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Policy Compass



WP4 – Policy Compass Evaluation

D4.2 – Evaluation of Basic Functionalities

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Executive Summary:

This report presents the preliminary results obtained from the evaluation of the basic functionalities of the Policy Compass platform by the UK and Russian pilot sites (CCC and ITMO) from a user experience perspective. The evaluation scenario for every basic functionalities were initially developed by UBRUN. Based on these scenarios, the pilot sites were able to test the basic functionalities of the platform that were ready at this stage. The preliminary results highlight that the platform functionalities currently available are working well with a need for further improvements to be made to the user interface. Finally, the overall satisfaction relevant to the platform is not currently positive due to the lack of information available on the platform and the moderate level of ease of use but most of the evaluators expect that it could be improved using the feedback presented as part of this report.

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Evaluation of basic functionalities

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ABBREVIATIONS

CO	Confidential, only for members of the Consortium (including the Commission Services)
D	Deliverable
DoW	Description of Work
FP7	Seventh Framework Programme
FLOSS	Free/Libre Open Source Software
GUI	Graphical user Interface
IPR	Intellectual Property Rights
MGT	Management
MS	Milestone
OS	Open Source
OSS	Open Source Software
O	Other
P	Prototype
PU	Public
PM	Person Month
R	Report
RTD	Research and Development
WP	Work Package
Y1	Year 1

PARTNER NAME CORRESPONDING TO ABBREVIATION IN POLICY COMPASS DOW

Fraunhofer	Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e.V.
UBRUN	Brunel University
ATOS	ATOS Spain SA
LIQD	Liquid Democracy e.V.
NTUA	National Technical University of Athens
ITMO	Saint Petersburg National Research University of Information Technologies Mechanics and Optics
CCC	Cambridgeshire County Council

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1. INTRODUCTION

This report presents the preliminary results of the evaluation of basic functionalities of the Policy Compass platform by the UK and Russian pilot sites (CCC and ITMO) from a user perspective. To make sure the basic functions of the Policy Compass platform are tested, UBRUN developed related scenarios of creating new metrics, historical events and FCM models. Based on the scenarios, ITMO and CCC conducted the evaluation for the developed basic functionalities in prototype. The evaluation followed some of the selected behavioural KPIs relevant to our evaluation context presented in D4.1 report. We only selected the behavioural KPIs related to user satisfaction, ease of use and quality of basic functionalities. Fundamental feedbacks about the technical improvement have also been included in the scope of this evaluation report. In the next section, the methodology of the evaluation has been reported. Section 3 then presents the scenarios for evaluating the platform basic functionalities. Section 4 discusses the evaluation for the technical function and also highlights the results of the evaluation based on the behavioural KPIs and finally, Section 5 presents the conclusions.

2. METHODOLOGY FOR EVALUATION OF BASIC FUNCTIONALITIES

2.1. Evaluation Process

As a first step to evaluate the basic functionalities of the Policy Compass platform, the usage scenarios for each of the functions to be tested were developed. These scenarios were based around the two menu functions of the Policy Compass platform; CREATE, BROWSE¹. We conducted the evaluation for the CREATE and BROWSE menus, which are mainly related to the basic functionality for developing policy model using the open data.

In the “CREATE” menu, we can create the metric, historical event, visualisation, and FCM model. The result of “CREATION” can be searched in “BROWSE” menu. To test and evaluate these basic functionalities, we provided the virtual scenario to evaluators in CCC and ITMO. Following the scenario, CCC and ITMO evaluated basic functions in two aspects: technical evaluation (Section 3) and overall evaluation using the measures from behavioural KPIs in D4.1 (Section 4).

Technical feedback was provided through a qualitative evaluation including major/minor bugs and the issues on the usage of the platform. Suggestions for further improvement are also expected to be covered by this evaluation. Overall evaluation is conducted based on the behavioural KPIs in D4.1 which presented the state-of-the-art key performance indicators for the Policy Compass Project. These indicators refer to the assessment of the Policy Compass service from an end-users’ view point especially with regard to their acceptance of using the service and satisfaction from the service. We chose relevant indicators to our evaluation situation from the developed KPIs in D4.1. At the end, CCC and ITMO evaluated the platform independently and then UBRUN aggregated the final evaluation results.

2.2. Training sessions for Evaluation

To make the evaluation more accurate and efficient, UBRUN provided two targeted training sessions to each of the project’s pilot partners (CCC and ITMO). In the first training session (6th January), UBRUN visited CCC and explained the fundamental concepts of basic functionalities and the objective of each menu. Especially, the basic concepts of FCM were mainly dealt with through this training session as most of general users are not familiar with the fundamental concepts of FCM model. For a deeper understanding of the platform, section 7 of D2.1 was used as a platform manual, which explains in detail the instructions for each menu. Based on this training, evaluators started evaluations according to the given scenario.

In the frames of the second session (15th January), UBRUN reviewed and received the feedback from the evaluation experience after the first training and UBRUN, CCC and ITMO shared their opinions about evaluation. In addition, UBRUN provided additional instructions for evaluation scenario and collected the user experience information about the platform for future modification.

¹ “WANT TO” and “REQUEST” menus in Policy Compass platform is now under implementation so they were not evaluated this time. These menu will be evaluated in Fields trials (D4.4 and D4.5)

The overall evaluation was conducted during two weeks (from 6th January to 20th January) with 15 evaluators (10 from CCC, 5 from ITMO).

3. EVALUATION SCENARIOS

The following simple scenarios applicable to usage of Policy Compass platform are to be followed to evaluate the functionalities. The demo version of the platform can be found in website <http://alpha.policycompass.eu> with initial interface as follows:

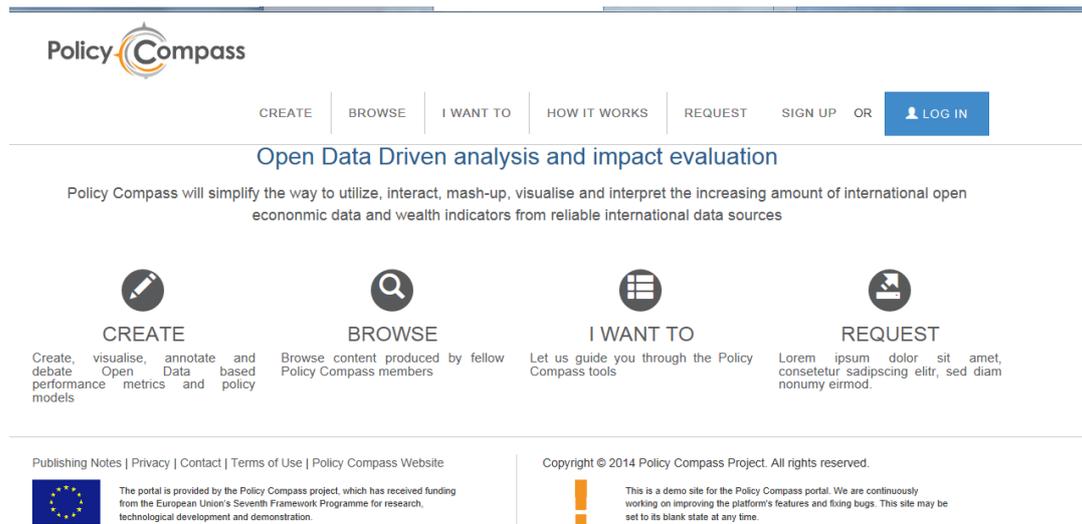


Figure 1: Screenshot of the Policy Compass platform

3.1. CREATE

If you ‘click’ the ‘CREATE’ option, you can see the four submenus – Create Metrics, Create Visualisation, Create Historical Event, and Create Fuzzy Cognitive Map. The following sections describe the scenarios for the usage of each sub-menu.

3.1.1. Create Metrics

Given Scenario:

- *You want to develop a metric for fertility rate in UK, titled ‘**Fertility Rate.**’ You can see and download excel data from the website of ONS (Office for National Statistics) (<http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcm%3A77-317529>).*
- *Initially, all of the main details should be filled in manually and then, you can fill the metric content in two ways.*
 - *Data Grid – Using the data downloaded from ONS, fill in the blank table in the “Data Grid” menu.*

- *From File – Creating new excel file from the data downloaded, upload the excel file. As downloaded excel file contains many datasheets, you should choose and copy the suitable data and a make new excel file for this metric.*

3.1.2. Create Historical Events

Given Scenario:

- *Moscow had been hit by the heaviest spring snow in the last 50 years. This snow lasted for three day from 14 March 2013. We can find this event from news (http://rbth.co.uk/multimedia/video/2013/03/14/moscow_hit_by_heaviest_spring_snowstorm_in_the_last_50_years_23863.html).*
- *Create this history through our policy compass platform. Using the ‘Create Historical Events’ menu, add this event as a part of our database.*
- *Name this historical events ‘**Heavy Spring Snow in Moscow.**’ You can fill the details of this event and create an event.*

3.1.3. Create Visualisation

Given Scenario:

- *As you have already created the metric ‘Fertility Rate.’ Now visualise this metric using ‘Create Visualisation’ page.*
- *In this page, add the ‘Fertility Rate’ using ‘Add metric.’*
- *Then visualise this metric and modify by the way you want to see it.*

3.1.4. Create Fuzzy Cognitive Map

Given Scenario:

- *Create a new FCM model (CCC to create Figure 3 in page 18 of D4.1 final report and ITMO to create Figure 8 in page 25 of D4.1 final report).*
- *Open existing FCM model and edit some properties of the model.*
- *Obtain concept and causal-effect strength values from Metrics Manager*
- *Enter the concept and causal strength with fuzzy value manually*

3.2. BROWSE

‘BROWSE’ provides the search for metrics, visualisations, FCM models, and historical events in database. This section shows the simple scenario for searching data using ‘BROWSE’ menu.

Given Scenario:

- *Search any metrics, events, and models through this menu.*
- *Search by queries such as ‘events’, ‘FCM’, ‘metrics’, etc.*
- *Make a query based on the keyword or title.*
- *Try to search the metric ‘Fertility Rate’ and the historical events ‘Heavy Spring Snow in Moscow,’ which are already created by you in last section.*

4. EVALUATION RESULTS FOR BASIC FUNCTIONALITIES

4.1. Evaluation for ‘CREATE’

In this part, the evaluation result for ‘CREATE’ menu is presented. CCC and ITMO provided the evaluation results after they tested the given scenario. This evaluation focuses on the technical functionalities to create new metric, historical events, visualization and FCM model. Most of the functionalities were reported to be working properly; however, the feedback also contains a number of issues and recommendations for easier interface.

4.1.1. Create Metrics

- **Issues:**

- Data sets need to be clarified with descriptions of how data should be formatted (Interface has been changed from the description in D2.1)
- Significant data cleaning is needed to upload data
- Not understanding the terminology
- Policy Domain: too short and disputable list of domains

- **Recommendations:**

- Would be useful to have some guidelines for formatting and loading data file for metric creation.
- The terms in the menus should be clarified and guided by additional information so that general users can understand how to create new metrics.
- The policy domain categories need to be expanded and/or should be editable.

4.1.2. Create Historical Events

- **Issues:**

- Unclear meaning of ‘Scale’, ‘Geolocation’
- End date of event: Can’t select future dates/years

- **Recommendations:**

- Being able to manually type in dates would be helpful as that can often be quicker than selecting dates
- Include future dates for strategic and forecasting data
- The terminologies should be clarified for general users’ the convenience.

4.1.3. Create Visualisation

- **Issues:**

- More guidance is needed – the object of this menu is not clear for users.

- **Recommendations:**

- Needs some clearer on-screen instruction for the lay user.
- Browser compatibility should be checked

4.1.4. Create Fuzzy Cognitive Map

- **Issues:**

- Not enough metrics to make various FCM models
- The location of concepts changes every time we try to run simulation
- There is not any help for Types of Activators

- **Recommendations:**

- Need for instruction for what is FCM and what people can do with FCM model
- .Need for instruction of fields in ‘Add concepts’ and ‘Create Association’ (i.e., ‘activator’, ‘weight’, ‘fixed output’)

4.2. BROWSE

- **Issues:**

- Not sure, what icons for the different search results represent.
- If one of the results is selected once, browser ‘back’ button cannot work and return the initial browse page.

- **Recommendations:**

- When we select one search result, the new page should appear for this selection.
- Description for icon (representing the types of result, i.e., metrics, historical events, FCM models) should be provided.

5. OVERALL EVALUATION OF PLATFORM

In this section, CCC and ITMO have completed the below questionnaires in order to evaluate the overall Policy Compass platform based on the selected and modified questions from the behavioural (User Centric) KPIs reported in D4.1.

Table 1. KPIs Category: Information Quality

Questions	Comments
Do you think the information on the Policy Compass platform is free from errors; has no errors and covers all information needed?	Most of basic functionalities seem to be working well, but there need to be more information and definition on the site.
Is the information on the Policy Compass platform up-to-date?	Now, the platform is alpha version. More information including metrics and events should be uploaded before publication.
Is the information presented in the Policy Compass platform relative to your needs?	N/A: Evaluation for scenario is already given and no need for other information.
Does the Policy Compass platform provide you with all the information you need?	Not in its present form, but it can provide valuable information if more data is accumulated and shared in the future.

Table 2. KPIs Category: System Quality

Questions	Comments
Is it easy to navigate within the Policy Compass platform?	No. It is not intuitive enough and members of the public may struggle. Need for improvement in interface
Is it easy to go back and forth between the Policy Compass platform website?	Relatively Yes
Is the Policy Compass platform available all the time?	Basic functionalities including creating new metric, historical data, visualization, FCM model, and browse are available. But a few improvements are needed.
Does the Policy Compass platform load all the text and graphics quickly?	Moderate but sometime it takes long.

Does it only take a few clicks to locate information on the Policy Compass platform?	Need for more directional information is needed.
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Table 3. KPIs Category: User satisfaction

Questions	Comments
Are you satisfied with the information gained from the Policy Compass platform?	Not currently, but it can give satisfaction with more fluent data and models.
Do you like the overall function of Policy Compass platform?	Partially yes, but some functionalities such as create metrics and FCM models should be modified in more user-friendly way.
Do you feel that the service provided by Policy Compass platform benefits you?	Not currently – lack of data
Are you satisfied with the complete service offered by Policy Compass platform?	N/A: Now, the Policy Compass is alpha version.

6. CONCLUSIONS

The purpose of this deliverable was to evaluate the basic functionalities of the Policy Compass platform and to receive fruitful feedback from the evaluators for future improvement of the platform. Throughout this evaluation, we can received many fruitful feedback which should be considered for future improvement of Policy Compass platform. .

For this evaluation, UBRUN developed usage scenarios for Policy Compass platform and CCC and ITMO conducted the evaluation following the given scenarios. The evaluation from CCC and ITMO can be categorized based on two different aspects; basic functionalities and overall evaluation.

Basic functionalities such as creating new metric, historical data, FCM model, and visualization are well working without bugs and BROWSE menu also provides easy search environment for users. However, many users who participated in this evaluation indicate a need for improvement in user interface. As most users are not familiar with the concepts using in in basic functionalities, guidance and instruction for using the CREATE menu is needed. The main issues from basic functionalities are summarized in table 4.

Table 4. The summary of issues in basic functionalities

Menu	Main issues and Improvement
Create Metrics	<ul style="list-style-type: none"> - Instruction for data table is needed - Policy Domain: too short and disputable list of domains - Data sets need to be clarified with descriptions of how data should be formatted
Create Historical Data	<ul style="list-style-type: none"> - Can't select future dates/years so it excludes all forecast data
Create Visualization	<ul style="list-style-type: none"> - Needs some clearer on-screen instruction for the lay user
Create FCM Models	<ul style="list-style-type: none"> - Instruction for FCM models is needed -Need for more metrics for FCM models development -The concept location changes every time we try to run
BROWSE	<ul style="list-style-type: none"> - When we select one of search results, it should be opened in new windows.

Most of these abovementioned issues are about the inconvenience in user interface and should be considered again in the development phase. Apart from this deliverable, requirement

document including these improvement and UI problem will be sent to the partners in charge of the development of each functionality.

Overall evaluation of the Policy Compass platform is not currently perceived positively. Due to the complexity of user interface, evaluators failed to feel the ease of use for this platform. In addition, only part of the public data are available on the site currently, so the users hardly feel the value of information provided by Policy Compass platform. However, as more information is accumulated by many users with improved user interface, evaluators expected that the satisfaction level of the Policy Platform would improve.

Basic functionalities of the alpha version of Policy Compass platform shows moderate performances but we found some improvements in the aspect of technical and interface through this evaluation. By sharing the feedback from evaluation phase and complementing alpha platform, we can make more user-friendly and efficient platform for the general users of Policy Compass platform. We expect the every functionalities of Policy Compass platform will be completed with high functionality and user friendly interface before we conduct field trial.