Development of a Web platform to browse and visualize the key findings of a Sports Satellite Account of Trentino

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INTRODUCTION AND GOALS:

A project carried out by a student of UNITN aiming to give an economic dimension to sport in the area of Trentino is the start point of my Thesis.

As some European countries reported, the idea of knowing how sport helps the economy becomes important in order to give to sport an appropriated dimension. A Sport Satellite Account is developed also in Trentino to achieve that goal.

Even with some troubles to acquire all data needed, the SSA (Sport Satellite Account) is successfully build and sport is now measurable in terms of Trentino’s GDP. This project analyses sports as the European definition;

“Any form of physical activity which, through casual or organized participation or not organized, aim at expressing or improving physical fitness and mental health, the development of social relations and obtaining results in competition at all levels.”

This project is about the analysis of the data that has been recollected to create a SSA and the creation of a web platform to browse and visualize the key findings of the Sport Satellite Account of Trentino.
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1. MOTIVATION:

The project I want to go on with is to give a platform somehow to show the important data in order to increase people’s interest on sport or, at least, concern people about how big is and could be the income in Trentino thanks to Sport and people who practice it.

Paolo Bouquet, Teacher in the University of Trento in economy and informatics is the one who is in charge of that project and so, the platform to show those data could be an easy webpage created with php and Mysql. My background before starting the project is none on web development, php and Mysql. That’s why my project will be structured in few parts:

- **Approaching the topic**
  
  The document written about SSA in Trentino as well as some other projects carried out in other European countries will be the support to understand which data are needed and how the calculus is made.

- **Getting in touch with tools required**
  
  Some notions on html, php and mysql are required to build a webpage. Also some google charts expressions are used.

- **Setting of the data**
  
  Creating a database with all data that must be analyzed is indispensable

- **Building a way to show conclusions**
  
  A web support will show the most important data, thinking on people who might not be familiarized with this topic. A glance on the webpage should be enough to understand what was carried on.

This written report will go through all these points to describe briefly the process I followed.
2. DATA SELECTION:

The Thesis written by Simone Revolti (a student from economics’ faculty of University of Trento) about the way they proceed to collect all data needed and how they worked with these data to obtain the results aimed was the document I worked on to start and understand deeply the work that was being carried on.

The collection of data was not as soft as expected, some data that other countries collected by official departments of statistics was unable to be found in Italy nor Trentino. Because of that, some speculations and hypothesis needed to be done in order to complete successfully the aim of the main project; create a Sport Satellite Account of Trentino.

At the end, the team managed to calculate the impact of sport in terms of Trentino’s GDP, and also they worked on a way to analyze the impact of sport in terms of Added Value. Both ways of obtaining results were extremely relevant to take some early conclusions on how sport in a big input to that northern region of Italy.

Once the data was collected and analyzed, we found particularly relevant the meaning of those data concerning:

- The sport tourism in Trentino
- The international comparison
- The impact of sport in terms of value added, consumptions, production and occupation

Of course, that was not the only data that must to be shown in order to give to sport the dimension it disserves speaking about Trentino.

The impact in Trentino’s GDP was also very high compared to other analyses of that same kind in other European countries.
3. SPORT SATELLITE ACCOUNT

   a. **Sportive GDP**

To evaluate the impact of Sport in terms of GDP some calculus are needed. The formula and the procedures used to achieve that goal are:

\[ Y = C + G + I + X \]

Where:

C: Household spending, the expenditure incurred by households, residents and non-residents for the purchase of goods and services related to sport.

G: Expenditure of Public Administration, the expenses incurred by Public Administration to finance the sports sector.

I: Fixed investments, consisting of the acquisition of fixed assets of resident producers, where fixed assets are defined as intangible goods and materials products intended for use in manufacturing processes for a period exceeding one year. In sport investments mean facilities or sponsorship by private investors.

X: trade balance; are net exports resulting from the difference between exports / imports of services and sports assets.

Due to some difficulties finding the appropriate and accurate data some hypothesis and assumptions had to be done to perform that calculus.

   b. **Sport in terms of Added value**

The Calculus done in this part of the project is just an extrapolation of the national (Italian) Added Value. The sport production national has been divided by the number of adepts in Italy and then multiplied by the adepts in Trentino. In that way we obtain the average value per capita of sport production.

This same procedure was followed to obtain the regional Added Value of Trentino concerning Sport only.
c. Second project

During the work done to successfully complete the project, particularly while collecting data, some difficulties were found. Some specific data that could have been very useful to go on with the research were missing and unable to found. That was because it was the first time a project like that was being elaborated in Italy and the data that the public statistic departments collected were not about that.

Even if the team managed to go through the problems and find a good looking solution, the idea of elaborating a second part of the project aiming the design of a platform to collect valuable and accurate data to future projects grew up.

That second project would be very interesting because of the conclusions we could take after analyzing the data. Sport is actually a very important input in Trentino and a web to collect those data would be a big improvement to build, in following steps, a fully Sport Satellite Account.

The final written report, on which I based the Web platform I build, takes into consideration this second part also. After a deep explanation of how the SSA has been created, it gets even deeper with the possible design of that optimal web to obtain meaningful data.
4. WEB DEVELOPMENT:

- The final report must be in order to be easy to read on the web page. A creation of a menu and a head following the last report design was created. The basic web design is created with “css” and “html” code. I divided the work done in few subtitiles in order to obtain that:

The web site is divided in 8 web pages showing the analysis carried on.

- A creation of a database with “phpmyadmin” is needed. In order to develop the exact database in other servers schema documentation is needed. Extracting the database in pdf and also in sql give a complete service to obtain a full documentation. The pdf show how the tables are designed and the sql file, when imported to any other server will create a database exactly the same as the database I used in this project.
Tables with data from the database must be shown in the webpage so, some simple "php" language is needed to create the connection and obtain those data.

To generate the graphs on the webpage I found very interesting to work with "google charts", is a simple tool that allows you to create attractive charts of (in this case) data extracted from a database with "php". "Google charts" uses some javascript to develop the charts.
CONCLUSION:

Understanding how a team work, how every single person has some goals to achieve and need the support or supervision of coworkers to do that. Also knowing how the analysis of data or the conclusions you can take from those analyses is important to be shown appropriately. Showing what you learned from data to those who could be interested or could do something to help your project is the main goal of all data projects.

In that case we were looking to give to Sport an appropriate dimension so the investments done could be reconsidered or, at least, token into consideration. Nowadays Data has more power than many people think and, if you are able to manage the data correctly it will, for sure, help you understanding or achieving what you are looking for.

But, above all that personal knowledge I could extract from my experience working in that team I also improve some technical skills that will probably be very helpful in the future.

Developing this web site gave me the opportunity to get in touch with some new tools. This experience has given me the opportunity to look for some interesting things to know in order to create a webpage. I also had the opportunity to work with data and databases. Even if I don’t know where the future will take me, those skills learned while creating this project will, for sure, give me and extra and valuable skill.
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