

Power BI Key findings for SKINWIZARD Project (Skincare Product Recommendation System and DIY Skincare Recipe Generator)



Mohamed Nausath Fathima Ilma

APIIT Code: CB013369 — SU Code: 23039813

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Contents

1	Primary Research Key Findings	2
1.1	Problem Analysis	2
1.2	Evaluation Of Primary Research Insights	3
1.2.1	Questionnaire Findings	4

List of Figures

1.1	Primary Research Process	3
1.2	Analysis 1	4
1.3	Analysis 2	5
1.4	Analysis 3	6
1.5	Analysis 4	7
1.6	Analysis 5	8
1.7	Analysis 6	9
1.8	Analysis 7	10
1.9	Analysis 8	11
1.10	Analysis 9	12
1.11	Analysis 10	13
1.12	Power BI Dashboard For Primary Research	15

List of Tables

1.1	Summary of Key Takeaways of Primary Research	14
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Chapter 1

Primary Research Key Findings

1.1 Problem Analysis

Even though the skincare industry has a large scale of skincare products based on different skin types, concerns, and preferences, users find it challenging to find the most suitable products based on the ingredients (Fuschia; 2021). Thus, to address this issue, the project is tailored to provide Skincare Product Recommendations based on the user's chosen ingredient and category.

Also, the user needs to know about recipe generation based on currently available products. Hence, the users can use the application to make a quick skincare recipe based on currently available products. Browsing or googling the internet is less time-consuming and ineffective. Thus, this part of the project aims to give instant skincare recipes based on the user's input of available ingredients on hand.

Even though both the applications mentioned above are critical, there is no exact or closely related application output. Hence, this is an opportunity for the cosmetic industry to use these applications and make a practical and helpful application to serve the user.

Ultimately, this project helps to enhance the skincare shopping experience and DIY recipe-making to take care of the skin at home based on the unique needs of each individual. Thus, it helps to promote consumer satisfaction and confidence in skincare product usage.

1.2 Evaluation Of Primary Research Insights

The questionnaire "Skincare Products: Survey Exploring Skincare Products Preferences," including 24 questions, was distributed among the target audience. The target audience is identified as individuals who are 18 years or above 18 years old. Among the responses, a collection of 107 responses was gained with the aim of providing valuable insight for the evaluation of primary research insights by the researcher's solution.

Hence, this chapter aims to delve into the analysis and observation of the survey findings to extract meaningful insights regarding consumer preferences, behaviors, usefulness, and usage of skincare ingredients, analyze the usage of DIY skincare ingredients, and attitudes towards skincare products.

Through careful examination of the survey responses, the researcher aims to identify patterns and correlations among the skincare ingredients and products based on product types, ingredient preferences, usage, purchasing habits, satisfaction levels, and more! Figure 3.1 summarizes the primary research process of surveys.

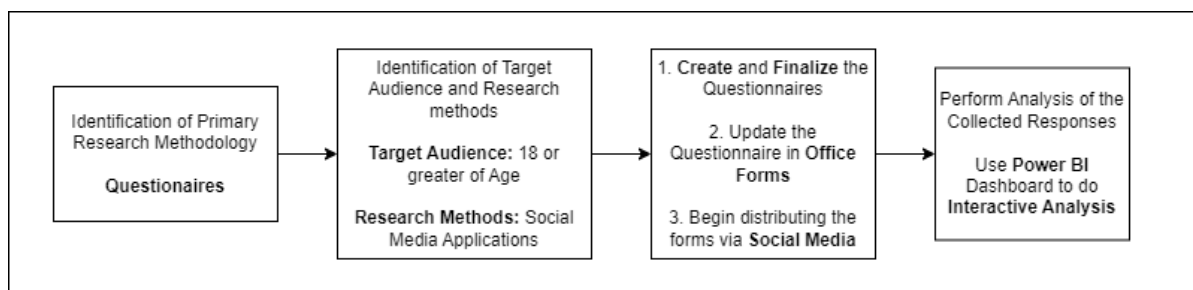


Figure 1.1: Primary Research Process

The next subsection evaluates the key findings from the questionnaire and interviews, including the question, purpose, and observation gained.

1.2.1 Questionnaire Findings

Analysis 1

Question: What is your gender?

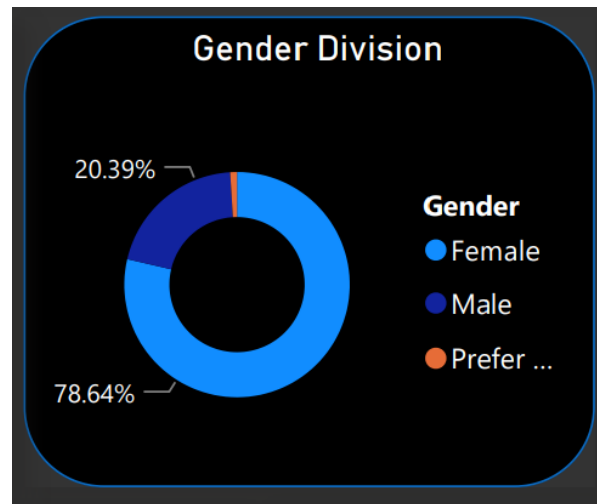


Figure 1.2: Analysis 1

Purpose of the question: To identify the gender category highly involved in skincare product usage

Observation: Figure 3.3 depicts the insights obtained for this questionnaire analysis. Even though skincare products are widely common among 79% of females, 21% of males are integrated and use skincare products. This key finding ensures the conventional stereotype that skincare is primarily used by a wide range of women and shows a growing acceptance among men in adopting skincare practices.

Analysis 2

Question: Do you prefer using commercially available skincare products or homemade/DIY alternatives?

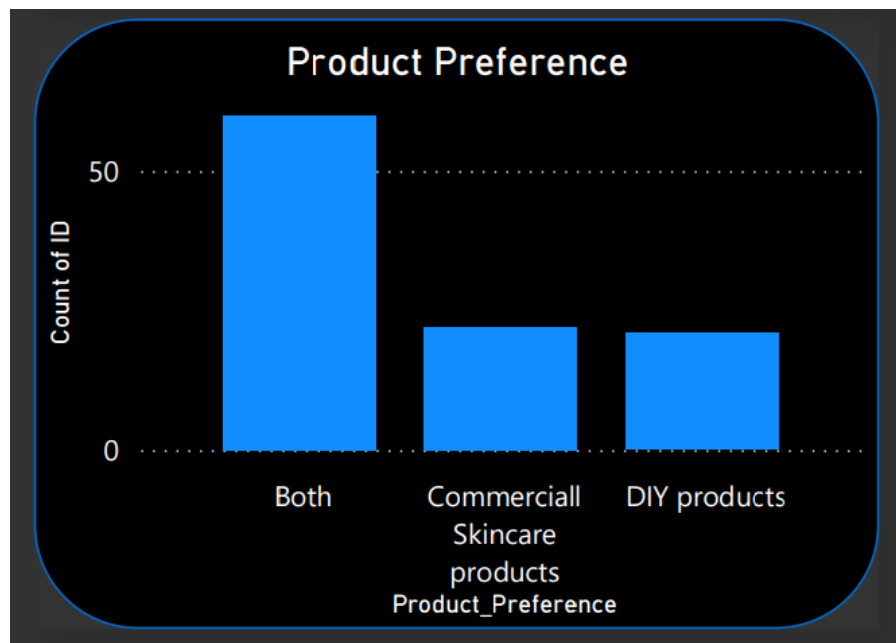


Figure 1.3: Analysis 2

Purpose of the question: To identify whether people use commercial skincare products and homemade/DIY products.

Observation: Figure 3.4 depicts the insights obtained for this questionnaire analysis. Based on the observation, 59% of the participants use both commercially available and home-made products. Hence, the researcher's applications have a higher usage and positive output in terms of people using the application. This finding also suggests that the researcher's application closely meets the requirements of the audience who prefer both types of skincare solutions.

Analysis 3

Question: How satisfied are you with the current skincare products you use?

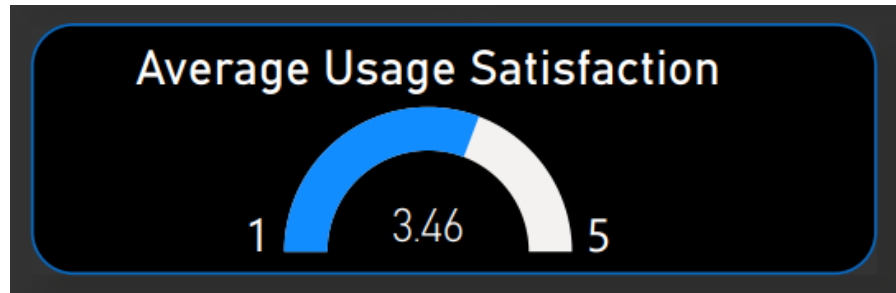


Figure 1.4: Analysis 3

Purpose of the question: To identify whether the currently available products had met at least 4.5 of customer satisfaction

Observation: Figure 3.5 depicts the insights obtained for this questionnaire analysis. Since certain groups are still not yet satisfied, proper product recommendations and DIY skincare recipe generators can help to give such audiences better outcomes. Thus, the customer satisfaction can be further enhanced. By providing access to a wide range of skincare options, the researcher's application is capable of enhancing overall customer satisfaction levels.

Analysis 4

Question: Do you research skincare ingredients?

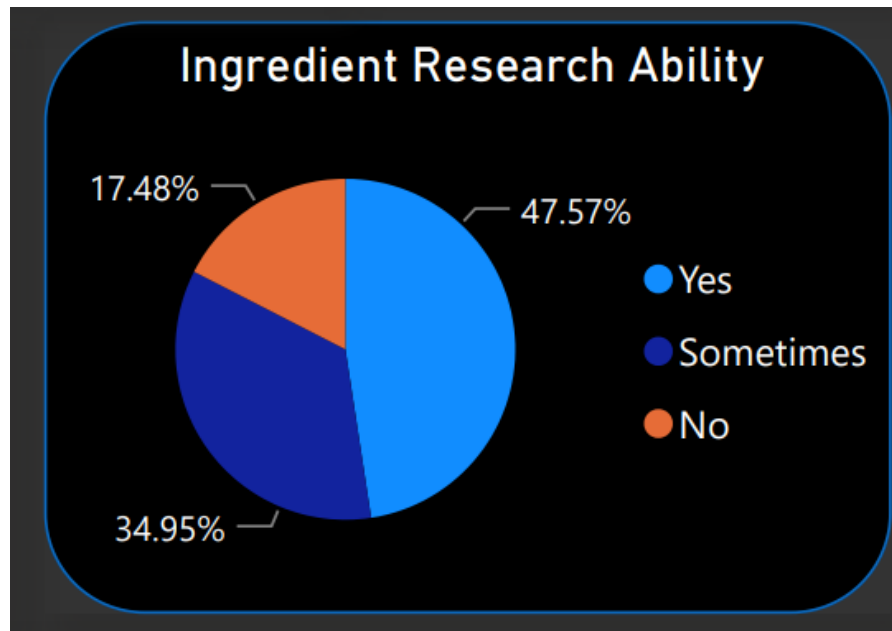


Figure 1.5: Analysis 4

Purpose of the question: To identify whether the target audience research about skincare ingredients.

Observation: Figure 3.6 depicts the insights obtained for this questionnaire analysis. Nearly 49% of people research skincare ingredients, and yet 35% of the target audience sometimes research skincare ingredients. Only a small quantity of the target audience does not research ingredients. However, the majority of research is on skincare ingredients. Moreover, the observation indicates only a small target audience does not conduct any research on skincare ingredients. Hence, a vast audience prioritizes the usage of ingredients in their skin.

Analysis 5

Question: Do you research about skincare ingredients before purchasing a product?

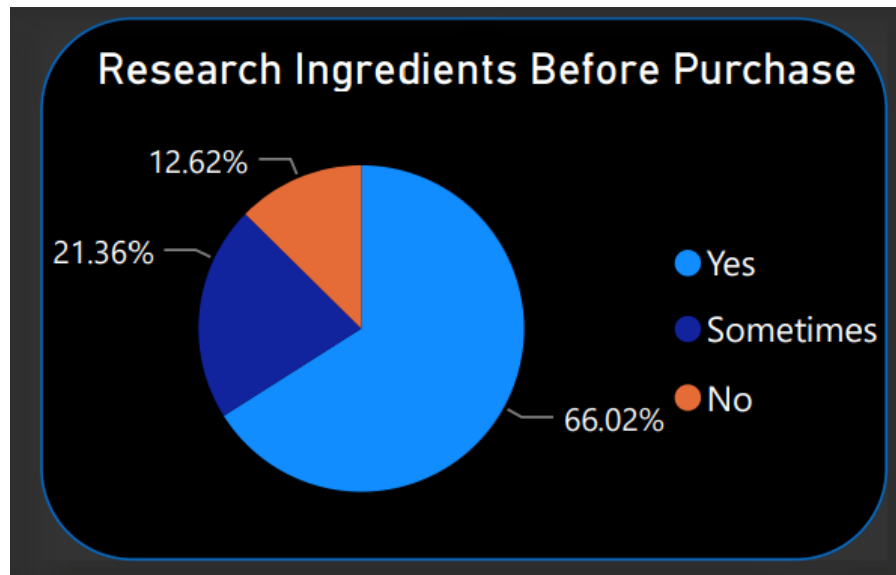


Figure 1.6: Analysis 5

Purpose of the question: To identify whether the target audience research about skincare ingredients before purchasing a product

Observation: Figure 3.7 depicts the insights obtained for this questionnaire analysis. Almost 71% of the target audience research skincare products before purchasing and are aware of skincare ingredients. Hence, the researcher's application gains more success in terms of application usage. Thus, the effectiveness of choosing skincare products can be enhanced further. This finding indicates a high level of awareness among consumers in carefully selecting and using products in their skincare routines.

Analysis 6

Question: Do you research on which type of ingredient is suitable for your skin or body?

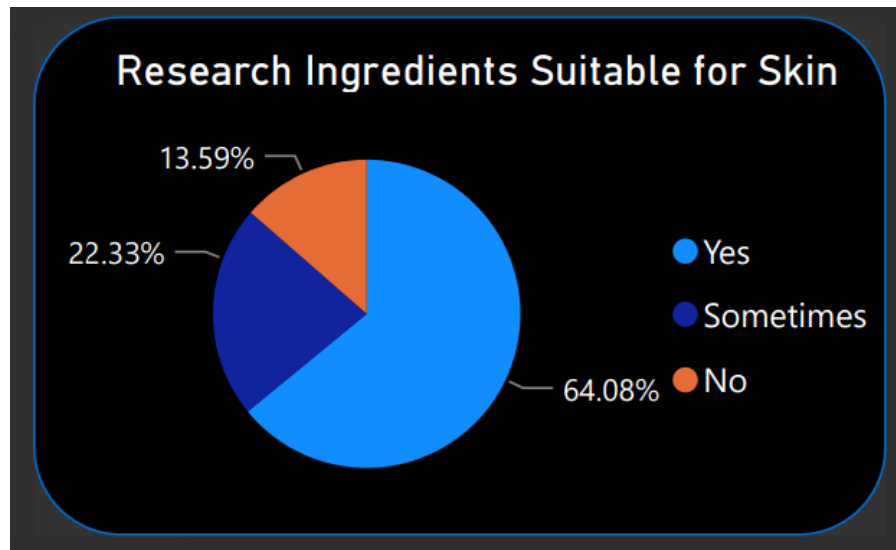


Figure 1.7: Analysis 6

Purpose of the question: To identify whether the target audience research which type of ingredient is suitable for your skin or body

Observation: Figure 3.8 depicts the insights obtained for this questionnaire analysis. 64% of the target audience tends to search for skincare ingredients suitable for their skin. Hence, the audience identifies the importance of researching skincare ingredients based on their skin and body. However, after researching, they can use the researcher's application to make informed decisions.

Analysis 7

Question: Do you prefer skincare products with specific ingredients?

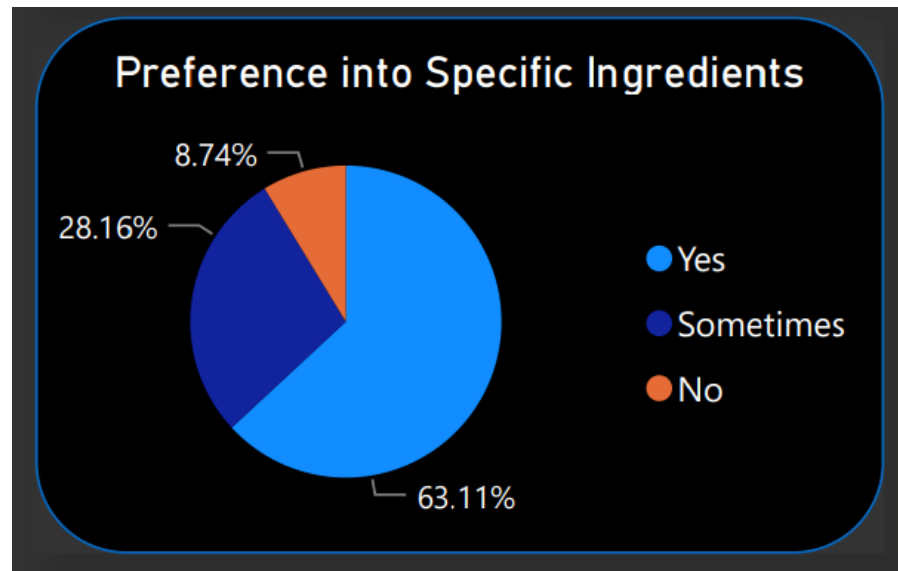


Figure 1.8: Analysis 7

Purpose of the question: To identify whether the target audience prefers skincare products with specific ingredients

Observation: Figure 3.9 depicts the insights obtained for this questionnaire analysis. If the target audience prefers skin care products with specific ingredients, they are more likely to search for such products. Hence, product identification will be difficult in that case. Thus, the researcher's application helps to streamline this process. However, the researcher's application identifies this challenge to smooth the identification of skin care products with specific ingredients.

Analysis 8

Question: Do you give importance for the use of natural/organic ingredients in your skincare products?

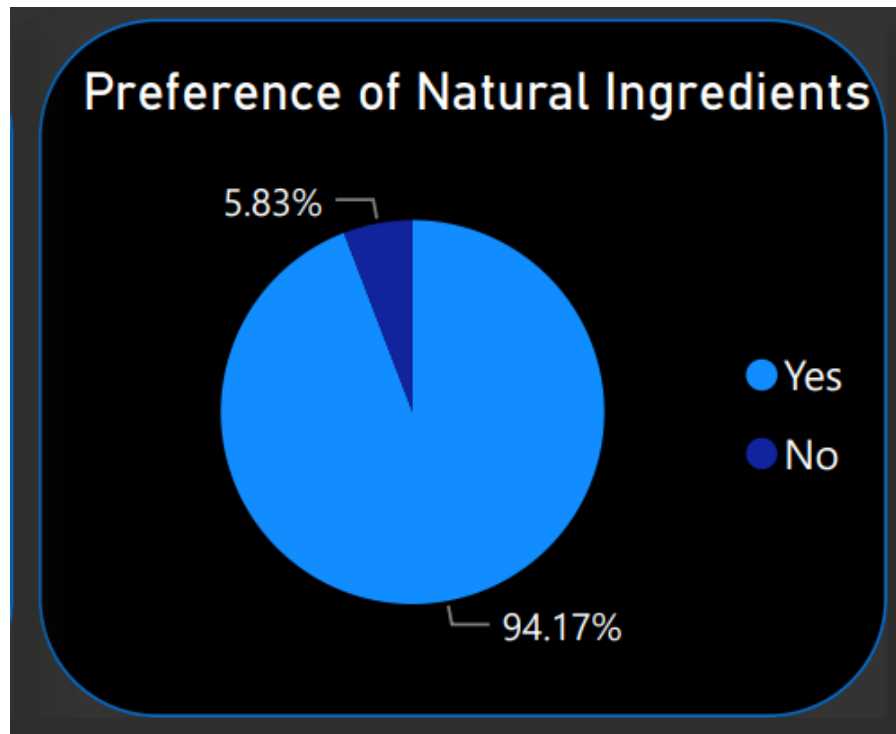


Figure 1.9: Analysis 8

Purpose of the question: To identify whether the target audience uses natural/organic ingredients in your skincare products

Observation: Figure 3.10 depicts the insights obtained for this questionnaire analysis. Since 94% of the target audience prefers to use natural or organic ingredients, a DIY recipe generator will be helpful. It would help to find the most apt recipe based on the essential ingredients the user prefers to include. Since the proposed solution uses a DIY recipe generator, it helps users create recipes with natural and organic ingredients that meet their skincare needs.

Analysis 9

Question: Would you be comfortable using a tool to find skincare products suitable for you by giving the product ingredient you prefer it to include?

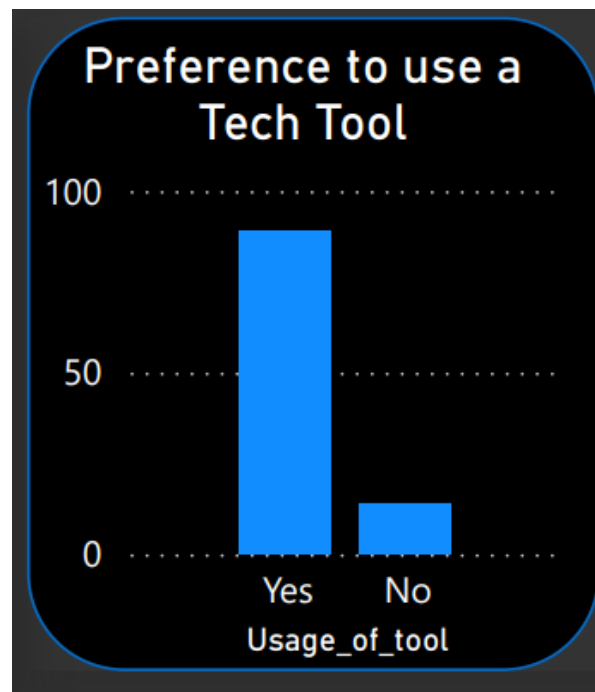


Figure 1.10: Analysis 9

Purpose of the question: To identify the success rate of the researcher's application or solution.

Observation: Figure 3.11 depicts the insights obtained for this questionnaire analysis. Since 87% of the target audience prefers to use an application to identify the skincare products based on the ingredients, the researcher's solution has a high success rate. Also, many people would use this application to fulfil their requirements.

Analysis 10

Question: Would you be comfortable using a mobile or web application for the above use case?

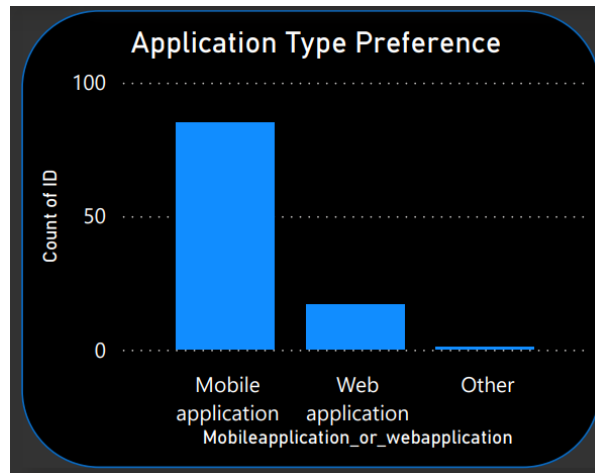


Figure 1.11: Analysis 10

Purpose of the question: To identify whether the target audience prefers a mobile or web application.

Observation: Figure 3.12 depicts the insights obtained for this questionnaire analysis. As planned, the researcher can make a mobile application to provide the applications of the solution. Hence, more people also prefer a mobile application than a web application. Furthermore, the observation ensures that the researcher's choice to prioritize the development of a mobile application is strategic and would positively enhance user engagement.

Table 1.1: Summary of Key Takeaways of Primary Research

Description	Participant Count
Total Participants for Questionnaire	107
Total Participants of Target Audience	103
Male Participants in the survey	21
Female Participants in the survey	81
Participants who research ingredients	67
Participants who research specific ingredients	65
Participants who research ingredients before purchasing a product	68
Participants preferring commercial skincare products	22
Participants preferring DIY Skincare products	21
Participants preferring both (Commercial skincare products and DIY skincare products)	60
Participants preferring to use mobile applications	85

Based on the summary Table 3.1, it can be concluded that the primary research essential for the SKINWZIZARD project was successfully completed. These insights would also help the researcher make decisions to align the application with users' requirements. Since the majority of participants focus on "skincare ingredients" for both commercial and DIY products, the research project SKINWIZARD creates a win-win situation for the project's success.

The Power BI dashboard in Figure 3.13 helps to further analyze the key findings further in an interactive manner.

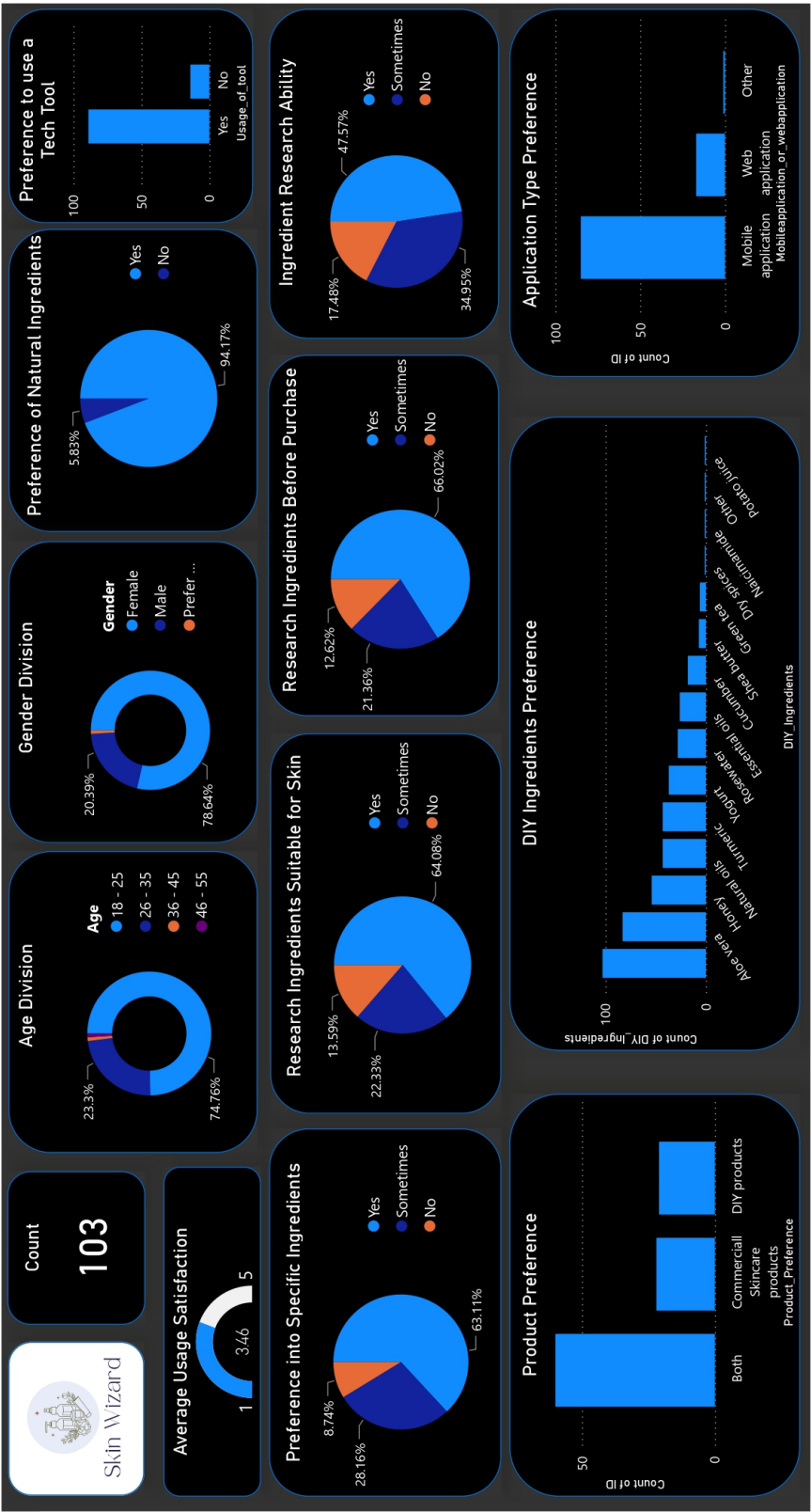


Figure 1.12: Power BI Dashboard For Primary Research

Bibliography

Fuschia (2021). Ingredients suitable for different skin types.

URL: *<https://www.linkedin.com/pulse/ingredients-suitable-different-skin-types-fuschiabyvkare/>*