2023

AI AND PATTERNS IN CULTURAL VISITATIONS

IDENTIFYING MOTIVATIONS AND OVERCOMING BARRIERS IN VISITING THE NATIONAL CENTRE FOR CREATIVITY, SPAZJU KREATTIV, WITHIN A CULTURAL HERITAGE BUILDING

CULTURE VENTURE

SOVRINTENDENZA TAL-PATRIMONJU KULTURALI
SUPERINTENDENCE OF CULTURAL HERITAGE

CULTUREHINT

mdia

SPAZJU KREATTIV

Contents

Executive Summary 2
Introduction 3
Project Scope 4
Research questions 4
Timeline: Research Phases 5
KPI to Track Project Goal 6
Summary of Salient Findings 6
Research location: Spazu Kreattiv- Malta's National Centre for Creativity 7
Methodology 9
Design of a survey 9
CultureHInt: Ai-Driven Analysis and Optimisation 9
Research Population and location 10
..... 11
Demographics 12
Research Population: Locals 12
Research Population: Tourists 13
Knowledge and Interest in Spazju Kreattiv 21
Spatial Analysis: Distinction between space and place 22
Information about the Cultural site and its Operations 23
Propensity to visit 24
Links to Previous Research on cultural participation in SK 27
The Conversion Stages 28
FLOWHINT V2 UPGRADE 29
FLOWHINT V1 TO V2 CONVERSION 29
AI-DRIVEN MONITORING DATA 29
AI-driven methodology 31
AI-driven optimisation strategy 31
Role Definition 32
Approach Examples 32
Shift Availability 32
Optimisation results 32
Conclusions 34
References 35

Executive Summary

- PROJECT SCOPE

The project was funded by the Malta Digital Innovation Agency and spearheaded by Malta's Superintendence of Cultural Heritage. The project research partners were Culture Hint and Culture Venture. Spazju Kreattiv, Malta's national arts centre in Valletta served as the research subject. The scope of the project was to build a solid case study on the use of AI combined with audience development techniques on the tourism sector, specifically cultural tourism.

- KEY PERFORMANCE INDICATOR

To track the success of the project from Spazju Kreattiv, Malta's National Centre for Creativity (SK) perspective, the researchers made use of daily footfall inside the building as main KPI.

- SURVEY PHASES

Culture Venture designed and implemented surveys in four phases among people outside SK's premises as part of the audience development efforts.

- AI MONITORING AND OPTIMISATION

Culture Hint used its FlowHint monitoring devices to monitor people flow outside of SK, its forecasting algorithms to predict the flow in advance, and its optimisation engine to implement shifts outside SK to convert non visitors into visitors.

- MONITORING DATA

The location offers an incredible potential, with a peak of 35000 visitors on Castille Sq. and Ordinance St. in December 2022.

- IMPLEMENTATION WAS SUCCESFUL

AI-driven shifts on Castille Sq. increased visitation by 11%, beating the set KPI.

- AWARENESS ABOUT SPAZJU KREATTIV (SK) IS LOW

Survey respondents had low awareness of the space: 57 of the surveyed non-cultural tourist respondents did not know about SK (4 did). The same was true for the cultural tourist respondents 49 did not, 7 did.

- RESPONDENTS ARE KEEN TO VISIT

When information was given on the historical building, respondents expressed interest in visiting.

This report is a compilation of data sets and analysis conducted by Dr Valerie Visanich and Toni Attard for Culture Venture, and Cesare Fiala and Maksym Malynovskyi for Culture Hint. The authors acknowledge the contribution of interviewers from the Superintendence of Cultural Heritage and the guest relations officers at Spazju Kreattiv. Special thanks to Jonathan Borg, Head of Unit, Heritage Planning Consultations & Built Heritage Restoration Monitoring, Superintendence of Cultural Heritage, Daniel Azzopardi Artistic Director, Spazju Kreattiv, Edward Zammit, Business Development Director, Spazju Kreattiv and all staff at Spazju Kreattiv.

Introduction

Recent decades have witnessed a burgeoning debate on how to democratize cultural events in general, and museums in particular, by widening access to non-visitors. This study builds an understanding on non-visitation, by using AI-driven devices for monitoring visitor flow at the National Centre for Creativity in Malta, situated within a protected cultural heritage site. This examination is couched in studies on cultural tourism and audience development in relation to an understanding on motivation and barriers for visitation.

Central to the principles of this report are the identification of reasons for visitation and non-visitation as well as the planned interventions for audience development. Then, this research implemented Culture Hint's methodology at Spazju Kreattiv, to convert non-visitors into visitors during the duration of the research project. Finally, this report presents mitigation and recommendations.

This study uses AI combined with audience development techniques on the tourism sector, specifically cultural tourism. It seeks to build on cultural participation research and introduce AI as a tool to monitor and forecast visitor flow at Spazju Kreattiv and inform strategic planning to optimise the visitor experience - specifically improving the Centre's engagement with visitors.

Project Scope

This project was funded by MDIA and spearheaded by Malta's Superintendence of Cultural Heritage. It is aimed at building a solid case study on the use of AI combined with audience development techniques on the tourism sector, specifically cultural tourism.

Research questions

What can footpath flow tell us about visitation patterns? What does this study tell us about non-visitation? How can we convert non-visitors into visitors using AI-driven methodologies?

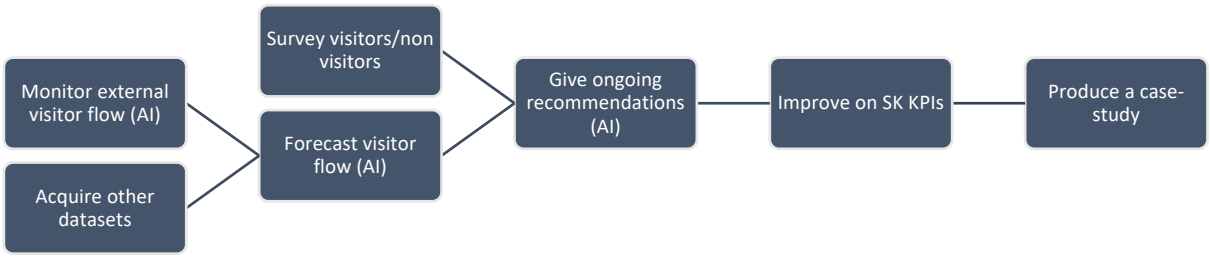
The main aims of the research are:

With the use of AI, the flow of persons around Spazju Kreattiv was charted and examined in relation to the surveyed population during the same times. This study analyses responses from the surveyed population to understand reasons for visitation or non-visitation and in relation to whether they were residing in or visiting Malta. Respondents who were not residing in Malta and therefore considered as visitors to the Islands were subdivided in two categories: those who claimed that the visit to Malta was motivated by at least culture and those who claimed that the visit was not motivated by culture.

The scope of adopting this methodology was to outline any differences across different groups in perceptions and behaviour in summer as opposed to shoulder tourist seasons and winter. The interviewers were intentionally positioned at Castille Square and Ordinance Street in Valletta, in order to analyse the correlation with the footfall of people around the building of Spazju Kreattiv.

This study places emphasis on obtaining information on the propensity to visit Spazju Kreattiv, both for those who maintained that they visited and those who highly considered visiting as well as those who claimed they had no intention to visit.

The research trajectory included the following factors:



- *Key Performance Indicator*

In an attempt to track the success of the project from Spazju Kreattiv's (SK) perspective, we focused on daily footfall inside the building as main KPI.

- *Survey Phases*

Culture Venture designed and implemented surveys in four phases among people outside SK's premises as part of the audience development efforts.

- *AI Monitoring and Optimisation*

Culture Hint used its FlowHint monitoring devices to monitor people flow outside of SK, its forecasting algorithms to predict the flow in advance, and its optimisation engine to implement shifts outside SK to convert non-visitors into visitors.

Timeline: Research Phases

- July 2023: project kick off
- Jul: AI-driven monitoring starts (FlowHint 1.0 installed)
- 29 Aug – 2 Sept: Phase 1 surveys
- 26 Sept – 30 Sept: Phase 2 surveys
- 21 Oct – 27 Oct: Phase 3 surveys
- 3 Nov: FlowHint 2.0 installed

- 28 Nov – 7 Dec: Phase 4 surveys
- Jan – Mar 2023: Data analysis

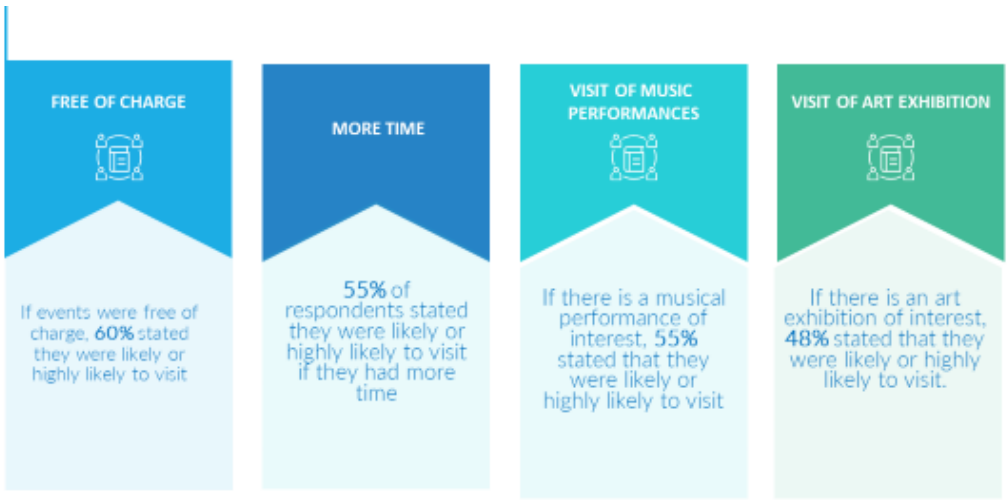
KPI to Track Project Goal

The KPI for this project focused on daily footfall inside the building. A challenge identified by Spazju Kreattiv, and under observation in this study, was the difficulty to attract visitors from the outside areas into a historical building that is purposely designed as a military fortification to keep people out.

From the sociological perspective, the motivators for visitation and non-visitation play a crucial role, and more information on the sociological metrics follow. From a cultural heritage perspective, footfall inside the building was an important KPI, alongside with the replicability of this project to other historical sites.

Summary of Salient Findings

Preliminary results point towards the identification of some key factors influencing decisions for non-visitation, including time, money and lack of information.



This data yielded important research on audience development. Findings include:

1. The monitoring data shows that the location offers an incredible potential, with a peak of 36217 visits to Castille Sq. and Ordinance St. for the month December 2022.
2. From the surveyed population, a total of 118 respondents were not living in Malta (42.5%),while 161 (57.5%) respondents were living in Malta.

3. AI-driven shifts on Castille Sq. increased visitation by 11%, beating the set KPI.
4. Survey respondents had low awareness of the space: 57 of the surveyed non-cultural tourist respondents did not know about SK (4 did). The same was true for the cultural tourist respondents 49 did not, 7 did.
5. When information was given on the historical building, respondents expressed interest in visiting. Local participants were asked whether they consider visiting and 79% (n=87 those who never visited) said they would visit or would consider visiting.

Research location: Spazu Kreattiv- Malta's National Centre for Creativity

St James Cavalier Centre for Creativity was established in 2000 when the old fortification of St James Cavalier in Valletta was designated by the Government of Malta, as Malta's millennium project to redesign the building as a Centre for Creativity. Architect Richard England was faced with the task of re-engineering this building, originally meant to keep people out, as one open to all and inviting anyone to come inside. The Centre for Creativity has functioned primarily as an arts centre, particularly because there was no such entity in Malta. However, the organisation has frequently encouraged engagement from other aspects of the creative industries outside the art world, primarily from creative endeavours that are not immediately associated with the arts, such as creative thinking and the sciences.

The original branding of the Centre was directly tied in with the historic building that is St James Cavalier, a part of the city of Valletta's 17th century fortifications. So much so that the centre was named St James Cavalier Centre for Creativity. The original logo featured a prominent outline of the building and the name emphasised St James Cavalier over the Centre for Creativity descriptor. The effects of this connection resulted in having the public and frequent visitors referring to this Centre in terms of the structure of St James Cavalier.

This was also emphasised by research participants in a research project conducted in 2017. This led the Foundation to emphasize the Centre for Creativity aspect over St James Cavalier as a building by renaming the centre from St James Cavalier Centre for Creativity to Spazju Kreattiv (*Creative Space*).

The precise wording on the Foundation's mission statement with regards to audience development and engagement is as follows: “to act as a catalyst for all forms of expression, by providing space and extending experience to reach all people and involve them in interactive participation” (www.kreattivita.org). The appropriate enactment of this primary aim leads back to the concept of audience development and particularly audience engagement by ensuring alternatives to top down models of communication. This led to the need for a sociological research exercise in which for the first time, knowledge on the perceptions of persons who visit the Centre as well as those who do not, was acquired.

The current artistic vision, based on the three pillars of Artistic Excellence, Community Outreach and Internationalisation, champions inclusion and diversity, with a highly varied programme of events that are promoted in both Maltese and English on different media. This artistic vision prioritises:

- ARTISTIC EXCELLENCE: Creatives from different walks of life are encouraged to propose concepts which strive to push artistic boundaries and resonate with current socio-political contexts. Initiatives which show a considerable amount of research and creative accomplishment are viewed favourably.

- COMMUNITY OUTREACH: This organisation strives for social dialogue and exchange with different community groups. In this context, submitted proposals need to show a clear understanding of the target audience/s, including strategic ways of engagement. Accessibility in all its forms, being physical or intellectual, is encouraged and viewed as an important aspect of any successful endeavour. Digital presence and online interactivity as part of the proposed ventures are also seen as essential elements in being favourably considered to form part of the programme.

- INTERNATIONALISATION: In the continued aim of achieving artistic accomplishment, interested applicants are encouraged to seek international partners in the production of proposed ventures. Such encounters and associations should be viewed in the continued evolution and development of the project. Involvement in international networks and cross-collaborations with strategic partners with the aim of further development and prospective touring opportunities are encouraged.

Methodology

The research methodology for this study was designed to identify cultural participation and propensity to visit this cultural heritage site as well as to track footfall.

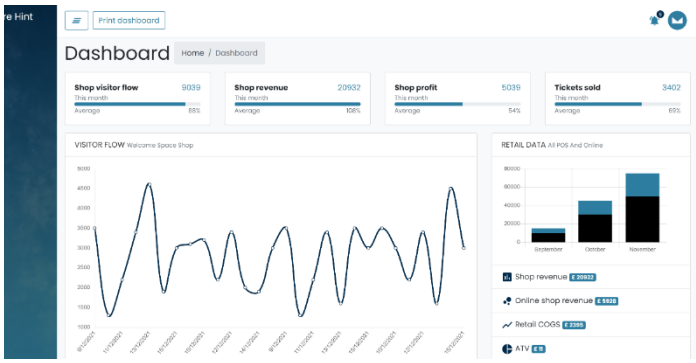
Design of a survey

A survey was designed and administered by researchers during the set four phases of the research. The intention of doing this self- administered questionnaire interview was to obtain knowledge on the meanings and feelings of locals as well as tourist on their cultural participation, particularly on their perception of and propensity to visit Spazju Kreattiv.

The design of the questions included Likert scale statements, specifying responses on the degree of approval or disapproval, used to gauge the intensity of specific responses and facilitate interpretation of results. In terms of content, questions solicited respondents' general views on cultural participation as well as their views on specific questions on the cultural site in question. During fieldwork, all ethical concerns were taken into consideration. Questionnaire development and administration observed confidentiality and general data protection regulations (GDPR). Moreover, the use of AI driven monitoring was ethically sound because it is fully GDPR compliance since no personal data collected. This system, which is easy to setup with plug-and-play devices, counts all people who spend at least 3-10 seconds within the foothold of the sensors, to avoid counting people who are just walking through the public spaces.

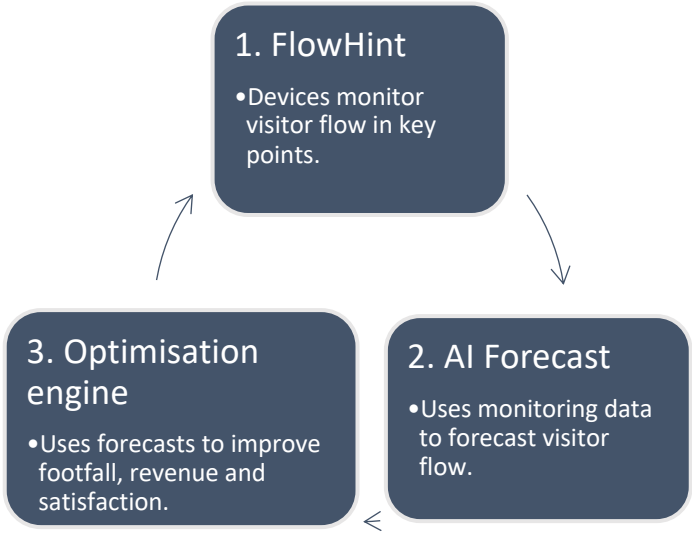
CultureHInt: Ai-Driven Analysis and Optimisation

This study used Artificial Intelligence software to record and forecast visitors' flow around the building. Leverages AI to monitor visitors flow and result in audience development. Culture Hint was used as the optimisation platform for this venue. CH clients use its software to increase visitor satisfaction and revenue per visitor, up to +97%. CH used Artificial Intelligence to improve SK's visitor numbers. CH combines in-house developed hardware and software.



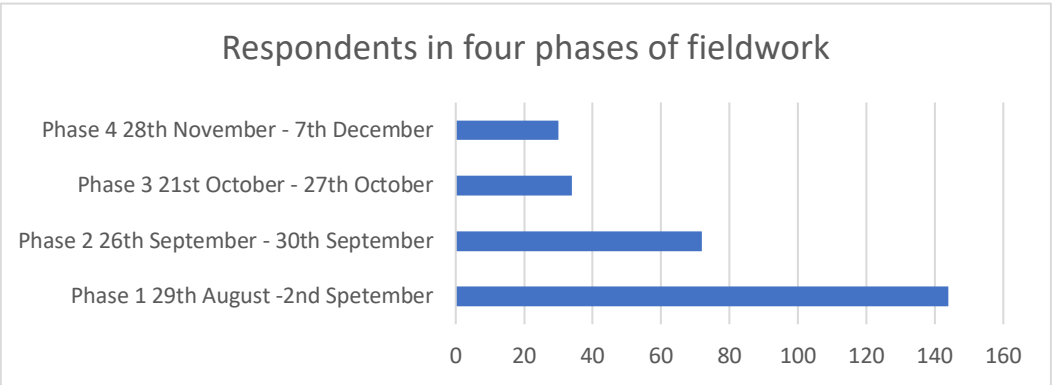
FlowHint, CH's visitor flow monitoring hardware.

Culture Hint dashboard

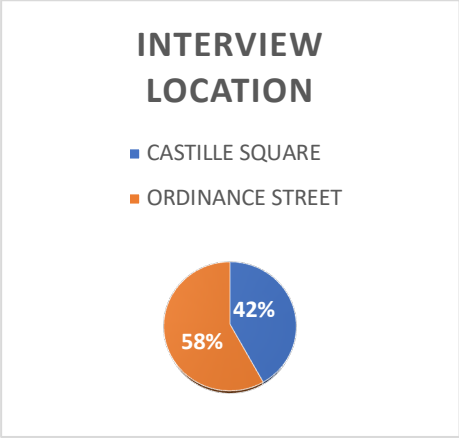


Research Population and location

During fieldwork, 280 valid responses were obtained. Out of these, 118 respondents were not living in Malta (42.5%), while 161 (57.5%) were living in Malta.



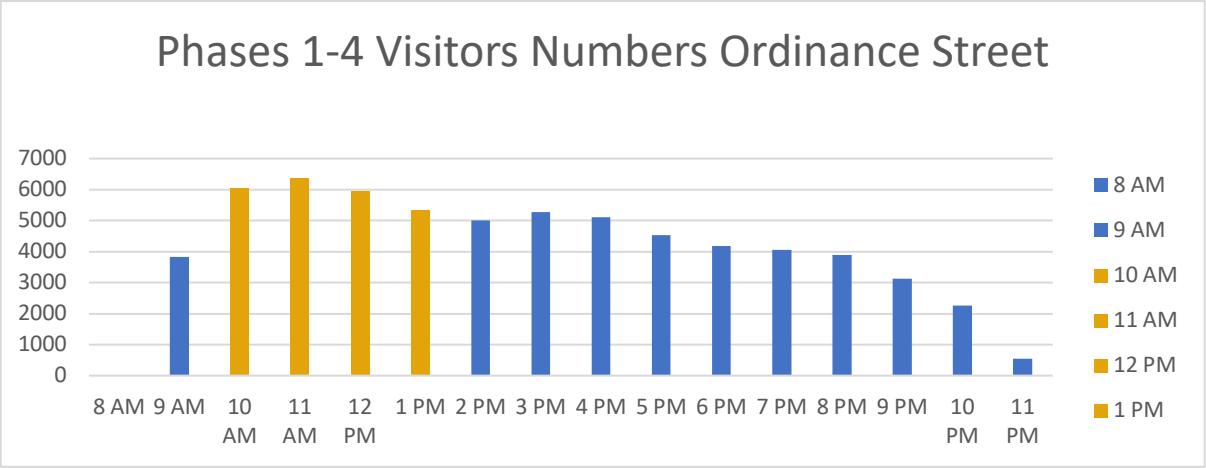
Phase 1: 144 responses
Phase 2: 72 responses
Phase 3: 34 responses
Phase 4: 30 responses
Total Valid Responses: 280

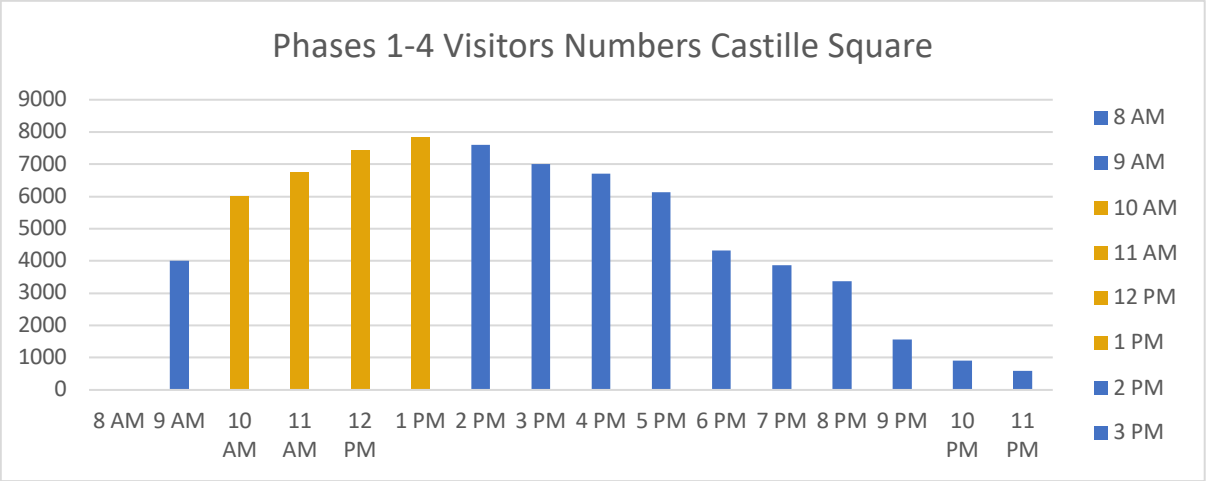


CASTILLE SQUARE

ORDINANCE STREET

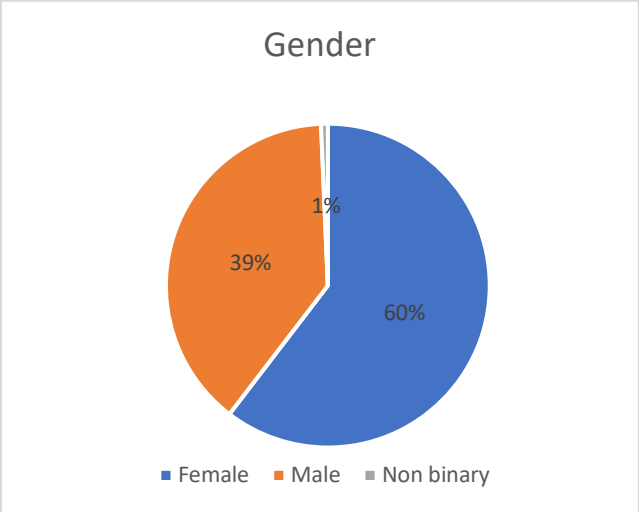
The number of visits collected by Culture Hint for each location (Ordinance street and Castille square) are represented below. The charts show the number of visits only during the days when surveys were conducted, with the data aggregated by hour of the day. Highlighted in orange, indicate the hours when surveys were conducted.



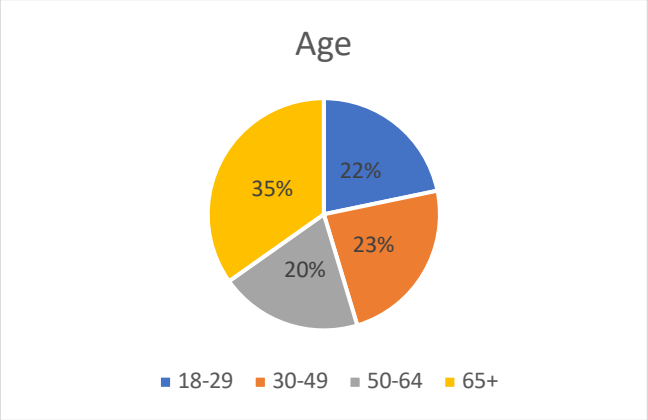


Demographics

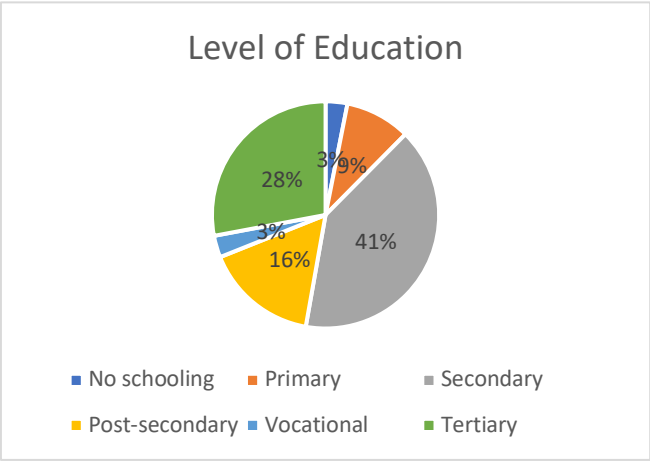
Research Population: Locals



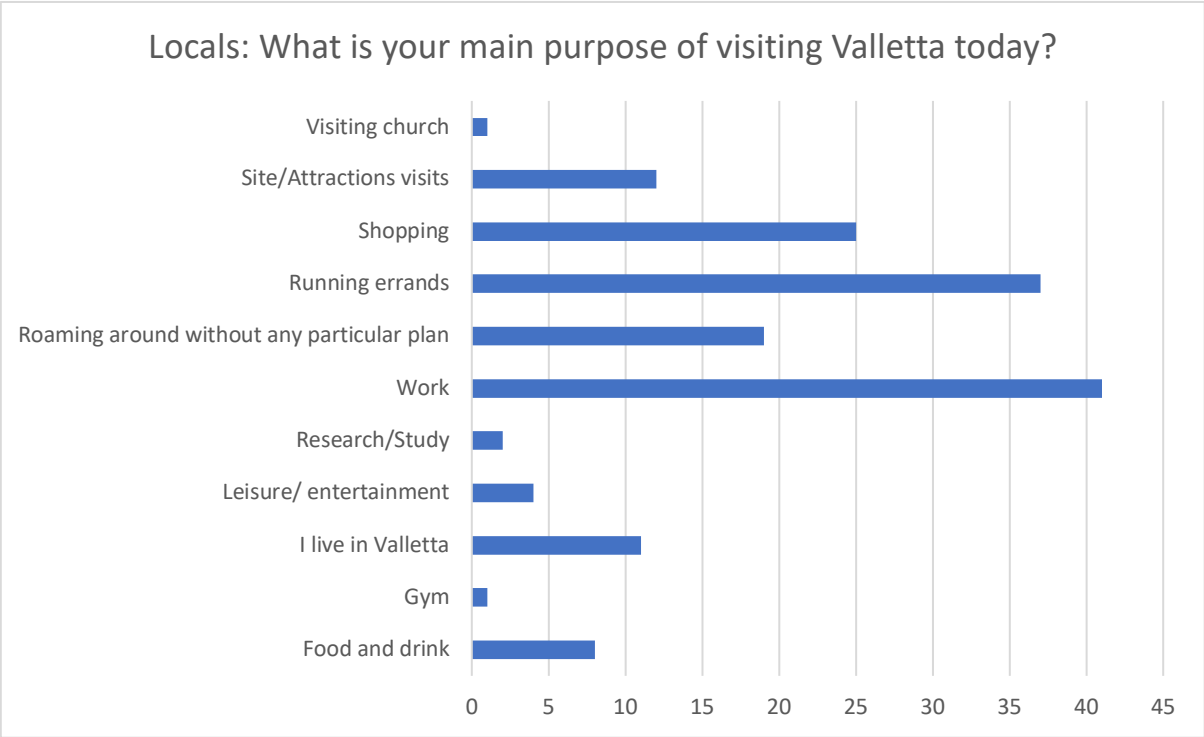
The research population was included both for locals and tourists. Whilst the sample size is sufficient, it is not representative of the total number of persons in the area during the time of research.



Respondents interviewed who stated that they live in Malta were predominantly women (60%) and 55% of respondents were 50+ years old.



The level of education was predominantly secondary level (41%), with a relatively high rate of tertiary education (28%) for this age cohort.



Local research participants maintained that the main purpose for their visit to Valletta was for work, to run errands as well as for shopping purposes.

Research Population: Tourists

The tourist research population was divided in two: Those who listed culture as one of the motivations for visiting Malta (n=57) and those who considered culture not as a motivation for visiting Malta (n=61). This classification was used depending on whether they listed either history and culture or cultural/ arts events whereas the others were categorized as ‘visitors excluding Culture as a motivation'.

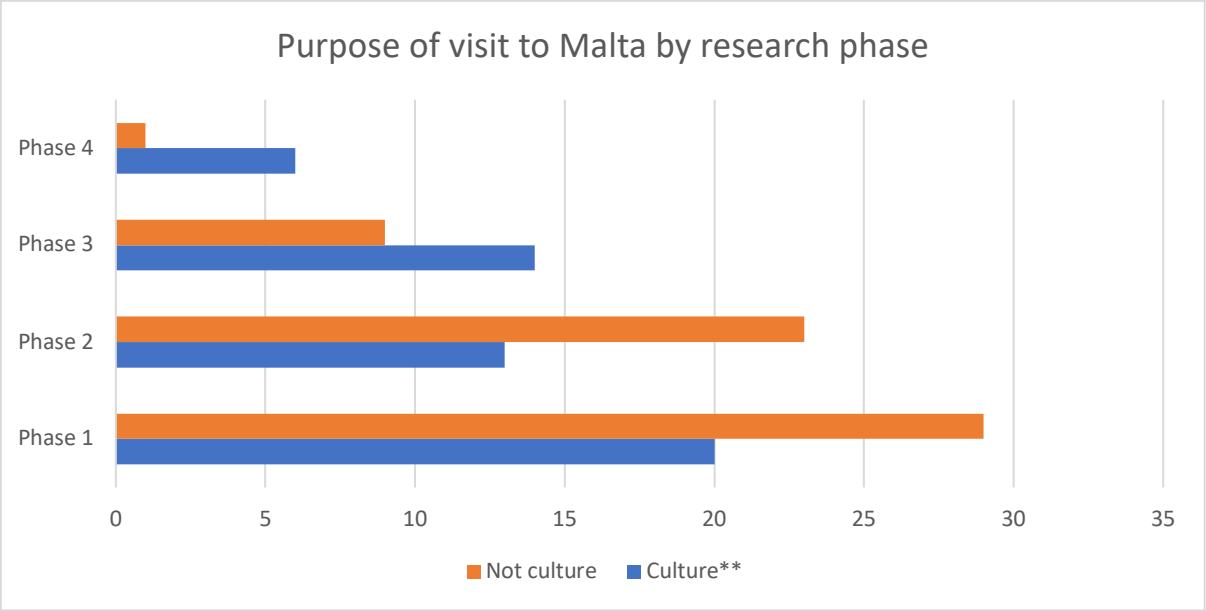
There are various sociological notions worthy of investigation in the definition of culture, including in the increased fluidity between 'high' and 'low' forms of culture and the increase of the cultural omnivore, referring to persons embracing different cultural tastes (see Peterson and Simkus, 1992). This is especially the case in persons with higher level of education who are more likely to participate in different cultural events (Van Eijck's and Knulst's 2005). These aspects can be studied further however they do not fall within the scope of this report. Herein, while also acknowledging the ambiguity in what is meant by 'culture' both by the interviewers and respondents, this study narrowed down the definition by making use of the Malta Tourism Authority's (MTA) classification as the determinant for defining culture The classification given during the administered interview, in line with the MTA's classification, were the following:

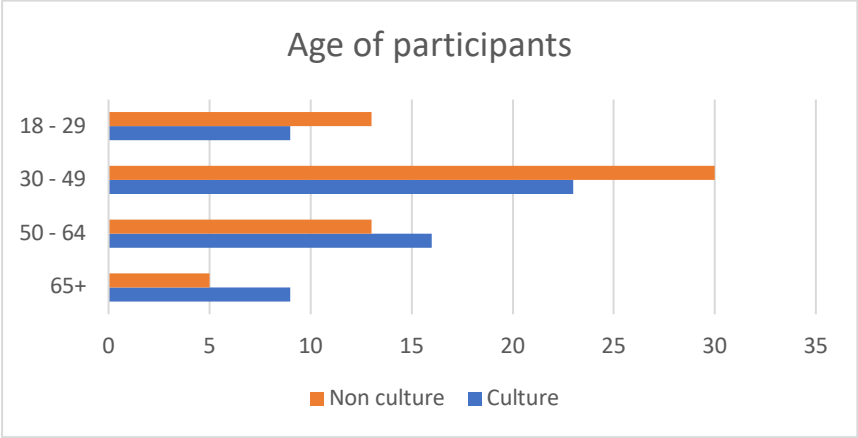
Culture**
Not culture

Purpose of visit is defined by any of these:

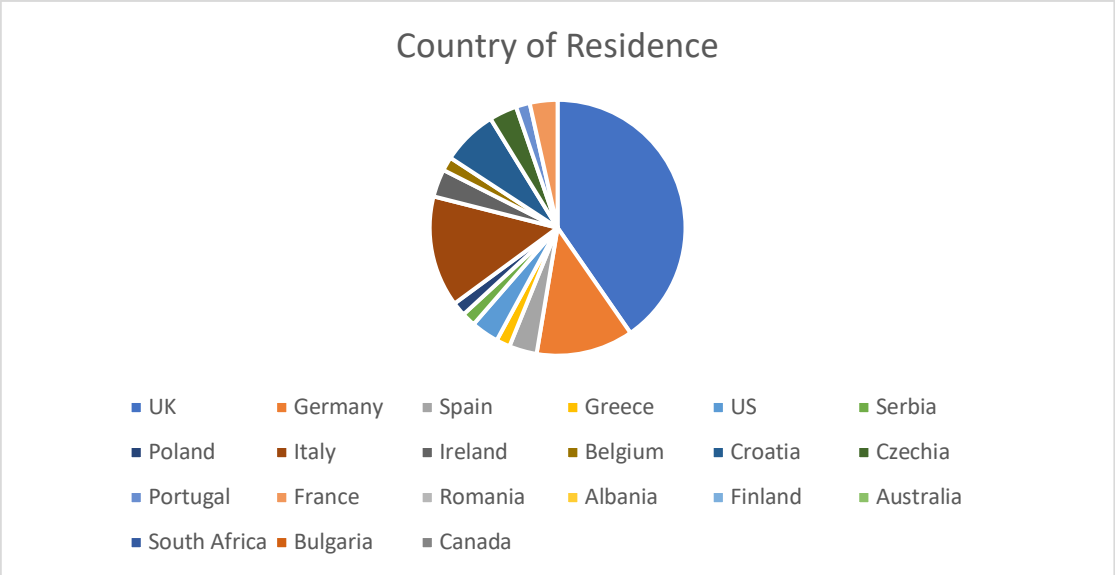
- Sun, sea, climate
- Convention/ conference/ seminar
- Business/ other work
- Getting married/ honeymoon
- Medical care
- Language course
- Religious/ spiritual/ pilgrimage
- Scuba diving
- History and culture **
- Cultural/ Arts events **
- Incentive trip
- Visiting friends and family
- Special occasion
- Wellness
- Educational/ study
- Sports

Interestingly, tourists interviewed during Autumn, were more inclined to visit Malta for cultural purposes as opposed to those who visited Malta in summer.



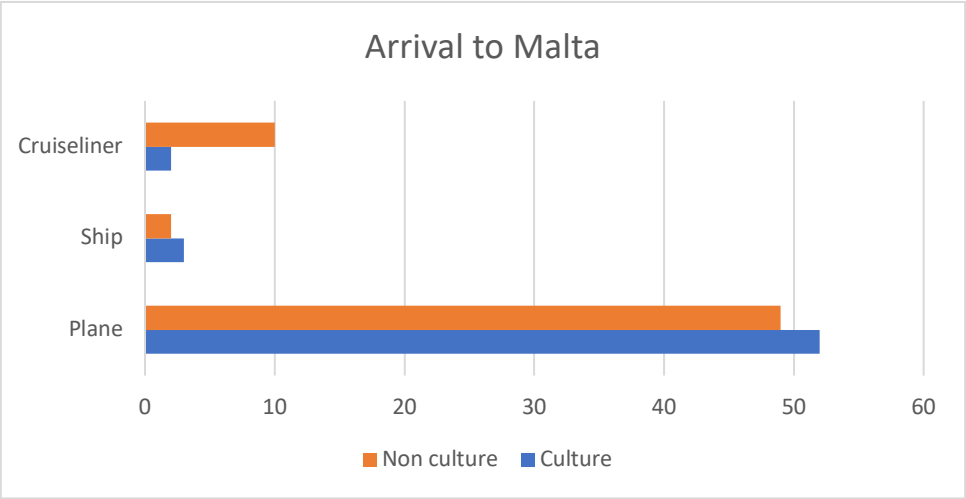


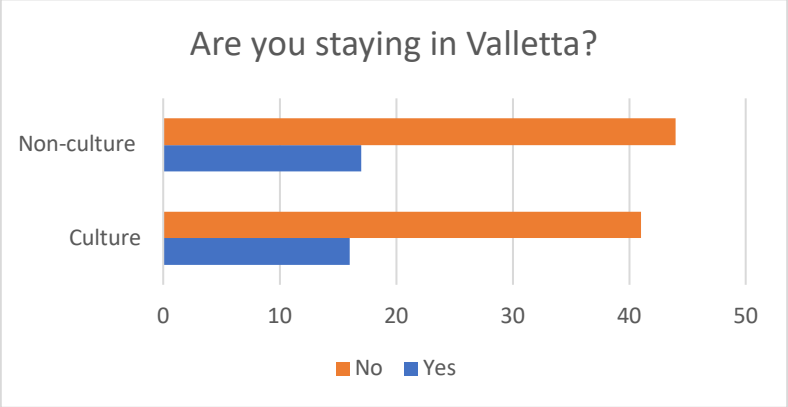
The majority of tourist participants were within the age cohort of 30-49 years old for both the participants culturally-motivated as well as those non- culturally-motivated.



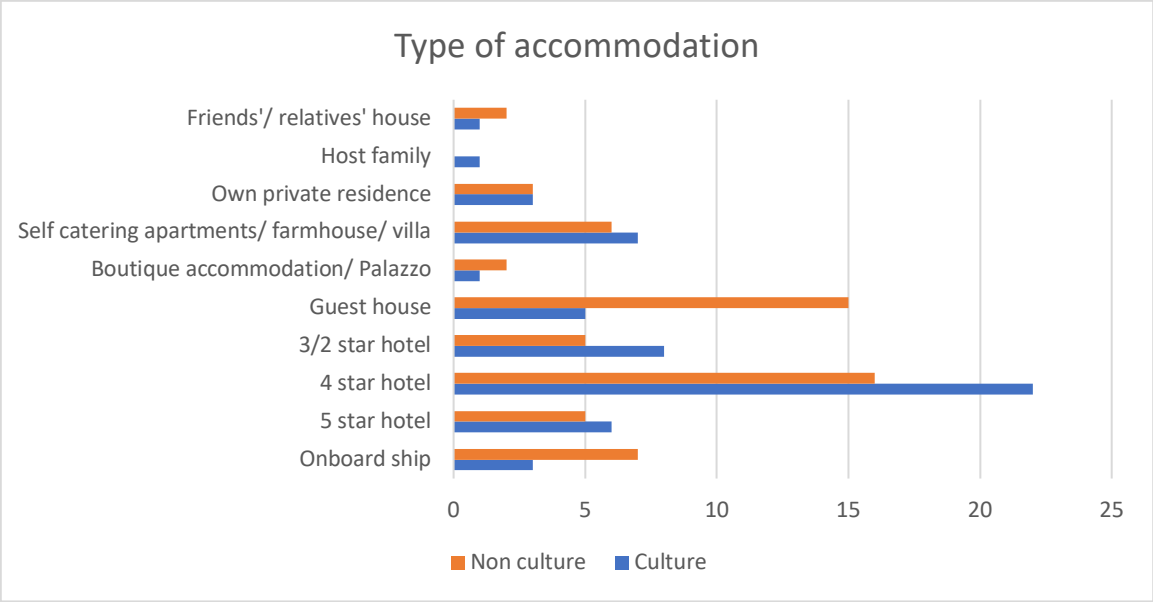
The sampled population included tourists from a wide variety of countries, with the UK (n=43) as a popular country of residence. Also, the majority of participants visited Malta for the first time (61%). Most respondents arrived in Malta by plane. It is worth noting that those who arrived in Malta with a cruise liner did not consider culture as the main motivator of visiting the Islands.

First time visit to Malta			
	Culturally-motivated	Non culturally-motivated	TOTAL
Yes	38	34	72
No	19	27	46
	57	61	118

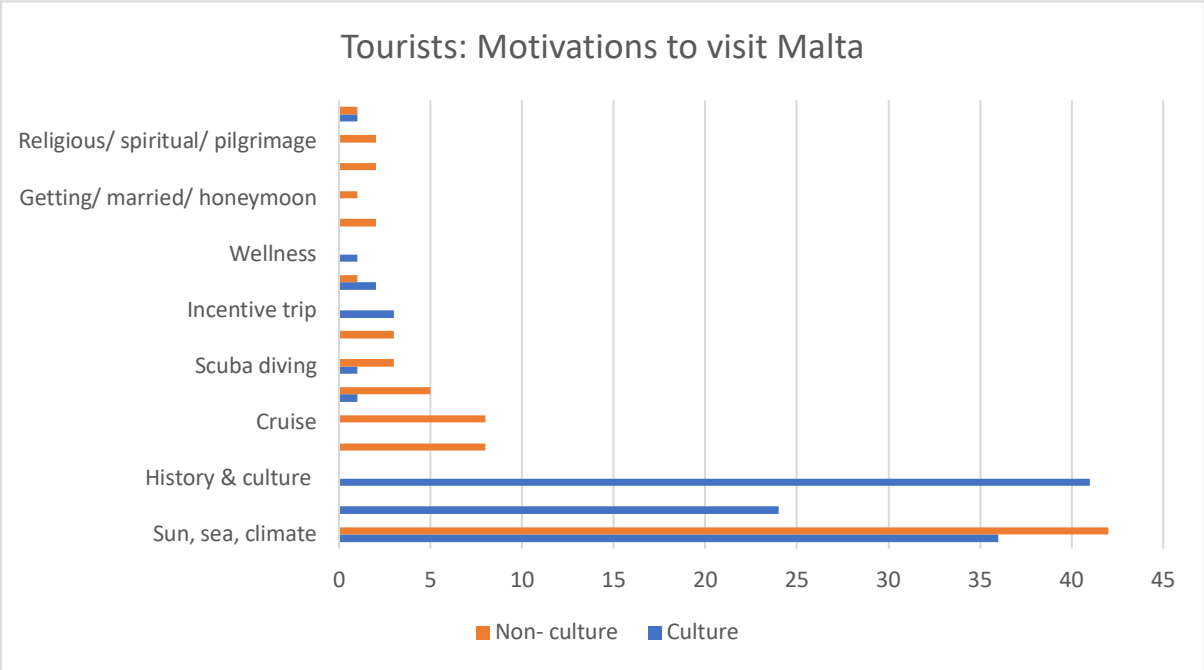


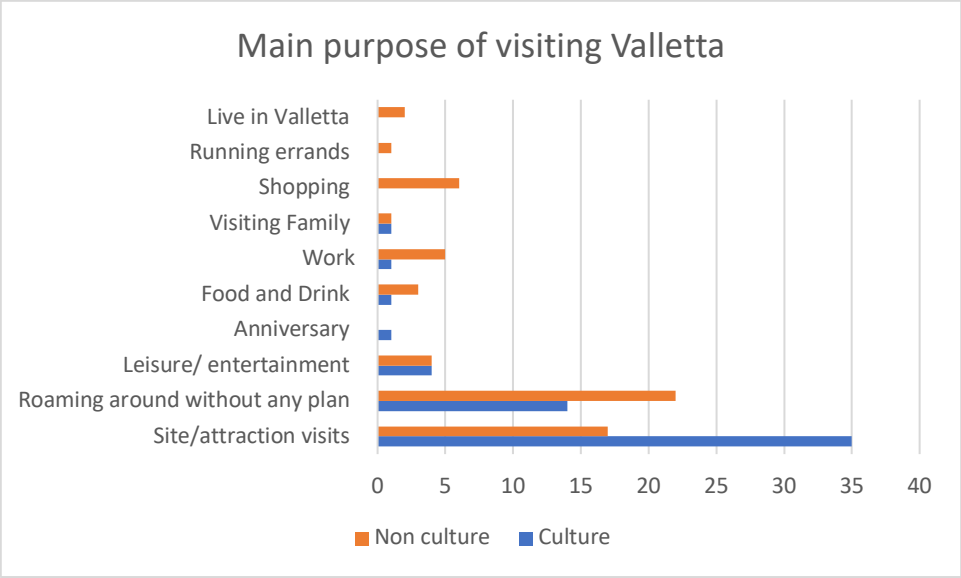


Only a few participants stated that they were staying in Valletta whereas the most popular type of accommodation were 4-star hotels and guest houses.

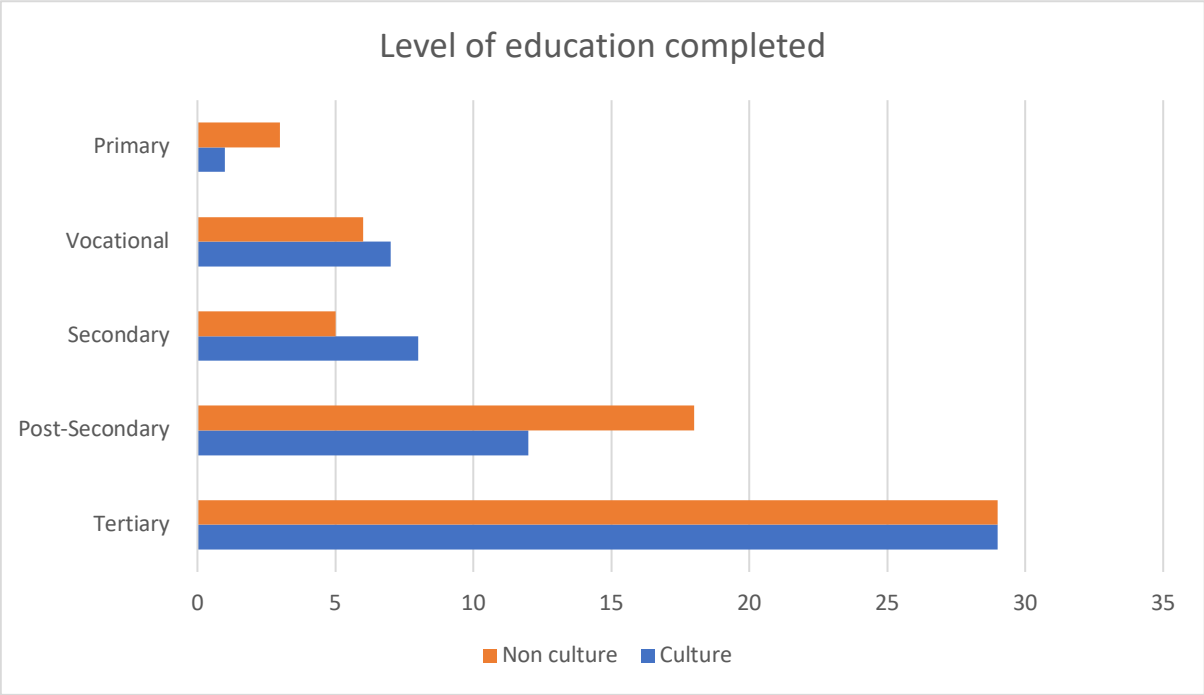


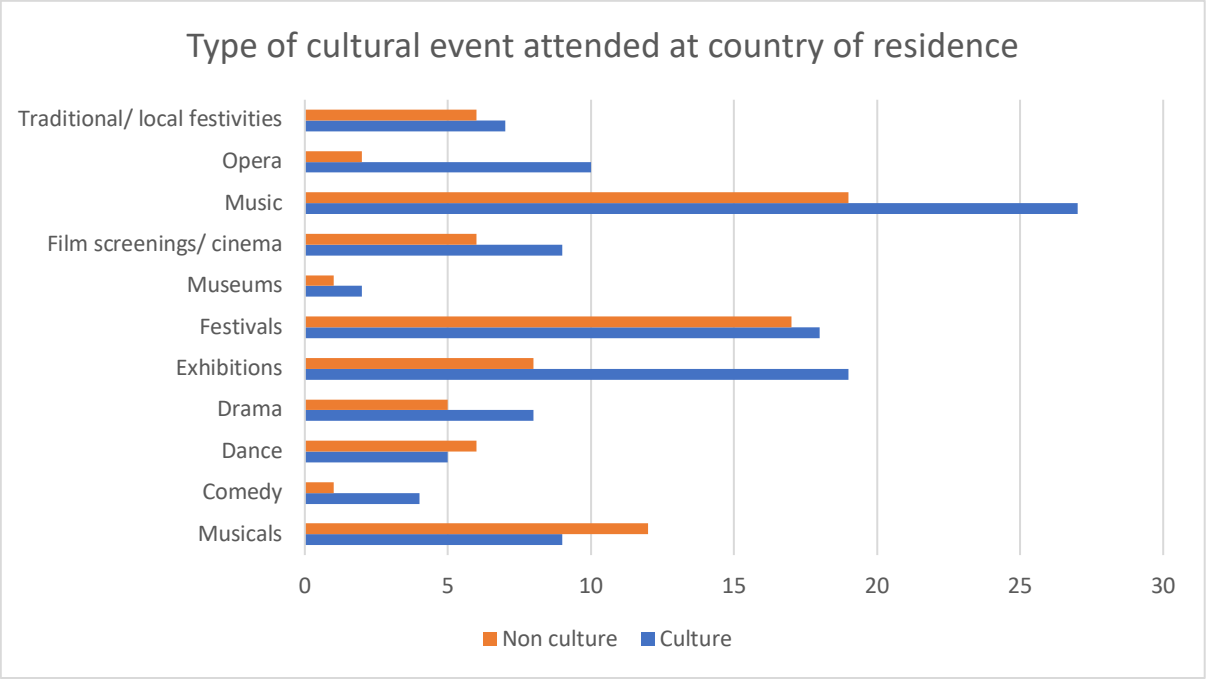
The main purposes of visiting the city of Valletta, itself a UNESCO world heritage site, were for site and attraction visits as the most common for culturally-motivated (n=35) and for non-culturally motivated (n=17). Also, the idea of roaming around without any plan was equally important for tourist participants (n=14 for culturally motivated, n=22 for non-culturally motivated).

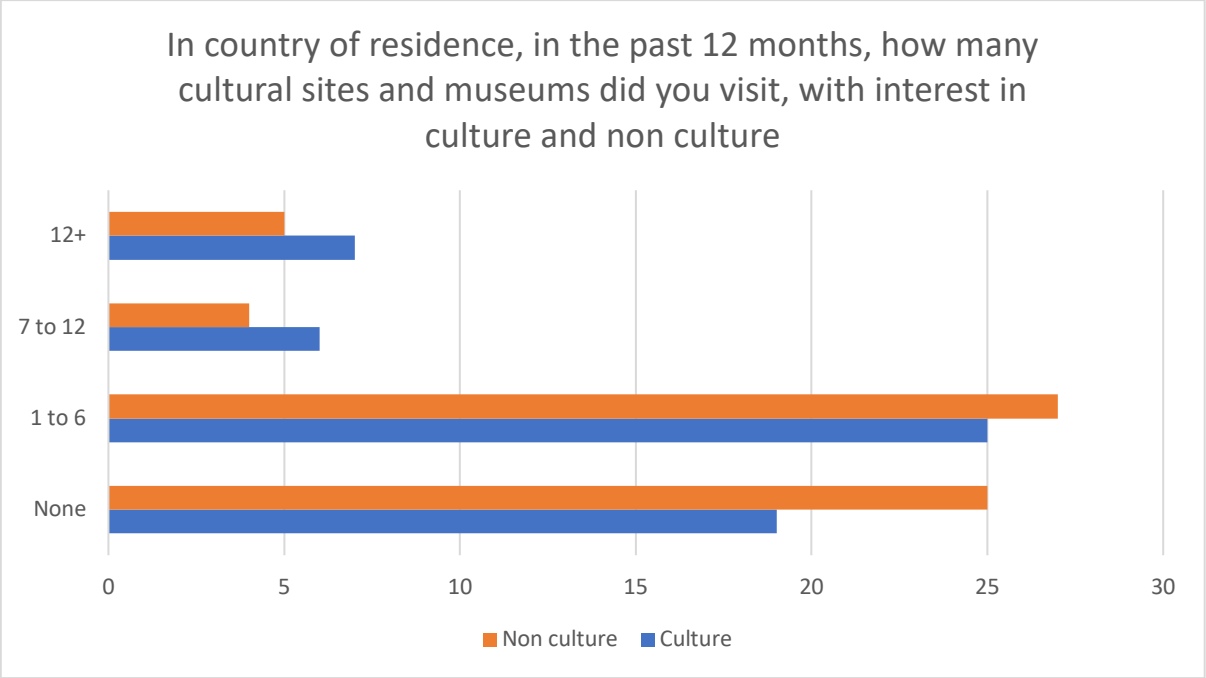


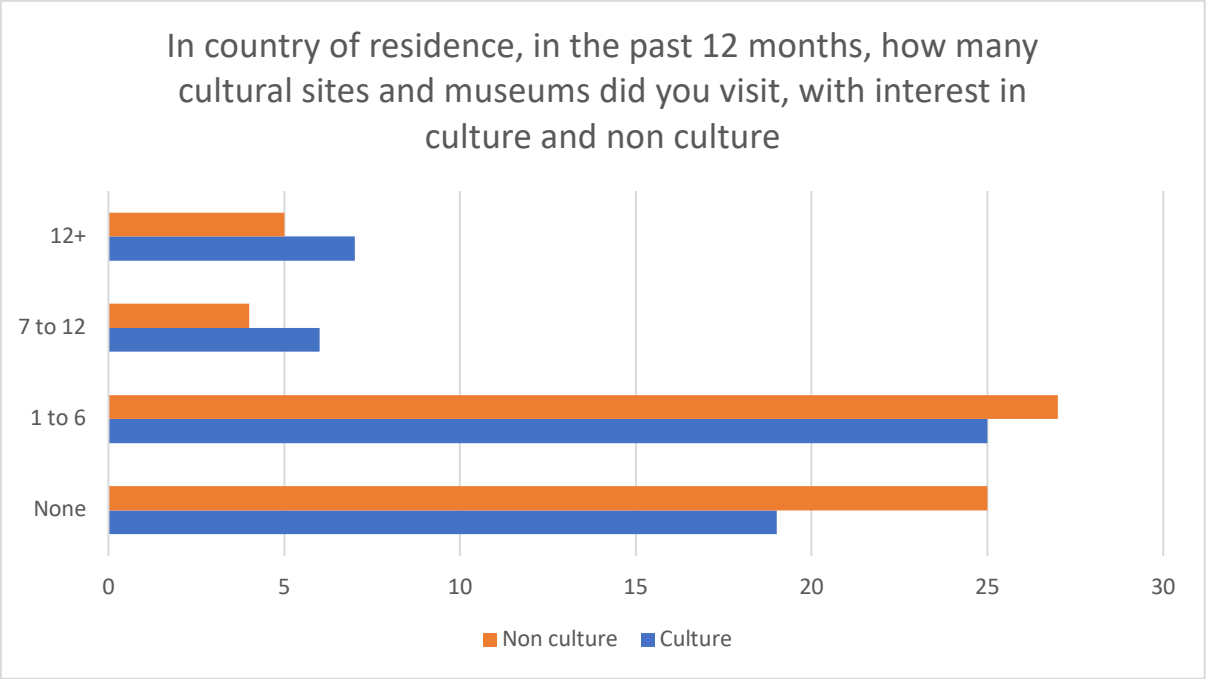


Predominately the tourist research population had a tertiary level of education (n= 29 each for both cohorts of culturally-motivated and non-culturally-motivated). Herein, the cultural omnivore theory is relevant to explain having persons with higher level of education who are likely to enjoy both 'high' and 'popular' forms of art. In effect, both culturally-motivated and non-culturally-motivated maintained that they had visited between 1 to 6 cultural sites in the past 12 months as well as having music, festivals and musicals as popular cultural events for both cohorts. Nevertheless, for Opera, as a distinctive form of artform was attended predominately by the culturally-motivated cohort (83%) rather than by the non-culturally-motivated cohort.



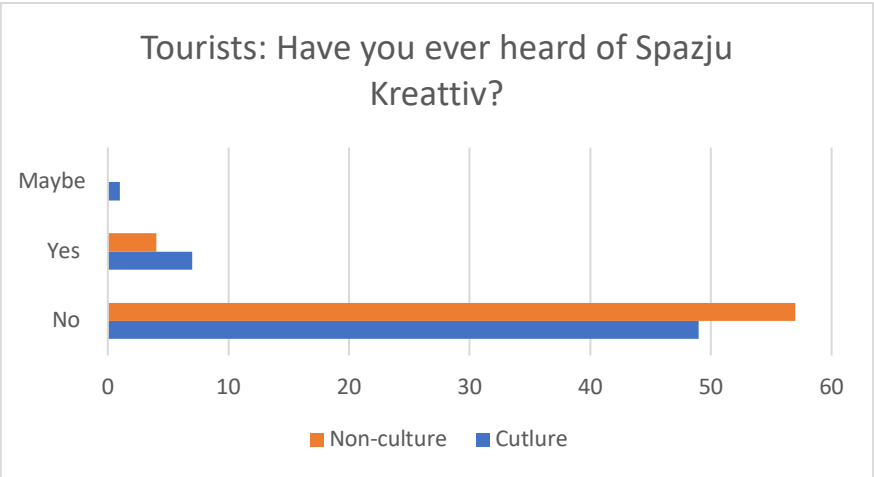

Type of cultural event attended at country of residence
Traditional/ local festivities
Opera
Music
Film screenings/ cinema
Museums
Festivals
Exhibitions
Drama
Dance
Comedy
Musicals
0
5
10
15
20
25
30
Non culture
Culture


In country of residence, in the past 12 months, how many cultural sites and museums did you visit, with interest in culture and non culture
12+
7 to 12
1 to 6
None
0
5
10
15
20
25
30
Non culture
Culture

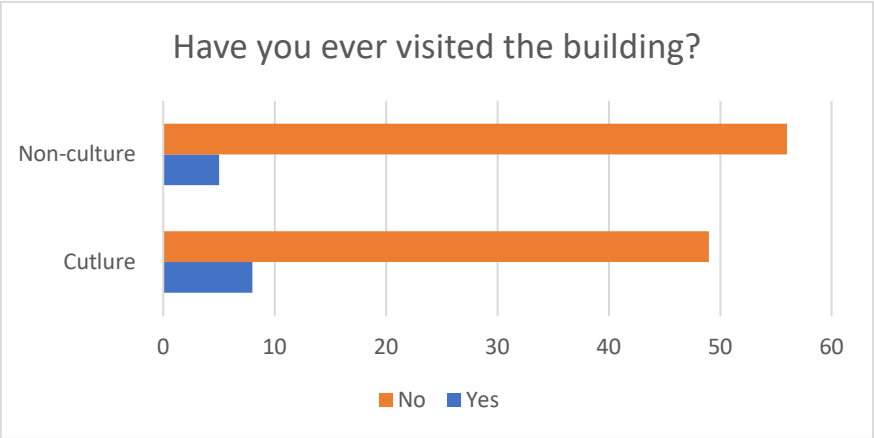


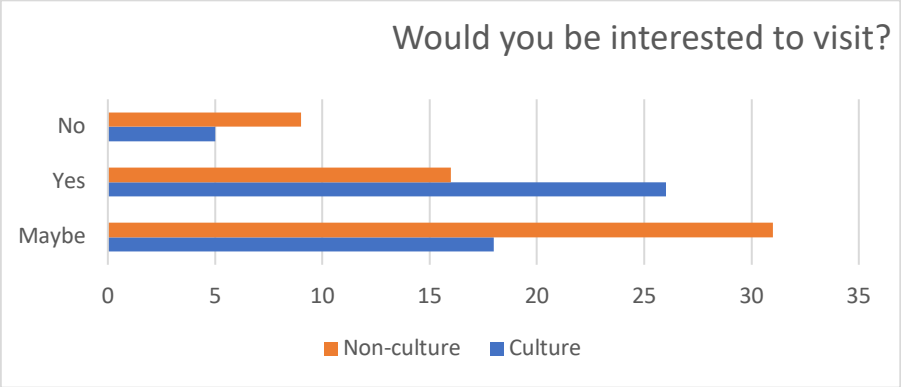
Tourists were asked about the sites visited in Valletta prior to the interview. Even though the majority of participants maintained that they had not visited any sites, possibly because the interview was conducted at their moment of arrival, others stated that they visited the Upper Barrakka Gardens and public squares. Interestingly, the mention of Spazju Kreattiv was less than other museums and historic sites in the vicinty of the interview locations.

Knowledge and Interest in Spazju Kreattiv



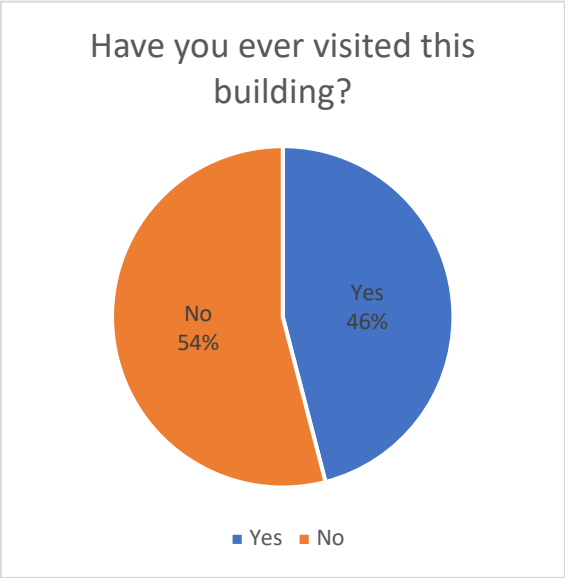
The majority of tourist participants stated that they had not heard or visited Spazju Kreattiv, yet expressed interest in visiting after receiving basic information about it. The lack of knowledge on the premises was evident in both culturally motivated and non-culturally-motivated cohorts.

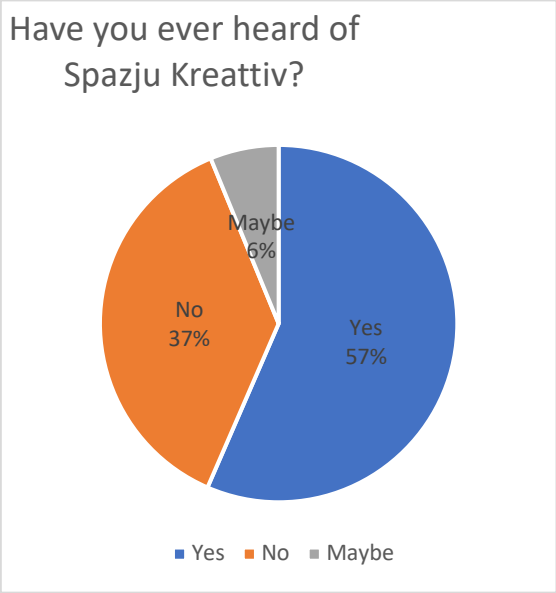


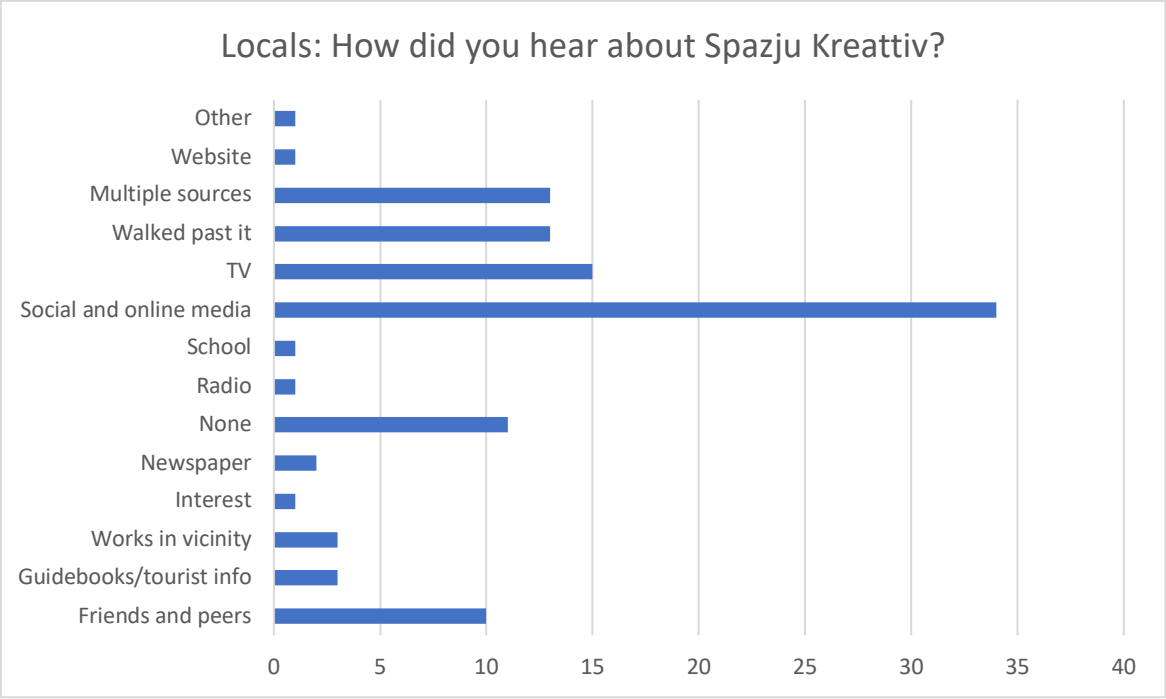


Spatial Analysis: Distinction between space and place

For local research participants there was a clear disassociation of Spazju Kreativ (the place) with St James Cavalier (the physical space). 54% stated that they never visited the building. 19% of those who visited (n=74) St James Cavalier stated that they never heard of Spazju Kreattiv. Local participants who heard of Spazju Kreattiv did so through social and online media (n=34), followed by TV (n=15). These cohorts maintained that they mainly visited for an exhibition.

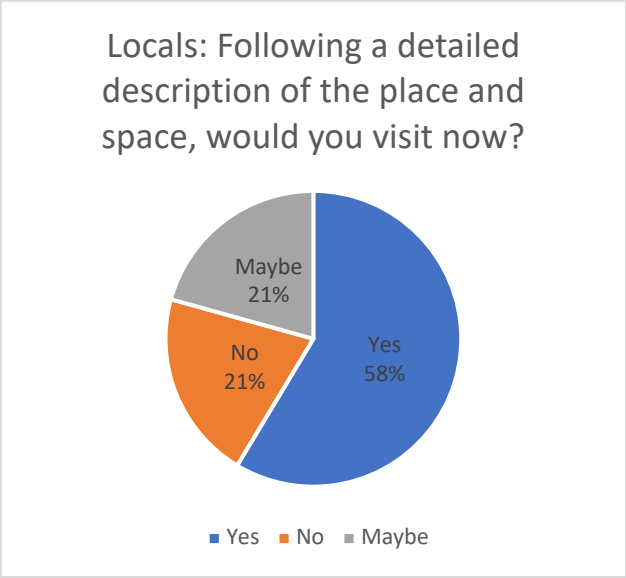






Information about the Cultural site and its Operations

It warrants to note that there was a noticeable interest to visit the premises after information about the cultural heritage site was given. The following information was given: *This is a 16th century fort called St James cavalier and now houses Spazju Kreattiv, Malta's national arts centre with an arthouse cinema and a cultural program of exhibitions, music and theatre.*



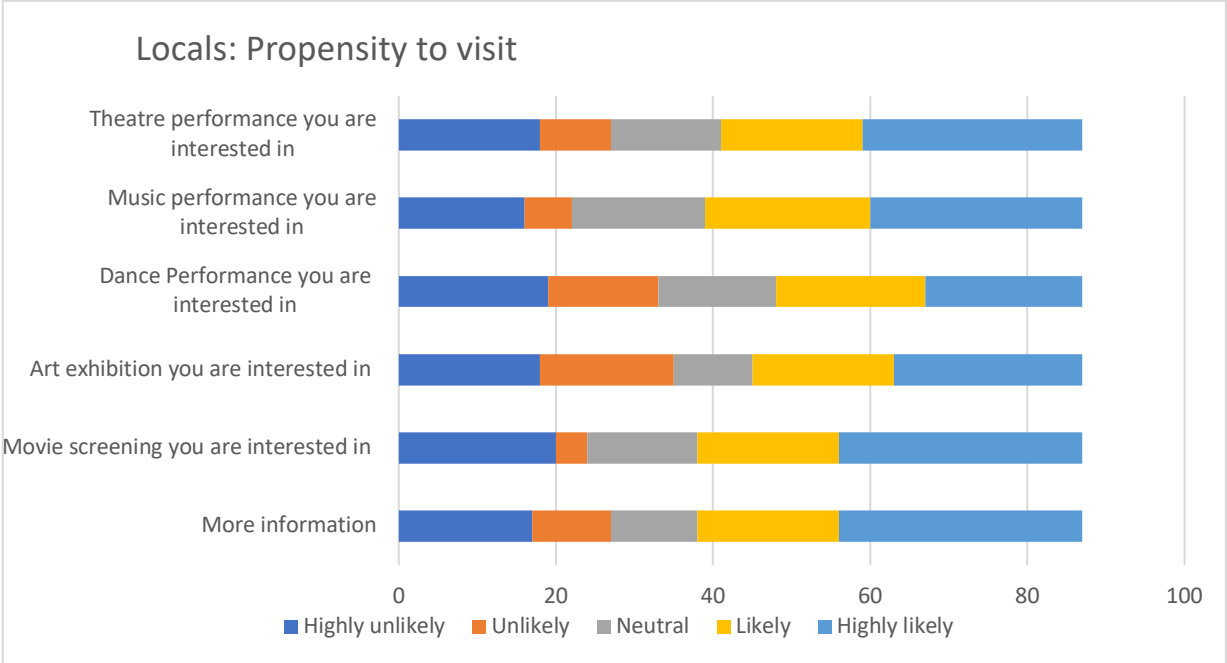
Following information about the place and space, local participants were asked whether they consider visiting and 79% (n=87 those who never visited) said they would visit or would consider visiting.

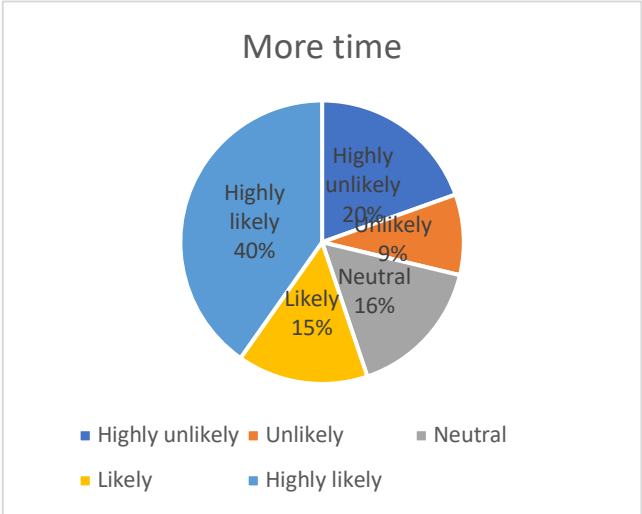
In addition, a total majority of culturally-motivated tourists (90%), stated that would be interested or might consider visiting following a brief on the historic building.

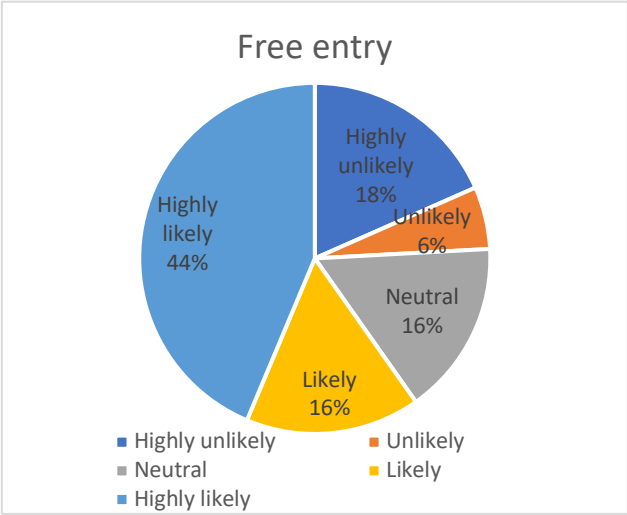
Would you be interested to visit?	Culturally-motivated	Non-culturally-motivated	TOTAL
Yes	26	16	42
No	5	9	14
Maybe	18	31	49
	49	56	N= 105

Propensity to visit

Local research participants maintained that they would visit the premises if events were free of charge. Another important factor to respondents is the availability of more time, with 55% respondents stating that they were likely or highly likely to visit if they had more time. The most popular type of events to visit were musicals; performances (55%) and art exhibitions (48%).

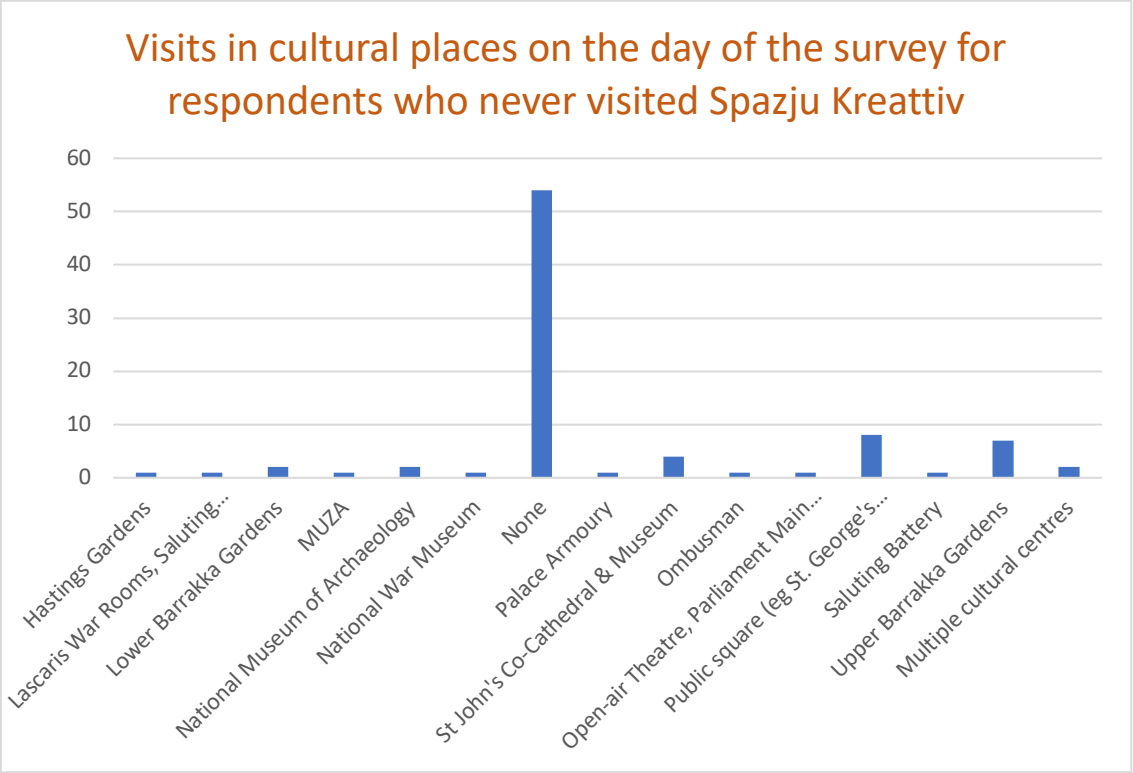






76% of those who said they were highly unlikely or unlikely to visit if the event was free of charge also stated that they did not visit any cultural site or attraction while in Valletta on the day of the interview.

47% of those who said they were highly likely or likely to visit if the event was free of charge also stated that they had visited other sites or attractions while in Valletta on the day of the interview.

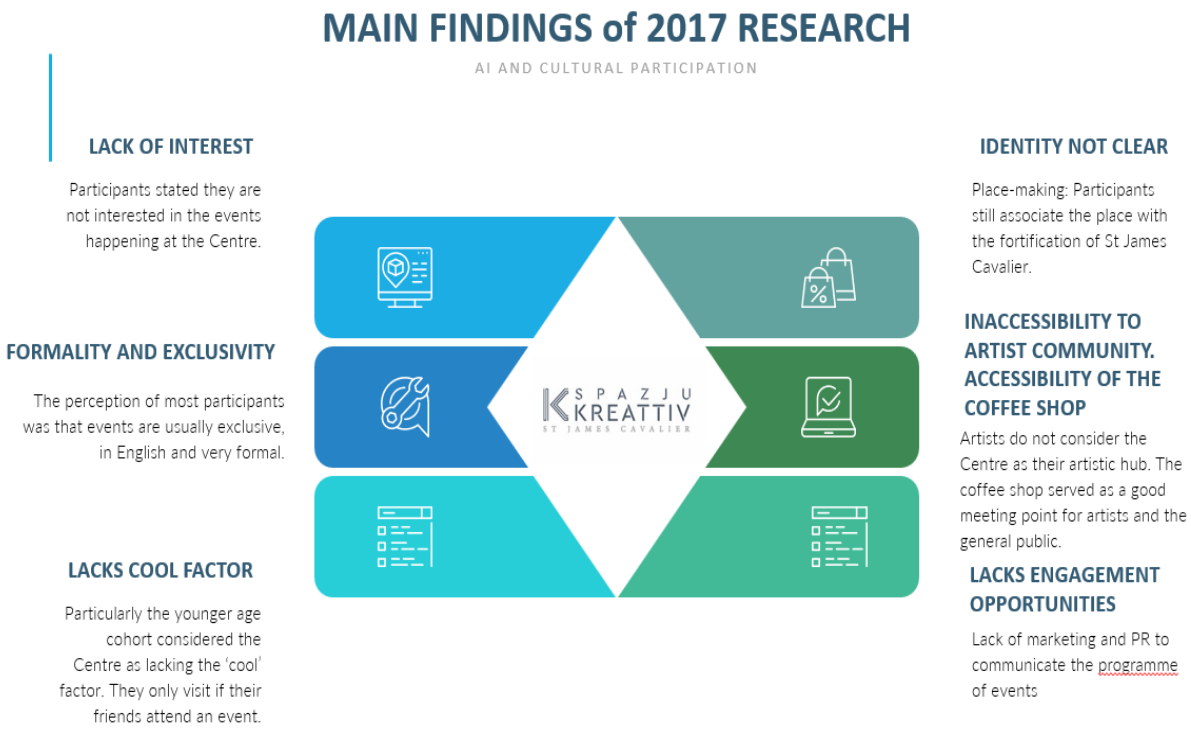


50% of local respondents who never visited Spazju Kreattiv also claimed that they had not visited any cultural places while in Valletta on the day of the survey.

Links to Previous Research on cultural participation in SK

Prior to fieldwork, a detailed analysis of all documentation available was conducted included thorough analysis of the previous sociological study on audience development in 2017, authored by Valerie Visanich and Toni Sant and published in the academic journal *Culture and Society*[1]. In this study it was evident that despite the fact that the general public thought that 'prestigious' art forms are displayed/performed at what is now known formerly as the St James Cavalier Centre for Creativity, they felt 'out of place' and had not intended to visit. One of the recommendations of this study was to work on democratising this art space. Strategic directions towards this were the inclusion of more folk events as well as attracting more youth.

It is worth noting that since 2017, there have been ample changes made to the programme vision, operations and communications strategy. This is evident in the vast calendar of events and its outreach activities which makes SK much more dynamic and effective than it was in 2017.

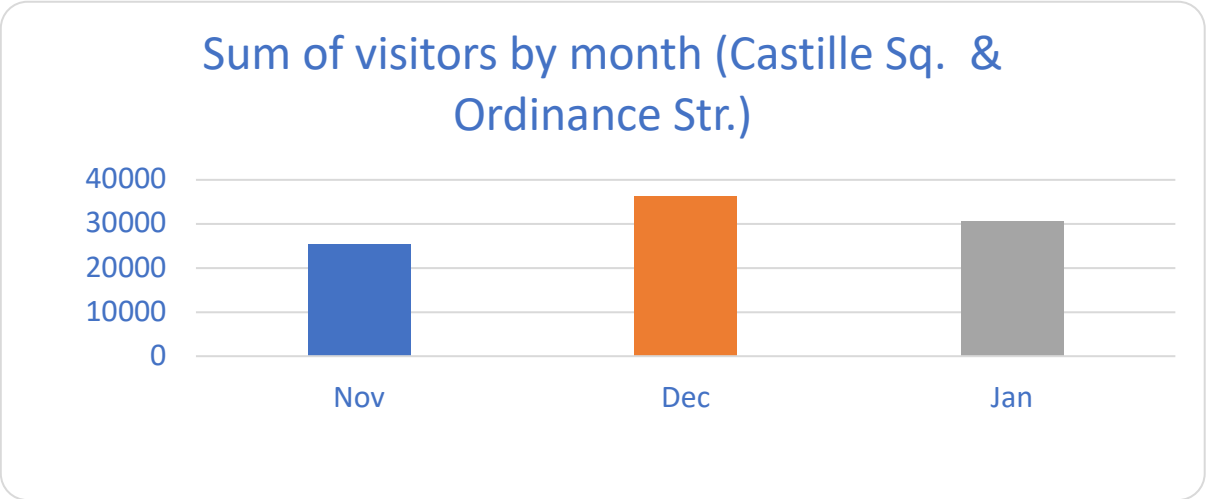


[1] Visanich, V., & Sant, T. (2017). Establishing a creative identity: Rebranding a creative space. *City, Culture and Society*, 10, 11-16.

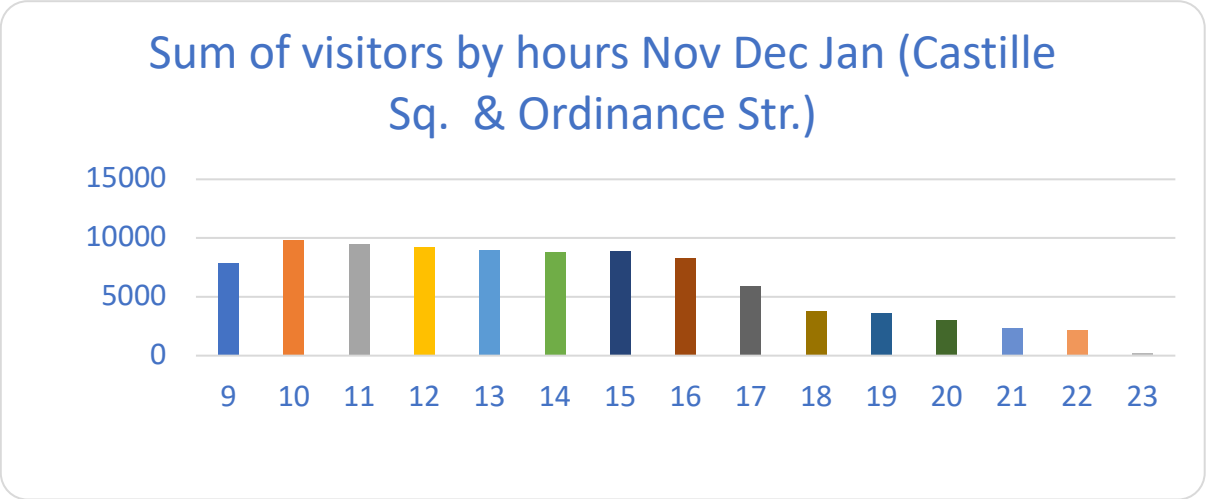
The Conversion Stages

One of the main objectives of the project was to create opportunities for the conversion of non-vistors to visitors. The main tool for data collection, monitoring and optimisation was FlowHint. Below, the monitoring data from Culture Hint is reported, with monthly, hourly breakdowns for FlowHint 2.0 .

Monthly Numbers



Hourly Numbers



FLOWHINT V2 UPGRADE

Following suggestions from other clients, SK and Culture Venture, CH developed the 2.0 version (V2) of its FlowHint devices. The new devices were designed in-house to deliver the following capabilities:

1. Visitors counting and dwell time. Previously, the devices would monitor only visitor density (count x dwell time), but FlowHint 2.0 monitors both dwell time and their count.
2. Monitoring Regions Of Interest independently. FlowHint 2.0 can monitor different regions independently, inside the same field of view.
3. Monitoring other classes. FlowHint 2.0 can monitor cars, bikes, and other classes, together with people.

FLOWHINT V1 TO V2 CONVERSION

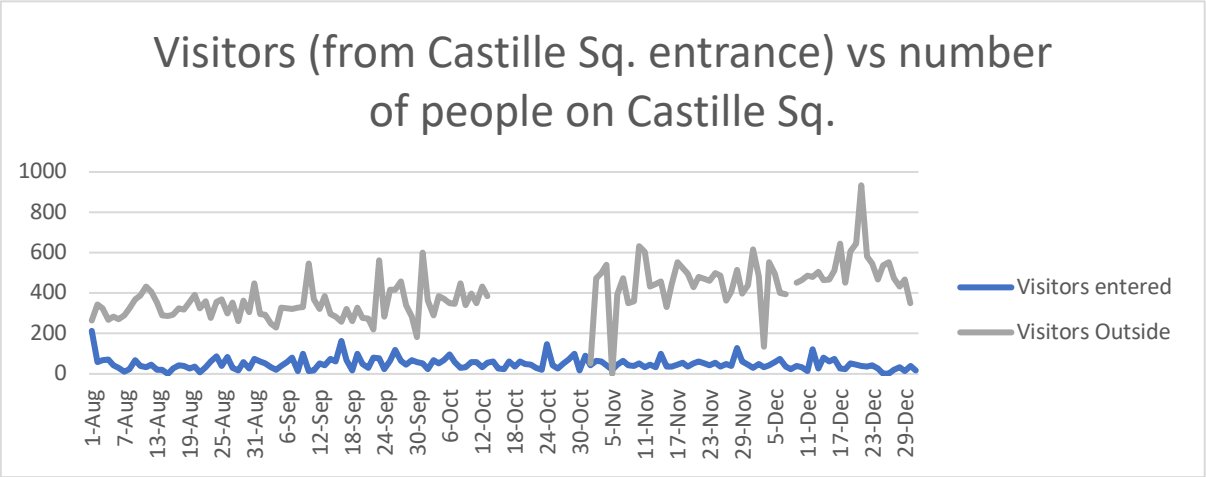
Culture Hint was able to convert density data from FlowHint v1 devices to number of visits. CH did so by benchmarking the v2 devices count against the v1 devices density for 2 weeks, on location. Below are reported the statistics on the Conversion Factor.

Conversion Factor (CF) stats			
		Lower est	Up est
10:00 to 23:00, 1/11 to 23/11			
Observations	271		
Average CF	611.3462		
St Dev Pop	956.824		
St Dev Sampl	958.5943		
Conf int 90%	95.6037	515.7425	706.9499
Conf int 95%	113.9188	497.4274	725.265
Conf int 99%	149.7147	461.6315	761.0609
10:00 to 17:00, 1/11 to 23/11			
Observations	157		
Average CF	484.1156		
St Dev Pop	889.2551		
St Dev Sampl	892.1007		
Conf int 90%	116.7357	367.3799	600.8513
Conf int 95%	139.0992	345.0164	623.2148
Conf int 99%	182.8073	301.3083	666.9229

AI-DRIVEN MONITORING DATA

The conversion allowed CH to backtrack the number of visits

Insiders vs Outsiders



During the period spanning from the 14th of October 2022 to the 31st of October 2022, as well as on the 8th of December 2022, the devices experienced an offline status due to unforeseen circumstances.

CH used various factors to predict number of visits to Castille Sq. and Ordinance Str., such as event calendar in Valletta. Below a visualisation of the main events that influenced outside visitor flow. Other initiatives which may well have affected the visitor flow during the monitored period are events organised by SK, namely:

- Where The Crawdads Sing (August 2022);

- 150IRichard Ellis (September - October 2022);

- BioArt Alchemy: Works by Anna Dumitriu (September - October 2022);

- It-Teatru tal-Miskin (September 2022);

- Ta' Fuqha Senduqha (October 2022);

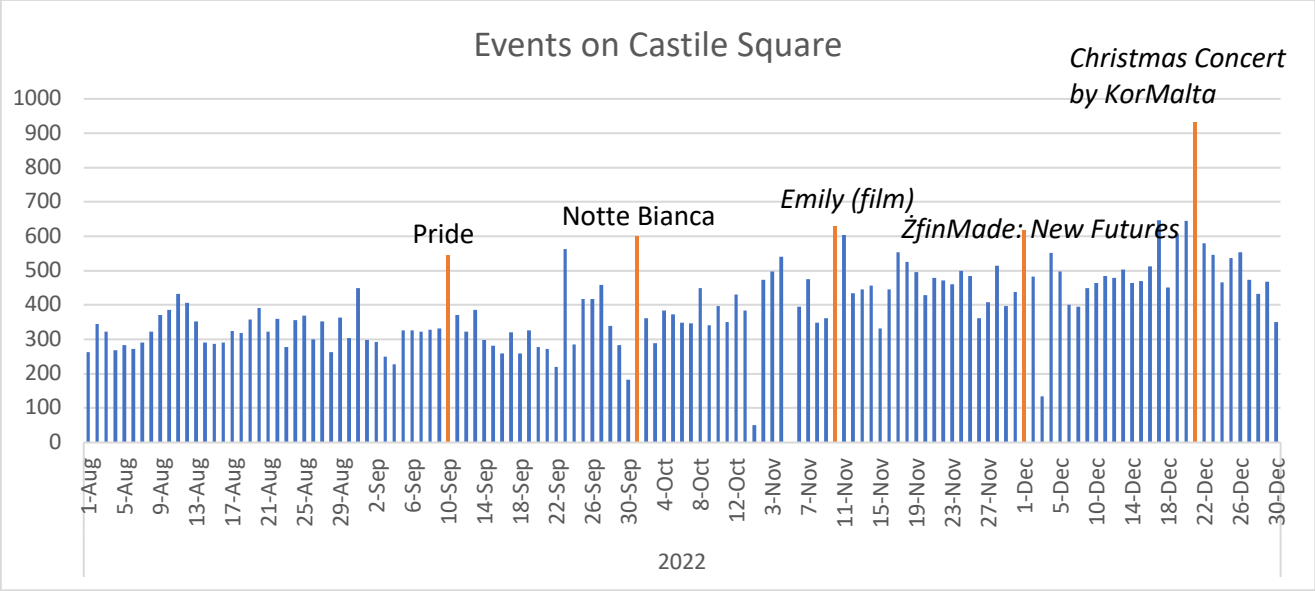
- Inaction is a Weapon of Mass Destruction (October - December 2022);

- Gabarrón, the colours of hope (November - December 2022);

- ŻiguŻajg International Arts Festival for Children and Young People (Friday 18th - Sunday 27th November 2022);

- Kwijns (December 2022).

Events vs Total visitors



AI-driven methodology

AI-driven monitoring gives this research precise population size for the survey data. From the research, it emerged that people outside SK are potentially interested in visiting SK, especially if given more information about it and specifically about its free entry.

As AI-driven monitoring captures people numbers outside SK, by applying CH's forecasting algorithms, researchers could identify future opportunities for converting people roaming around into SK visitors. This was implemented during the research through AI-driven optimisation.

Culture Hint's algorithm forecasted visitor flow for the upcoming periods. The forecasts were then automatically fed into CH's optimisation engine. For SK, the optimisation engine suggested the optimal allocation of SK personnel **outside** of SK, to convert passers-by into visitors.

The focus was Castille Sq., as it was busier than Ordinance Str. and presented an easier access to SK.

AI-driven optimisation strategy

The AI driven optimisation provided SK with suggestions on the optimal times for their staff

to promote the Centre and the activities to people outside the building. The researchers supported SK in defining the role of this task and the approach to potential visitors.

Role Definition

- Role: Visitor Relations Officer
- Type of approach: Outside, Castille Sq.
- Goal: Helping, directing and informing visitors in the area around Spazju Kreattiv.
- Ideal candidates: Students & part-timers
- Performance evaluation: Footfall increase

Approach Examples

"Hello, are you a resident, or just visiting?"
"Welcome to Valletta, may I tell you something about this building? Entrance is free."
"This is the national centre for creativity, Spazju Kreattiv, a 16th century fortress, it was ment to keep people out, to defend the capital city. Now it is the place for creativity and we're welcoming people in. "
[conversation]
"Today, we have a new exhibition going on, and movie projections [provide the name, time, theme and price of the projection]."
If they are interested, direct them inside, to speak with your colleague at the desk.
In any case, give them the leaflet about St. James' history.

Shift Availability

Due to SK's GRO shortages, only part of the suggested shifts outside the buidling were executed. Nonetheless, CH was able to use SK's suggested benchmark to calculate the impact that the AI-driven optimisation had on visitor numbers (SK's primary KPI). Considering the underutilisation of the data provided, a significant 11% improvement was registered.

Optimisation results

	Value	Unit
AVG ValueIn 25 Aug to 24 Oct	55	people
AVG ValueIn for shifts executed	61	people
AVG shift duration	2.775	hours
AVG ticket price	7	€
AVG return	42	€
GRO cost/hour	8	€
AVG shift cost	22	€

AVG profit/shift	20	€
Improvement	**11%**	**%**

Potential conversion was also tested and recorded during the interviews. At the end of the interview, respondents were given information about St James Cavalier as a historical building and Spazju Kreattiv. They were then invited to visit, and their response was recorded in one of the 5 stages of conversion observed by the interviewers:

1. Non-conversion (respondent did not visit)
2. Potential but non-conversion (respondent expressed interest to visit but it wasn't possible (ex Centre was closed)
3. Potential conversion (respondent expressed interest to visit, at some point)
4. Non-committal potential conversion (respondent stated that he/she/they will think about it)
5. Immediate Conversion (respondent visited immediately).

Total sample size = 108

	Culturally-motivated	Non Culturally-motivated	Total % of surveyed visitors
Did not visit	3%	10%	12%
Expressed interest to visit, but it wasn't possible	3%	8%	10%
Expressed interest to visit, at some point	12%	12%	25%
Will think about visiting	21%	23%	44%
Visited immediately	8%	1%	9%

Conclusions

- The location offers an incredible potential, with a peak of 35000 visitors on Castille Sq. and Ordinance St. in December 2022.
- External people flow is highly variable: after monitoring external people flow, it was observed that the area registers high variability.
- AI-driven shifts worked: AI-driven shifts on Castille Sq. increased visitation by 11%, beating the set KPI.
- Respondents had low awareness of the space: 57 of the surveyed non-cultural tourist respondents did not know about SK (4 did). The same was true for the cultural tourist respondents 49 did not, 7 did.
- When information was given on the historical building, respondents expressed interest in visiting.
- The mixed methodology of AI driven research with qualitative data collection provided further insight on visitors and non-visitors. Nevertheless, it is worth noting, the limitations of this study, including the relatively low response rate of the survey.
- The observations emerging from this research and as reported in this document together with the tested methodology and tools used, could be strengthened further with ongoing monitoring and technological advances in artificial intelligence.

References

Peterson, R. A. and Simkus, A., 1992. How musical tastes mark occupational status groups. In: M. Lamont and M. Fournier, eds. Cultivating Differences: Symbolic Boundaries and the Making of Inequality. Chicago: University of Chicago Press, pp. 152–186.

Van Eijck, K and Knulst, W.P., 2005. No more need for snobbism: Highbrow cultural participation in a taste democracy. European VALERIE VISANICH 72 Sociological Review. November, vol. 21, no. 5, pp. 513-528.

Visanich, V., & Sant, T. (2017). Establishing a creative identity: Rebranding a creative space. *City, Culture and Society*, 10, 11-16