Economics essays - channel tunnel economy



Channel Tunnel Economy

The Channel Tunnel

1. Introduction

According to Leroi (1970), during the last 70 years the Channel Tunnel had appeared in the parliament in about 40 occasions and it was one of the unique projects at that time. It seemed to be impossible to achieve because, it would connect France and the UK together, The Channel Tunnel was an old idea raised In 1802 when a French mining engineer, Albert Mathieu, arranged the first impractical plan for linking France and Britain.

Another Frenchman, Thome de Gamond (1807-1876) was the first to explore the viability of the Channel Tunnel by taking votes to agree on the depth of the water and by collecting samples from the sea. Then In 1870's both countries decided to work together to apply the project. With government approval both countries agreed to do the first serious technical examination of the geology to investigate what rocks set under the sea bed between Dover and Calais. In 1881 the two companies began digging seriously from the cliffs between Dover and Folkestone, and west of Calais. Within the first year both sides had finished digging nearly 2km of the tunnel.

In 1882 the English Tunnel company faced political opposition, so the British government was attempted by the VIP visitor to get consent to finish the work, however the British army opposed. In 1973 the two governments decided to take another step to complete the Tunnel but in 1975 the construction was deserted again due to economy and a financial calamity because there was completely increasing in world oil prices.

In 1980s the British and French governments commissioned more studies and agreed that the rail tunnel would be more significant least perilous. Furthermore they gave the contract to private companies using private money to erect a rail tunnel. They started working again on both sides in 1987, and opened the new link in 1994 by using new-fangled technology for deep-sea discovery to ensure accurately what was under the sea.

The Eurotunnel finished on time, and the Tunnel was opened by Queen Elizabeth II and French President Francois Mitterrand in Calais on 6 May 1994. In spite of the opposition and problem the high speed rail link in 1993 was opened from the French-side. On the English side, the first stage of a purpose-built line from the Tunnel to London was opened in 2003.

This paper will discuss the construction of the tunnel; focus on several constraints such as the climate and economy, and several problems such as geological aspects and financial factors. Finally this project will present some benefits of building the tunnel that include the economy and tourism.

2. 0 Literature review

2. 1 Construction

The Channel Tunnel is the longest tunnel ever established undersea., The section that undersea built in 24 miles long and the fixed cross-channel; the link was made up of three 31 miles long tunnels, the tunnel links two terminals one at Folkestone and the other one at Coquilles clause to Calais and lies at an average depth of 40m under the seabed.

Between 1987 and 1991, 93 miles of tunnel were made, there are two ways, one way tunnels dedicated to rail traffic and the other one for central

services tunnel connected every 375m with cross passages to the rail tunnel. (Penny, 1996).

2. 1. 1 Ventilation

The ventilation system was created for high safety of the project, and there were two system from the beginning a normal ventilation and the supplementary ventilation system which were created to provide airiness in the tunnel during the journey (Penny, 1996).

2. 1. 1. 1 The normal ventilation system

The purpose of the normal system is to provide air to 20. 000 passengers within the tunnels and its working standard in to blow fresh air into the service tunnel which then filters into the running tunnels by controlled air distribution units, by this it means if anyone opened the door while in the tunnel in order to escape from an event, the passenger whatever he/she would move to an area of fresh air and safe place (Penny, 1996).

2. 1. 1. 2 The supplementary ventilation system

The purpose of the supplementary ventilation is to supply proactive control of the smoke that would come from fire, so the system was built at both ends of the undersea section of the tunnels which allows the smoke to be driven in both directions.

Reasons to build the Channel Tunnel

According to Leroi (1970), there are many reasons that led to building the Tunnel. The First reason that led to building the tunnel is the weather.

Because of the lack of the comfortable weather for travelling cross the sea by boats, they also had to avoid stormy sea crossings, Moreover air services

can be stuck by bad weather. Addition lots of people are subject to air sickness. (1970: 15)

The Second reason is the economy. Although the tunnel would be an advantage in, many economists consider that some form of tunnel would be even more crucial if Britain were probably to remain outside the common market. In consequence of existing tariff barriers, Britain's exports would have to become more competitive.

This would offer advantages to British manufacturers if they improved their sales in the competitive markets of Europe. Furthermore, to some figures that the cost of taking cars throughout the tunnel would be less than taking them by ships or airplanes, so holiday makers could save about 2, 000, 000 pounds in the first year of procedure, consequently in fifteen years they could save sixty million pounds.

2. 3 Problems during building the Channel

Geological problems were considered to be one of the main difficulties. In 1870, after the Prussian-war, both the UKandFrance decided to work together. Geology engineers used a new technology developed for deep-sea oil exploration to check specifically what was under the sea bed and if it is possible to stretch it or not.

Moreover they have found the chalk in France fine and easy to dig in Sangatte but on the English side the shaft was flooded through cracks in the chalk so they had to change from east of Dover to the western area. On the French side there were several problems such as, change sea level, ice

sheets and change in coastline. These were problems the engineers had to deal with before beginning the actual construction.

The second problem, which was considered as one of the important aspect to create the tunnel was financial. The Tunnel is an impossible project to apply nowadays with recent economic standards. When the project was under consideration, after the First World War, the sponsors thought it would cost nearly 20 million. By 1929 it's rose to 27 million and ten years later the cost increased by 5 million.

2. 4 Benefits of the Channel Tunnel

2. 4. 1The first benefit is the economy aspect

The LCR, which is responsible for the high speed of the Channel Tunnel, considers that the achievement of the high speed would convert the countries economy. The tunnel has had an impact on increasing the economy of Kent because of its adjacent position to the continent. Roughly 20 million tonnes of freight are transported through the tunnel per year (Gavin, 2006).

It was likely that the completion of the Tunnel would change the stream of passengers travelling around without cars between London and Paris, as it would compete with sea ferries, and also air travel. British Rail assumed that after two years of the opening the Tunnel, nearly 13 million passengers per year would be travelling by trains between Britain and Continental Europe.

2. 4. 2 The second benefit is the tourism aspect

According to the KIS (2004) evaluated that: a total of 3. 391 carriers would be created without the Channel Tunnel and there would be 5. 521 jobs with

the tunnel moreover, the studied estimated that in 1987 that the tourist would increase jobs from 2. 000 to 3. 000 tourism due to the impact of the Channel Tunnel as a tourist attraction.

Research aim

The purpose of this research is to determine if the Channel Tunnel has increased tourism and boosted the economy for both countries the UK&France.

Methodology

The survey was conducted by means of a questionnaire given to passengers at St. Pancras station, to complete the 11 questions and it was divided on two parts, the first 4 questions was about personal information (gender, age, occupation and nationality) the next seven questions was all concerned with aspects of the Channel Tunnel one questions which the Likert scale (strongly agree, don't know, disagree, strongly disagree and undecided) founded on whether the Channel Tunnel had increased tourism of both the UK&France.

Discussion

From the findings, it have seen a very clear that majority of this research is there are a strong relationship between tourism states and the Channel Tunnel as result of that the tunnel increased the rate of tourism in the UK. According to KIS, 2004. Passengers believed that the Channel Tunnel had increased tourism for both the UK&France, because the results of study showed that 60% of respondents agreed with it and it seemed that be more than 60% and it's surprisingly that 10% agreed strongly.

Secondly, it was clearly that most of the respondents believed that the Channel Tunnel benefited the economy of both countries, 55% of respondents believed that the channel Tunnel helped the economy as 40% did not know about it. It was surprising that 5% of British respondents have said no, while they supposed to

Acknowledge the increased of the economy after the Channel Tunnel.

Conclusion

This project has demonstrated a summary about the construction of the tunnel and talked about several reasons for building the channel tunnel, as well the problems faced, it shows the benefit of the channel tunnel, in both the economy and tourism. the Channel Tunnel was a huge engineering achievement; most of people didn't believe that the project will be done and it was for them such as a dream idea yet this project has been achieved but the expectations of the sponsors where higher than normal the low income and tourist attraction it made was a failure for there predictions but it will always be a huge success by mankind regarding the geological, financial and engineering problems that faced, the Channel Tunnel is an amazing project and it is supposed to be one of the seven wonders of the world. And I expect it will double the average of the income for both countries the UK and France in both aspects the economy and tourism in the future.

References

 Charles penny, 1996 Channel tunnel transport system Thomas Telford publishing, Thomas Telford services Ltd, 1heron uay, London E14 4jd.

- David Leori, 1969, The Channel Tunnel, Clifton books new England house, new England street, Brighton bn1 4hn.
- (Gavin Stamp, 2006), Dream location' a challenge for Kent Available at: http://news. bbc. co. uk/1/hi/business/5234132. stm (accessed: 1st May 2008)
- SOUTETSU SEN, 2004 the channel tunnel impact on tourism in the
 United Kingdom. available at: http://www. reading. ac.
 uk/nmsruntime/saveasdialog. asp? IID= 12796&sID= 48883 [Accessed
 20 th May, 2008]
- Theotherside. co. uk available at: http://www. theotherside. co. uk/tm-heritage/background/tunnel. htm#visit[Accessed 3 rd May, 2008]
- Hay, A. Merdith, K. Vickerman, R, (2004). The impact of the channel
 Tunnel on Kent and relationships with NORD-PAS DE CALAIS, available
 at: http://www. kent. ac. uk/economics/research/Full%20Report. pdf
 [Accessed 11 th May, 2008]