



13th Global Forum on Tourism Statistics

Modeling economic monitoring systems of tourism impacts at the sub-national level

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Agenda

Background of the research

- GSTC and ETIS experience

Theoretical framework

- Stakeholder theory, Economic Indicator systems and Tourism Satellite Account approach

The aim of the research

- Which model can provide an appropriate design for a decision-making process that focuses on collecting and correlating fundamental tourism economic data at the local level?
- Which economic indicators are fundamental for monitoring and managing the economic impacts of tourism at the sub-national level?

A local tourism economic model

- Destination perspective

The case study

- Visit South Sardinia

#VisitSouthSardinia



Province of Cagliari



Total area: 473 km²

Population density:
395.35/km²

Accessibility of the destination:
(port and airport)
medium-high

Price: medium

Strong international image

From GSTC to ETIS

KEY ROLE of stakeholders

Lack of ECONOMIC DATA:

- tourism daily spending
- contribution to GDP

Tourism economic impact in the TSA approach

- The **Tourism Satellite Account (TSA)** (IRTS 2008*, TSA: RMF 2008*) and is the culmination of research on measuring tourism's **direct economic contribution** to a national economy and for outlining a path for estimating the **indirect and induced economic effects of tourism**.
- The first Italian TSA (published in 2012) has been realized by a working group composed by members of Istat, Bank of Italy, University of Messina, Ciset and the National Tourism Observatory.
- The first Italian TSA would represent a prototype which aims to reconcile internal tourism consumption with domestic supply based on data produced by official sources.

IRTS 2008*: United Nations (2010) International Recommendation for Tourism Statistics 2008 (IRTS 2008)

TSA: RMF 2008*: United Nations (2010) Tourism Satellite Account: Recommended Methodological Framework 2008 (TSA: RMF 2008)

The first Italian National Satellite Accounts

(Source: Istat 2012, «Statistiche Report, Anno 2010»)

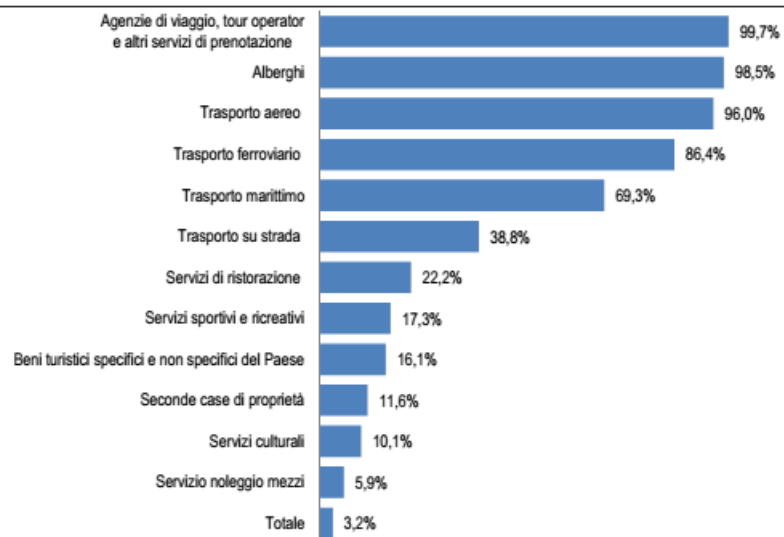
Italian internal visitor expenditures by category of item purchased

CONTO SATELLITE DEL TURISMO: CONSUMO TURISTICO INTERNO PER PRODOTTO. Anno 2010, milioni di euro

PRODOTTI	Spesa interna per turismo			Altre componenti del consumo turistico (4.2)	Consumo turistico interno (4.3) = (4.1) + (4.2)	Incidenza %
	Spese del turismo inbound (1.3)	Spese del turismo domestico (2.3)	Spesa interna per turismo per turismo (4.1) = (1.3) + (2.3)			
Prodotti turistici caratteristici	22.306	39.480	61.786	33.808	95.594	83,8
1- Servizi ricettivi per i visitatori	12.064	15.893	27.957	22.288	50.245	44,1
1.a- Servizi ricettivi diversi dal punto 1.b	10.759	12.539	23.298	7.858	31.156	27,3
1.b- Servizi ricettivi relativi all'uso di seconde case di proprietà	1.305	3.354	4.659	14.430	19.089	16,7
2- Servizi di ristorazione	6.604	10.426	17.031	0	17.031	14,9
3- Servizi di trasporto ferroviario passeggeri	216	1.639	1.854	677	2.531	2,2
4- Servizi di trasporto su strada passeggeri	696	2.087	2.783	494	3.277	2,9
5- Servizi di trasporto marittimo per vie d'acqua passeggeri	42	1.823	1.866	1	1.867	1,6
6- Servizi di trasporto aereo passeggeri	1.138	2.507	3.645	3.593	7.238	6,3
7- Servizi di noleggio mezzi	204	340	544	339	883	0,8
8- Servizi delle agenzie di viaggio e altri servizi di prenotazione	188	2.837	3.025	3.817	6.842	6,0
9- Servizi culturali	258	431	689	643	1.331	1,2
10- Servizi sportivi e ricreativi	896	1.496	2.393	1.957	4.349	3,8
Beni turistici specifici e non specifici del Paese	7.033	10.886	17.919	504	18.423	16,2
TOTALE	29.338	50.366	79.705	34.312	114.016	100

Italian final – demand direct effect coefficients for each category of item purchased

COEFFICIENTE TURISTICO* PER PRODOTTO. Anno 2010, valori percentuali



* Il coefficiente turistico per prodotto rappresenta la quota di produzione destinata alla domanda turistica

The first Italian National Satellite Accounts

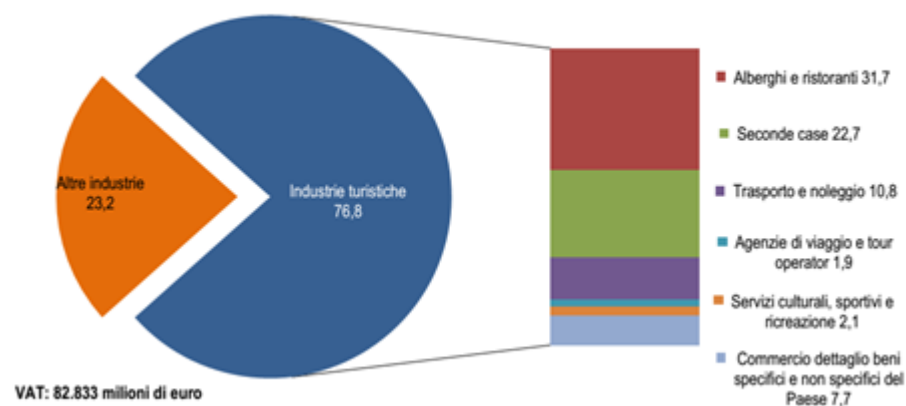
(Source: Istat 2012, «*Statistiche Report, Anno 2010*»)

Italian Tourism Direct Output and Direct Gross Value Added breakdown by category

PRODUZIONE E VALORE AGGIUNTO DEL TURISMO PER BRANCA DI ATTIVITÀ ECONOMICA. Anno 2010, milioni di euro

Industrie turistiche e altre industrie	Produzione turistica	Valore aggiunto turistico
Industrie turistiche	108.462	63.654
Alloggi per visitatori	53.651	37.610
Alberghi	32.865	18.827
Seconde case	20.786	18.783
Ristorazione	14.787	7.393
Trasporto ferroviario	5.675	3.630
Trasporto su strada	4.300	2.818
Trasporto marittimo	2.076	960
Trasporto aereo	6.496	1.245
Noleggio attrezzature per trasporto	604	290
Agenzie di viaggio, tour operator e altri servizi di prenotazione	6.036	1.591
Servizi culturali	1.100	681
Sport e ricreazione	2.733	1.065
Commercio dettaglio beni caratteristici tipici del Paese	11.003	6.372
Altre industrie	42.715	19.179
TOTALE	151.177	82.833

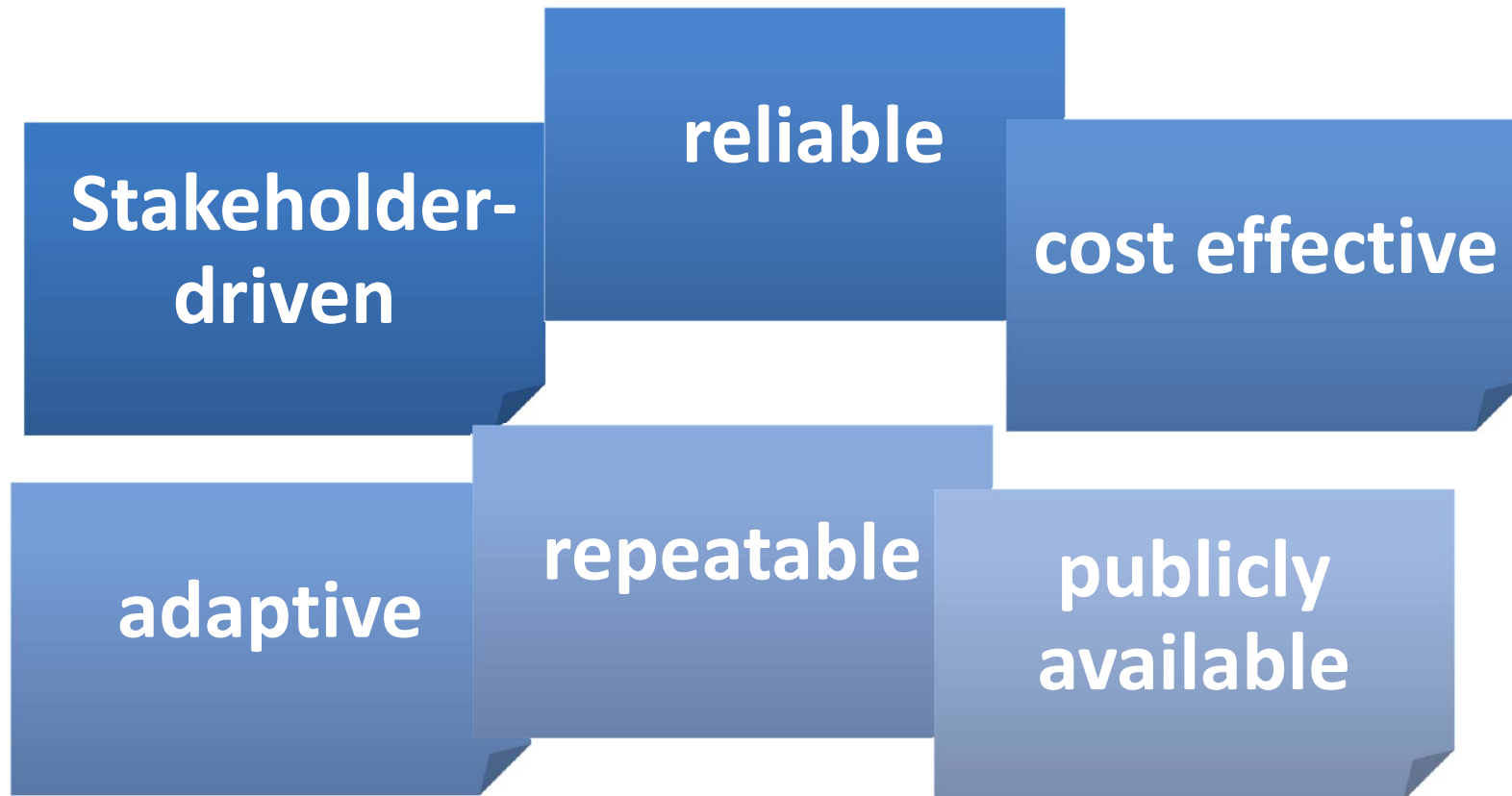
VALORE AGGIUNTO DEL TURISMO (VAT) PER BRANCA DI ATTIVITÀ ECONOMICA. Anno 2010, composizione percentuale



From ITSA to sub-regional tourism evaluation: the drawbacks of a «top-down» approach

- **Italian TSA is far from complete:**
 - ✓ it only considers the direct effect of tourism consumption omitting the indirect and induced impacts;
 - ✓ it does not mention the effect of tourism impact on employment.
- **Italian official statistical sources do not systematically collect economic data disaggregated at the municipal level.**
- **Information on tourism demand collected through the two official sample surveys “*Holidays in Italy and abroad*” (Istat) and “*International Tourism of Italy*” (Bank of Italy) cannot be used to estimate the peculiarities that characterize tourism in each sub-regional destination.**

Local Tourism Economic Monitoring Model



Local Tourism Economic Monitoring Model

Relevant Stakeholders	Economic Activities: Production-Supply Consumption-Demand		Economic Impacts:
	Supply	Demand	
<u>Private sector</u>	Revenues	External costs	Private added value (direct and indirect effects)
<u>Public sector</u>	Tourism revenues	External costs for tourism services	Public Added Value
<u>Community</u>	Salaries	Induced demand	Social Value
<u>Tourists</u>		Tourist demand	Tourist Demand Value

Local Tourism Economic Monitoring Model

Relevant Stakeholders	Economic Indicators	Methods/Sources
<u>Private Sector</u>	Contribution of Tourism to GDP (WTO- GSTC-ETIS)	Company search, i.e. Amadeus Tourist Survey
	% of Tourism enterprises actively taking steps to source local sustainable and fair trade goods and services (ETIS)	Enterprise Survey
	Occupancy Rate Average price RevPAR (WTO- GSTC-ETIS)	Province Database Tourism Enterprises Consortia/ Associations Survey
	Number of second homes per 100 homes (ETIS)	Municipality Survey

Local Tourism Economic Monitoring Model

Relevant Stakeholders	Economic Indicators	Methods/Sources
<u>Public Sector</u>	<p>Annual expenditures on tourism (% of total tourism revenue)</p> <p>Tourism revenue: Second homes taxation, eco-taxes, user-fees, transfers from public administrations, funding and donations (WTO)</p>	Municipality Survey

Local Tourism Economic Monitoring Model

Relevant Stakeholders	Economic Indicators	Methods/Sources
Community	Direct tourism employment/total employment (ETIS- WTO) Average tourism wage/average wage in community (WTO)	Labour Agency Survey Company search, i.e. Amadeus

Local Tourism Economic Monitoring Model

Relevant Stakeholders	Economic Indicators	Methods/Sources
Tourists	Daily Spending per tourist Average length of stay Tourist nights (ETIS-GSTC-WTO)	Survey Province Database

Visit South Sardinia Tourism Monitoring Ongoing project implementation and first results



First step: Tourism typical activities- economic evaluation

	Employed Persons (units)	Mean* share of Employed Persons (%)
All	33974	100%
Tourism Activities	6831	40,22%

	Aggregated Wages (thousand Euros)	Mean* share of Aggregated Wages (%)
All	806058	100%
Tourism Activities	173975	40,46%

	Gross Value Added	Mean* share of Gross Value Added (%)
All	1718092	100%
Tourism Activities	282076	37,88%

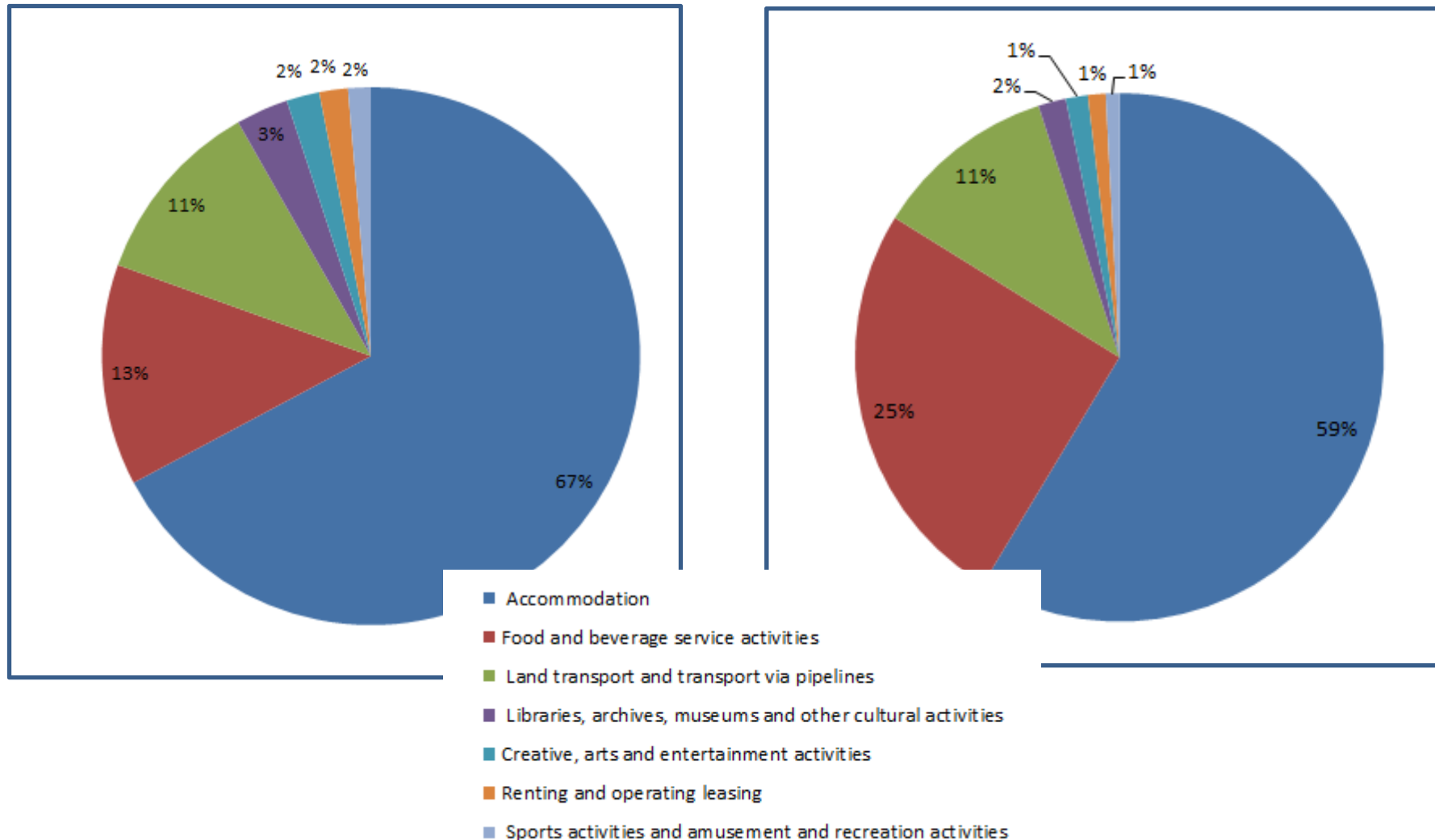
*The mean is calculated giving to each municipality's share the same weight.

Source: Own calculation based on “*Aida database of Bureau van Dijck*” which contains firm-level information about companies located in Italy.

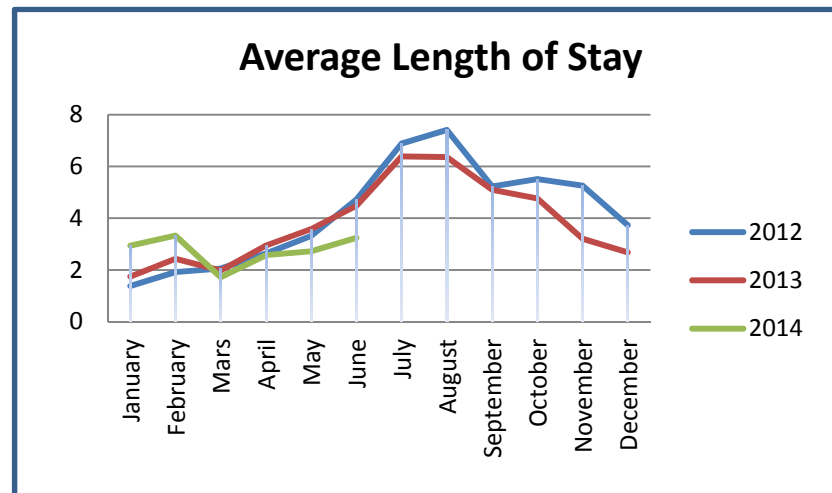
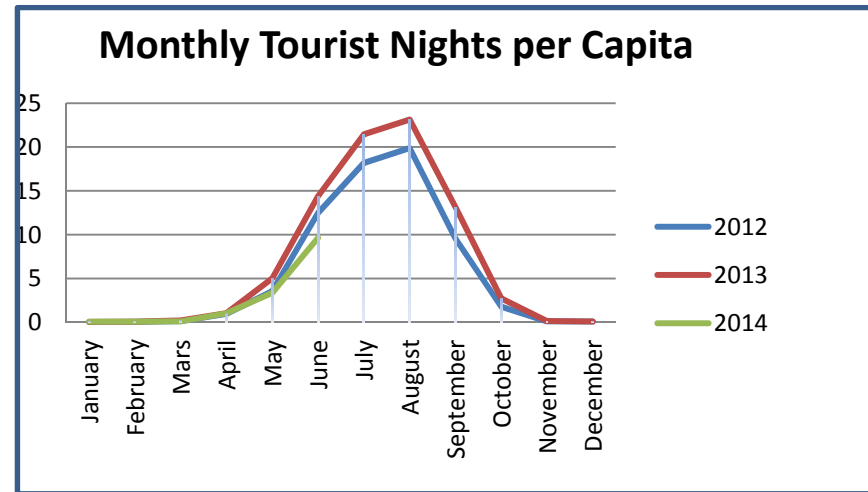
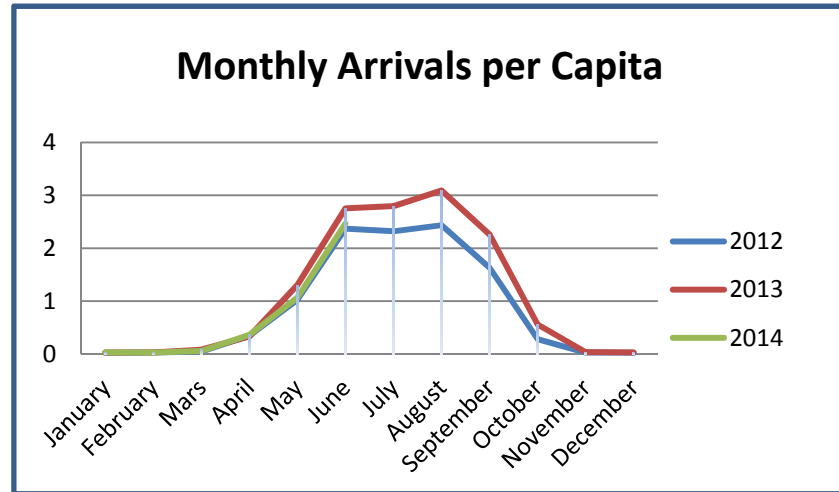
Visit South Sardinia Tourism Activities breakdown by Industry (NACE Rev. 2)

Gross Added Value
100% = 282076 th. Euros

Number of Employed persons
100% = 6831 units



Second step: official accommodations tourism indicators and evaluation of registered tourism volume



The survey sampling

The sampling is the Time Location Sampling (Kalsbeek, 2003)

- sampling people at locations where they may be found
- suitable for hard-to-reach populations, e.g. unobserved tourists .

The specific TLS for tourism surveys (De Cantis et al. 2010) is a two-stage stratified sampling design:

- the first-stage units are constituted by the combination of places, days and hours;
- the second-stage units are constituted by the Italian (not resident) and foreign tourists at the end of their vacation period in the municipalities.

Third step: official tourism expenditure sample survey

In the sample survey:

-the questionnaire is inspired by ETIS Toolkit Sample Visitor Survey

-the sampling plane is made using the Time Location Sampling approach and the sample size is determined using the official data from different statistical sources (Banca d'Italia, ISTAT, arrivals of tourist in Visit South Sardinia).

	Inbound Tourists	Domestic Tourists
May	45	74
June	73	136
July	90	117
August	89	123
September	87	81
Total	384	531

Visit South Sardinia survey sampling

Next steps

- **Implementation of the sample survey in the municipalities and calculation of the final – demand direct effect coefficients for each category of item purchased**
- **Use of suitable administrative sources to cover the lack of information on the ignored component of the demand side (e.g. household census, garbage production, traffic, second houses registers, etc.) and sample survey of the non official final demand**
- **Involvement of the four consortia that represent the private sector to determine the destination RevPAR as a measure of destination enterprise performance**
- **Public sector collection of revenues (e.g. eco-taxes and user fees) and public costs (e.g. seaside cleaning and bathing lifeguard service) in tourism**

The model

provides critical information for strategic planning



captures the economic impacts of tourism experienced by all destination stakeholders

must be managed at municipal level

guarantees standardization and time – space comparability

highlights local peculiarities

provides destination solutions to the lack of information