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04/29/2021

RESEARCH DOCUMENT

On Roermond City

GROUP 8

B-CB-BUSN2-B2-CB01

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INTRODUCTION

We produced a research document for our Roermond project. We will address Roermond's discovery in this research paper. At the end of this article, we will have a proof of the problems that the client has provided to us. Traffic, young people leaving the area, and the local economy are among it. These three viewpoints have a position to be and develop in Roermond, but they have yet to be proved as sustaining problems.

We've come up with a main question and a couple of sub-questions to help us analyse such issues in the city. Therefore, the main question will help out with analysis overall and a clear understanding of a topic and our possible solution. But sub-questions work as a skeleton around which we will gather information to answer the main research question.

- What effect do the three problems have on Roermond?
 - What is Roermond?
 - What is the relevance of Roermond?
 - What is the local economy in Roermond?
 - What is the problem and what caused it?
 - What historical places are there?
 - What is happening in the traffic jam and young people?
 - What IT solution can resolve the problem?

Each of the sub-questions will have a leading research subject that will be accompanied by the response by the end of this paper. Each of the sub questions is based on a particular issue raised by the client; for example, a sub question about local economy is a research sector for the local economy crisis in Roermond, covering its context and proof of a current issue. The same concept applies to the other two issues. Following the completion of such an analysis, there will be a sector responsible for IT solutions, which will serve itself as a source of research and potential integration to the traffic issue, young people leaving the area, and the local economic crisis.

WHAT IS ROERMOND?

We'll try to answer our first question, "What is Roermond?" in this segment.

Roermond is a city in the south of the Netherlands, specifically in the Limburg province. It is located on the Roer's banks and near the Maasplassen a 3.000-hectare chain of large and small lakes. (*Roermond travel and city guide, Jan 2014*). Roermond was once a port town and a major trade centre; today, it is a city with a long and rich history. (Holland.com, 2020) Also it has a population of 58.000 inhabitants. (*Welcome to ROERMOND*, (n.d.))

Nowadays, Roermond is best regarded as the home of the Benelux's largest designer outlet (the Benelux consists of Belgium, the Netherlands and Luxembourg), (Holland.com, 2020).

Below, we'll discuss the importance of Roermond, their stories and backgrounds, and all of the material we might find on the subject in order to try to address the question: What is relevance of Roermond?

WHAT IS RELEVANCE OF ROERMOND?

The city centre is full of history and culture, and is designated as a conservation area. The city has a list of protected buildings, like churches and guild houses, its skyline dominated by the St. Christopher Cathedral, dating back to the 15th Century and the Munster Church, built in the 13th Century. (*Welcome to ROERMOND*, (n.d.))

History

Roermond is a city built by the romans. Between the 16th and the beginning of the 18th century Roermond was ruled by the Spanish. The Spanish brought Catholicism back into Roermond to such an extent that when the Protestant Dutch reclaimed the city, the people of Roermond did not trust them. When Belgium and the Netherlands went their separate ways, the area was split in two parts, Roermond was the part that stayed with the Netherlands. During world war two, Roermond was occupied by the Germans until the US army liberated them towards the end of the war. Due to such events and with the later on rebuilding and restoration of many of the properties, the city was brought back to life. (*Roermond travel and city guide, Jan 2014*). Another fascinating aspect of historical events was the 1613 witch trial, which is also known as the largest trial in the Netherlands since it resulted in the deaths of sixty-four people by flames. (Wise Witch, 2020). There is also a History House, which is a museum dedicated to Roermond's historical evolution. According to what we discovered, Roermond is a city steeped in history, from its origins to the events that have taken place there. History tourists should keep an eye on this place because it has such a compelling and intriguing tale.

Relevance

One of its main attractions is a Roermond's Designer Outlet that attracts millions of visitors each year and features 150 stores featuring 200 brands such as Gucci, Prada, and Armani. (Holland.com, 2020). Besides the outlet, Roermond's city centre also has little boutiques in historic buildings. On Wednesdays the Munsterplein is converted to a marketplace surrounded by cafes where you can grab a drink and a snack. (Holland.com, 2020). Besides that, Roermond got a strong set of parks, leading to a rich nature of the city. Dagstrand De Weerd park, for example, is well-known for its waterfront and overall elegance, and it continues to be a tourist attraction. Then there's a group of museums that must be seen. Cuypershuis Roermond, for example, is a museum that was once the home and studio of architect Pierre Cuypers, who was born and raised in Roermond. (Things to do In Roermond: List of tourist attractions in Roermond, (n.d.)) Then there's a list of tourist-friendly restaurants and cafes. For example, Aruna Cuisine – Beste Restaurant Roermond is well-known for its pleasant atmosphere and friendly staff. It also has delectable cuisines. We can also see from this knowledge that Roermond is a town with a fantastic atmosphere and places that visitors can enjoy.

Events

Roermond does not have a diverse range of festivals or events, but we discovered that Roermond hosts a Solar Weekend, which is a summer festival that features electronic music as the main host, but also includes a bit of music from other genres, as well as a variety of activities for visitors to enjoy. (Solar weekend 2021) Roermond also acts as a host for the Big City Swim, a fundraising event that raised about 80,000 euros in 2019. It also grew to 150 volunteers to assist with the preparation of such a gathering. There are two key chain parts for raising funds: one for facilitating 11 cancer-related researches, and the other for making mammography less painful. This is a fantastic fundraising project with a unique approach for such a small community. (Roermond city Swim, (n.d.))

As a result of our research into the Roermond area, we discovered a variety of fascinating and exciting locations and activities that we would not have discovered without a research process. As a result, aside from the Design Outlet pop-ups, historical heritage, parks, and other difficult-to-find locations, Roermond's relevance has waned, and we want to get it back. Since it has been discovered that such a rich history and fantastic places are difficult to find, we would like to suggest that we use our IT abilities to conserve such places and bring them back to the attention of tourists and citizens of Roermond.

Then, after presenting such broad details about Roermond's relevance and answering the question about it, we'd like to look at another sub questions about local economy like: What is Roermond's local economy? What is a problem and what caused it?

WHAT IS THE LOCAL ECONOMY IN ROERMOND?

Economic portrait of Roermond

Here, we'll look at the sub questions of a local economy, such as what the problem is and what caused it. With the details provided below, we hope to demonstrate our findings and provide answers to these questions in a research format.

Roermond is a Dutch city located in the southern part of the country. It has a long and fascinating history, as well as various attractions such as churches, events, cafes, and others. Roermond, however, is facing some upcoming issues despite having such a wide set of economy representatives. Consider the following scenario:

The biggest problem being that the development of the local economy is impacted by the Designer Outlet. Over the past 5-6 years the local businesses faced bankruptcy for example, the local "ABC sushi bar". (see Figure 1). This happened in May of 2019, when the Outlet was in his prime with more than 7 million customers per year. (Abc sushi Bar B.V. (n.d.))

The screenshot shows a website with a blue header containing navigation links: Home, New bankruptcies, Bankruptcies, Online auctions, News, Services, and English. Below the header, a breadcrumb trail reads: Home > Bankruptcies and suspensions of payment > Abc Sushi Bar B.V. The main heading is "Bankruptcy Abc Sushi Bar B.V.". The text below states: "Abc Sushi Bar B.V. in Roermond (Limburg) was declared bankrupt by the court in Limburg. The appointed curator is mr. E.J.M. Stals. The insolvency number of this case is F.03/19/158. The (main) activity of Abc Sushi Bar B.V. is food and beverage service activities. There are 5 reports available." To the right of this text are three icons with links: a play button for "Started up again?", a document icon for "Retain", and an envelope icon for "e-mail notification". Below this is a blue button labeled "Vordering indienen". A blue banner below that says "There are more details available on this case. Click here to log in or register FOR FREE." At the bottom, a grey box titled "General information" contains a table of details.

Name:	Abc Sushi Bar B.V.
Place:	Roermond
Province:	Limburg
Status:	Bankruptcy
C of C number:	63825244
Insolvency number:	F.03/19/158
Court:	Limburg department Roermond
Examining magistrate:	mr. BRM de Bruijn

Figure 1: screenshot (an information from an article "Bankruptcy Abs Sushi Bar B.V. 2017, <https://www.faillissementsdossier.nl/en/bankruptcy/1501112/abc-sushi-bar-b-v.aspx>)

We can assume that the issue isn't entirely due to the Outlet, but rather one of the many causes of local business in Roermond, based on a representation of a local bar's bankruptcy with a pick of tourists visits. In that area, the majority of businesses, including this sushi bar, suffer.

In keeping with the local economy's struggles, we found a table that represents Roermond's income values in 2018 and 2019. As a result, we can see that the lowest income has a percentage of 41 percent and 45.30 percent with the lowest income per household, while the highest income has a percentage of 17 percent and a household income of 14,90 percent, indicating that the gap between low and high incomes is substantial and leads to evidence of suffering in general, not only dependent on local business, but on overall economy in the city. (see Figure 2)

Income	Value	Unit	Year
Number of income receivers	46.600	number	2018
Average income per income receipt	€30.100	Euro	2018
Average income per inhabitant	€24.700	Euro	2018
40 percentile persons with lowest income	41%	percentage	2018
20 percentile persons with highest income	17%	percentage	2018
Active persons 15-75 year	58,00 %	percentage	2018
40 percentile households with lowest income	45,30 %	percentage	2018
20 percentile households with highest income	14,90 %	percentage	2018
Percentage households with a low income	9,50 %	percentage	2018
Percentage households at social minimum	8,80 %	percentage	2018
Persons with social security welfare	1.900	number	2019
Persons with social security for incapacity for work	3.620	number	2019
Persons with social security for unemployed	940	number	2019
Persons with social security for elderly	11.190	number	2019

Figure 2: screenshot (a table with Income of Roermond of 2018 and 2019), <https://allcharts.info/the-netherlands/municipality-roermond/>

We also decided to equate an average salary in the Netherlands to the average income per inhabitant, where we can see that either the income in Roermond is much lower than the income in the Netherlands comparisons starting at the age of 25, or the average income per inhabitant in the age range of 20 to 24 is higher than the Netherlands one. (see Figure3). However, we assume that the gap is due to the fact that the average income in Roermond is 24,700 euros, which is lower than the average income in the Netherlands, which is 28,330 euros. Such a distinction can also be reinforced by the local economy's struggles and cultural diversity.

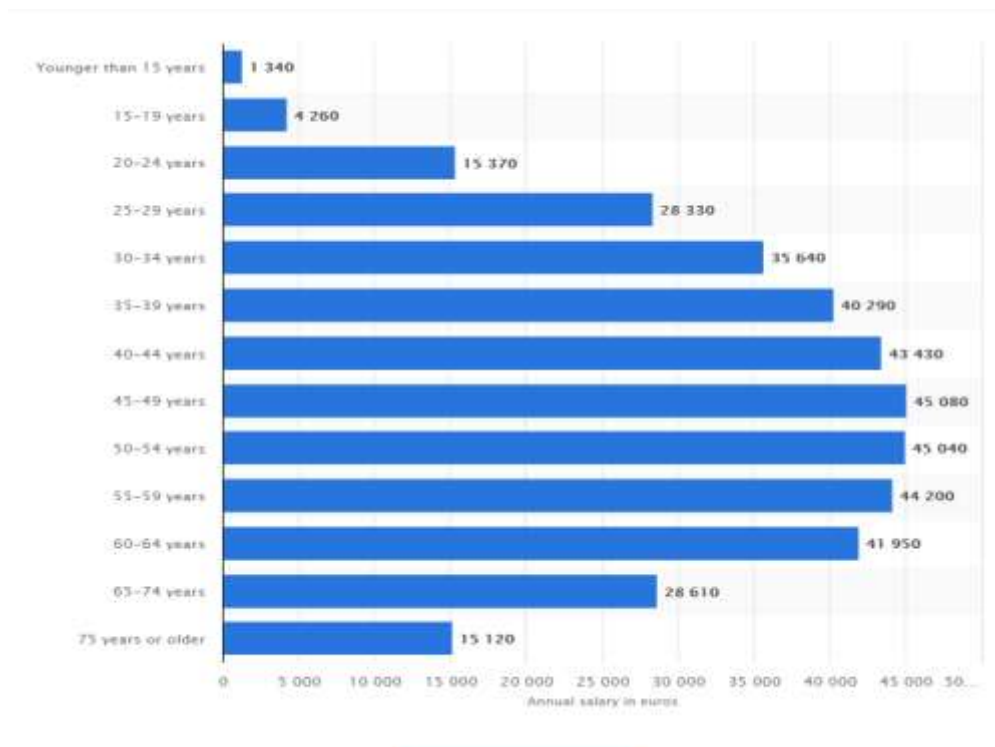


Figure 3: screenshot (a table with Average Salary in the Netherlands per age group), <https://allcharts.info/the-netherlands/municipality-roermond/>

There is also outside data and research that we want to maintain and acknowledge for such a broad subject, to get a better understanding of the local economy in Roermond, based on our findings about local economy and its potential problems.

SIDE EFFECTS OF THE ECONOMY

Another piece of data we wanted to present is a correlation between people's opinions on the Roermond economy as a whole. As a result, in order to gather information from potential clients, we conducted a survey designed specifically to collect data for analysis and determine if people are interested. As a result, we used the survey to collect some data, which showed that 78.8% of respondents had an opinion about local business in Roermond. (Refer to Figure 4) The question is vague and does not fully refer to economy, but it reflects the curiosity shown by survey participants

who agreed with the questions and wanted to learn more about Roermond's economy.

Do you think if there was more information about local business like Cafe De Verleiding, would you hear about a place like this?

52 responses

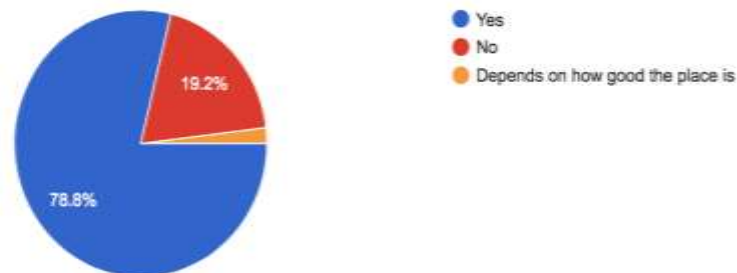


Figure 4: screenshot (pie chart number one with a question “Do you think if there was more information about local business like Café De Verleiding, would you hear about a place like this?”),
2021,https://docs.google.com/forms/d/e/1FAIpQLSfVNk_kDGi4vMMvQsKx6kU2bOR5nkLKtjyh1YyukE27tHnVuw/viewform?usp=sf_link)

As an addition we found about the revenue of Roermond. The information that we managed to gather was related to the revenue of the company's metrics. Due to the visible graph (see Figure 5), we pointed out the differentiation of the revenue in quarter four of 2019 to quarter one of 2021. The beginning had a high start with the revenue equal to one hundred millions of dollars and at the end it maintained of twenty-two million dollars.

Roermond Company Metrics



Figure 5: screenshot (graph of “Roermond Company Metrics” them?),2021,<https://www.zoominfo.com/c/roermond/372618550>)

We retained an assumption about this revenue graph due to some leading events that occurred in 2020 and continued in 2021. (see Figure 5). As can be shown, the respondents from 2019 to 2020 are stable, sticking to a simple the same stage with just a slight difference in decline, while the leading gap between the fourth quarter of 2020 and the first quarter of 2021 shows a significant decrease. As we can see, with the start of covid, not much of a local economy was harmed due to a lockdown that started on March 15th, although with the extension of rules and overall lockdown till May, some of the movement began to valuate, such as hair salons reopening, the bar reopening with an outside location, and so on. As a result, there was not as much of a detriment to small businesses as there might have been, and there was also government funding for businesses, which helped. However, if we regard October as the start of the 2020 fourth quarter, a partial lockdown was enforced on the 14th of October, as well as the closure of cafes, restaurants, and bars, which remain closed to this day. (*COVID-19 pandemic in the Netherlands* 2021) As a result, based on the graph, we can conclude that the second close of the lockdown affected Roermond's company much more than the first (see Figure 5).

Based on the subject of the city's local economy, its challenges and causes, as well as supporting facts, we approached this portion. We couldn't have a better answer on such a global topic due to a lack of information on Roermond, but we maintain a collection of assumptions and proofs to stick with it. All of the information above represents our results in relation to our sub questions; all of the analysis demonstrates an example of a local economy, its potential cause, and proof that it is a problem, which are answers to our Roermond sub questions.

In addition, Roermond is dealing with a slew of other issues, including a city's historical legacy. Which will be discussed further in the following section.

WHAT HISTORICAL PLACES ARE THERE?

Description of historical areas.

We'll go through another one of our sub questions in relation to Roermond's past in this section. What historical places are there? Even, to look at it from an issue perspective, we'd like to illustrate a potential source.

The city of Roermond is full of historical sites, but most of them have been damaged or lost due to time or other factors. Here is an example of two most popular historical sites in the Roermond:

- The Munsterberg: is a church notable for its front tower, as well as the fact that it is the only surviving part of a 1924 abbey. Another two front towers were added as part of the expansion, which was extremely controversial for the Roermond Minster. (*Dguide - destination guide - munsterkerk*,(n.d.))
- The Rattentoren: is a round corner tower that is the second watchtower to survive. This also has a charming interior with a Medieval Roermond theme. (user,(n.d.))

On the one hand, the Outlet retains Roermond's status, but on the other, it is the reason why no one knows the city's past. The Outlet attracts at least 7-8 million visitors per year (WW, (n.d.)). We continued to include a survey as an additional proof of the study workflow, which we designed specifically to attract interest and participation from people of various ages and cultures. We decided to see if there was a general interest in participating in a product and knowing about Roermond city overall. As a result, we found that approximately 84.6 percent of the participants from a total of 52 responders are unaware of Roermond's historical sites. (see Figure 6)

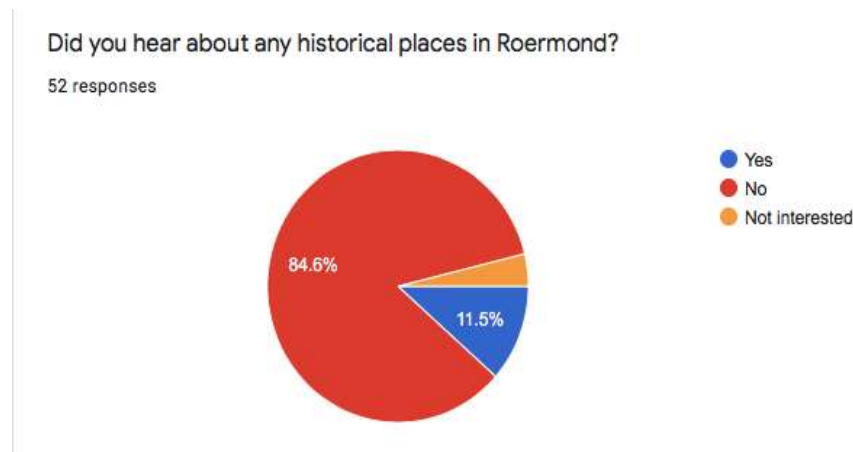


Figure 6: screenshot ("Did you hear about any historical places in Roermond?"),2021,https://docs.google.com/forms/d/e/1FAIpQLSfVNk_kDGi4vMMvQsKx6kU2bOR5nkLKtJyh1YyukE27tHnVuw/viewform?usp=sf_link)

Then we'd like to move on to Roermond's side issues, which are often seen as potential problems for the area, prompting our second sub question: What is going on with traffic and young people? As a result, the section below will include an answer to such a question as well as additional arguments.

SIDE ISSUES OF ROERMOND (WHAT IS HAPPENING IN THE TRAFFIC JAM AND YOUNG PEOPLE?)

Roermond is still dealing with a number of other issues. One of the most serious problems in Roermond is traffic congestion. Every year, at least 7-8 million people visit the Outlet, with nearly 60-70 percent of them coming from Germany and Belgium. (WW,(n.d.)). As a result, in comparison to a normal daily basis of the city without additional European Union tourists, such a large number of visitors to the city's most famous attraction can be supported by road traffic.

We also found a graph that shows the transportation proportions in 2019 in the South of the Netherlands (which includes Roermond), and we're assuming that the increased traffic is followed by a large number of vehicles, which is a significant amount of (see Figure 7).

Transport	Value	Unit	Year
Passenger cars total	28.955	number	2019
Passenger cars petrol	24.180	number	2019
Passenger cars other fuel	4.775	number	2019
Passenger cars per household	1,00	average	2019
Motorcycles	1.945	number	2019

Figure 7: screenshot ("The graph illustrates the local transport in 2019. (?)",2019,<https://allcharts.info/the-netherlands/municipality-roermond/>)

Furthermore, there is a concern about how young people grow and maintain the city's standing. Roermond has seen a large rise in population over the last four years. There are, however, just families and senior couples. Due to a variety of issues, young people are leaving the area. The first is Roermond's lack of higher education. (Webb, 2019)

In addition to the problems faced by young people, we discovered that the city's average age is 43 years old, while in overall the average age is 42 years of in the Netherlands (see Figure 8).

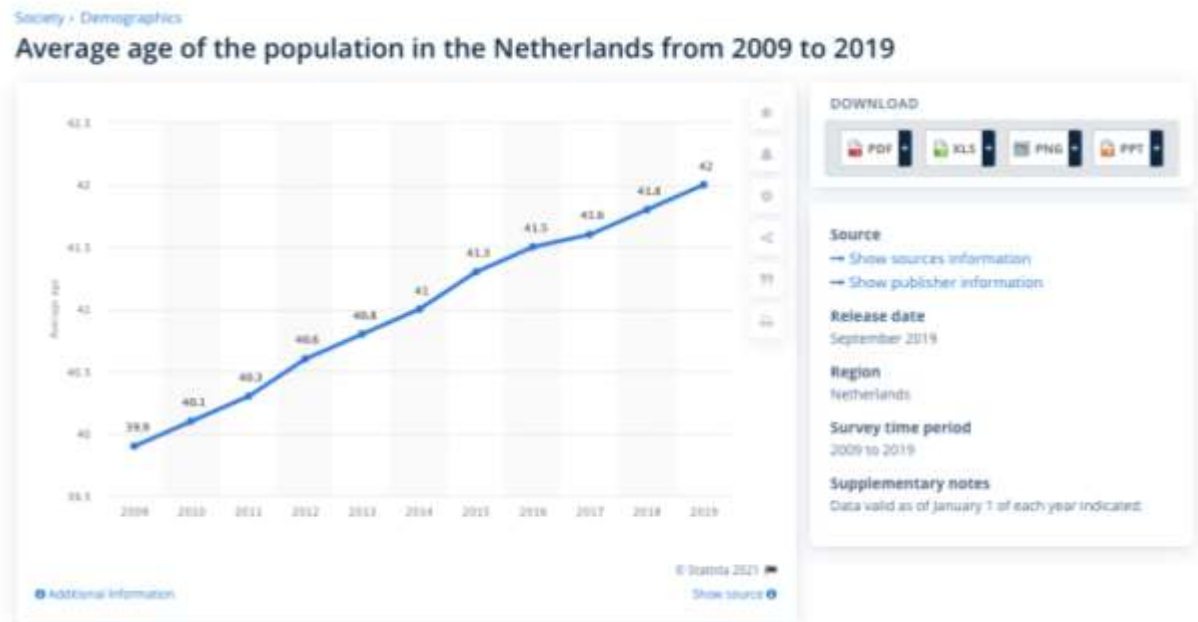


Figure 8: screenshot, department & 4, 2020 (graph of “Average age of the population in the Netherlands from 2009 to 2019”),<https://allcharts.info/the-netherlands/municipality-roermond/>

Furthermore, the city's age index is higher than the Netherlands. This can be seen in the graph below. Also shown in the graph is the average age, which is 43 years old. (see Figure 9)

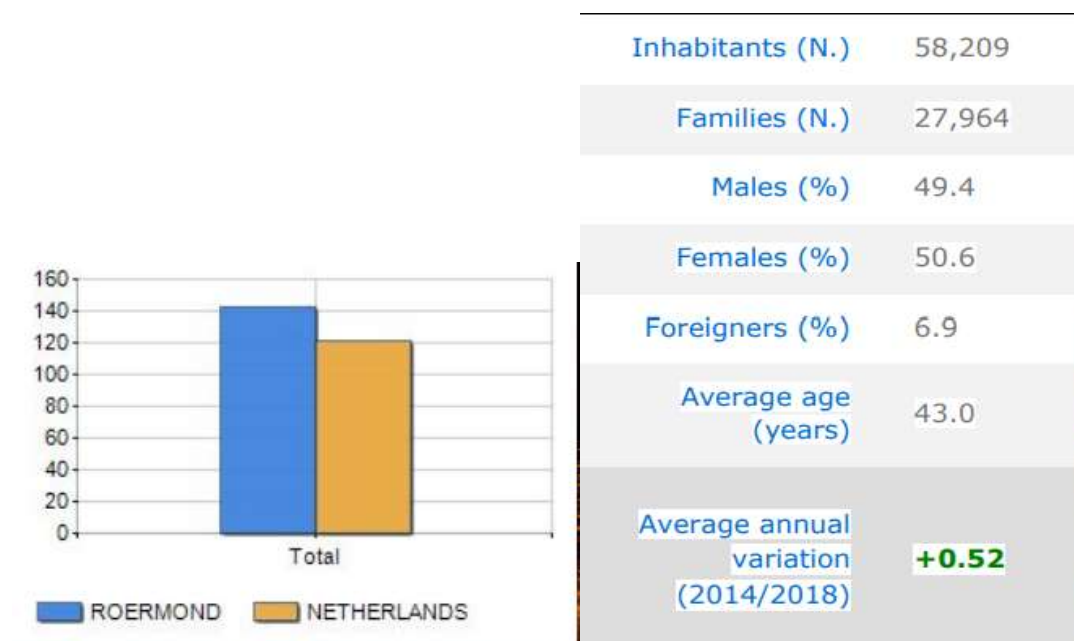


Figure 9: screenshot (graph of “Index of age in Roermond “), (n.d.),
<https://allcharts.info/the-netherlands/municipality-roermond/>

Another example of the young people dilemma is seen in the bar chart below, which shows a percentage by age group. We can see that the highest percentage relies on the 45 to 65 year age group, implying that this age group relies on Roermond more than the 15 to 25 year age group, which is only 11 percent. Having such a low percentage of this age group in this reference is a remark of the city's unpopularity among the young and can be considered another systemic expense of the Roermond city. (see Figure 10)

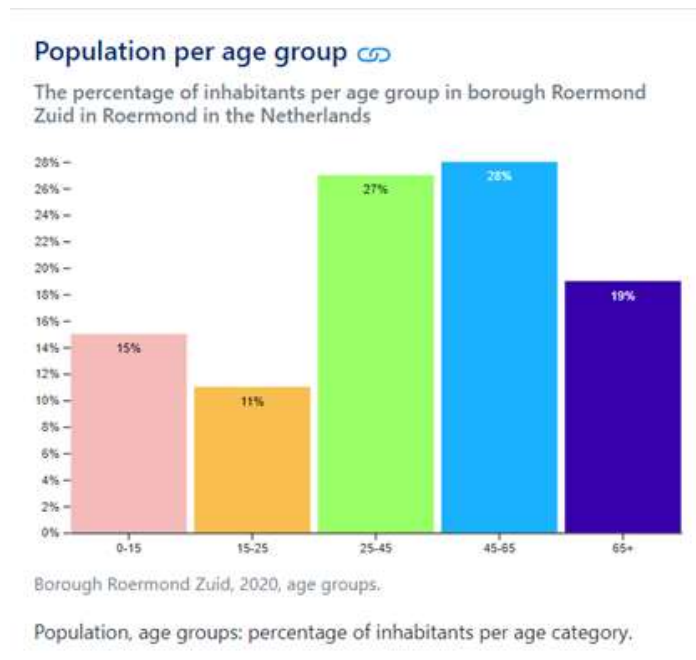


Figure 10: screenshot (bar graph of “Population per age group”),
(n.d.), <https://allcharts.info/the-netherlands/municipality-roermond/>)

All of the topics in the sections on local economy, heritage, and other issues, on the other hand, must be discussed. As a result, we answered a collection of questions about these topics with a segment on local economy, history, and side issues, such as:

- What is the local economy in Roermond?
- What is the problem and what caused it?
- What historical places are there?
- What is happening in the traffic jam and young people?

Based on our results, we continued to highlight local economy problems in Roermond and their causes, then we went on to historical heritage, where we presented examples of historical places and their possible causes, and finally we pointed out issues such as traffic congestion and young people leaving the area. We identified the source of the problem and noted that, like all of them, it is a problem that requires a solution.

However, before diving into solution growth, a summary of all of the issues identified should be made.

CONCLUSION

Roermond is a city with a rich historical past and numerous tourist attraction. However, due to local economic challenges, traffic congestion, and young people leaving the area, it continues to be a daily struggle. Despite an increase in visitors per year and a number of activities, it continues to face problems. Due to the economic crisis, citizens' income is falling below what it should be in comparison to the rest of the world, resulting in local businesses going bankrupt. It's not just the problem; there's also a traffic jam that affects 7-8 million visitors per year, and a population that's rising but losing a young generation, with an average age index of 43.3 years, which is higher than the national average.

Roermond is experiencing terrible time consumption and spending as a result of all of these problems. As a result, as a website platform solution, it may address such issues while still having the potential to gain popularity and be used in the same way as other travel applications. In the future, we hope that Roermond will shine and attract new visitors who will be able to explore the city independently and without the use of a guide network. This study provides an answer to our main research question: What effect do the three problems have on Roermond? Overall, the impact is negative, according to the research, Roermond is facing a slew of serious problems in terms of local industry, population, and traffic. Which are a large part of the city's lifestyle and future growth, and which are also harmed by such a collection of issues.

All of the evidence for such a statement is mentioned above in the sections that step-by-step clarify each of the sub questions:

- What is Roermond?
 - What is the local economy in Roermond?
 - What is the problem and what caused it?
 - What historical places are there?
 - What is happening in the traffic jam and young people?
- What IT solution can resolve a problem?

In addition, we presented answers to these questions in their personal pages, where we defined them, speculated on their causes, and demonstrated that they are real problems.

As an additional form from our survey, we gathered some answers based on why do people think there should be more information about local business and historical places overall, here is a result:

Why do you think there should be more information about local business and historical places to know about?

37 responses

- It is important to educate yourself in terms of culutural awareness
- I love visiting local businesses, but it is hard to find them!
- It helps generate tourism
- than it would be easier for people who don't live in Roermond to visit historical sights or local shops.
- It will attract more tourists or more opportunity for costumers that will support the local economy.
- Because if add up more information, it will be easier to travel.
- They are needed in this society, otherwise the big capitalist shops will take over
- So people can find them easier and know more background information
- So you know what you're visiting the city for. Tips on activities

Figure 16: screenshot (a comment section with a question “Why do you there should be more information about local business and historical places to know about?
) ,2021,https://docs.google.com/forms/d/e/1FAIpQLSfVNk_kDGi4vMMvQsKx6kU2bOR5nkLKtjyh1YyukE2_7tHnVuw/viewform?usp=sf_link)

There will be a representation of an IT solution that will have a potential resolution function for the problems identified by the client to be able to address issues with traffic, young people leaving the area, and the local economic crisis.

WHAT IT SOLUTION CAN RESOLVE THE PROBLEM?

Description.

We recognize that Roermond requires a resolution based on issues such as local economy, historical forbites, traffic congestion, and young people leaving the area. We've shown that these problems exist now, and we'd like an IT solution to solve them.

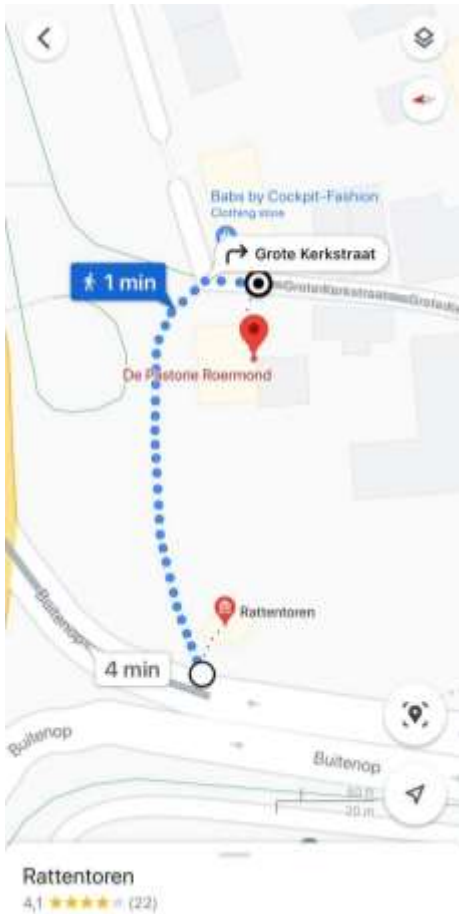
Our solution includes a website portal that will serve as a source of information for our customers. The website will provide a list of tourist attractions, cafes and restaurants, hotels, and several other locally related locations, as well as function as a map and guide generator.

As an example, we consider a "Rattentoren," a round corner tower with a historical background from the 14th century, a historical attraction for a lot of visitors of Roermond. (see Figure 11) On the web page, a map with the location of "Ratterntoren" will be shown, with the user having the option of keeping only to "Ratterntoren" or adding a cafe nearby (or other local places). As a result, if a user selects an additional location, a generator of options will appear, including nearby cafes such as "De Pastorie Roermond." (see Figure 12) After generating such a path, a customer is given a final result that includes a fixed route that can be used to schedule future visits to the Roermond.



Figure 11: screenshot (screen form a Google maps app of a path of Rattentoren location),2021

They will be able to display a range of choices with the distinction of categories such as history, local business, and several others when



planning their trip. Each location will have a description, a summary of what they can give you as a customer and a review of each location with potential user comments.

As a result, based on this brief explanation and a possible example, our key idea would include an algorithm that will create a potent combination of routes for users to use when planning a trip to Roermond.

To ensure that our application will be useful or at the very least interesting to others, we made a survey to collect feedback from a variety of people regarding our approach to the solution. Here is an example of what we were ready to comprehend from our future users:

Figure 12: screenshot (screen form a Google maps app of a path from Rattentoren location to De Pastorie Roermond),2021

1. Indicates whether or not people are interested in learning more about the places listed in the previous questions of the survey. (see Figure 13)
2. Indicates whether or not people are interested in the participation of our tool in general. (see Figure 14)

Do you think that there should be more information about local business and historical places, and how to find them?

51 responses

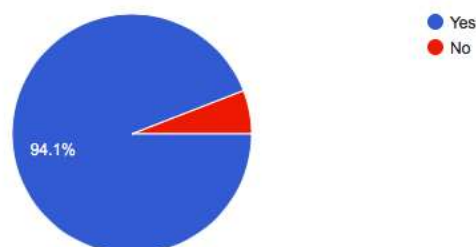


Figure 13: screenshot (pie chart number one with a question “Do you think that there should be more information about local business and historical places, and how to find them?”),2021,https://docs.google.com/forms/d/e/1FAIpQLSfVNk_kDGi4vMMvQsKx6kU2bOR5nkLKtJyh1YyukE2_7tHnVuw/viewform?usp=sf_link)

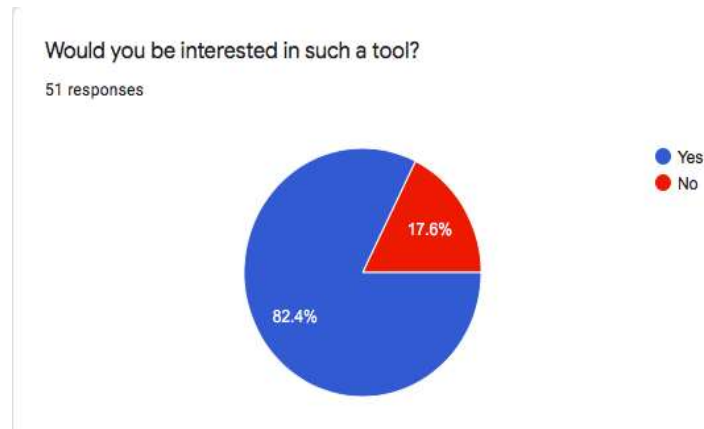


Figure 14: screenshot (pie chart number two with a question “Would you be interested in such a tool?”),2021,https://docs.google.com/forms/d/e/1FAIpQLSfVNk_kDGi4vMMvQsKx6kU2bOR5nkLKtJyh1YyukE2_7tHnVuw/viewform?usp=sf_link)

Based on the findings, we can infer that the vast majority of people will be interested in using such a platform to learn more about places like that.

Proof that it will work.

We can't have clear proof of its working approach based on our recognition. However, we discovered that the majority of similar web platforms have a collection of comprehensive information that is comparable to our future algorithm. These websites are created for the purpose of book online or generating trips. For example, we discovered a "trip wolf." It's a smartphone app created by a group of Vietnamese travellers. This application includes more than 600 guides of different destinations. (comments, 2020)

We're mentioning this app not only because of its success among travellers and users but also because we're attempting to create a similar approach for our product. As a consequence, one of the advantages of this app is the ability to use offline guides, but many applications may lack such a feature, incurring a cost to us. Additionally, users can wish to inquire about their route planning at the hotel, which typically offers online access. Besides, tripwolf offers a set of maps that identify locations such as hotels, restaurants, museums, and other attractions.

As well as, this application offers information about the location that the user wants to select, such as a hotel, by displaying a photo, phone number, details, and other information. However, even for us, users would not be able to book a room directly from the website.

The location of the maps will provide information and generate a route from one location to another, but a user will not be able to submit several routes or provide detailed information about each location, which is similar to our software, which will generate a route and provide a lot of information about the locations but will not be able to create up a majority of routes for users to enjoy.

“Overall, tripwolf got over 10 million downloads worldwide, it is one of the most popular travel guide apps in Google Play Store. And build up over 600 travel guides with premium content.” (Tripwolf - travel guide & map - apps on google play, n.d.)

We have discovered a variety of positive customer reviews as well as a store-wide ranking. Here's a view of it. (see Figure 15 and 16)



Figure 15: “tripwolf - hungry for travel”; 21 April 2008,<https://www.flickr.com/photos/tripwolf/2431548356/>; logo



Figure 16: screenshot (with set of reviews of the TripWolf from the Google Play Store, 2017,<https://play.google.com/store/apps/details?id=com.tripwolf&hl=en&gl=US>)

As a result, based on a tripwolf example and its overall performance, we assume our workflow would produce a usable website framework to create routes for tourists and become another travel tool to help our Roermond's culture and economy.

Proof it will resolve.

Again, there is no strong guaranty that our approach can fix problems such as the local economy crisis, historic places that have been overlooked, and additional issues such as traffic jams and young people leaving the area, but some of the research information that we gathered assisted us in evaluating that there are multiple options for resolving a variety of issues by using an online tool. Which is represented down below as an example.

Like in 2017 Eventbrite survey found that three-quarters of millennials prefer experiences more than objects-and travel-centric apps help them. (How the rise of travel apps helps local economies. (n.d.)) This can also be stated as a clear statement with evidence that IT solutions are beneficial and that people use them, which contributes to our approach in which an IT solution can be used to solve a problem. People are also interested in IT software, and they participate in surveys to demonstrate their curiosity, client involvement contributes to good engagement and resolution of Roermond city problems. As an example, one of the apps on the list, "Eatwith," provided a way for locals to welcome visitors who wanted to sample different cuisines based on the culture of the city. As a guest, a tourist selects the location to which they wish to travel, and the app searches for hosts in the area, allowing the user to leave a message for them. This app provides more than 130 countries for the host to register in, leave their location and detailed description, and also state the price of the meal that will be cooked by them. As an example, a traveller might book a meal at one of the citizen's places to try home cooking in the city they are visiting; as a result, it has not only piqued visitors' interest but also intrigued the interest of locals, but as well "this approach gives income to the people who host travellers at their homes" (How the rise of travel apps helps local economies. (n.d.)). Based on this information, it not only aided the locals in their time of need, but it also maintained an interest in lesser-known restaurants or cafes, which increased their income.

We can see from this example that an IT tool that appeals to tourists can provide not only a boost in income for locals and tourist businesses but also revenue for the local economy. And our project aspires to this objective as well; the example given above exemplifies the ideals that developers were aiming for; it illustrates how the growth of customers' interest led to a number of benefits. While for us, it will be a response to the problems that we have found, and our principles will be driven by this aspect.

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