How I met the fish in the information system

The Fish and Ponds e-learning system demonstrates the principles and the way of using the SAMO technology platform. To better illustrate and understand how to work with data, an example of fish, ponds, work and partners is used. It shows how the data is related and how it can be displayed.

SAMO can be used to create both simple and complex agenda systems. Systematic data capture and structured data display leaves your hands free for business or administrative activities.

The intuitive interface, easy configuration and the possibility of integration with existing systems is a given.

The concept of tiles

The tiles in the cockpit represent the different agendas. Each tile has its own limited range of functions. The purpose of each tile is made clear by a pictogram. Some tiles display basic data in a preview, such as counts.

Together, the tiles form a system of linked data. The configuration determines which data and to what level of detail it is necessary to see. The data can also be further filtered. Each user can only access data to which they have set permissions or are in the area of interest.

Map application

Ponds are spatially displayable data that have GPS coordinates. They can be viewed on available map layers. Each pond also has an information overview. Here the data is entered from the dials or in free text. This is defined in the metadata. The codebook is an ordered list of unique entities and ensures data consistency.

It is also possible to display the data simultaneously in a list. You can choose to display tiles or tables. For example, it is possible to filter ponds by type. For more detailed analysis there is an export function to Excel.

You can show or hide the information summary for each item in the list. For example, you can display the fish in a particular pond and details about them. The overview window can be zoomed in and out by scrolling, or the user can use the arrow keys to move to the next overview.

Fish - data that arrive

Another agenda is the fish database. The interconnection allows you to access individual fish through the Fish agenda and at the same time through the Ponds agenda.

For each fish there is a link to the corresponding pond.

Sponsors have a similar type of attachment to the pond as the fish and for our purposes represent a source of funding. Details can also be seen in the overview.

Ponds

Ponds are similar to branches or workplaces in the demo system. Fish can swim in the ponds, but at the same time the ponds need to be maintained. Ponds also need to be guarded or stocked. There are different types of ponds. Ponds have statuses that can change. They are assigned to each county and each pond has an owner. The list of owners is in the People agenda, where each owner has a list of their respective ponds.

In addition to the owners, fishing guards and external labour also work on the ponds. This brings us to the next agenda - the management of external labour.

External workforce

Fish work in ponds just like employees. Other workers look after the ponds. It is common practice to manage external labour. The partners may be, for example, certification bodies or suppliers of services and materials.

For the workforce, we will be primarily interested in time-distributed data with an emphasis on scheduling. The assignment to a pond located in the space can be traced in a detailed report for the workforce.

Workflow

The pond owner needs to keep track of work progress and status changes. Is maintenance/inspection scheduled, underway or already done? A simple workflow diagram is used to illustrate this.



The diagram shows which phases have passed and which will follow by means of points and arrows. The inspection types themselves are managed in a separate tile for clarity.

All inspection and other work can be viewed in a calendar-like overview. The Planning board function is a summary view and can be used as the main dashboard for work management.

Other related agendas

The strength of the metadata-driven SAMO platform is the ability to add additional agendas that work with downstream data. This helps to keep the data in order, see the connections between it and easily move between areas of interest.

The agenda tiles make the amount of data clearer. In addition, data can be displayed in charts and we can change the depth of detail we need to see.

Context between objects and data types

The information system is broken down into individual business objects in the charts below. The graphs represent real-world objects, such as ponds. The links between objects are shown. There is a diamond symbol between the pond and the fish to represent the relationship. One-way arrows show which objects serve other objects. For example, the fish species object serves only the fish object.

The diagrams also show data types (boolean, integer...), links to dials or where free text can be entered.







