

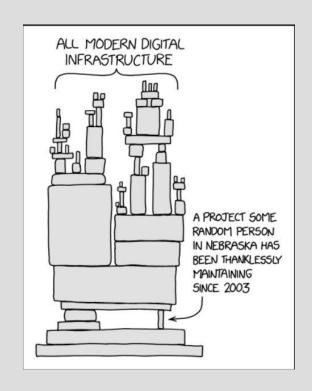
Using px at Statistical Office of the Republic of Slovenia

Igor Štefelin, Matej Alič



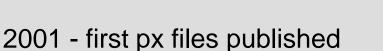
SiStat building blocks

- Final aggregated data and metadata in bilingual multi-dimensional tables (px files)
- Px tools (PxEdit, PxWeb, PxWin)
- PxPublisher (our own application)
- Internal and external users (needs user satisfaction survey)

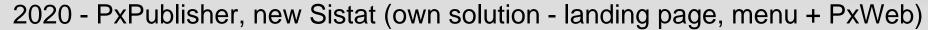




SiStat history



2017 - multilingual px files



2021 - all tables (including HVD) available at OPSI (open data portal) via PxPublisherAPI

2024 - SiStat updated to PxWeb 2022, graphical redesign of custom pages and PxWeb, with interface improvements).

Using PxEdit, PxJob, PcAxis/PxWin over 20 years in production

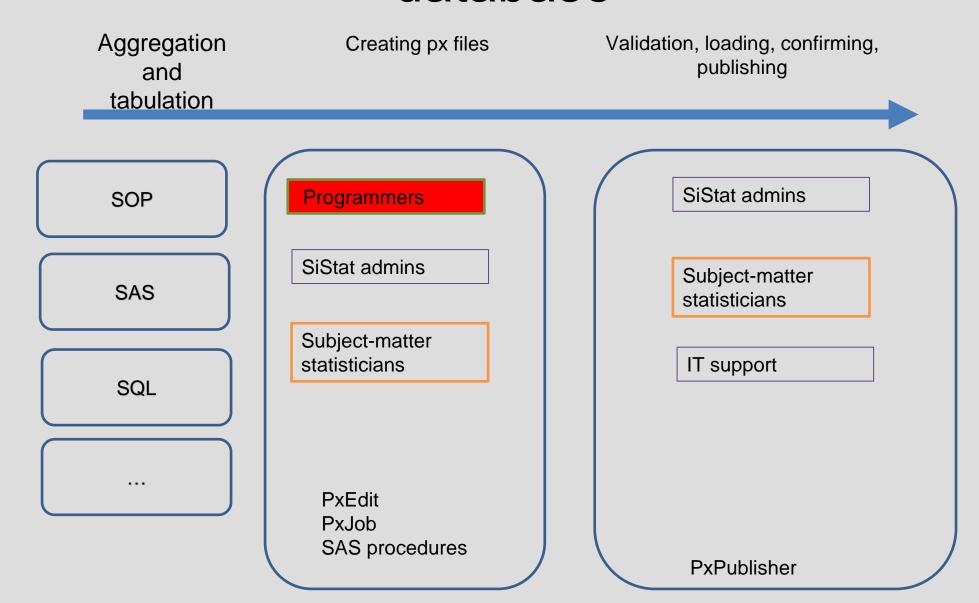
Training courses for all employers

Content and technical support preparing px files





Publishing process in SiStat database





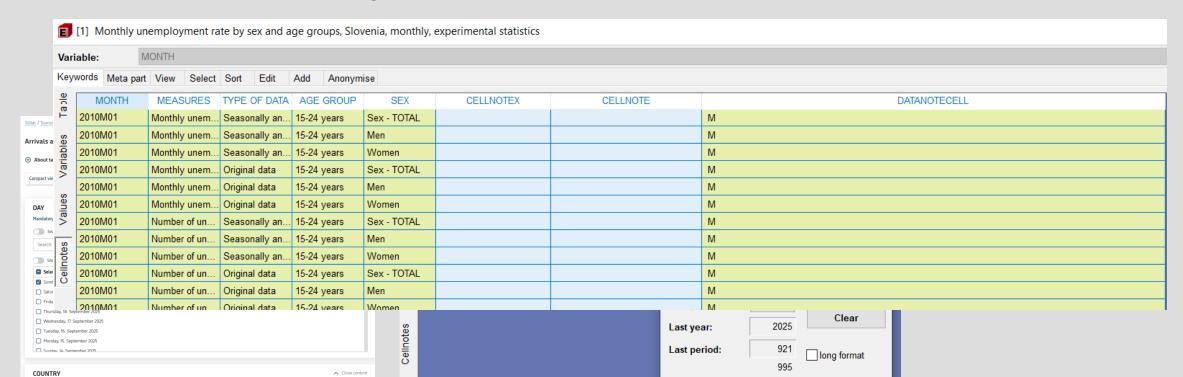
Preparing px files

- > 95% via PxEdit, 5% semi-automatically with SAS procedures
- Multiple input sources (SAS, SOP internal tool, sql databases, Excel), input format source: csv, xlsx...
- > 110 statisticians + support from 3 Sistat admins
- Using PxJob for updating data, database maintenance and standardization



PxEdit special features

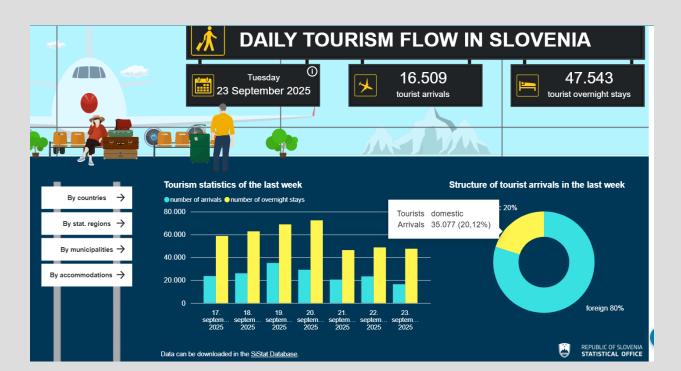
- Adding standardise notes via PxEdit (ini file)
- Datanotecells for adding less reliable data notes

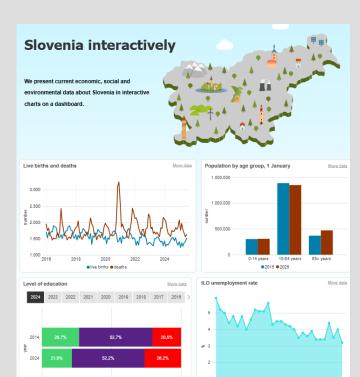




Px data integration

- Dashboards: Slovenia interactively, Population pyramid ...
- PowerBI integration via PxWebAPI and Qumio Power Query (M) generator (pros + cons)







SiStat preparing tables – future challenges and historical flaws

Historical flaws:

External trade data in modifed PxSQL solution (died in few years - migration to px files) Adding too many notes in tables - hard to maintain

Future challenges:

Automation of preparing px files

Standardisation of codelist and metadata

Using hierarchies in codelist (not with vs and agg files) - not optimally supported with PxWeb

Destiny of PxEdit?

PxWeb + PxPublisher = SiStat



PxPublisher

Used for validation, loading, confirming and publishing the tables (px files) in the SiStat Database

Customized menu structure of content through PxPublisher - independent from location of px files (all in one folder)

Easy to change menu structure - add new sections in tree view

Easy to issue new ID's for new tables

Easy to change users (statisticians who updates an uploads the tables)

A year

2024

a new table

0872003S.

Sistat Editor

Overview of matrix notifications on the SiStat portal

UPDATED).

for the English

1450632S.px for the

Adding

Adding ı						
	Published	The guy	Message SLO	Message from ANG	edit	Delete
Message type	4/6/2024	publication of a new table	New tables in the SiStat database: 2706319S, 2706320S, 2706321S, 2706322S.	New tables in the SiStat Database: 2706319S, 2706320S, 2706321S, 2706322S.	edit	Delete
Display date	31.5.2024	publication of a new table	New tables in the SiStat database: 2170219S, 2170220S.	New tables in the SiStat Database: 2170219S, 2170220S.	edit	Delete
SiStat area	31.5.2024	publication of a new table	New table in the SiStat database: 2170406S.	New table in the SiStat Database: 2170406S.	edit	Delete
Message in Slovenian	28/05/2024	table termination	Table 0953286S is no longer published in the SiStat database, the data can now be found in table 0953288S.	Table 0953286S has been removed from the SiStat Database. Data are in table 0953288S.	edit	Delete
Message in English	5/27/2024	change in structure - category	In the tables 1912002S, 1700102S, 2012102S, 2007402S, within the dimension ECONOMIC INDICATOR, a new category Accumulation of labor force was added.	A new value, Labor hoarding indicator, has been added in variable ECONOMIC INDICATOR in tables 1912002S, 1700102S, 2012102S, 2007402S.	edit	Delete
	20/05/2024	change in structure - category	In tables 0427601S, 0427602S within the INDEX dimension added a new category Quarter / average in 2021.	A new value, Quarter / average of the year 2021, has been added in variable INDEX in tables 0427601S, 0427602S.	edit	Delete
	5/16/2024	publication of a new table	New tables in the SiStat database: 0882714S, 0882715S.	New tables in the SiStat Database: 0882714S, 0882715S.	edit	Delete
	5/16/2024	publication of a new table	New tables in the SiStat database: 0887401S, 0887402S, 0887403S, 0887404S, 0887405S, 0887406S, 0887407S, 0887408S, 0887409S.	New tables in the SiStat Database: 0887401S, 0887402S, 0887403S, 0887404S, 0887405S, 0887406S, 0887407S, 0887408S, 0887409S.	edit	Delete
	5/16/2024	publication of	New tables in the SiStat database: 0872002S,	New tables in the SiStat Database: 0872002S,	edit	Delete

0872003S.



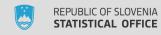
PxPublisher API

Added features on the SiStat Database

Changing content structure on SiStat Database

Data exchange with OPSI (Slovenia open data portal)

HVD status update on OPSI



What have we achieved with **SiStat**?

More than 1 billion data points in 4523 published multi - dimensional data tables

Custom pages with customized PxWeb interface that includes additional functionalities, navigation and search bar.

Better integration with PxPublisher API to provide additional information about the tables within custom pages and PxWeb interface. Such as last updated tables, highlighted tables (we change them once per year with most viewed per statistical area), table titles on hovering the ID's, breadcrumbs, etc.

Improved search interface with autocomplete, last searched queries and additional table info, added filter for filtering tables within the treeview in category pages.

Notification banner and Changes site to notify users of changes in the tables or other important issues (through PxPublisher)



SiStat / List of database structure changes

LIST OF DATABASE STRUCTURE CHANGES

Upcoming changes

Date of change	Theme	Change description		
29/9/2025	Economic accounts for agriculture	New table in the SiStat Database: 1561504S.		

Latest changes

Date of change	Theme	Change description
23/9/2025	Government budget appropriations or outlays on R&D	Code of value for General advancement of knowledge in the variable SOCIO-ECONOMIC OBJECTIVE has been changed in table <u>2364303S</u> .
22/9/2025		Maintenance of metadata for half-yearly tables in the SiStat Database has been completed. Due to technical



2024 user engagment highlights

170,000+ unique users

1.8 million+ pages viewed

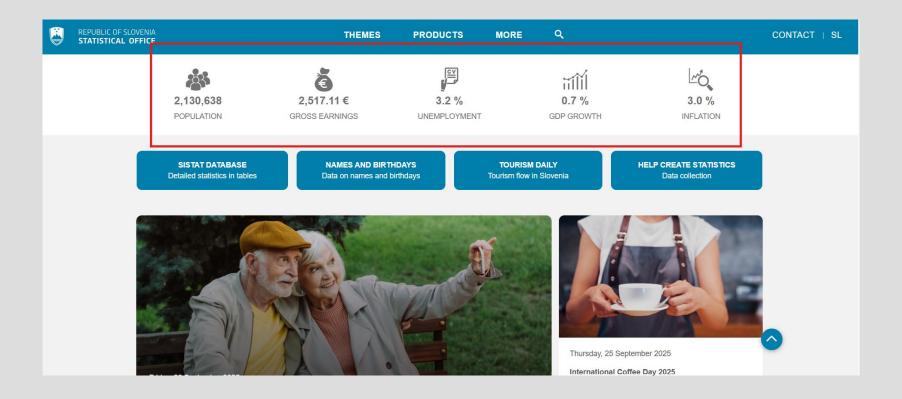
PxWebApi calls: 60,000 (2020) → 600,000 (2024)

5,600+ saved queries



Future

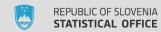
We want to include PxWebAPI to more of our products. Example: API calls to SiStat Database for data used on our main website





Future

When PxWeb 2.0 and PxWebApi 2.0 are relased we plan to transition to the new products, which will also mean redesigning our SiStat Database.



Thank you for your time ©