



League of Legends European Championships
Summer Finals Malmö 2022



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Executive summary



Demographics Analysis

37,78%

were **domestic visitors**

4,85%

were **local visitors**

57,37%

were **international visitors**



Over

19,600

ticket holders across two event days



21.45%

Denmark was home to **most international visitors**



30

Different countries were represented among the visitors



Behavioral Analysis



6 hours and 13 minutes

Was the **average length of stay** of visitors in the event area

96,36%

visited the event **with others**

77,41%

of visitors came to Malmö **only for the LEC event**

85,06%

attended **both event days**



Economic Impact Tourism Expenditure

75,42%

of the visitors **stayed in Malmö** during the event



77,57%

Overnight visitors **primarily used hotels** for accommodations

10,02%

The second most used **type of accommodation** was AirBnB.

Production Expenditure

39.636.628,80 SEK

Impact from **international and domestic tourism** (€3.725.247,07)

11.485.184,45 SEK

Impact from **organizing committee** (€1.079.434,63)

51.121.813,25 SEK

Total economic impact from the LEC Finals

Introduction

This report presents an analysis of the economic impact for the League of Legends European Championships (LEC) Summer Finals 2022, hosted in Malmö, Sweden on the 10th and 11th September 2022. The purpose of this report is to understand the demographics of the visitors of the event, as well as studying the potential strategic alignment for the city of Malmö. This is done by determining the tourism interest, recruitment potential, and ultimately the economic impact generated from an international esports events.

The study comprises a combination of three core components: Demographic Analysis, Behavioral Analysis and Economic Impact analysis. A fourth additional component takes focus on the potential for talent attraction into the city of Malmö.

The Demographic Analysis constitutes extensive visitor data from both international as well as domestic visitors, in attendance at the LEC event. The behavioral analysis examines visitors' movement around the event, the city, and Sweden. The economic analysis encapsulates the LEC visitor expenditure, together with the production expenditure by the organizer, Riot Games. Taken all together, this study uses a transparent and credible framework to determine the most reliable and accurate calculation of economic impact related directly to the event.

This study was commissioned by the City of Malmö and conducted by Geelmuyden Kiese Denmark (GK), an independent consultancy agency located in Copenhagen, Denmark. GK has extensive experience in conducting economic and social impact analyses of major events around the world, both in urban spaces as well as arenas. Stine Tinsfeldt was responsible for the demographic, behavioral and economic impact analysis and preparing the report and Andreas Darre was responsible for the tourism and production expenditure. Laura Vingtoft, Mads Birkekær, Andreas Darre & Emma Andersen were responsible for data collection during the two event days. Frix Rode is responsible for the creation of graphics and layout of the report and Advisor Martin

Montes has supervised the entirety of the report's production and quality assurance.

1.1 Introduction to the 2022 League of Legends European Championship Finals

The LEC Summer Finals took place on the 10th and 11th of September 2022 at the Malmö Arena, hosting the Semi-finals and Finals, respectively. It was the first LEC roadshow with a live audience in three years since the advent of the Covid-19 pandemic with an almost sold-out Arena during the Semi-finals and a sold-out Finals event.

The League of Legends European Championship (LEC) is an esports tournament organized by Riot Games. Riot Games was founded in 2006 and has since developed, published, and hosted a variety of esports events worldwide. The game League of Legends was released in 2009 and has become one of the most played PC games in the world with a global community of fans. The LEC is the highest competitive level of League of Legends in Europe, hosting the top 10 European teams in a regular season played in studio. The LEC Summer Finals is the culmination of the entire season of competitive play, on a roadshow weekend hosting the semi-finals on day one and the finals on day two.

LEC Event Days

The LEC Summer Finals in Malmö, hosted their main show at the Malmö Arena and featured an additional expo area (LEC XPO) hosting a variety of commercial partner activations, as well as activations and community activities hosted by participating teams.

The LEC XPO was placed at the Malmömassan Exhibition and Congress Center and was a free-access space open for early access from 10:00 am – 12:00 pm and for general access from 12:00 pm – 3:00 pm. The LEC XPO had booths for visitors to engage with the LEC teams by taking part in tournaments and winning prizes or buying merchandise. The LEC partners had activations to engage visitors, those present being Mastercard, Kit Kat, LG and Kia, each partner occupying their own area and

engaging LEC visitors with a variety of activities. Lastly, the community stage hosted talks and activities such as karaoke and cosplay contests.

The Malmö Arena hosted the Semi-finals and Finals fixtures, opening doors to guests at 2:30 pm, followed by the first pre-show talk at 4:00 pm and the competitive matches starting at 5:00 pm each of the days.

It was the first LEC roadshow with a live audience in three years since the advent of the Covid-19 pandemic with an almost sold-out Arena during the Semi-finals and a sold-out Finals event.



Photo: LoL Esports Photos

2.0 Methodology



Economic impact studies use a variety of methodologies and theories in order to measure the impact of events. GK has developed a distinct and thorough method that seeks to measure the economic impact stemming from events carried out in arenas. The technique is inspired by the work of Professor Holger Preuss, which accounts for three primary sources of economic impact of events. Firstly tourism, secondly production expenditure of the organizing committee (standard term referring to the organizer of an event – in this case Riot Games), and lastly long-term investments in infrastructure. This report excludes the last source of impact as in the case of this event, it was hosted in a fully equipped indoor arena with the infrastructure necessary to host the LEC Finals, without the need for long term infrastructure investment.

To measure all components, well-proven methods of data collection, data analysis and evaluation, are utilized. Additionally, this report is testing the use of new mobility tracking data provided by telecommunications company 3 (Hi3G Denmark ApS). The tool, hereby labeled 3Insights, functions in accordance with the GDPR principles by anonymizing mobile phone tracking data, measuring the movements of users through the networks of mobile phone towers, identifying place of origin, length of stay at a specific location and general mobility with high accuracy.

In accordance, this report compiles data with a combination of three different methods:

- On-site survey conducted by GK
- Verified accounts from the Organizing Committee
- Selected data from 3Insights demographic visitor analysis tool

On-site survey

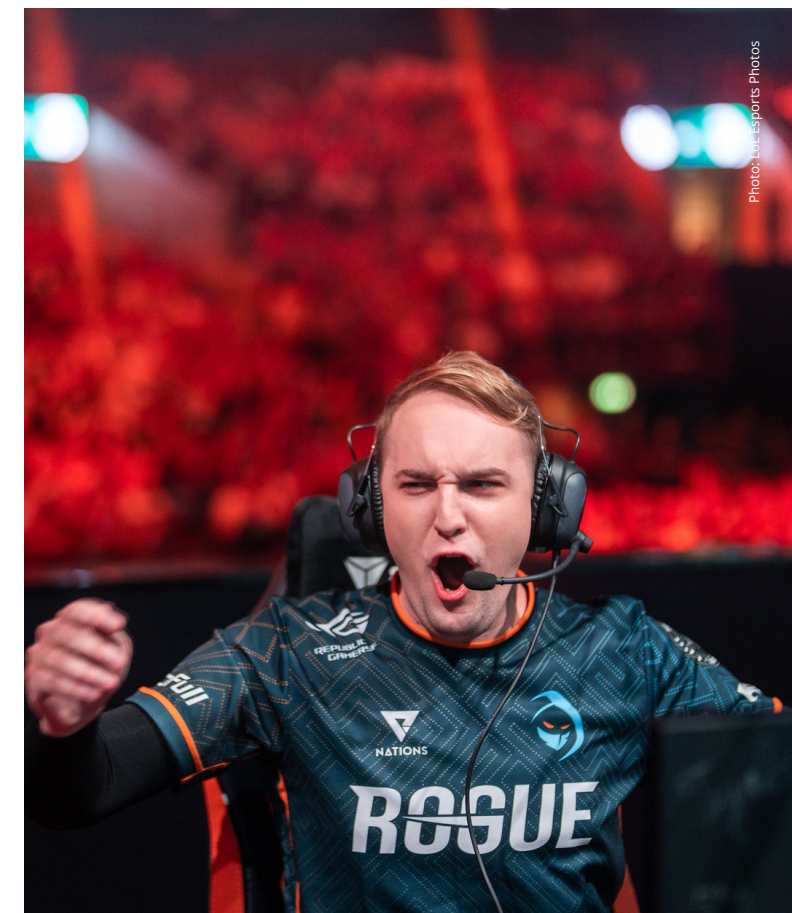
The on-site survey conducted by GK consists of a sample size of 549 individual respondents and gathered demographic data describing visitors' gender, age, place of residence, event attendance and visitor movement and more which enable insight into those attending the event. Thus, the confidence interval of the survey sample size is 98% with a margin of error at 5%.

Through the survey the study is able to ascertain pivotal demographic, behavioral, and expenditure data by event visitors. Tourism expenditure only considers those visitors that bring in new money. New money is defined as the spending made by visitors that reside outside of town and whose sole motivation for visiting the city is to attend the event. In effect, this report considers all the visitors from outside of Malmö as out of town visitors. Any visitors that were found to reside in Malmö were considered local visitors and were excluded from the survey data as they are not considered to bring in new money. The reasoning for this is expenditures of those residing in Malmö represent a recycling of money that already exists in the local economy. Thus, the focus of the economic impact is only attributed to the expenditure made by those residing outside of Malmö.

Verified accounts from the Organizing Committee
This report utilizes Riot Games verified accounts and event budget spent in the local economy during the LEC event. This data considers expenditure on accommodation, destination management company, physical production, venue, venue labor and additional spend on services from the local host city. As a result of the COVID-19 pandemic still being a prevalent health and safety consideration and of importance to Riot Game's show production, this expenditure is also included in the production expenditure.

3 Insights - Selected data from 3Insights demographic visitor analysis tool

3Insights utilizes an innovative tool tracking more than 1,5 million users of 3 and Oister. The data follows GDPR principles as the registrations are anonymized and aggregated and therefore cannot be traced back to individuals. The tool shares insights into visitor demographics, travel patterns, time spent in the event area and presents data on international versus domestic visitors, determining which region of Sweden visitors came from. The 3Insights data defines the mobility of visitors into different visitor types within a geographic area during a selected range of time. For the purpose of the LEC event, the geographic area in consideration is the LEC XPO and Malmö Arena for the period of 10th September and the 11th September and accounts only for visitors that were in the area for 90 minutes or more.



3.0 Demographic Analysis

The following section presents a detailed demographic analysis of the visitors in attendance at the LEC Summer Finals event.

Descriptive demographics

LEC visitors place of residence - major fan travel

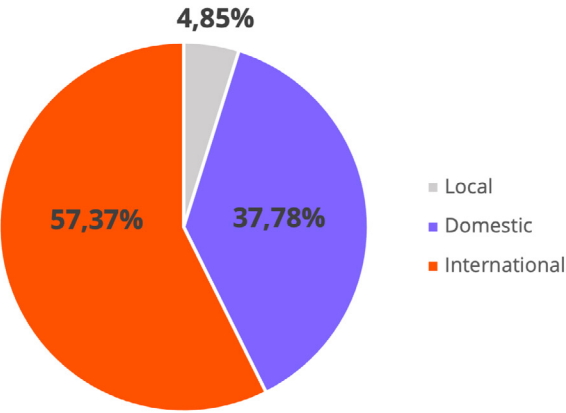


Figure 3.a

The LEC Finals instigated a major amount of fan travel, both domestic and international. Only 4,85% of the sample are considered local. Locals are considered to reside within Malmö and within a 20km radius of the city center. Domestic visitors are considered to live anywhere else within Sweden. International visitors are considered to live outside of Sweden.

International LEC visitors place of residence (%) (Figure 3.b, page 11)

The event demonstrated a strong attractivity to the European fan. Neighboring Denmark (21,45%) and Germany (11,78%) represent the highest proportion of the sample and this is likely the result of efficient travel connectivity. A train from Copenhagen to Hyllie station (Malmö Arena) takes less than 30 minutes at a cost of 134 SEK, while connectivity from various cities in Germany by flight vary from 1 hour to 2 hours and by train or bus, can take 6 hours or more, depending on the city of departure. By flight and train the costs range from 1500 SEK and above, while buses start around 700 SEK. Which is in all things considered an affordable journey.

The other notable country of residence of visitors were the United Kingdom (10,57%) and Norway (9,67%), also constituting countries that have good connectivity to Sweden.

Notable out of Europe visitors were registered in Brazil, Morocco, South Africa, USA and Uruguay, all below 1% representation. The map in **Figure 3.c** (page 11) shows the geographic spread of the country of residence of the LEC visitors.

Origin of domestic visitors

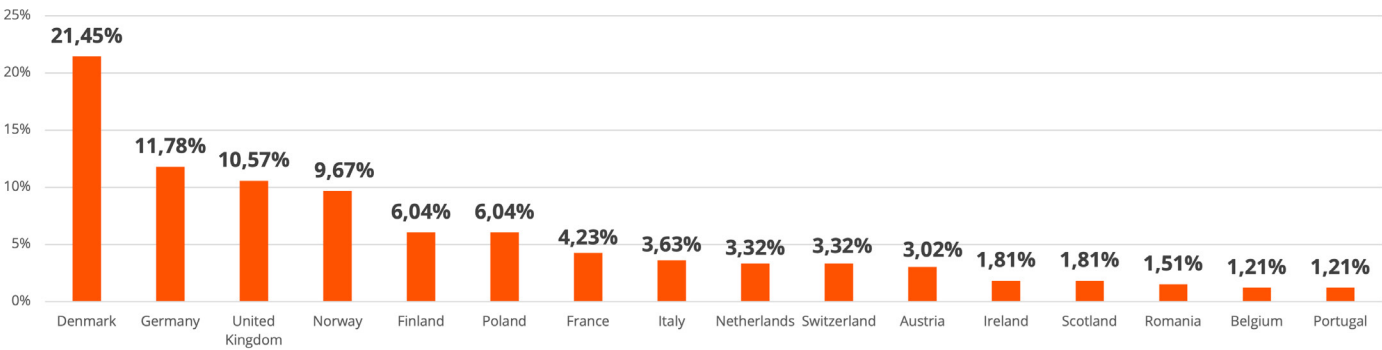
The report from the 3Insights has been used and assisted to determine the district of origin by domestic visitors, hereby presenting the distribution from within the Skåne region and further than 20km from Malmö metro. Furthermore, the top 5 domestic visitor density to the event from other urban centers in Sweden.

Origin of most domestic event visitors within Skåne - Top 5

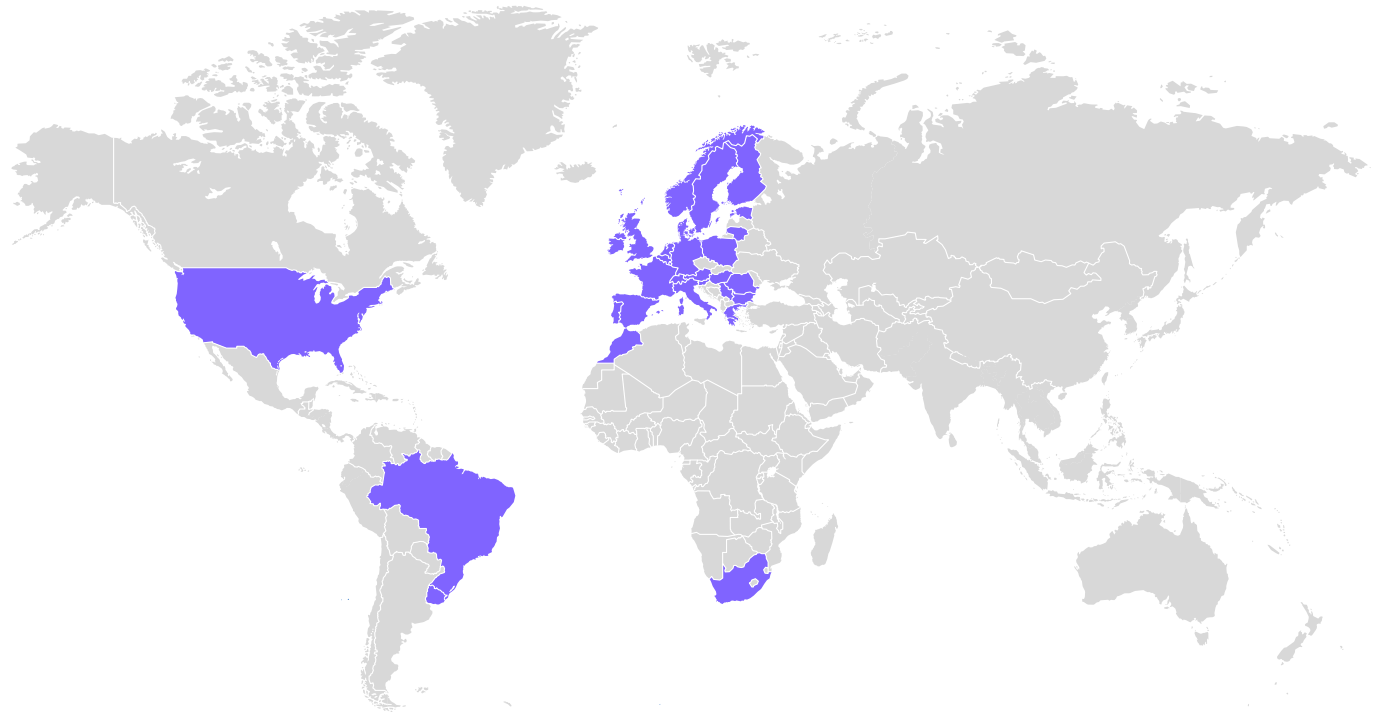
Urban centers	Unique visitors
Lund	1148
Trelleborg (Includes Klagstorp)	472
Helsingborg (Includes Rydebäck)	426
Eslov (Includes Stockamöllan)	284
Landskrona (Includes Annelöv)	229

95.15% visitors come from out of the host city

International LEC visitors place of residence (%) - Figure 3.b



Geographic spread of the country of residence of the LEC visitors - Figure 3.c

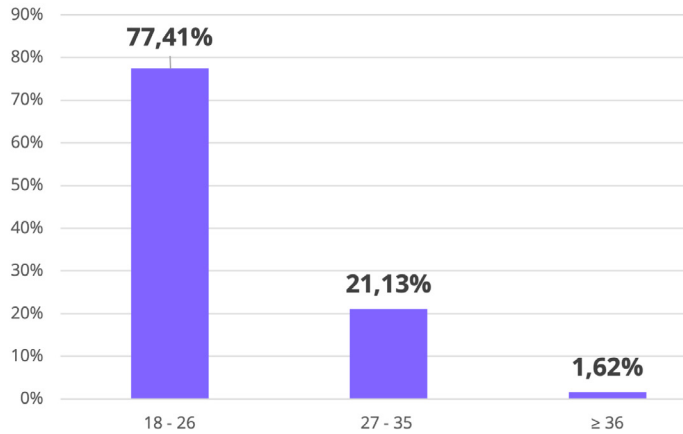


Origin of most domestic event visitors
outside Skåne (within Sweden) - Top 5

Urban centers	Unique visitors
Stockholm	794
Gothenburg	605
Uppsala	156
Halmstad	125
Lyckeby	115

Age distribution of LEC visitors

Figure 3.c



The age distribution of LEC visitors, represents an extremely high penetration within the European young adult, with 98,38% below the age of 35.



98,38% below the
age of 35.

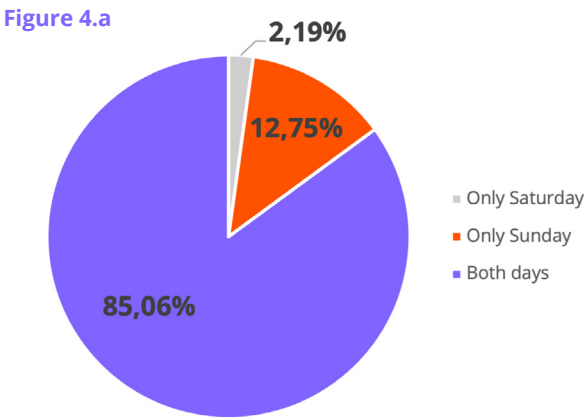
4.0 Behavioural analysis

Movement of Visitors

The following analyzes the movement of LEC visitors within the LEC event area as well as around the city of Malmö.

Majority of LEC fans attended both event days

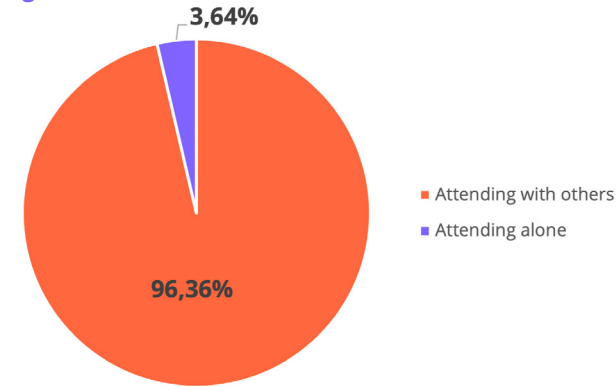
Figure 4.a



A large majority of visitors attend both the Semi-finals and the Finals (85,06%) which is understandable from the perspective of the large amount of domestic and international visitors with the primary purpose to visit the event. Furthermore, compared to other events, the cost of entry is perceived as relatively affordable allowing the possibility for young fans to attend both days.

The LEC Finals is a social event

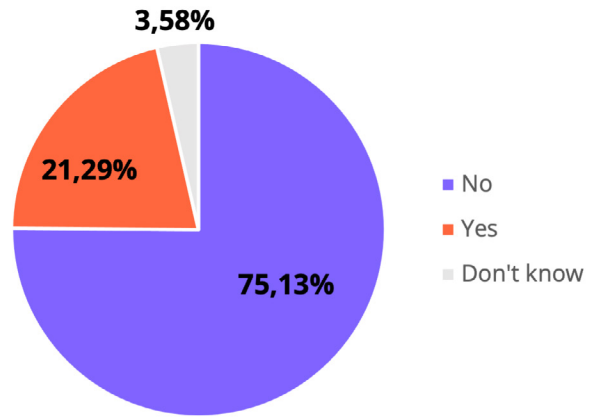
Figure 4.b



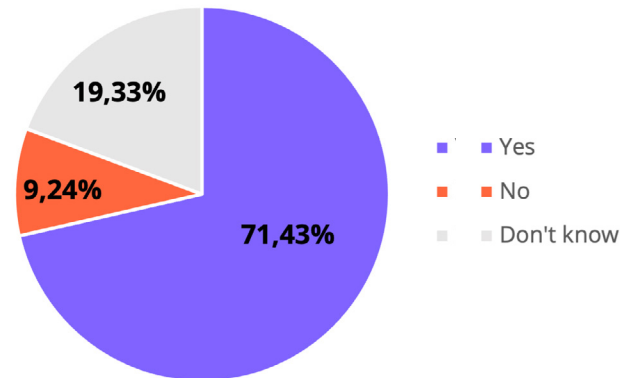
The game League of Legends is structured as a type of gameplay involving two opposing teams of five, with the teams' allocating roles, strategizing, and communicating in order to win, hence the game involves community engagement in order to play.

Accordingly, the game facilitates a community aspect, online as well as physically, whereby during this event it brings together numerous groups of people for the same purpose. Gaming and esports has been stigmatized as an individualistic activity, however it is evident that fans see major events as a place to meet and as an extremely sociable activity.

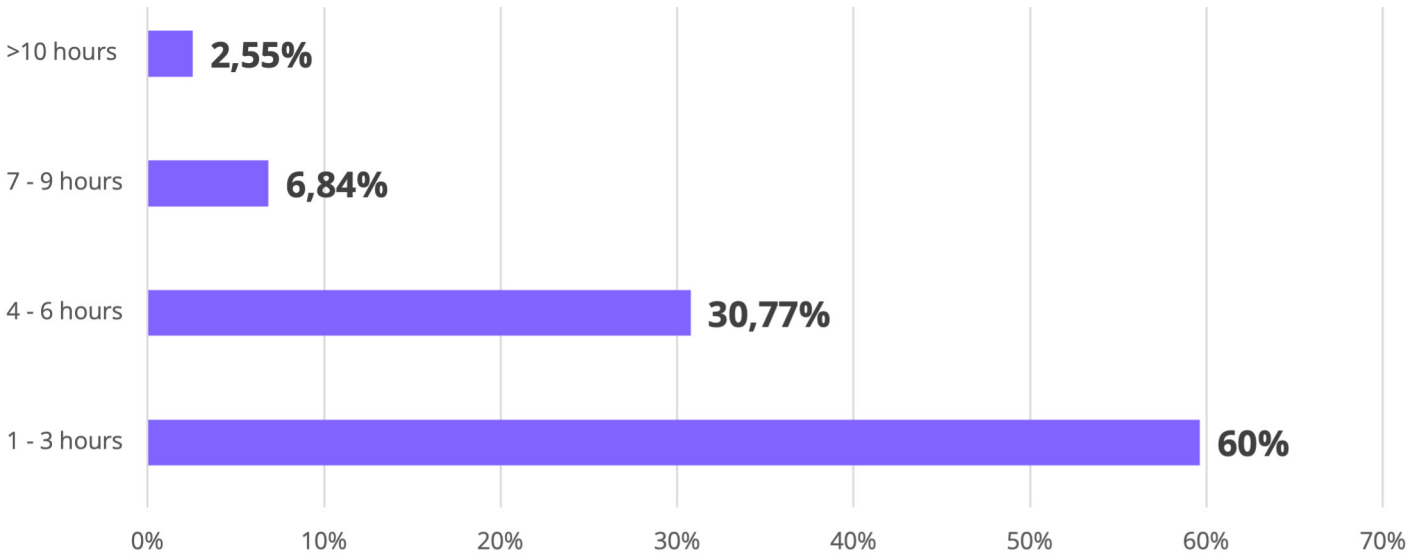
Visitors having visited other attractions during their time in Malmö - Figure 4.e



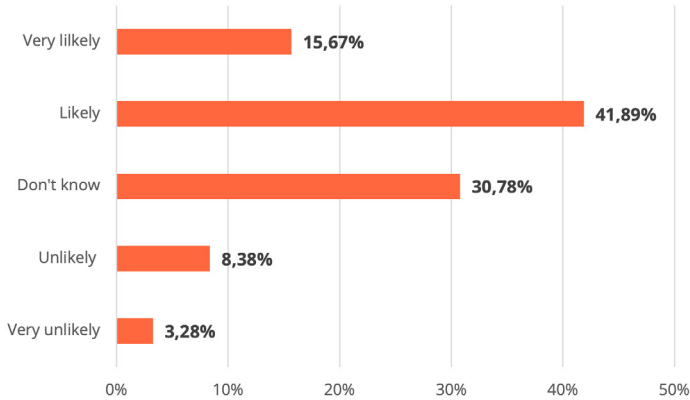
Visitors wanting to visit Malmö again - Figure 4.f



Average hours spent on attractions in Malmö - Figure 4.h



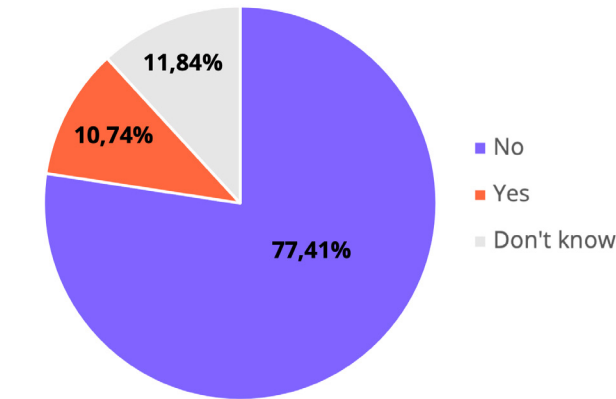
Likelihood of recommending friends and family to visit Malmö - Figure 4.i



Evidently, visitors brought on average 3,9 persons to the LEC Summer Finals, which reflects that there is a social aspect to the game that can promote social and community interactions, whether it be with other fans of the game in the local community or fans coming from around the world.

The LEC Finals are a principal motivator to visit the host city

Figure 4.d



The average visitor focused on interacting with the event (Figure 4.e, page 14)

Visitors to the LEC strongly prioritized their interaction with the event, as opposed to visiting other attractions in the city.

Interestingly locals and domestic visitors spent on average 5 hours and 45 minutes in the event area, while international visitors spent 9 hours 18 minutes on average in the event area, demonstrating a strong will for the fan to interact with the event as much as possible.

Average hours spent on attractions in Malmö (figure 4.h, page 14)

Those visitors that did visit attractions in Malmö, spent primarily between 1 -3 hours (60%), yet visitors spending 4-6 hours, represent 30,77% of the sample. Accordingly, since Malmö has its primary attractions and sights within a close vicinity of the venue, visitors were able to see many parts of the city without needing to travel very far.

Majority of respondents would visit Malmö again (figure 4.f, page 14)

Overall, the response from LEC visitors of whether they would visit the city again reflects that 71,43% would visit Malmö again.

Likelihood of recommending friends and family to visit Malmö (figure 4.i, page 14)

More than half of event visitors are likely to very likely to recommend visiting Malmö to friends and family. This speaks to a general positive sentiment of visiting the city during the LEC Finals.

5.0 Economic impact

The economic impact attributable directly to the LEC event is examined based on the concept of new money. New money relates to the funds directly spent into the local economy by visitors and other entities coming from outside the local community. This means, that all expenditure deriving from attendees to the event from local origin is excluded in the calculations. Furthermore visitors to the event that would have visited Malmö even if the event didn't take place, are also removed, as their expenditure cannot be attributed as a direct result of the event.

This study focuses only on direct economic impact and does not include economic multipliers (also known as the Keynesian multiplier effects). These multiplier effects are often a substantial part of other types of impact analysis. The multiplier is dependent on tax structures, the saving/buying traditions of the locals and the size of the region. For this reason, it is often national statistic boards the ones who perform these type calculations. Although, it is essential to emphasize that the multiplier effect will enforce an additional positive impact during a certain period of time. Since the study has made conservative assumptions when necessary and only included the direct effect that could be documented, the final estimated impact is a conservative measurement of the total economic impact the event has had on the city of Malmö.

The direct impact on this report is considered to derive from two primary sources:

- Tourism expenditure by event visitors
- Expenditure in the local economy by the organizers of the event

3/4 visitors stayed in Malmö overnight – vast majority stayed in hotels

5.1 Tourism Expenditure

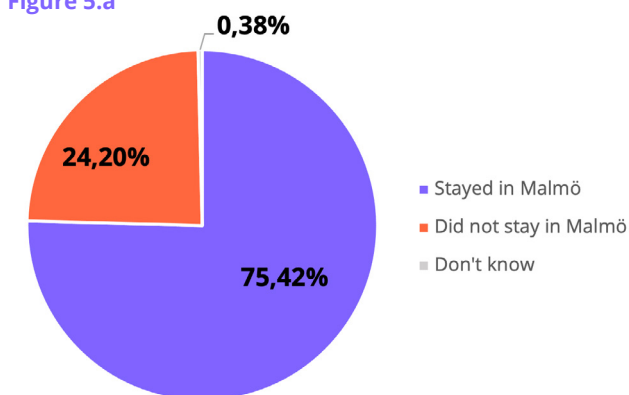
The tourism expenditure calculations are based only on domestic and international visitors, excluding locals and those who switched times to visit the city. Due to the particularly interesting segment of visitors, this report has also set to investigate the type of accommodation used by event visitors, as well as the expenditure within this sector. This is to provide a baseline of hotel room consumption, as it has become increasingly important for host cities to demonstrate an economic return on investment.

It is important to note the calculation for accommodation consumption is based on interview answers and not on a hotel room pick up report, as accommodation of guests was decided organically by fans themselves. As confirmed by the event organizer, the LEC Finals did not offer any travel packages that included accommodation options, making it impossible to collect a pick up report directly related to the LEC.

Further to accommodation, the daily spend in other elements, such as food, transport and expenditure in other attractions is also included.

LEC visitors staying overnight in Malmö during the LEC Finals weekend

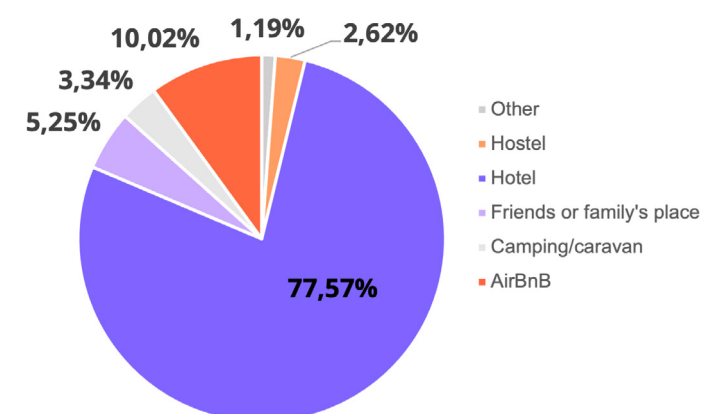
Figure 5.a



75,42% of visitors stayed overnight in Malmö for the LEC Finals weekend and only 24,20% did not stay overnight. Particularly, considering the optimal travel connectivity of Malmö to other cities around Sweden as well as Copenhagen, the large majority of visitors staying overnight shows the willingness of LEC visitors to stay in the local city for the duration of a two-day event.

Type of accommodation LEC visitors stayed at in Malmö

Figure 5.b



The LEC visitors staying overnight in Malmö primarily used hotels for accommodations (77,57%) and the second most used type of accommodation was AirBnB (10,02%). With less formal accommodation options accounting only to 12.4%.

Accommodation Spend on Average

Based on LEC visitors that stayed overnight in paid accommodation in Malmö (75,42%, n=390), the average spend on accommodation in Malmö was 1094,28 SEK per person, per night.

To calculate the total expenditure of LEC visitors' on accommodation, the equation accounted for the average spend in accommodation per night, multiplied by the estimated number of total accommodation room nights.

To estimate the total number of accommodation room nights, the total number of non-local ticket holders that stayed overnight is multiplied by the average length of stay of the visitors.

Accordingly, the total expenditure on accommodation of LEC visitors is estimated at 26.094.133,74 SEK.

Daily Spend excluding Accommodation

The calculation of daily average expenditure only considers the spend of domestic and international visitors (95,15% of the sample, n=537). This category of spending considers food, shopping, local transport, and expenditure at local attractions.

The average daily spend was 783,83 SEK per person.

Total spend on accommodation	26.094.133,74 SEK
Total expenditure excluding accom.	13.542.495,06 SEK
Total impact from tourism	39.636.628,80 SEK

Based on a combination of weekend ticket holders and single day ticket holders, multiplied by the average daily spend the total expenditure (excluding accommodation and tickets) is estimated at 13.542.495,06 SEK.

See total impact from tourism in table 1.

5.2 Impact from the organizing committee and international workforce

The organization of the LEC event is the full responsibility of its owner company Riot Games. The responsibility carries out from production and delivery of the event, all the way to budget and expenditure of the event. All the costs associated are managed by a central production team, located in Berlin, Germany.

As the budget to the event is brought externally to the city of Malmö, the economic effects of funds spent in the city are considered by the organizing committee a positive direct impact, as these are funds coming from the outside into the local economy.

The City of Malmo did provide public support to the event, including funds used to support the production, as well as administrative hours used on the event. Due to confidentiality restrictions, the details cannot be published, but Riot has mainly reinvested the public support back into the city of Malmö. These costs are not interpreted as a direct cost but as a reallocation of means, and thus a neutral impact on the local economy.

Table 1 illustrateshow the Organizing Committee contributes positively to the economy of the region and the city in which the event is hosted, because money is spent in the local community and not in surrounding areas. For instance, if Riot Games purchases local services and goods in the preparation and hosting of the event, it has a positive impact on the economy of the host cities.

Examples of spending by Riot Games include renting the local venue, renting hotel room nights and hiring local catering firms, amongst other suppliers.

The expenditure by the International workforce including journalists, VIP's, 30 players and team staff, Riot

Games' employees, and external partners, is included in the organizing committee expenditure, as Riot Games organizes a large portion of their experience, including hotels, catering and transport, making any additional expenditure negligent to this report.

The calculation of the money flow from the LEC is derived from a substantial amount of budget and spending data shared with GK's analysts by Riot Games. The original data is not included in the report due to discretion and confidentiality of trade secrets. However, the calculations include all of Riot Games expenditure in suppliers registered in Malmö, and deducting any public funding related to the event, as this is considered to have a neutral effect on the economy.

The calculations conclude an estimated direct impact from the LEC organizing committee and international workforce at 11.485.184,45 SEK added into economy of the host city of Malmö.

5.2.1 Negative externalities

In general, there are some negative externalities when major events are hosted in a city. Types of negative externalities include noise, traffic jams, littering, vandalism, police control, etc.

The LEC is held in a closed environment which predominately contains the negative externalities inside the venue, with cleaning and security organized and paid by Riot Games. The extra cost for the city only occurs when the guests are in transit from their hotel/home to the venue. Two reasons exist to why this can be assumed not to have been an issue. The behavior of esports fans is traditionally peaceful, and the event was held at an indoor venue causing no reportable disruptions to the city.

5.3 Conclusion of economic impact

The analysis shows that the LEC had a substantial economic impact on the city of Malmö, with a major contribution from tourism, thanks to an enlarged non-local visitor base and high expenditure in hotels around the city, compared to prior events and other forms of entertainment for shows of this length and size.

Table 1 - Destination of means depending on the origin of means

Origin of means		Destination of means	
Origin of means		City	Import
	Organizing committee	Positive impact	Neutral impact
	City	Re-allocation of means (Neutral impact)	Negative impact

Preuss 2014

IMPACT	IN SEK	IN EUR ¹
Impact from international and domestic tourism	39.636.628,80 SEK	€3.725.247,07
Impact from organizing committee and international workforce	11.485.184,45 SEK	€1.079.434,63
Total economic impact	51.121.813,25 SEK	€4.804.681,69

6.0 Recruitment potential

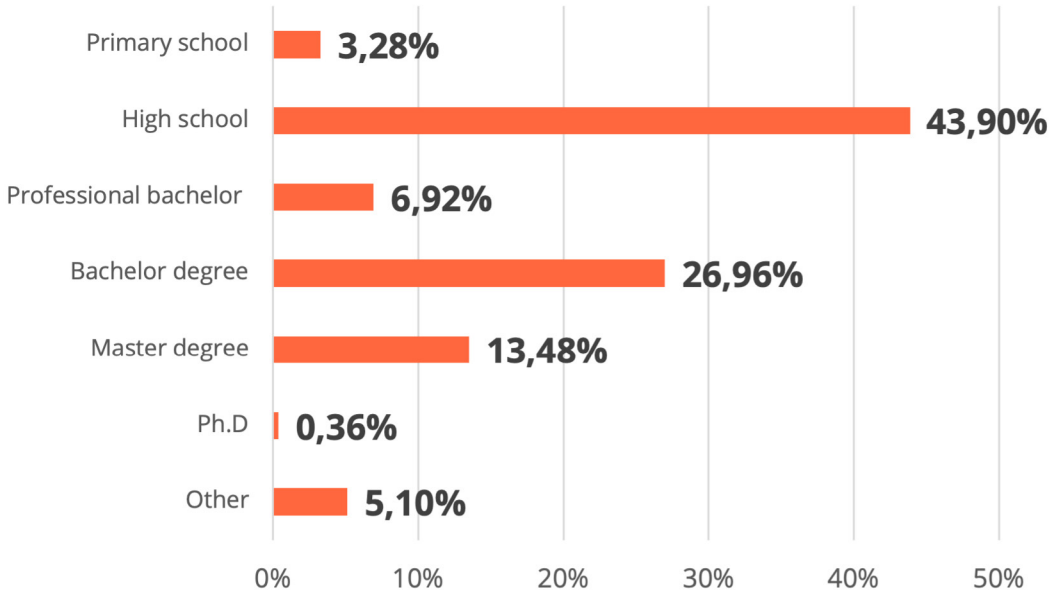
Besides appealing to a young demographic, the LEC also attracts a particularly interesting profile from the perspective of talent recruitment, for any city that with a technological and innovation ambition.

The report studies the professional profile of the LEC visitor to the event and suggests the potential for recruitment of this type of profile in connection to esports and gaming, as well as potential mega events in the future.

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Highest level of education completed (aged 18-53) - Figure 6.b



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Photo: LoL Esports Photos

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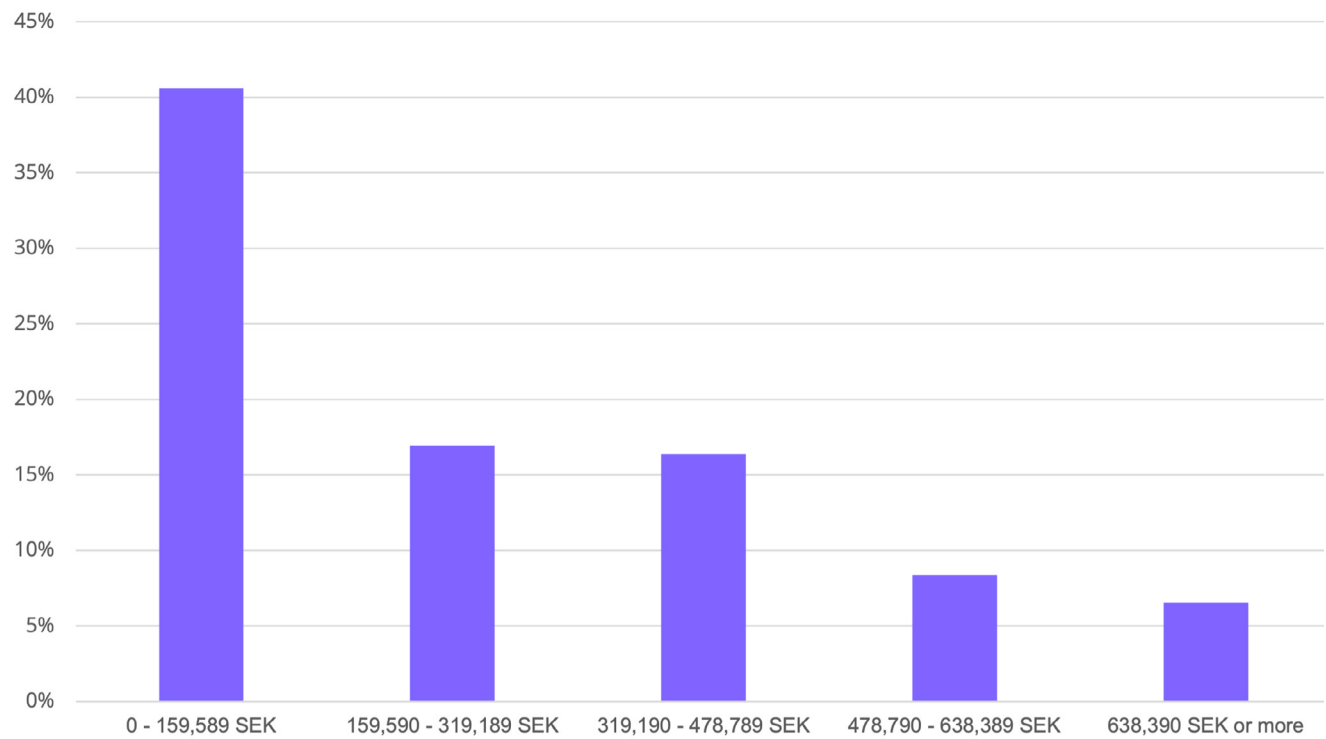
The other fields of work or study LEC visitors were most commonly engaged with were Business Management, Trades and Production and Natural Sciences. The descriptors for Business Management include Finance, Accounting & Marketing. For Trades and Production, it includes plumber, electrician, and factory worker and lastly Natural Science includes biology, physics, and chemistry.

The median annual income for the sample of LEC visitors is 212,789 SEK (Figure 6.f), comparatively lower than the Swedish median annual income (445,200 SEK)⁴ and the EU median annual income (270,635 SEK)⁴. This is due to the high concentration of students reporting an income of under 159,589 SEK per year. However, notably those LEC visitors that are full time employed in the sample reported a median annual income of 425,424 SEK.

REDACTED

Source: Comparison data from Eurostat 2020

Annual income of LEC visitors (SEK³) - Figure 6.f



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7.0 Modal event visitor

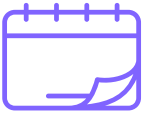
The modal visitor was a male aged 22 years old, coming from Western Europe, attending the event both days in a group of 4.

The modal attendee at the LEC event held in Malmö in 2022 was →

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Attending the event both days
(85,06% of respondents attended both event days)



Aged between 18-26 years old
(77,41% of those surveyed were between 18-25 years old)



Visiting from outside of Malmö
(95,15% of those surveyed were domestic or international visitors)



Staying in overnight accommodation (75,42% of those surveyed stayed in an accommodation in Malmö overnight)

REDACTED



This study was commissioned by the City of Malmö and conducted by Geelmuyden Kiese Denmark (GK), an independent consultancy agency located in Copenhagen, Denmark.

**GEEL—
MUYDEN
KIESE**