. So there are other options.

Appendix J.3:Apenanti Apo Ta Kastrá

Apenanti Apo Ta Kastrá (Translated From Greek To English)

Drew

How long have you been in business?

Speaker 2

In total I'm working the last 32 years, in this specific tavern I am the last 6 years.

Drew

How long have you been offering vegetarian and vegan options?

Speaker 2

From the beginning of this menu and in the previous restaurants, I always had. Although, on this menu there aren't many options, if I remember correctly there are two options: mushroom risotto and mushroom ragout. I also have the day of menu and today there are two more options there. Apart from the options that are categorized as vegan/vegetarian, there are many others on the general menu, for example yellow split pea purée. We already have them in our kitchen and in the Greek cuisine in general. For example, I do carrot soup but it's not on the vegan category. Also, the last days (due to Christianity) we were fasting and we mostly ate plant-based dishes.

Drew

What motivates your restaurant to offer vegan/vegetarian options?

Speaker 2

It appears there is a growing trend for that type of diet, a bit delayed in Greece though and it is mostly popular among younger people. In addition to that, it is a new discovery for me. For example, I made pasta with peppers from Florina and I added roasted cauliflower on top, through this I find different ways to cook.

Drew

Would you say that it is more tourists or Greek?

Speaker 2

We don't have a lot of tourists up here, mostly Greeks.

Drew

Do you think in the past 5 years the demand has increased?

Speaker 2

Yes, it has.

Drew

What kind of challenges, if any, does your restaurant face to have these options on the menu?

Speaker 2

None. On the contrary, there are also people who aren't even vegan, they are just changing their diet and they prefer the vegan/vegetarian options.

Drew

Does it affect the price or something like that?

Speaker 2

No, we use raw materials in various ways. It doesn't matter if they are going to be for vegan/vegetarian dishes or not. I didn't start cooking soy or tofu suddenly. We use fresh ingredients, just not dairy, meat, fish etc.

Drew

How often do you change your menu?

Speaker 2

That's where I am lacking. Approximately twice per year, but that may also not happen. We change the day of menu regularly and today there are 4 options on that and two of those are vegan. I just don't tell them apart, people can see that they are vegan/vegetarian. If vegans/vegetarians come here they will be able to get served, we are not big on meat whatsoever.

Drew

What platforms or tools do you use to promote your restaurant's vegan/vegetarian options, if any?

Speaker 2

I don't try much, I am not really into technology and social media. When people are interested in something we just inform them on the spot about everything.

Drew

How important would you say online reviews are at attracting customers?

Speaker 2

They are very important, I just don't know how to.

Drew

I know you've heard of Hellas Veg, have you heard of the Veggie Map they have?

Speaker 2

I was not aware there is one. I'm working with Hellas Veg ... (interruption) ... Last year there was a festival through Hellas Veg and took part with my carrot soup and we got second place. We got voted for by the people who tried it.

Drew

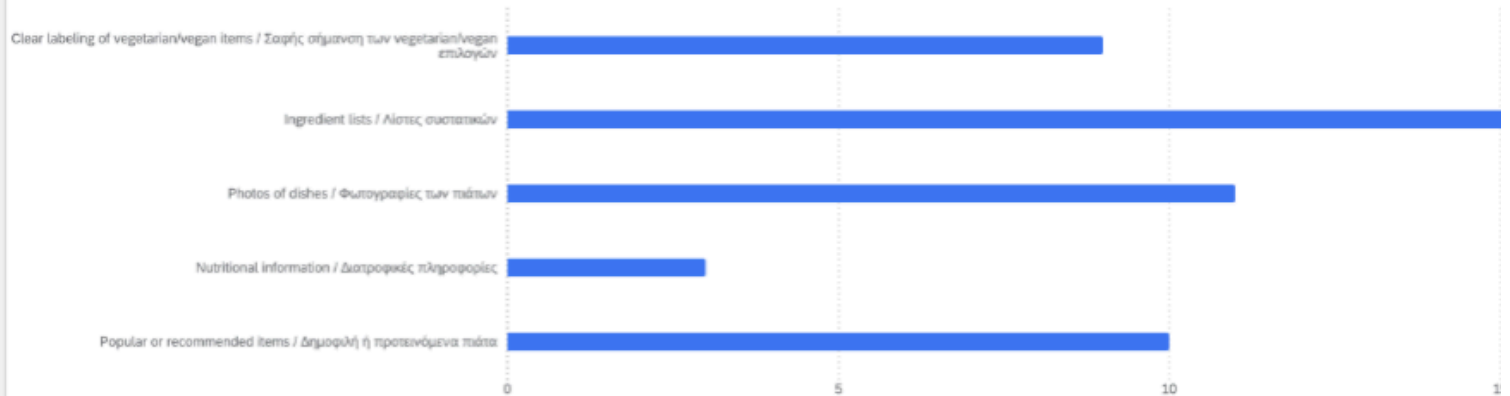
Now that you know there is a Veggie Map, how likely would you update your info on that?

Speaker 2

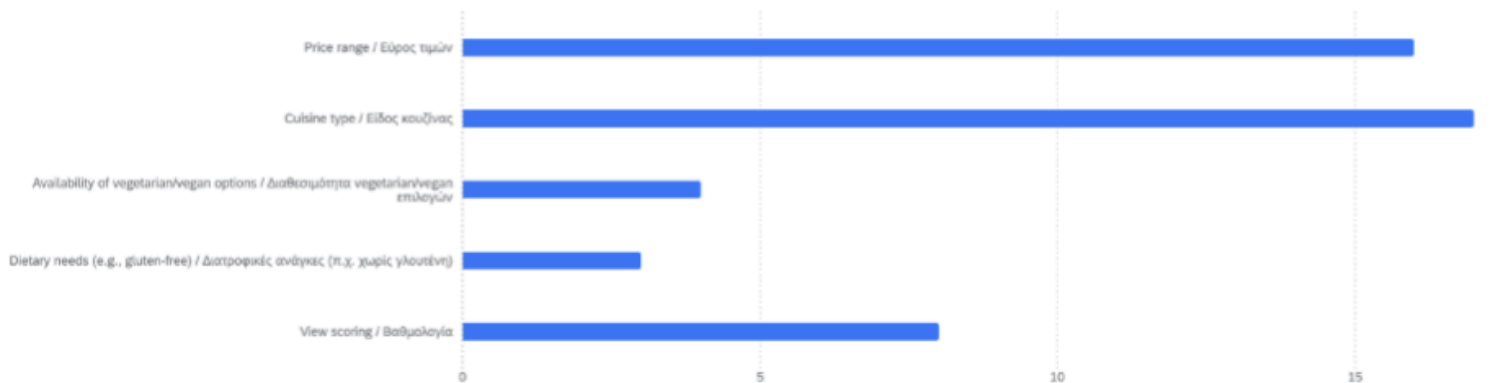
Very!! I have the energy and desire to cook and I like to explore more on that.

Appendix K: Extra Graphs Not Used in Analysis

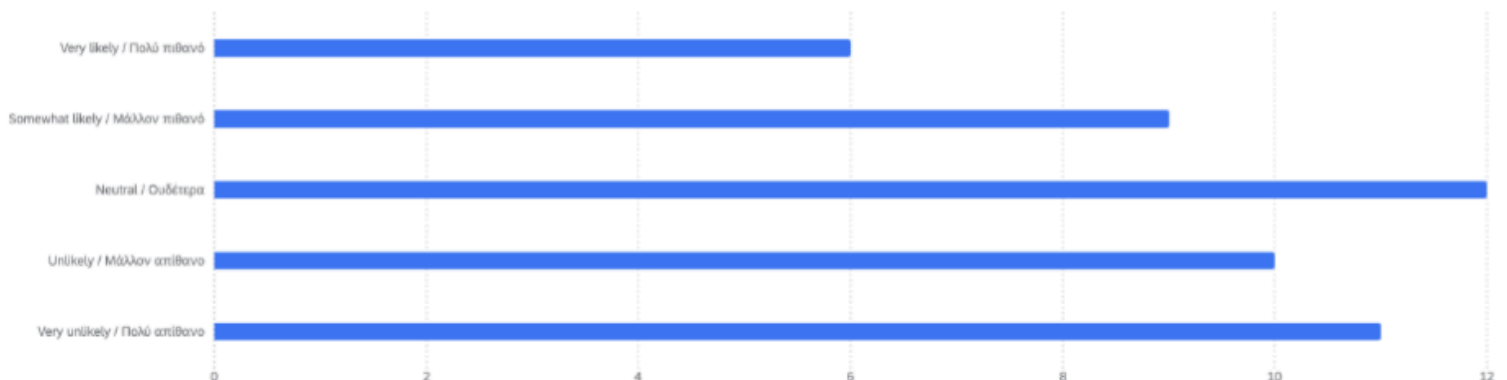
Q43: Q8/Ep.8: When looking at a menu, what information do you find most helpful? / Κοιτάζοντας ένα μενού, ποιες πληροφορίες βρίσκετε πιο χρήσιμες; 49 ⓘ



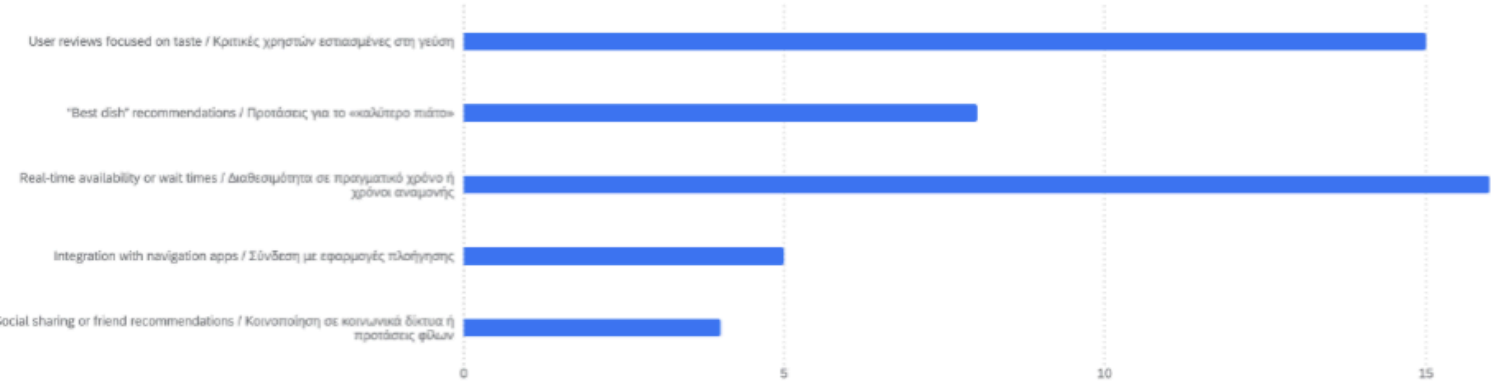
Q45: Q10/Ep.10: What type of filters would you be most likely to use on a restaurant map? / Ποιον τύπο φίλτρων θα ήταν πιο πιθανό να χρησιμοποιήσετε σε έναν χάρτη εστιατορί... 48 ⓘ



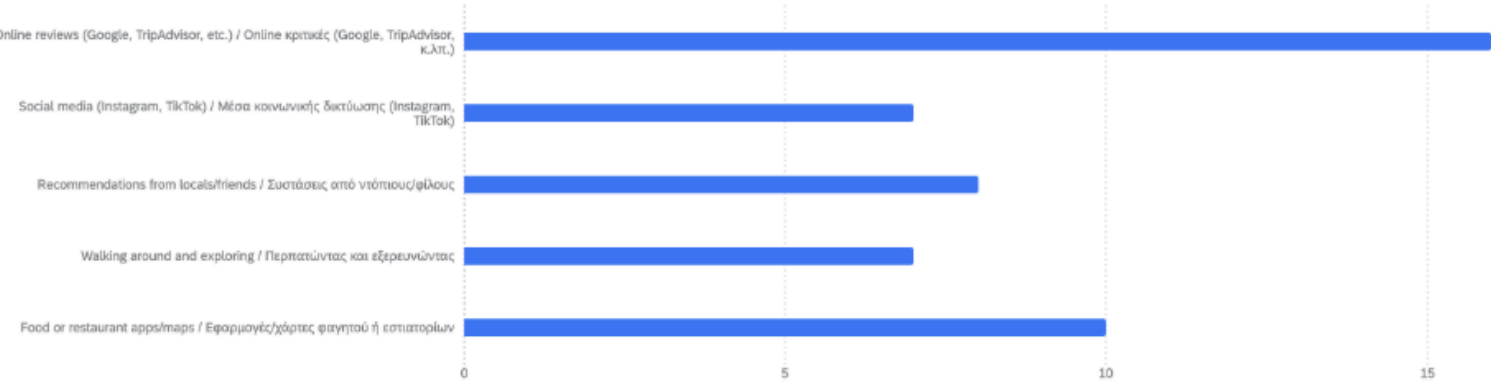
Q46: Q11/Ep.11: How likely are you to use a map specifically highlighting vegetarian/vegan options? / Πόσο πιθανό είναι να χρησιμοποιήσετε έναν χάρτη που επισημαίνει ειδικά veg... 48 ⓘ



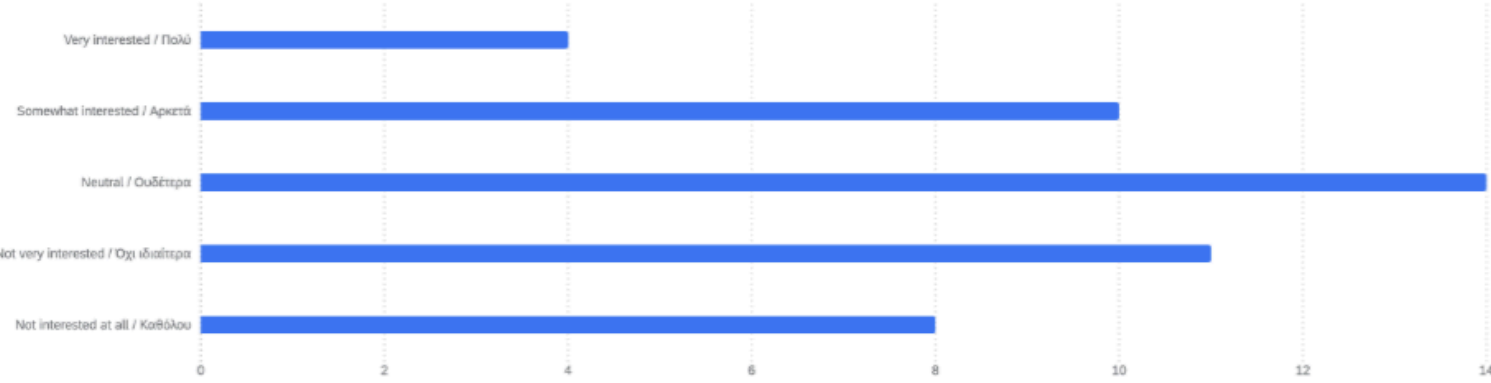
Q47: Q12/Ep.12: What additional feature would make a restaurant map more useful to you? / Ποιο επιπλέον χαρακτηριστικό θα έκανε έναν χάρτη εστιατορίων πιο χρήσιμο για εσάς; 48 ⓘ



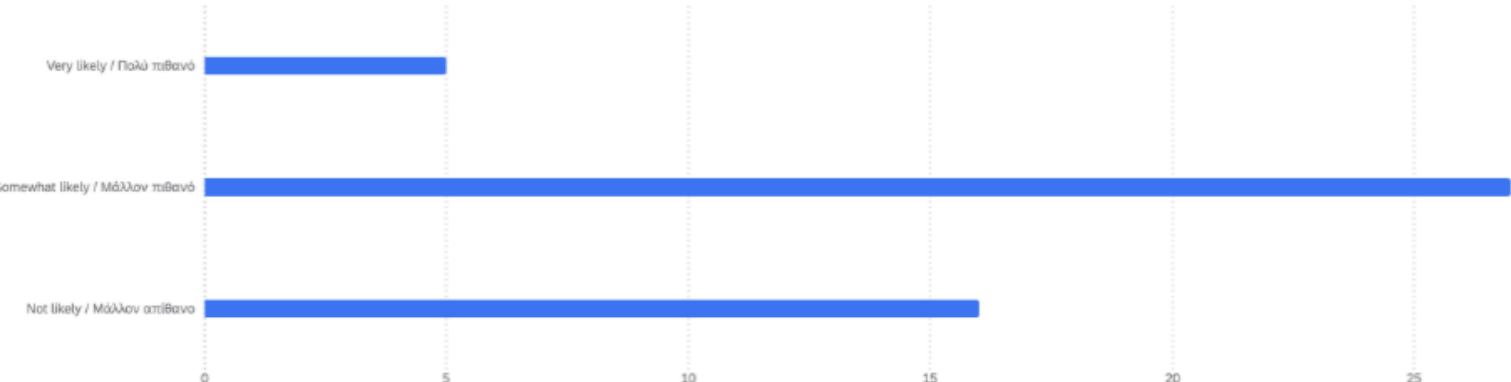
Q48: Q13/Ep.13: When traveling, how do you typically choose where to eat? / Όταν ταξιδεύετε, πώς επιλέγετε συνήθως πού θα φάτε; 48 ⓘ



Q49: Q14/Ep.14: While traveling, how interested are you in trying vegetarian or vegan restaurants? / Κατά τη διάρκεια ενός ταξιδιού, πόσο σας ενδιαφέρει να δοκιμάσετε vegetarian ή... 47 ⓘ

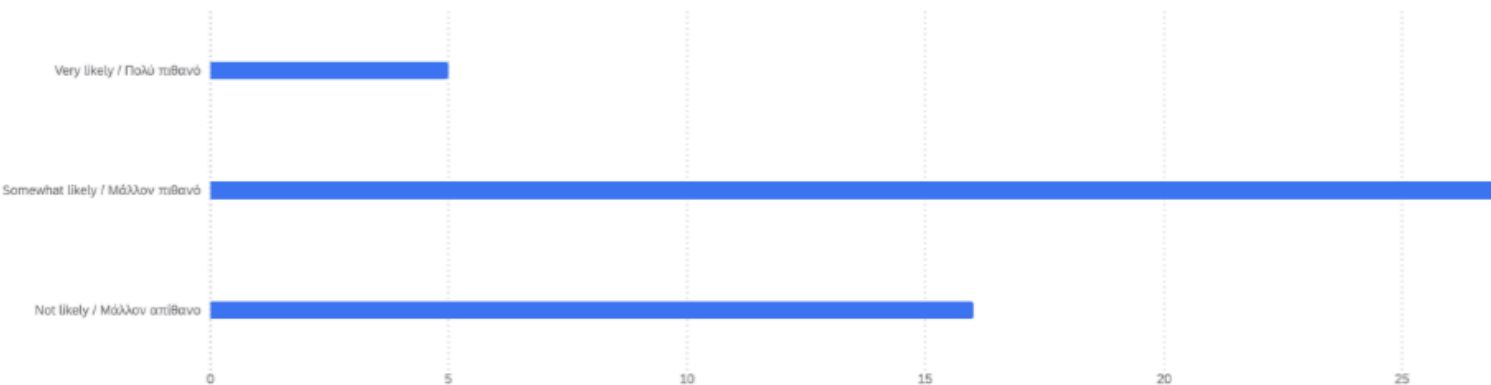


Q41: Q17/Ep.17: After the Veggie Map website is launched, how likely is it that you would use it? / Μετά την κυκλοφορία της ιστοσελίδας του Veggie Map, πόσο πιθανό είναι να τον χ... 48 ⓘ



Q41: Q17/Ep.17: After the Veggie Map website is launched, how likely is it that you would use it? / Μετά την κυκλοφορία της ιστοσελίδας του Veggie Map, πόσο πιθανό είναι να τον χ...

48



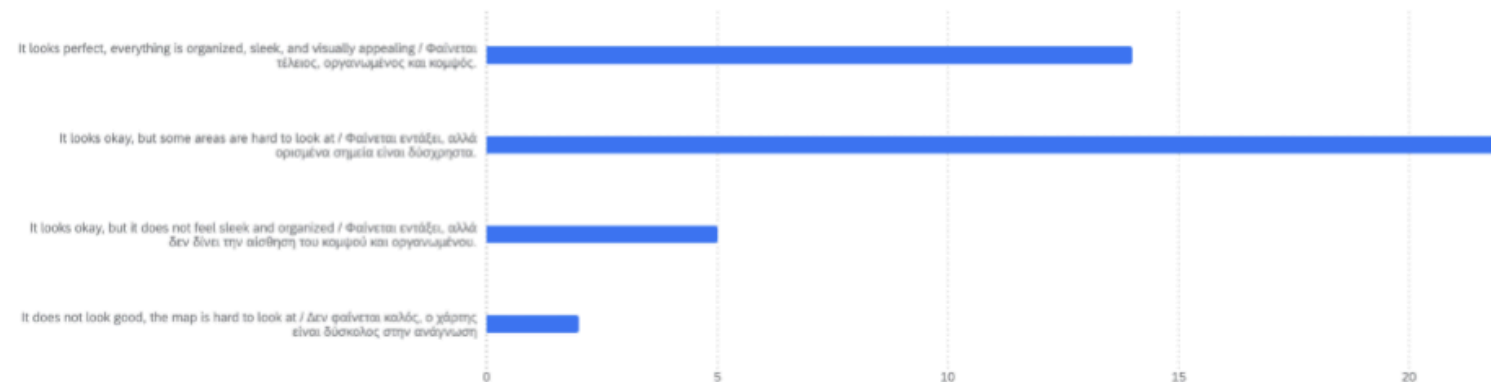
Q48: Q18/Ep.18: How easy is it to navigate the Veggie Map? / Πόσο εύκολη είναι η πλοήγηση στον Veggie Map;

44



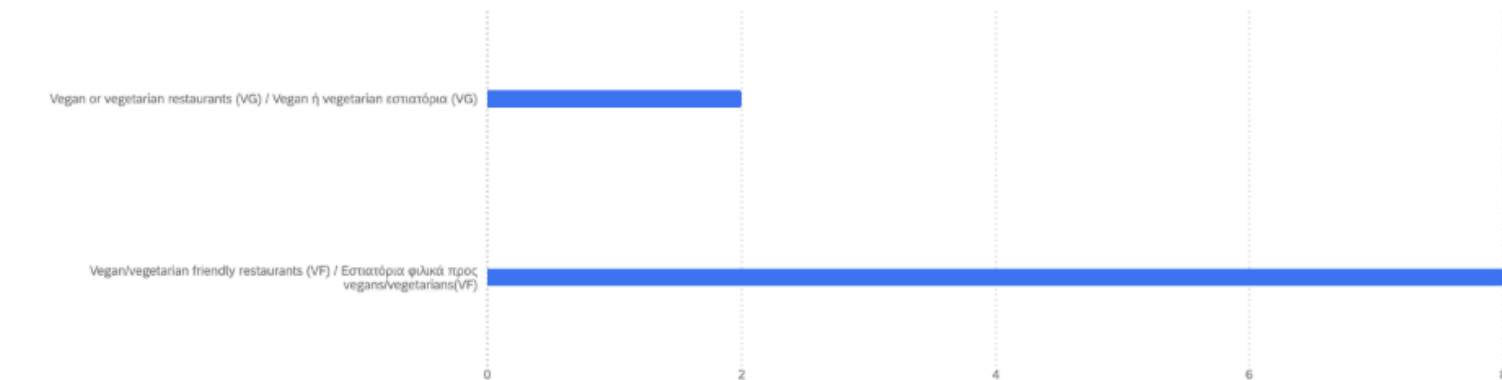
Q51: Q19/Ep.19: How visually appealing is the Veggie Map? / Πόσο ελκυστικός οπτικά είναι ο Veggie Map;

43



Q42: Q4/Ep.4: When dining out, do you mainly choose vegan/vegetarian restaurants or restaurants that have vegan/vegetarian main course options? / Όταν βγαίνετε για φαγητό, επιλ...

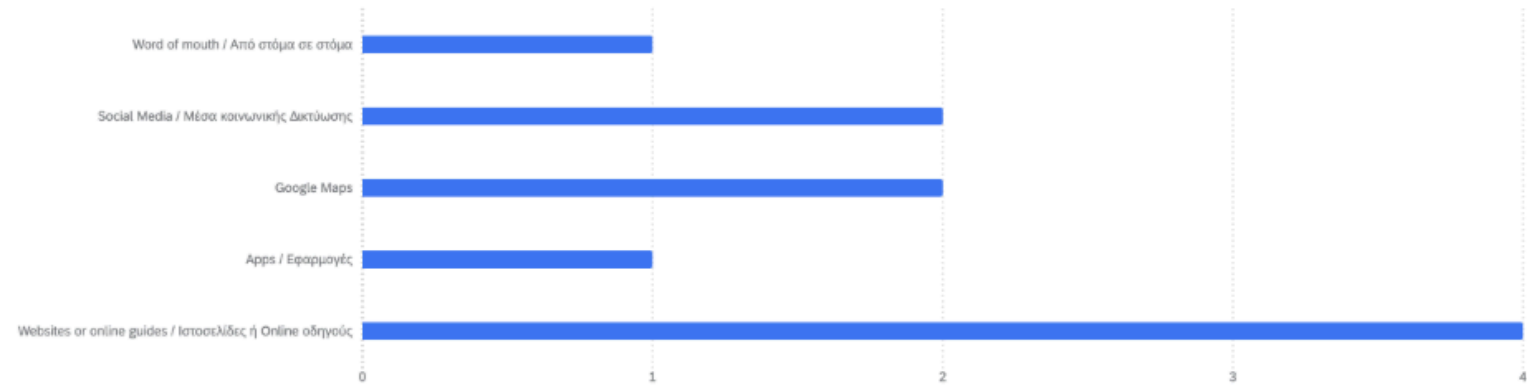
10



Q43: Q5/Ep.5: How do you choose a restaurant to dine in? / Πώς επιλέγετε ένα εστ...

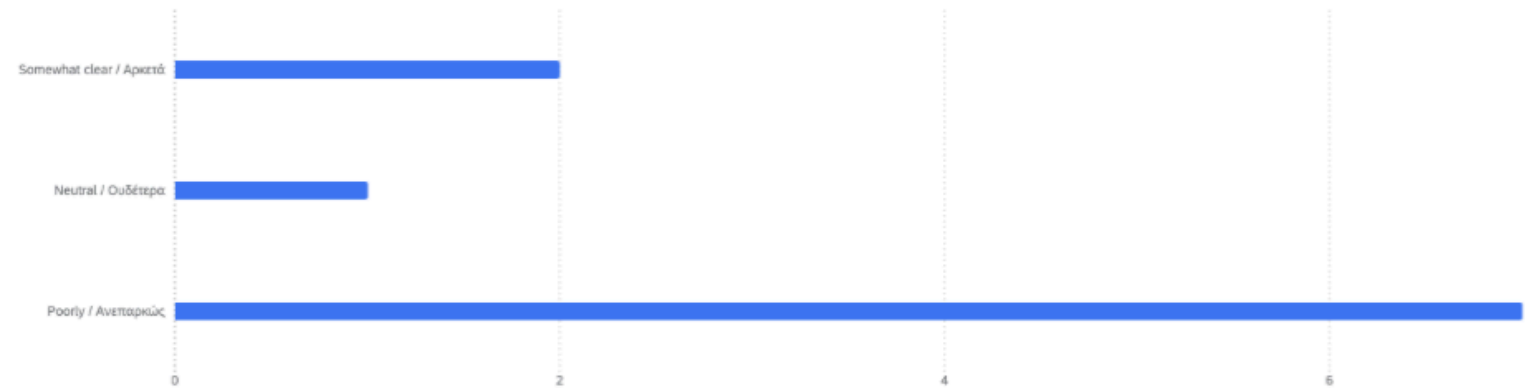
10 ⓘ

...



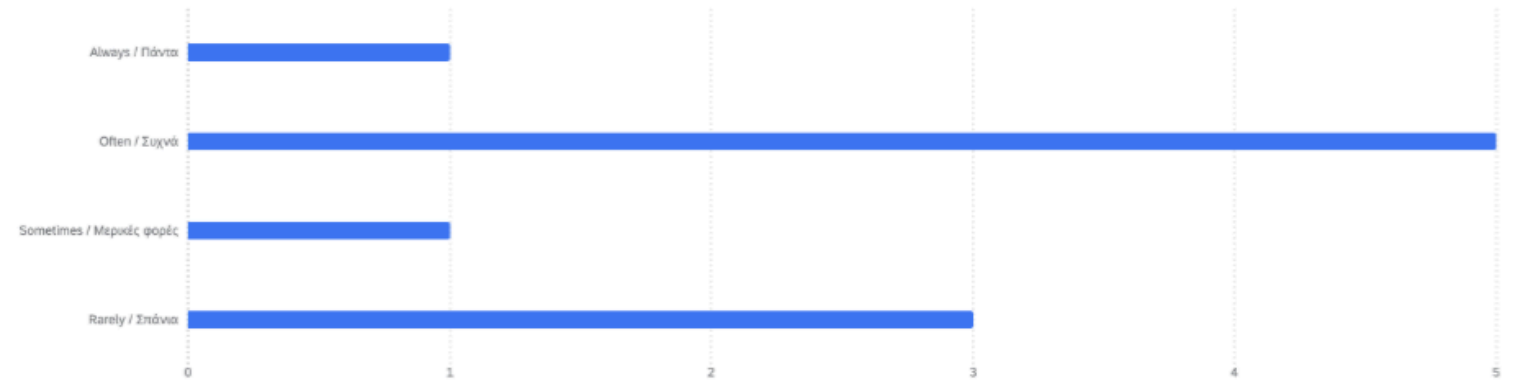
Q5: Q6/Ep.6: How clearly do restaurants label vegetarian/vegan dishes? / Πόσο ξεκάθαρα επισημαίνουν τα εστιατόρια τα vegetarian/vegan πιάτα;

10 ⓘ



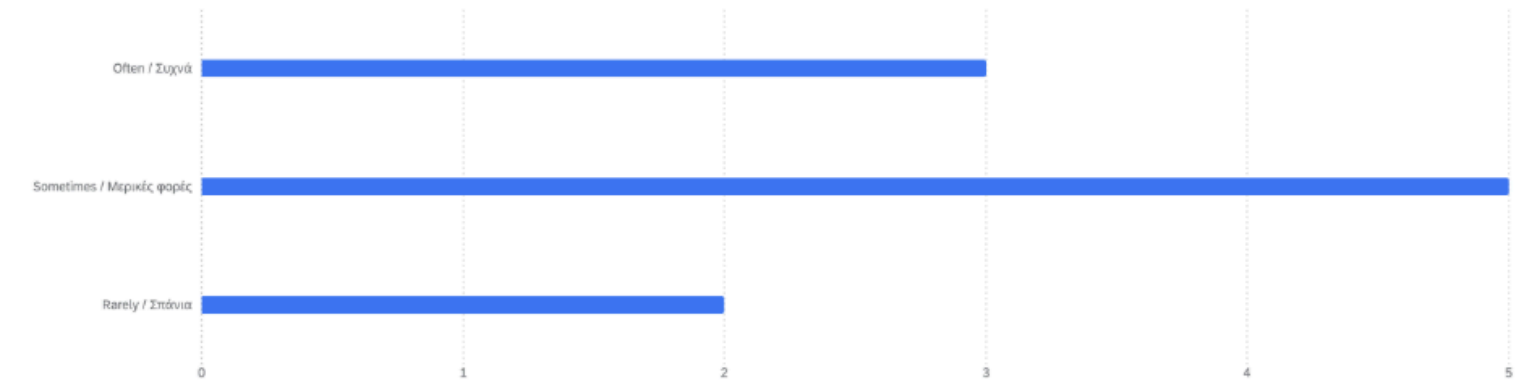
Q7: Q8/Ep.8: Do menu descriptions accurately reflect ingredients? / Οι περιγραφές του μενού αντικατοπτρίζουν με ακρίβεια τα συστατικά;

10 ⓘ

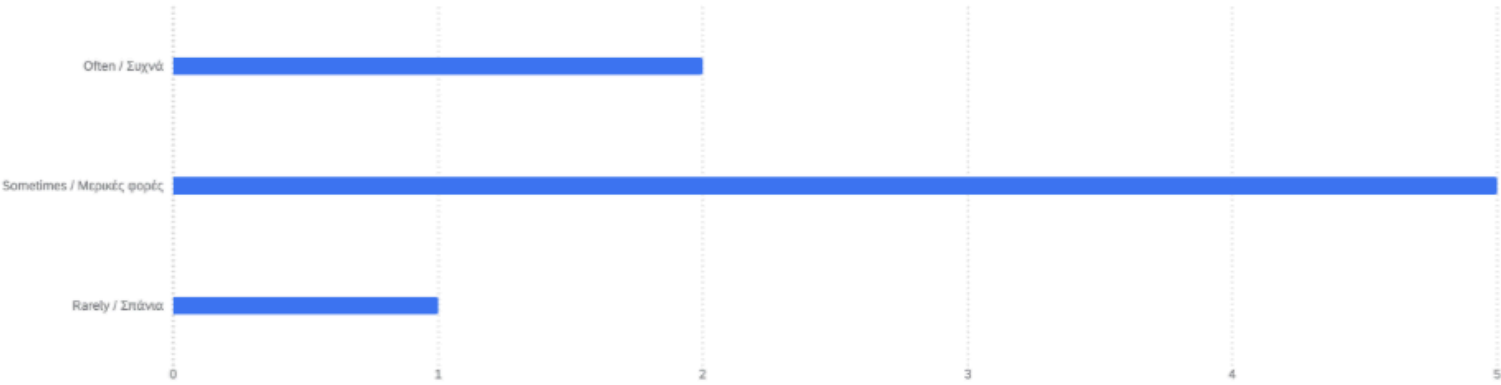


Q8: Q9/Ep.9: In your experience, does the restaurant staff understand the difference between vegetarians and vegans? / Σύμφωνα με την εμπειρία σας, το προσωπικό των εστιατορίων...

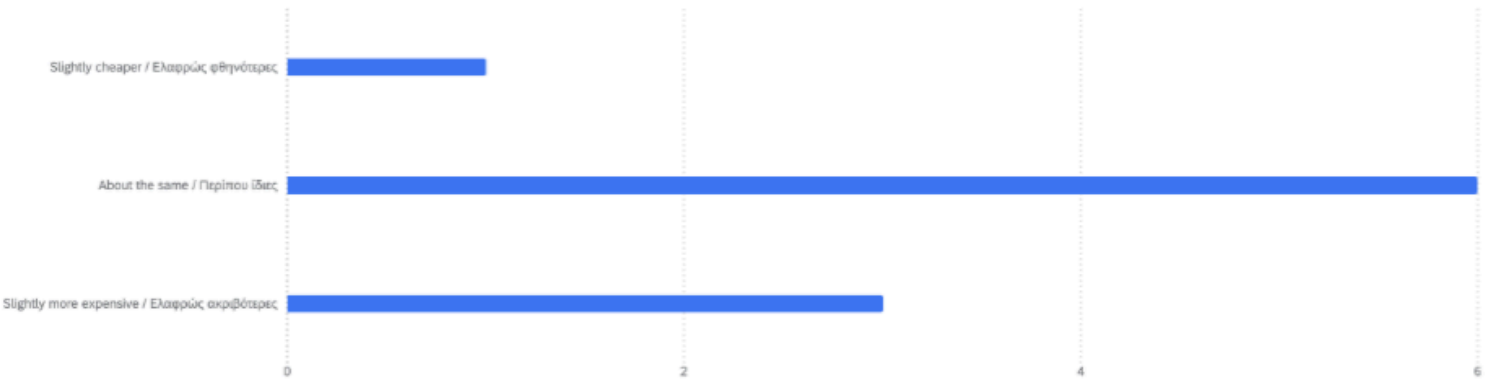
10 ⓘ



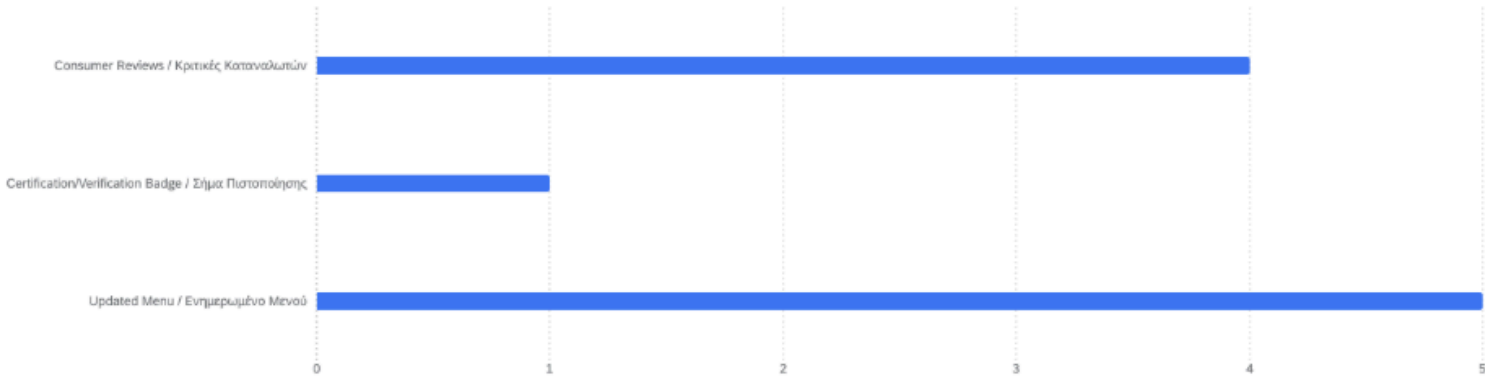
Q9: Q10/Ep.10: Do you think vegan/vegetarian options are easily accessible in Thessaloniki? / Πιστεύετε ότι οι vegan/vegetarian επιλογές είναι εύκολα προσβάσιμες στη Θεσσαλονίκη; 8 ⓘ



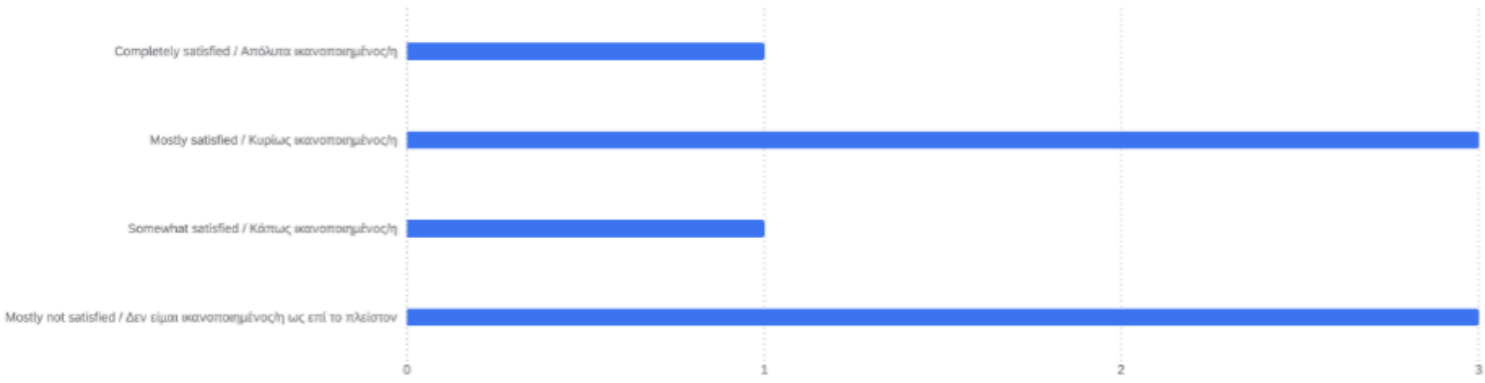
Q10: Q11/Ep.11: How do you feel vegan/vegetarian dishes are priced compared to meat-based dishes? / Πώς κρίνετε τις τιμές των vegan/vegetarian πιάτων σε σύγκριση με τα πιάτα... 10 ⓘ



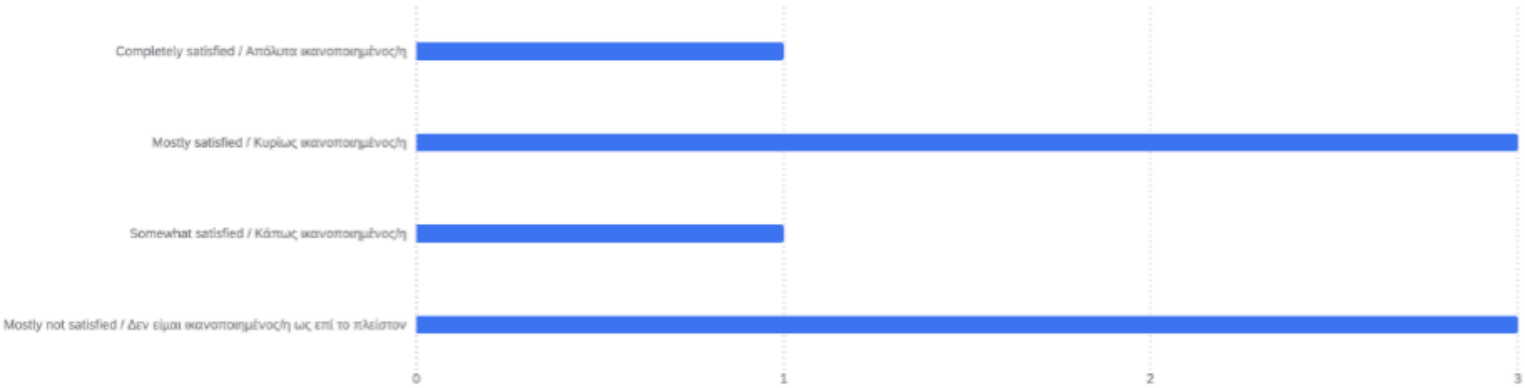
Q11: Q12/Ep.12: What information is most important for you when finding a place to eat? / Ποιες πληροφορίες είναι πιο σημαντικές για εσάς όταν ψάχνετε μέρος για φαγητό; 10 ⓘ



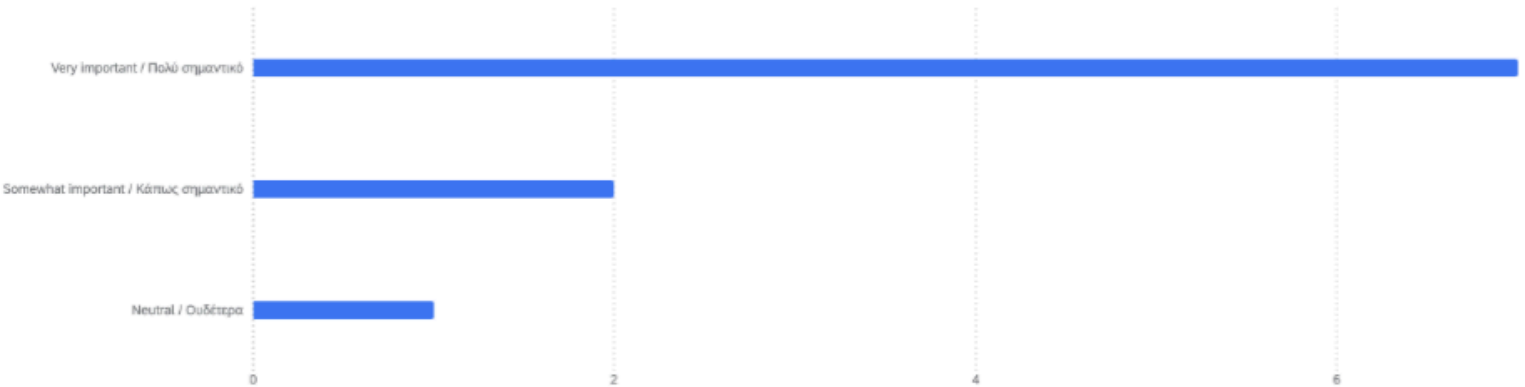
Q12: Q13/Ep.13: Are you overall satisfied with vegan/vegetarian restaurant options in Greece? / Είστε συνολικά ικανοποιημένοι με τις επιλογές vegan/vegetarian εστιατορίων στην Ελλάδα; 8 ⓘ



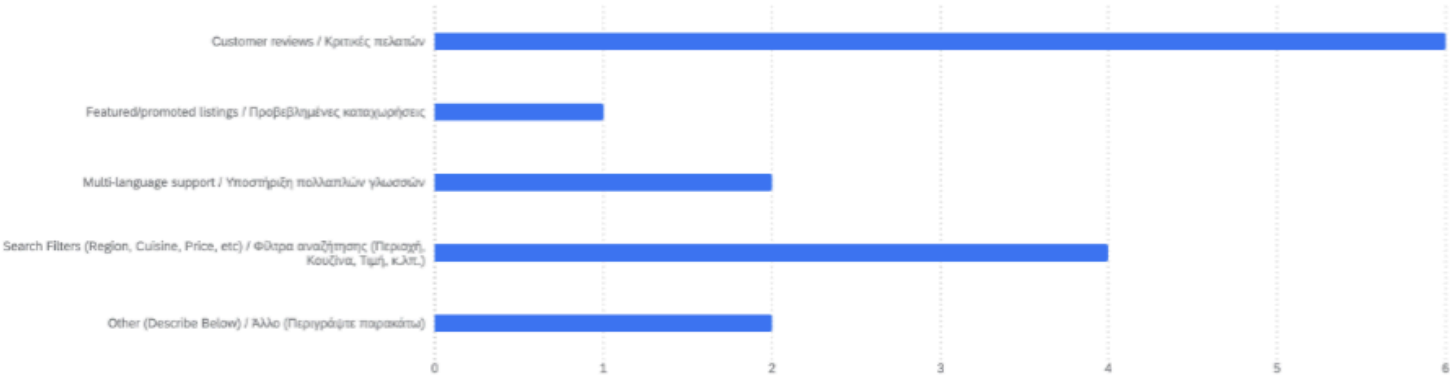
Q12: Q13/Ep.13: Are you overall satisfied with vegan/vegetarian restaurant options in Greece? / Είστε συνολικά ικανοποιημένοι με τις επιλογές vegan/vegetarian εστιατορίων στην Ελλάδα... 8 ⓘ



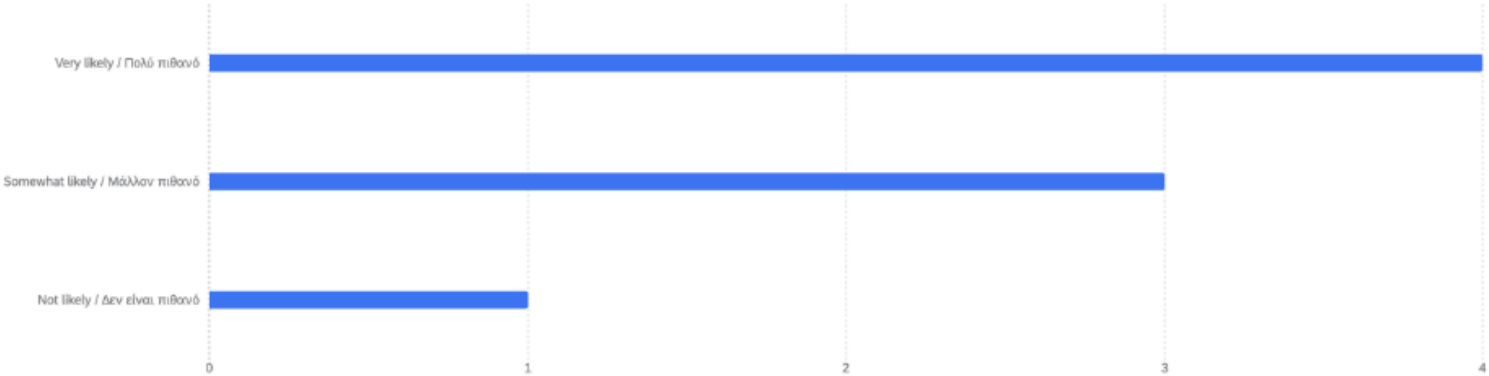
Q44: Q14/Ep.14:While traveling, how important is it for you to find vegetarian or vegan main course dishes in restaurants? / Κατά τη διάρκεια ενός ταξιδιού, πόσο σημαντικό είναι για ... 10 ⓘ



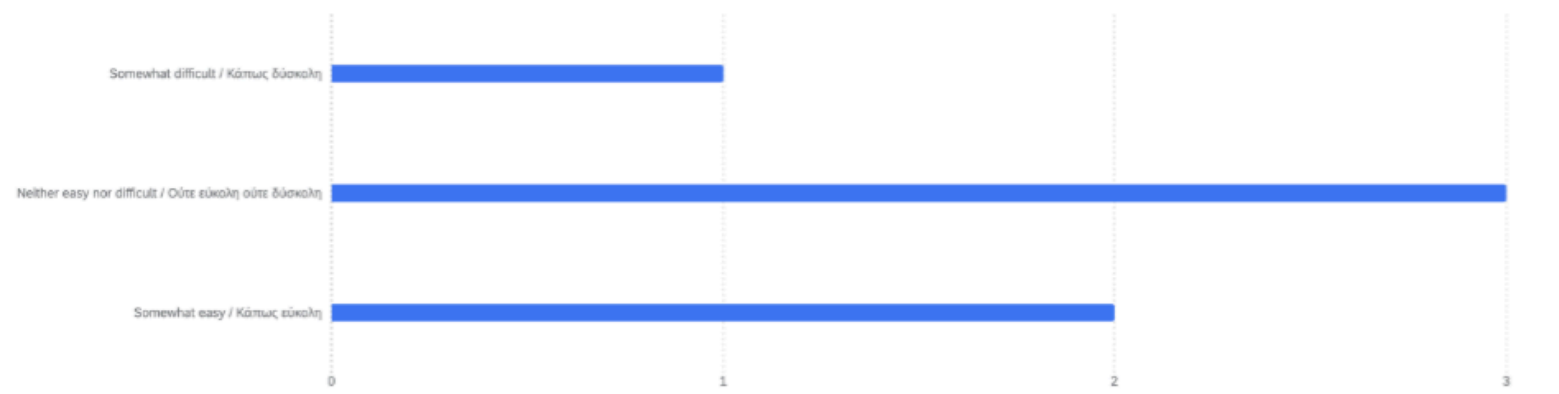
Q14: Q16/Ep.16: Which features of the Veggie Map would you find most important?... 8 ⓘ



Q45: Q17/Ep.17: After the Veggie Map website is launched, how likely is it that you would use it? / Μετά την κυκλοφορία της ιστοσελίδας του Veggie Map, πόσο πιθανό είναι να τον χ... 8 ⓘ



Q49: Q18/Ep.18: How easy is it to navigate the Veggie Map? / Πόσο εύκολη είναι η πλοήγηση στον Veggie Map; 6 ⓘ



Q50: Q19/Ep.19: How visually appealing is the Veggie Map? / Πόσο ελκυστικός οπτικά είναι ο Veggie Map; 6 ⓘ

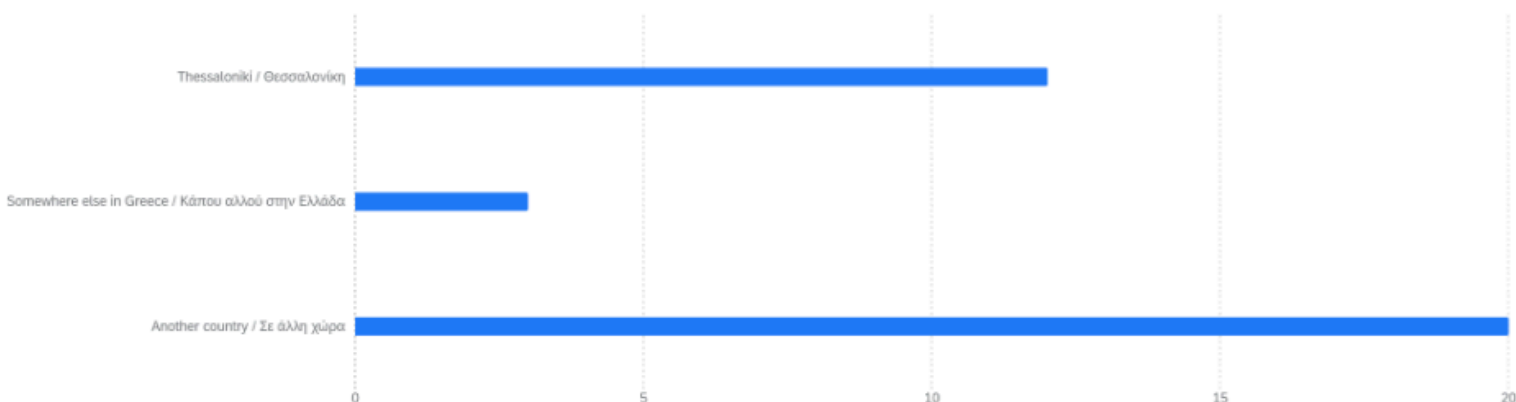


Appendix L: Extra Graphs from Veggie Map Prototype Evaluation

Q50: Q19/Ep.19: How visually appealing is the Veggie Map? / Πόσο ελκυστικός οπτικά είναι ο Veggie Map; 6 ⓘ



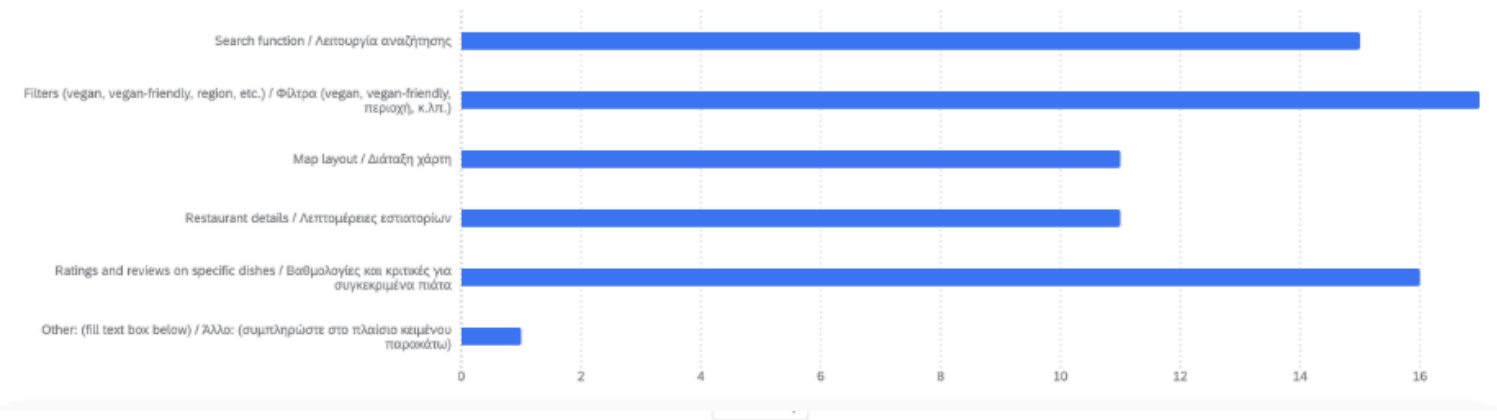
Q3: Q3: Where do you currently live? Ep.3: Πού μένετε αυτή τη στιγμή; 35 ⓘ



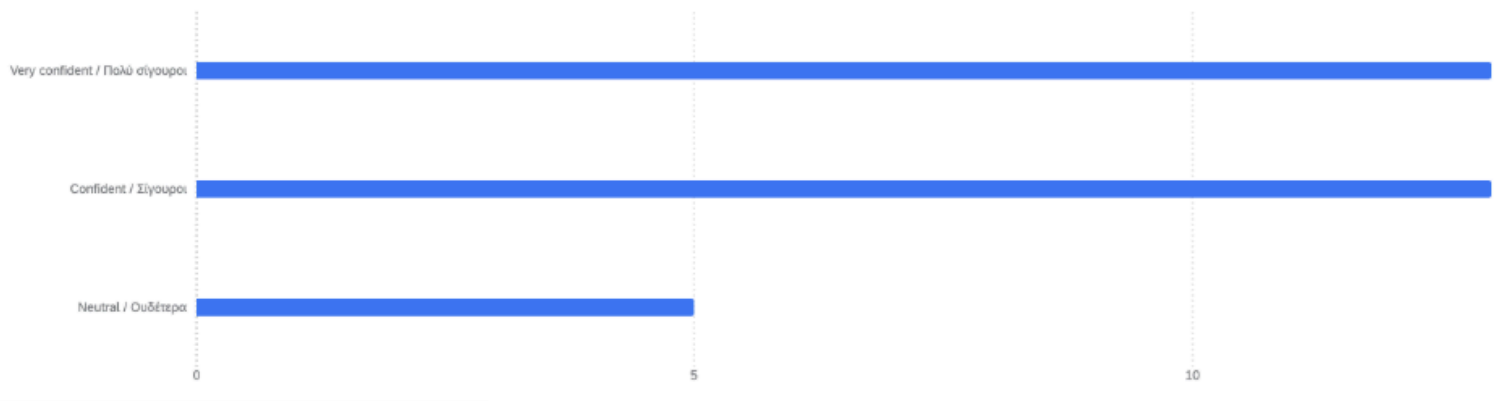
OE Q3: Q3.OE: How quickly could you find vegan/vegetarian options? E3.ΣΕ: Πόσο γρήγορα μπορέσατε να βρείτε vegan/χορτοφαγικές επιλογές; 31 ⓘ



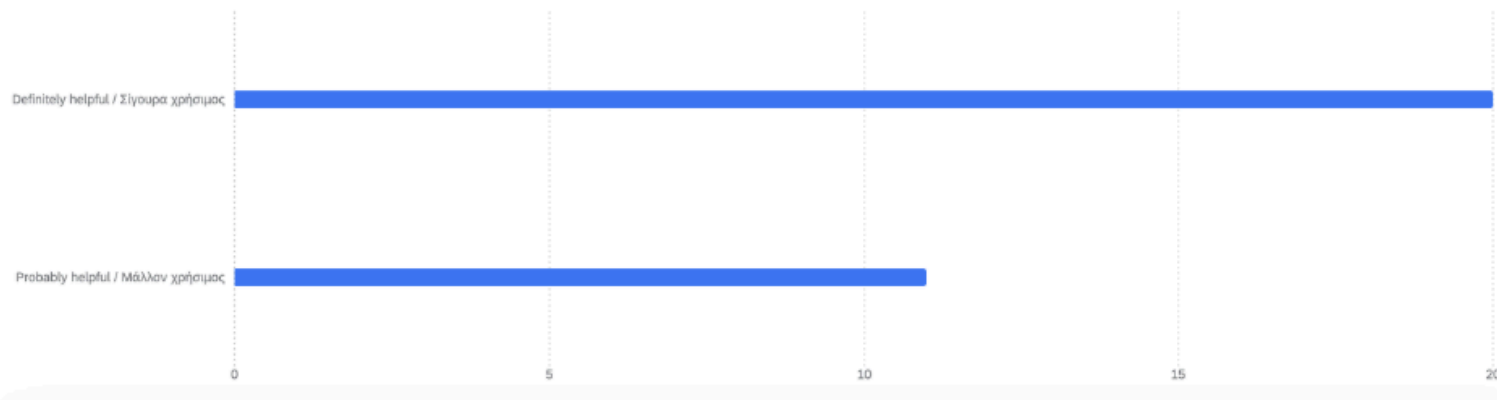
UF Q4: Q4.UF: Which features did you find most helpful? (Select all that apply) E4... 31 ⓘ



V Q6: Q6.V: How confident would you feel using the Veggie Map in a new city? E6.A: Πόσο σίγουροι θα νιώθατε χρησιμοποιώντας τον Veggie Map σε μια νέα πόλη; 31 ⓘ



V Q7: Q7.V: How helpful do you think the Veggie Map is for travelers or people unfamiliar with an area? E7.A: Πόσο χρήσιμο πιστεύετε ότι είναι ο Veggie Map για ταξιδιώτες ή άτομα ... 31 ⓘ



Appendix M: User Manual

<https://drive.google.com/file/d/1GOBZI-xc-VnSrSokNcTYPd5cGh97HYtU/view>