

The SPSS logo is displayed in white text on a red square background in the top-left corner.The IBM logo is in the top-right corner, with the text "Gold Business Partner" below it. Underneath, it says "Expert Data Science & Business Analytics".

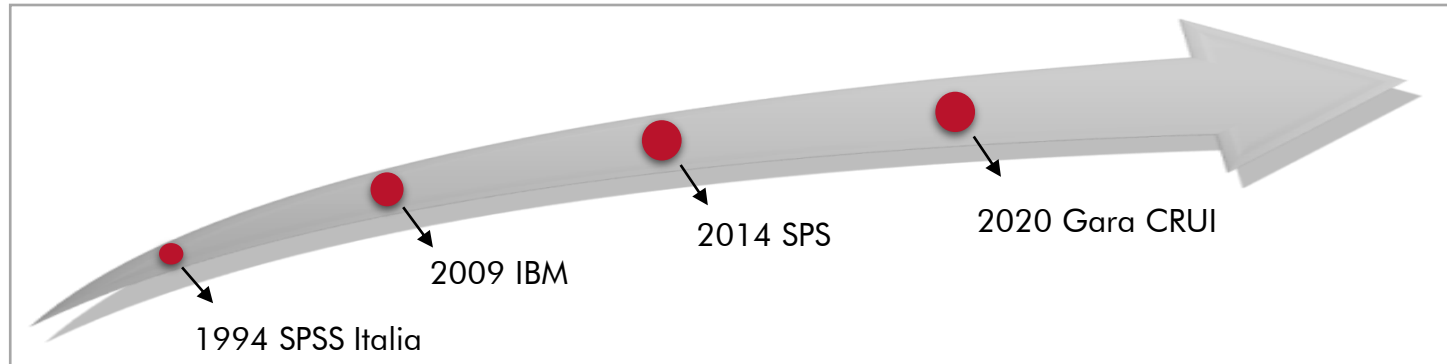
IBM  
Gold  
Business Partner  
Expert  
Data Science &  
Business Analytics

A photograph of four students walking away from the camera down a long, brightly lit hallway with a series of arches. The students are dressed in casual attire, including jeans and t-shirts, and are carrying backpacks or bags.

# Webinar

Importazione e preparazione dei dati con IBM SPSS Statistics

## Roadmap



## Posizionamento

- +25 anni di esperienza sui prodotti SPSS
- IBM BP **Software Support Provider** con competenza IBM Expert in Data Science and Business Analytics
- Gold Business Partner IBM



## Presenza sul mercato

- Scuole e Università
- Enti di ricerca (CNR, ISS, CREA ecc.)
- Sanità (IRCCS, AO, AOU ecc.)
- Pubblica Amministrazione
- Associazioni, Fondazioni
- Aziende (GdO, Finance, Retail, ecc.)

Il contratto stipulato tra CRUI e SPS S.r.l. in data 21 ottobre 2019 si riferisce alla fornitura licenze Campus IBM SPSS Statistics del “Catalogo licenze CRUI Campus PA” e di licenze aggiuntive IBM SPSS Amos e IBM SPSS Statistics per usi amministrativi.

Tutte le informazioni sul contratto sono disponibili al link

<https://www.spss.it/crui-universita-italiane>

Il referente commerciale per l’esecuzione contratto in SPS Srl è:

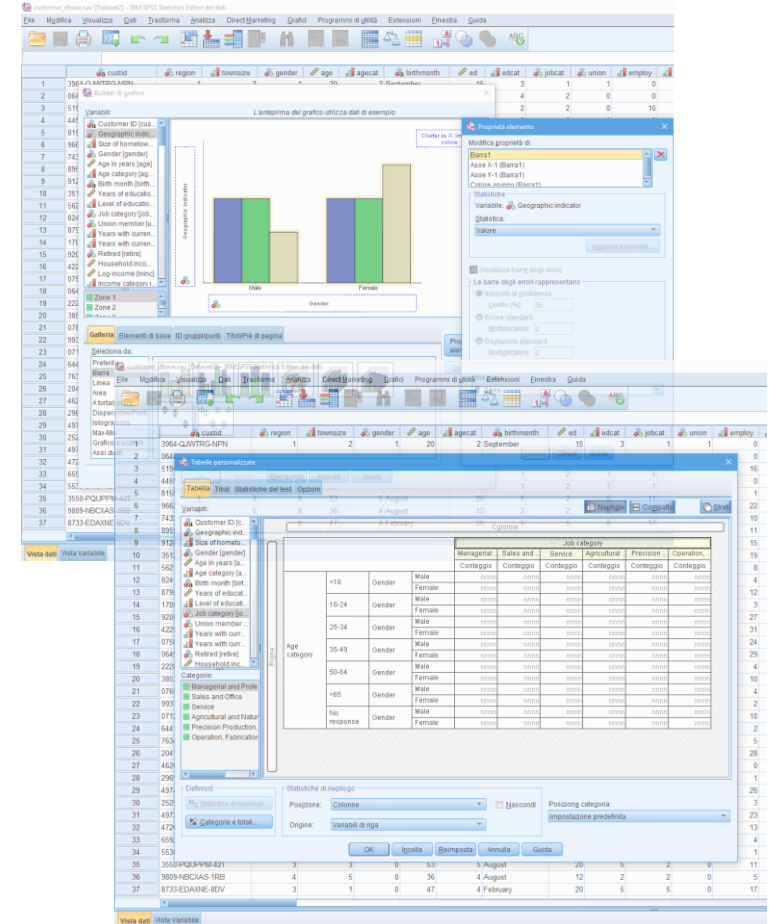
Laura Zerbini (+39 335 1360538, [laura.zerbini@spss.it](mailto:laura.zerbini@spss.it))



**Laura Zerbini**

Responsabile commerciale in  
Italia per aree Educational e R...





Arianna Azzellino docente @SPS

## Importazione

Panoramica dei formati riconosciuti da IBM SPSS Statistics

## Ristrutturazione e aggregazione

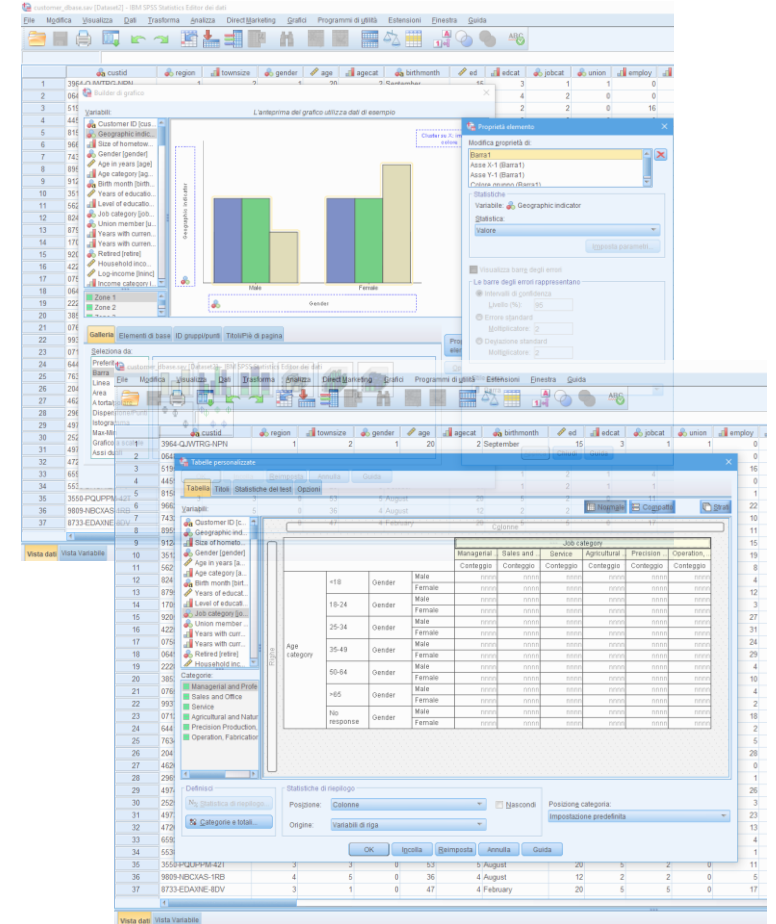
Ottimizzazione nella preparazione dei dati con IBM SPSS Statistics

## Calcolo di nuove variabili

Come calcolare nuove variabili da altre incluse nel dataset dipendenza

## Suddividi File

Scomposizione di File



The screenshot displays the IBM SPSS Statistics interface with several key components visible:

- Data Editor:** Shows a dataset with columns for 'region', 'townsac', 'gender', 'age', 'agecat', 'birthmonth', 'ed', 'educat', 'jobcat', 'union', and 'employ'.
- Variable View:** Lists variables such as 'Customer ID base', 'Geographic indic.', 'Size of household', 'Gender (gender)', 'Age in years (age)', 'Age category (agecat)', 'Birth month (birthmth)', 'Years of educat.', 'Level of educat.', 'Job category (jobcat)', 'Years with curr.', 'Union member (union)', 'Years with curr.', 'Household inc.', 'Log income (lninc)', 'Zone 1', 'Zone 2', 'Category', 'Sales and Office', 'Service', 'Agriculture and Natur.', 'Precision Production', and 'Operation, Fabricator'.
- Graphs:** A bar chart titled 'L'istogramma del grafico utilizza dati di esempio' is displayed, showing data for 'Male' and 'Female' across 'Gender'.
- Dialog Boxes:**
  - 'Proprietà elemento' (Element Properties) for 'Age category'.
  - 'Tabella personalizzata' (Custom Table) for 'Age category'.
  - 'Statistiche di risposta' (Response Statistics) dialog box, showing options for 'Categorie' (Categories) and 'Variabili di rigo' (Row variables).
- Table:** A table showing the relationship between 'Age category' and 'Job category' for 'Male' and 'Female' across various job categories like 'Nonoperativ', 'Sales and Office', 'Service', 'Agriculture and Natur.', 'Precision Production', and 'Operation, Fabricator'.

## Importazione

Panoramica dei formati riconosciuti da IBM SPSS Statistics

## Ristrutturazione e aggregazione

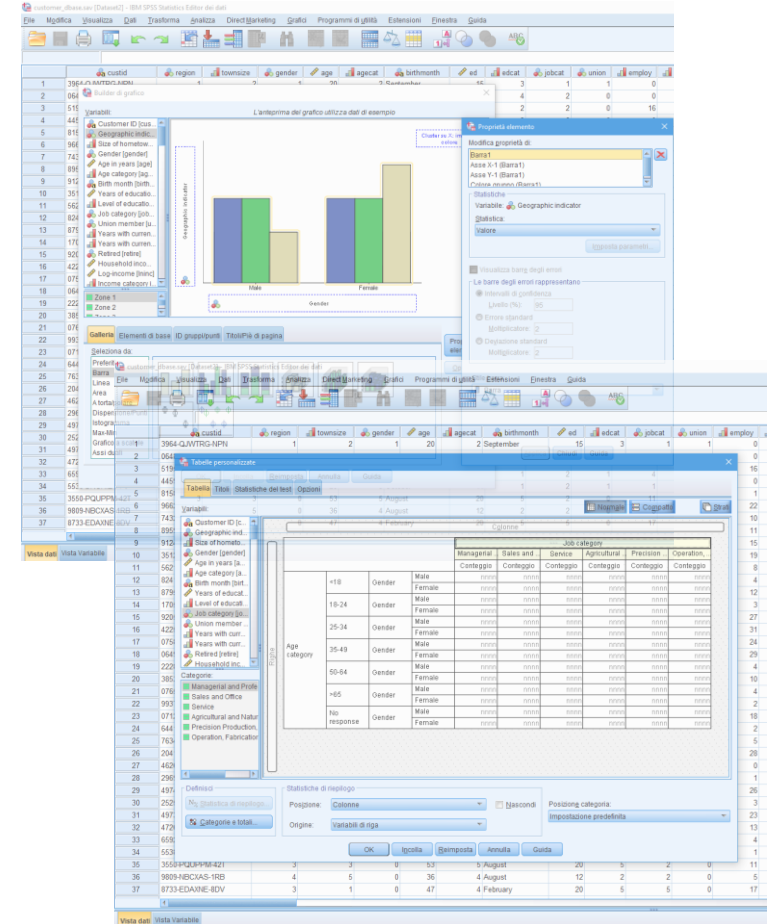
Ottimizzazione nella preparazione dei dati con IBM SPSS Statistics

## Calcolo di nuove variabili

Come calcolare nuove variabili da altre incluse nel dataset di partenza

## Suddividi File

Scomposizione di File



The screenshot displays the IBM SPSS Statistics user interface. The main window shows a list of variables on the left, including 'region', 'townsize', 'gender', 'age', 'agecat', 'birthmonth', 'ed', 'educat', 'jobcat', 'union', and 'employ'. A central dialog box titled 'L'importazione dei grafici utilizza dati di esempio' is open, showing a bar chart with 'Male' and 'Female' categories. Below the chart, there are options for 'Mostrare proprietà di', 'Statistiche', 'Variabile', 'Geographic indicator', and 'Valore'. A 'Tabella personalizzata' dialog is also visible, showing a table with columns for 'Age category', 'Gender', and 'Job category', and rows for various age groups and genders. The table contains numerical values representing counts or percentages.

Age category	Gender	Job category	Nonoperativ	Sales and Office	Service	Agriculture	Precision Production	Operation
<18	Gender	Male	.....	.....	.....	.....	.....	.....
18-24	Gender	Female	.....	.....	.....	.....	.....	.....
25-34	Gender	Female	.....	.....	.....	.....	.....	.....
35-49	Gender	Male	.....	.....	.....	.....	.....	.....
50-64	Gender	Female	.....	.....	.....	.....	.....	.....
>65	Gender	Male	.....	.....	.....	.....	.....	.....
No response	Gender	Female	.....	.....	.....	.....	.....	.....

Salvataggio automatico  023\_ACQUE\_SUPERFICIALI\_DATI\_Fiumi (2016).xlsx Arianna Azzellino AA

File Home Inserisci Layout di pagina Formule Dati Revisione Visualizza Componenti aggiuntivi Guida Acrobat Condividi Commenti

Incolla Arial 10 A<sup>+</sup> A<sup>-</sup> Generale Formattazione condizionale Formatta come tabella Stili cella Inserisci Elimina Formato Ordina e filtra Trova e seleziona Riservatezza

A226331 LAGO MAGGIORE (VERBANO)

BACINO IDROGRAFICO	CORSO D'ACQUA	CORPO IDRICO	PROVINCIA	COMUNE	COORD X	COORD Y	Codice	
226322	AGO MAGGIORE (VERBANO)	Brabbia (Canale)	IT03N00809811501051lo	VA	Cazzago Brabbia	477974	5071646	POTIVA
226323	AGO MAGGIORE (VERBANO)	Brabbia (Canale)	IT03N00809811501051lo	VA	Cazzago Brabbia	477974	5071646	POTIVA
226324	AGO MAGGIORE (VERBANO)	Brabbia (Canale)	IT03N00809811501051lo	VA	Cazzago Brabbia	477974	5071646	POTIVA
226325	AGO MAGGIORE (VERBANO)	Brabbia (Canale)	IT03N00809811501051lo	VA	Cazzago Brabbia	477974	5071646	POTIVA
226326	AGO MAGGIORE (VERBANO)	Brabbia (Canale)	IT03N00809811501051lo	VA	Cazzago Brabbia	477974	5071646	POTIVA
226327	AGO MAGGIORE (VERBANO)	Brabbia (Canale)	IT03N00809811501051lo	VA	Cazzago Brabbia	477974	5071646	POTIVA
226328	AGO MAGGIORE (VERBANO)	Brabbia (Canale)	IT03N00809811501051lo	VA	Cazzago Brabbia	477974	5071646	POTIVA
226329	AGO MAGGIORE (VERBANO)	Brabbia (Canale)	IT03N00809811501051lo	VA	Cazzago Brabbia	477974	5071646	POTIVA
226330	AGO MAGGIORE (VERBANO)	Brabbia (Canale)	IT03N00809811501051lo	VA	Cazzago Brabbia	477974	5071646	POTIVA
226331	AGO MAGGIORE (VERBANO)	Brabbia (Canale)	IT03N00809811501051lo	VA	Cazzago Brabbia	477974	5071646	POTIVA
226332								

DATO: DATI ANALITICI CORPI IDRICI FLUVIALI  
 FONTE DATI: ARPA Lombardia  
 ANNO DI RIFERIMENTO: 2016

DATI\_2016\_CI\_FLUVIALI

## Importazione

Panoramica dei formati riconosciuti da IBM SPSS Statistics

## Ristrutturazione e aggregazione

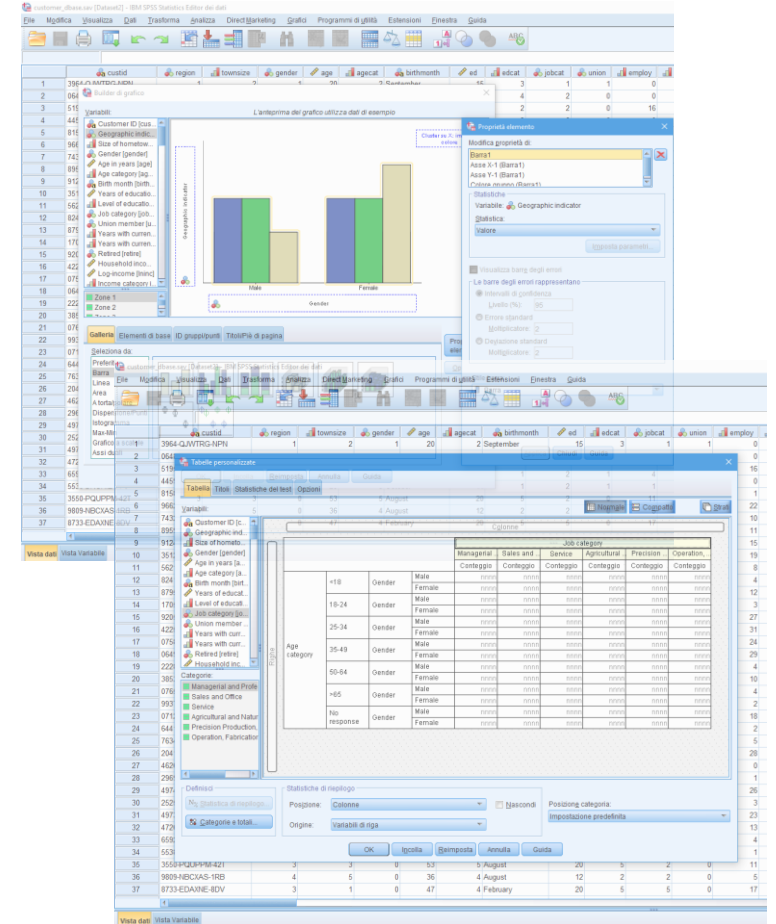
Ottimizzazione nella preparazione dei dati con IBM SPSS Statistics

## Calcolo di nuove variabili

Come calcolare nuove variabili da altre incluse nel dataset di partenza

## Suddividi File

Scomposizione di File



The screenshot displays the IBM SPSS Statistics interface with several key components visible:

- Data Editor:** Shows a dataset with columns for 'region', 'townsac', 'gender', 'age', 'agecat', 'birthmonth', 'ed', 'educat', 'jobcat', 'union', and 'employ'.
- Variable View:** Lists variables such as 'Customer ID base', 'Geographic indic.', 'Size of household', 'Age in years (age)', 'Age category (agecat)', 'Birth month (birthmonth)', 'Years of education', 'Years with current employer', 'Union member (union)', and 'Log income (lninc)'.
- Graphical Output:** A bar chart titled 'L'antropometria grafica utilizzata dall'esempio' showing data for 'Male' and 'Female' across 'Zone 1' and 'Zone 2'.
- Dialog Boxes:**
  - Importazione dati:** Shows options for file format (e.g., CSV, Excel) and encoding.
  - Calcolo di nuove variabili:** A dialog box for defining new variables from existing ones.
  - Dividi file:** A dialog box for splitting the dataset into separate files based on a variable.
- Table Editor:** A table showing a cross-tabulation of 'Age category' and 'Gender' with columns for various job categories (e.g., 'Managerial', 'Sales and Service', 'Agriculture and Natural Resources', 'Precision Production', 'Operation, Fabrication').



arpa\_2017\_grezza nodupli MIMB sav per ristr.sav [DataSet11] - IBM SPSS Statistics Data Editor

File Edit View Data Transform Analyze Graphs Utilities Extensions Window Help

Visible: 9 of 9 Variables

	PROVINCIA	COMUNE	CODICEPP	DatadiCampionamento	datastr	
1	MI	Abbiategrasso	PO0150020U0014	24/05/17	24/05/2017	(MCPA) Acido 2,4 meticlorofen
2	MI	Abbiategrasso	PO0150020U0014	24/05/17	24/05/2017	2,4-Dicofol
3	MI	Abbiategrasso	PO0150020U0014	24/05/17	24/05/2017	2,4,5-T
4	MI	Abbiategrasso	PO0150020U0014	24/05/17	24/05/2017	Acetamiprid
5	MI	Abbiategrasso	PO0150020U0014	24/05/17	24/05/2017	Acido 2,4 diclorofenossi acetico
6	MI	Abbiategrasso	PO0150020U0014	24/05/17	24/05/2017	ACLONIFEN
7	MI	Abbiategrasso	PO0150020U0014	24/05/17	24/05/2017	Alachlor
8	MI	Abbiategrasso	PO0150020U0014	24/05/17	24/05/2017	Aldrin
9	MI	Abbiategrasso	PO0150020U0014	24/05/17	24/05/2017	Ametrina
10	MI	Abbiategrasso	PO0150020U0014	24/05/17	24/05/2017	AMPA
11	MI	Abbiategrasso	PO0150020U0014	24/05/17	24/05/2017	Antimonio
12	MI	Abbiategrasso	PO0150020U0014	24/05/17	24/05/2017	Arsenico
13	MI	Abbiategrasso	PO0150020U0014	24/05/17	24/05/2017	Atrazina
14	MI	Abbiategrasso	PO0150020U0014	24/05/17	24/05/2017	Atrazina-desetil
15	MI	Abbiategrasso	PO0150020U0014	24/05/17	24/05/2017	Atrazina-desisopropil
16	MI	Abbiategrasso	PO0150020U0014	24/05/17	24/05/2017	Azimsulfuron
17	MI	Abbiategrasso	PO0150020U0014	24/05/17	24/05/2017	Azoto organico
18	MI	Abbiategrasso	PO0150020U0014	24/05/17	24/05/2017	Azoto Totale

Data View Variable View

IBM SPSS Statistics Processor is ready Unicode:ON

\*Untitled5 [aggr\_comune] - IBM SPSS Statistics Data Editor

File Edit View Data Transform Analyze Graphs Utilities Extensions Window Help

Visible: 9 of 9 Variables

	PROVINCIA	COMUNE	COORDEST_mean	COORDNORD_mean	AMPA_mean	Atrazina_mean	Benta
1	MB	Arcore	525421,00	5051267,00	,05	,01	
2	MB	Barlassina	510155,00	5055878,00	.	.	
3	MB	Cavenago di Brianza	531593,00	5048360,00	.	.	
4	MB	Concorezzo	525376,00	5047357,00	,05	,02	
5	MB	CORNATE D'ADDA	537874,64	5054516,72	.	.	
6	MB	Desio	516261,00	5051920,00	,05	,03	
7	MB	Lazzate	506628,00	5058454,00	.	.	
8	MB	Limbate	509330,00	5051480,00	,05	,01	
9	MB	Lissone	519297,00	5051532,00	.	.	
10	MB	Mezzago	534712,00	5052931,00	,05	,03	
11	MB	Monza	521911,00	5049573,00	,05	,01	
12	MB	Muggiò	517603,00	5047860,00	,05	,01	
13	MB	Ornago	532830,00	5049602,00	.	.	
14	MB	Renate	521585,00	5064072,00	.	.	
15	MB	Seregno	518063,00	5055028,00	.	.	
16	MB	SEREGNO	517402,64	5055726,31	.	.	
17	MB	Seveso	511146,00	5054716,00	.	.	
18	MB	Sulbiate	533532,00	5053607,00	.	.	

Data View Variable View

IBM SPSS Statistics Processor is ready Unicode:ON

## Importazione

Panoramica dei formati riconosciuti da IBM SPSS Statistics

## Ristrutturazione e aggregazione

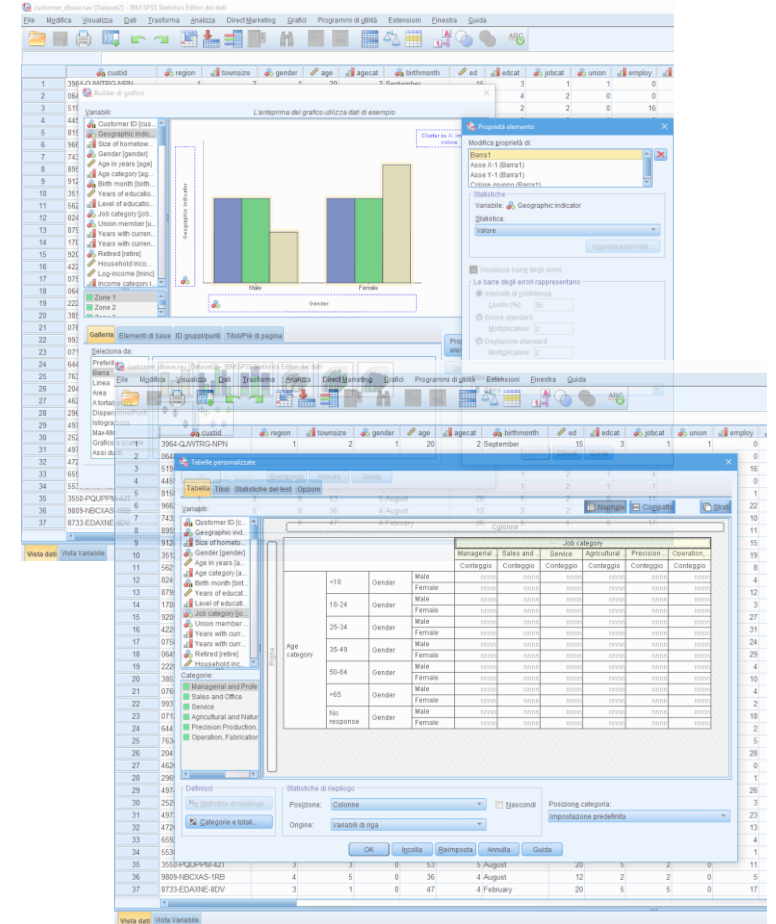
Ottimizzazione nella preparazione dei dati con IBM SPSS Statistics

## Calcolo di nuove variabili

Come calcolare nuove variabili da altre incluse nel dataset di partenza

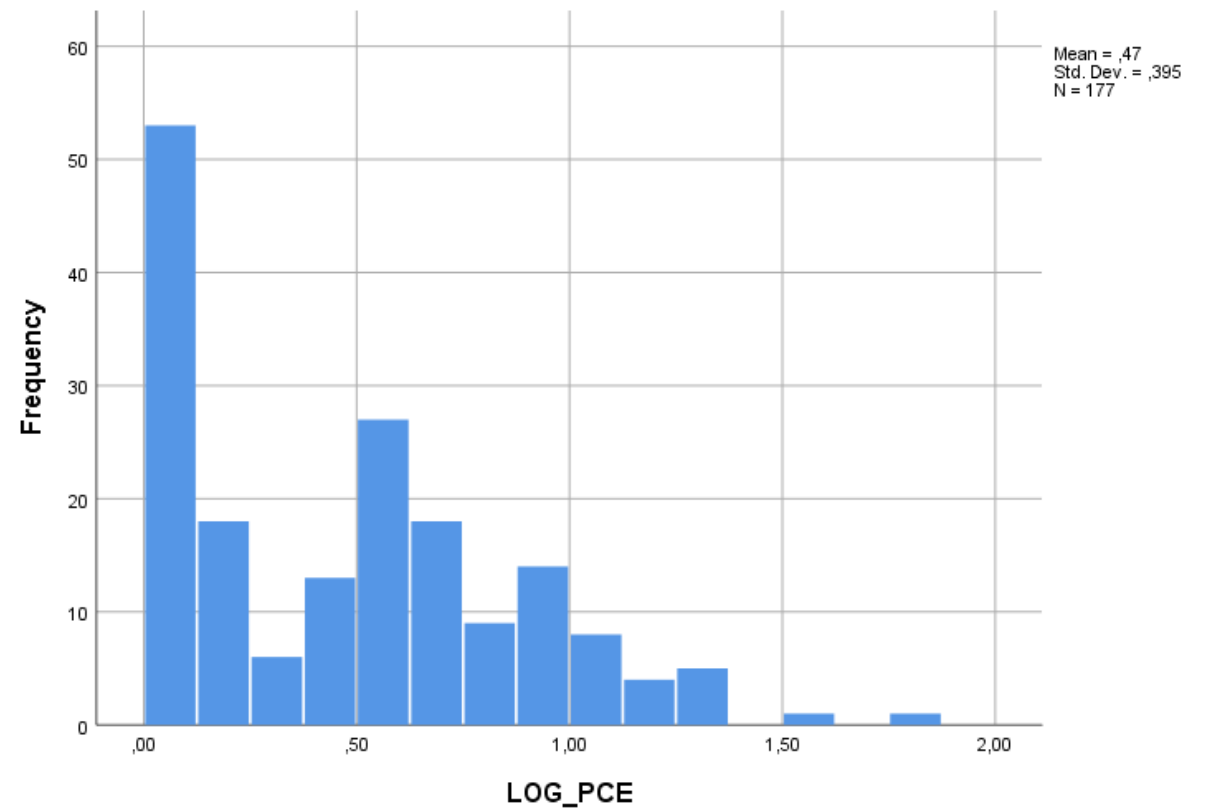
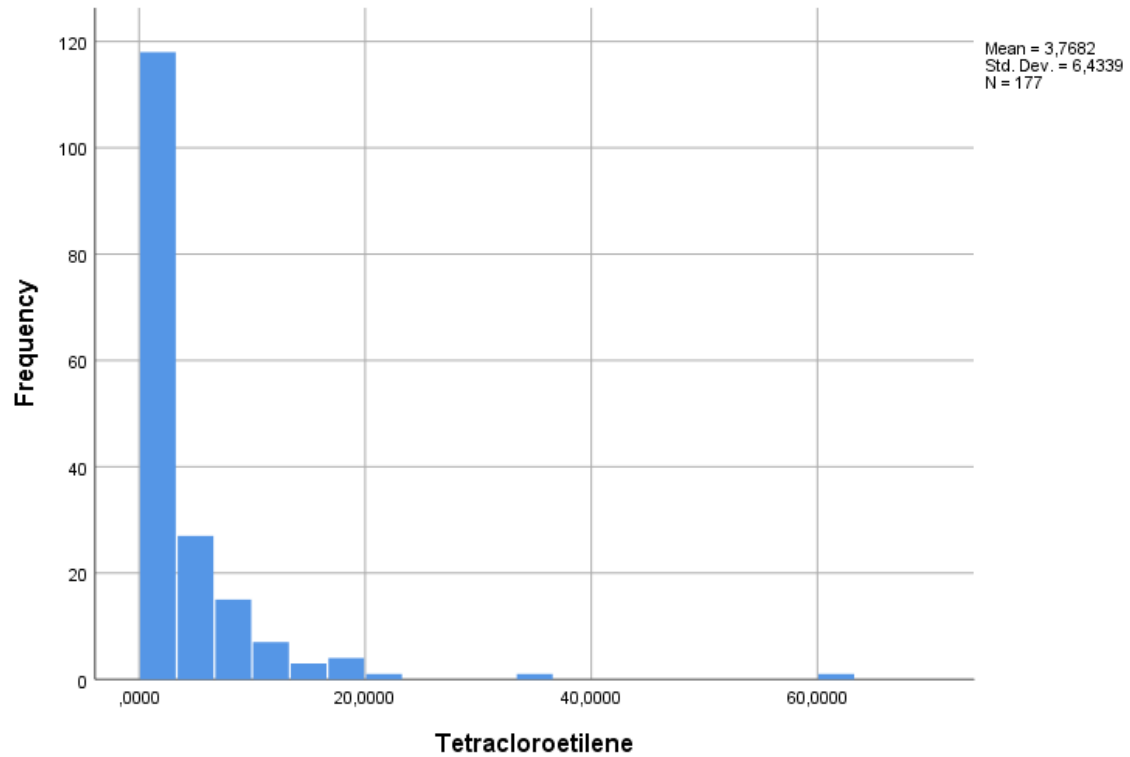
## Suddividi File

Scomposizione di File



The screenshot displays the IBM SPSS Statistics interface with several key components visible:

- Data Editor:** Shows a dataset with columns for 'region', 'townsize', 'gender', 'age', 'agecat', 'birthmonth', 'ed', 'educat', 'jobcat', 'union', and 'employ'.
- Variable View:** Lists variables such as 'Customer ID base', 'Geographic indic.', 'Size of household', 'Gender (gender)', 'Age in years (age)', 'Age category (agecat)', 'Birth month (birthmonth)', 'Years of education', 'Years with current employer', 'Union member (union)', 'Years with current employer', 'Household income', and 'Log income (lninc)'.
- Graphs:** A bar chart titled 'L'antropometria utilizza dati di esempio' is displayed, showing data for 'Male' and 'Female' across 'Zona 1' and 'Zona 2'.
- Dialog Boxes:**
  - 'Mostra proprietà di:' dialog for 'BASK1' with 'Asse X-1 (Barra1)' and 'Asse Y-1 (Barra1)' selected.
  - 'Tabella personalizzata' dialog for 'Tabella personalizzata' with 'Statistiche di base' and 'ID gruppi/variabili di pagina' selected.
  - 'Statistiche di risposta' dialog with 'Posizione: Colonna' and 'Origine: Variabili di riga'.
- Table:** A table showing the results of a calculation or transformation, with columns for 'Age category', 'Gender', and 'Male', and rows for various age groups like '<18', '18-24', '25-34', '35-49', '50-64', and '>=65'.



Visual Binning

Scanned Variable List:

Name:	Label:
LOG_PCE	

Current Variable: LOG\_PCE

Binned Variable: classi\_log\_PCE    LOG\_PCE (Binned)

Minimum: ,01    Nonmissing Values    Maximum: 1,79

Enter interval cutpoints or click Make Cutpoints for automatic intervals. A cutpoint value of 10, for example, defines an interval starting above the previous interval and ending at 10.

Grid:

	Value	Label
1	,090	<= ,09
2	,491	,10 - ,49
3	,732	,50 - ,73
4		HIGH ,74+
5		

Upper Endpoints

Included (<=)

Excluded (<)

Make Cutpoints...

Make Labels

Reverse scale

Cases Scanned: 273

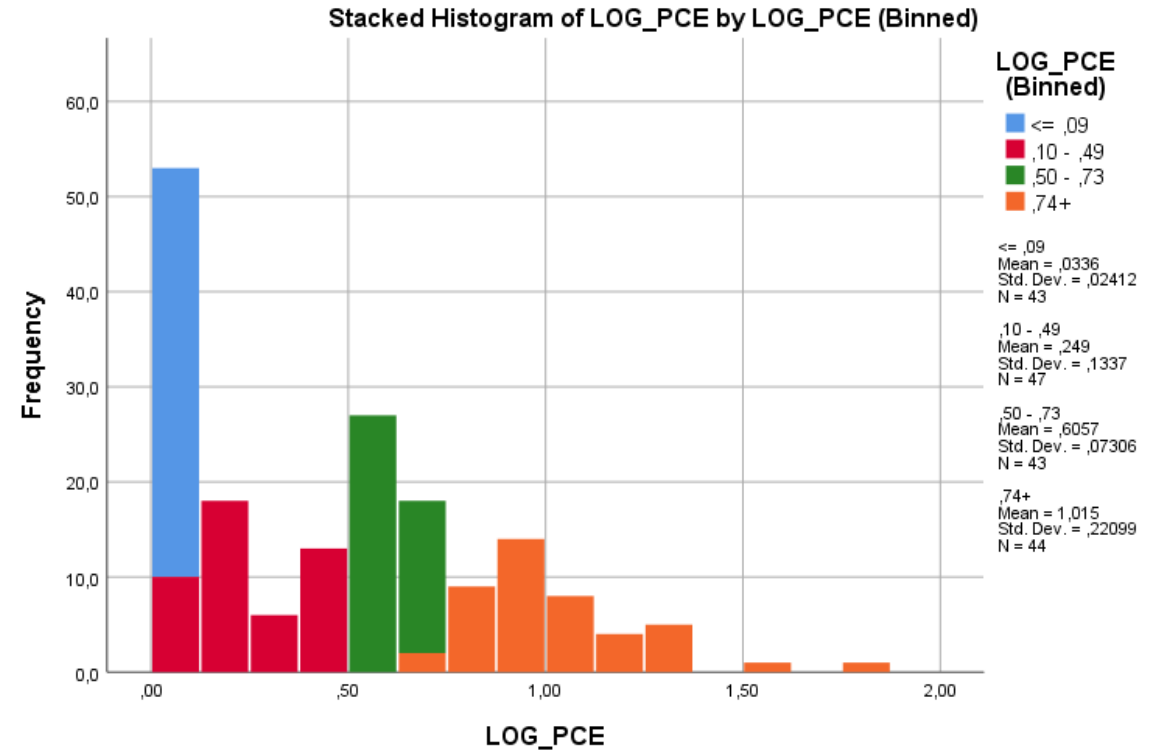
Missing Values: 96

Copy Bins

From Another Variable...

To Other Variables...

OK    Paste    Reset    Cancel    Help



## Importazione

Panoramica dei formati riconosciuti da IBM SPSS Statistics

## Ristrutturazione e aggregazione

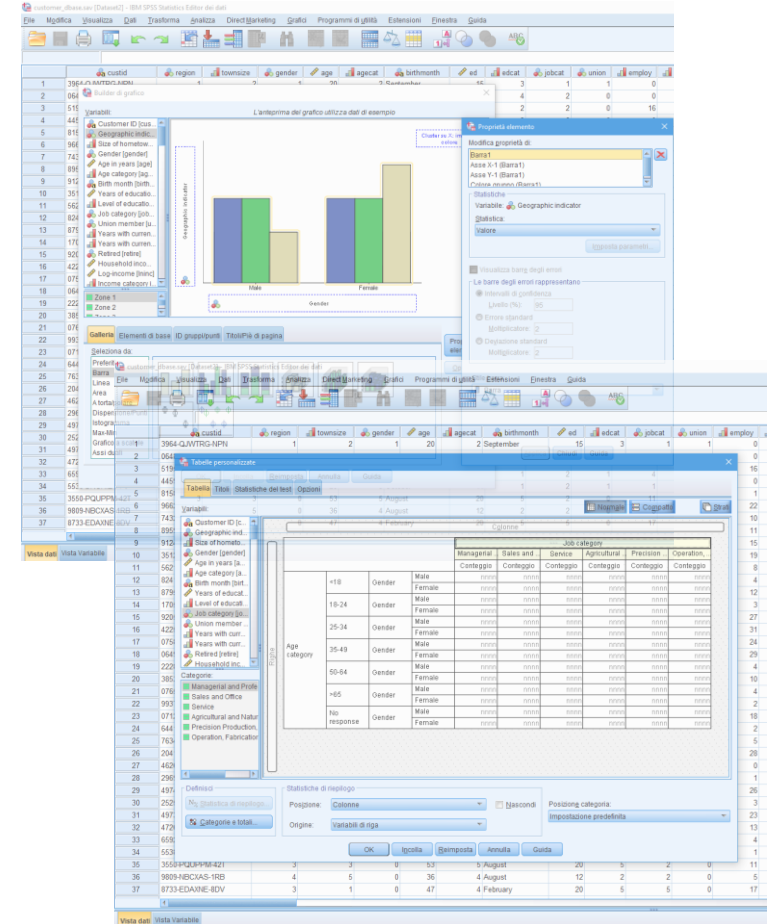
Ottimizzazione nella preparazione dei dati con IBM SPSS Statistics

## Calcolo di nuove variabili

Come calcolare nuove variabili da altre incluse nel dataset di partenza

## Suddividi File

Scomposizione di File



The screenshot displays the IBM SPSS Statistics interface with several key components visible:

- Data Editor:** Shows a dataset with columns for 'region', 'townsize', 'gender', 'age', 'agecat', 'birthmonth', 'ed', 'educat', 'jobcat', 'union', and 'employ'.
- Variable View:** Lists variables such as 'Customer ID base', 'Geographic indic.', 'Size of household', 'Gender (gender)', 'Age in years (age)', 'Age category (agecat)', 'Birth month (birthmth)', 'Years of education', 'Years with current employer', 'Union member (union)', 'Years with current employer', 'Household income', and 'Log income (lninc)'.
- Graphical Output:** A bar chart titled 'L'istogramma dei grafici utilizza dati di esempio' showing the distribution of 'gender' (Male and Female).
- Statistical Summary:** A table showing the distribution of 'Age category' across 'Gender' and 'Male'.
- File Splitting Dialog:** A dialog box titled 'Suddividi file' with options for 'Categorie' and 'Variabili di riga'.

Age category	Gender	Male	Female
<18	Gender	Male	Female
18-24	Gender	Male	Female
25-34	Gender	Male	Female
35-44	Gender	Male	Female
50-64	Gender	Male	Female
>65	Gender	Male	Female
No response	Gender	Male	Female

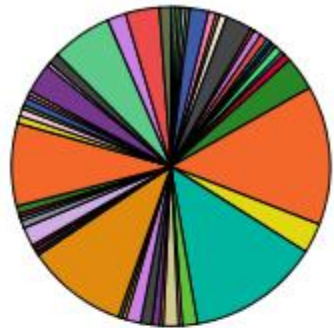
Green Metric World Universities.sav [DataSet12] - IBM SPSS Statistics Data Editor

File Edit View Data Transform Analyze Graphs Utilities Extensions Window Help

780 : Country Vietnam () Visible: 20 of 20 Variables

	Rank2019	University	Country	TotalScore	Set
764	497	Indiana University	USA ()	4400	
765	501	University of Wisconsin Parkside	USA ()	4400	
766	521	Skyline College	USA ()	4300	
767	522	University of Tennessee Martin	USA ()	4300	
768	543	Georgia College & State University	USA ()	4200	
769	551	Rider University	USA ()	4150	
770	552	Jacksonville University	USA ()	4150	
771	572	New Jersey City University	USA ()	4025	
772	600	Westminster College Fulton	USA ()	3900	
773	625	Pacific Union College	USA ()	3725	
774	671	Universidad Biblica de las Americas	USA ()	3100	
775	374	National University of Uzbekistan / Ozbekiston Milliy Univesiteti	Uzbekistan ()	5100	
776	539	Universidad Metropolitana Caracas	Venezuela ()	4200	
777	569	Universidad Central De Venezuela	Venezuela ()	4050	
778	575	Universidad Catolica Andres Bello	Venezuela ()	4025	
779	165	Ton Duc Thang University	Vietnam ()	6325	
780	221	Tra Vinh University	Vietnam ()	5975	
781					

Data View Variable View



<= 4300



4301 - 5700



5701+

Total Score (Binned)

### Country

- Algeria ()
- Argentina ()
- Australia ()
- Austria ()
- Azerbaijan ()
- Bahrain ()
- Bangladesh ()
- Belgium ()
- Bosnia and Herzegovina ()
- Brazil ()
- Bulgaria ()
- Canada ()
- Chile ()
- China ()
- Chinese Taipei ()
- Colombia ()
- Costa Rica ()
- Croatia ()
- Czech Republic ()
- Denmark ()
- Ecuador ()
- Egypt ()
- El Salvador ()
- Estonia ()
- Fiji ()
- Finland ()
- France ()
- Germany ()
- Ghana ()
- Greece ()
- Guatemala ()
- Hungary ()
- India ()
- Indonesia ()
- Iran ()
- Iraq ()
- Ireland ()
- Israel ()
- Italy ()
- Japan ()
- Jordan ()
- Kazakhstan ()
- Kyrgyzstan ()
- Latvia ()
- Lebanon ()
- Malaysia ()
- Malta ()
- Mauritius ()
- Mexico ()
- Morocco ()
- Netherlands ()
- New Zealand ()
- ...

### Statistics

		Setting & Infrastructure	Energy & Climate Change	Waste	Water	Transportation	Education & Research
N	Valid	780	780	779	779	779	779
	Missing	0	0	1	1	1	1
Mean		735,10	974,07	892,68	475,22	944,74	972,08
Median		750,00	950,00	900,00	500,00	975,00	975,00
Std. Deviation		281,577	362,016	445,094	259,060	343,133	396,097
Minimum		0	0	0	0	0	0
Maximum		1400	2025	1800	1000	1800	1800
Percentiles	25	525,00	725,00	525,00	300,00	725,00	700,00
	50	750,00	950,00	900,00	500,00	975,00	975,00
	75	925,00	1225,00	1200,00	675,00	1200,00	1275,00



# Ringraziamenti e Conclusioni

LAURA ZERBINI @SPS

