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# 1. Introduction

This document elaborates the achievement of Deliverable D.4.1.4 - Functional specification of online monitoring tool.

Enterprises seeking finance via alternative crowdfunding channels often lack the competence to develop and maintain an effective, durable and successful campaign. Therefore, they need quality service providers to assist them in their pre-launch, launch and post-launch activities.

These services may vary from different fields, such as legal advice on cross border financing issues or IPR rights, preparation of pitching video or PR advice on how to run a successful campaign.

In order to provide CF campaigners with quality service providers from different fields, through Crowdstream project we are developing the online quality monitoring tool. This tool will be in a form of web application and it will be a place where service providers can obtain a quality label through self-assessment process.

Development of functional specification represents a preliminary step for online quality monitoring tool development.



# 2. Functional and technical specification of the online monitoring tool

## 2.1. Quality criteria

The basic function of the online monitoring tool is to have defined qualitative criteria<sup>1</sup> and to provide online qualitative quality assurance of the service providers in the field of crowdfunding as well as the list of providers that meet the defined quality standards.

Table 1: Defined quality criteria for acquiring the transnational quality label

Quality criteria for CF service providers	Quality criteria for CF platforms
	No. of successfully funded CF campaigns on the platform
	Total no. of launched CF campaigns on the platform
	Success rate
	Interactions (how users interact with the platform)
	Total no. of backers
No. of successful CF campaigns	Frauds (how eventual frauds will be processed)
Success rate	Pre-screening of campaigns (before launched on platform)
No. of total CF campaigns	Information on capital adequacy requirements is available on the specific platform
Total value of successful CF campaigns	Information on data treatment provided before registration (what kind of information is stored and how, the way data privacy and online security are taken care off)
	Additional services offered by CF platform
	Specific resolution plans (in case of platform failure)
	Data aggregation (third party relations managed by the platform)
	Form of regulation

 $<sup>^{1}</sup>$  For more details on quality criteria please refer to the document D 4.1.3 Categorisation and prioritisation of quality criteria for CF services



Service providers will go through a set of questions related to the identified quality criteria. Based on their answers, software will calculate their score and if they reached set requirements, they will be awarded a quality label. All service providers who obtained quality label will be listed in order for CF campaigners to be able to see the ones who met the defined quality standards.

## 2.2. Scoring

Tables below show the scoring of individual quality criteria for CF service providers and CF platforms as well as percentage needed for acquiring the transnational quality label<sup>2</sup>. Scoring represents the information that enables the software to calculate the score of each CF service provider/CF platform. The range and number of points have been chosen based on information collected throughout other project activities including regional profiles, stakeholder meetings as well as events and workshops with different stakeholder groups, which was provided by each partner within WP2, WP3 and WP4 project activities.

Table 2: Quality criteria points for CF service providers

	Quality indicator	Range	No of points
		0	0
	No. of successful CF campaigns	1-4	5
		5-9	10
Š		10 and above	15
der		0% - 30%	5
OVi	Success rate	31% - 60%	10
service providers		61% - 80%	15
		80% and above	20
	No of total CE compoiens	0	0
CF s		1-6	5
$\mathcal{C}$	No. of total CF campaigns	7-12	10
		13 and above	15
	Tatalanda of managed CF committee	0 - 10.000 eur	0
		10.001 eur - 40.000 eur	5
	Total value of successful CF campaigns	40.001 eur - 70.000 eur	10
		70.001 eur and above	15

Maximum points	65
Required minimum for quality label (70%)	45,5

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<sup>&</sup>lt;sup>2</sup> For more details on transnational quality label please refer to the document D 4.2.1 Agreed, approved and published label granting procedure



Table 3: Quality criteria points for CF platforms

	Quality indicator	Range	No of points
		0 - 5	0
	No. of successfully funded CF campaigns	6-20	5
	on the platform	21-50	10
		51 and above	15
		0 - 50	0
	Total no. of launched CF campaigns on the	51 - 100	5
	platform	101 - 1000	10
		1001 and above	15
		0% - 3%	0
		4% - 10%	5
	Success rate	11% - 30%	10
ms		31% - 50%	15
CF platforms		51% and above	20
	Interactions (how users interact with the	No possibility for interactions	0
		There is possibility to complain and to provide other inputs	5
	platform)	There is possibility to retrieve help or guidance, to complain and to provide other inputs	10
		0-1.000	0
	Total no. of backers	1.001 - 5.000	5
	Total no. of backers	5.001 - 10.000	10
		10.000 and above	15
	Frauds (how eventual frauds will be	Procedures for identifying and managing fraudulent behaviour are not defined	0
	processed)	Procedures for identifying and managing fraudulent behaviour are defined and available to all users	10



	Quality indicator	Range	No of points
	Pre-screening of campaigns (before launched on platform)	No	0
		Yes	10
	Information on capital adequacy requirements is available on the specific platform	No	0
		Yes	10
CF platforms	Information on data treatment provided before registration (what kind of information is stored and how, the way data privacy and online security are taken care off)	No	0
CF		Yes	10
		No additional services offered	0
		Offered services include providing information on important rules and/or procedures	5
	Additional services offered by CF platform	Offered services include help and guidance with campaign preparation, marketing, financial and logistic aspects before and during the campaign, providing information on important rules and/or procedures	10



	Quality indicator	Range	No of points
	Specific resolution plans (in case of platform failure)	No specific resolution plans	0
		Defined specific resolution plans	10
rms	Data aggregation (third party relations managed by the platform)  Form of regulation	None	0
platfor		Manual	5
CF		API or similar automatic	10
		No regulation	0
		National level regulations	5
		EU level regulations	10

Maximum points	155
Required minimum for quality label (70%)	108,5



## 2.3. Design

User will have to fill the form with required information. Application will calculate does the user meet set requirements and display result back to user. Only if user meets the requirements he will be able to upload files and write message to confirm correctness of information he provided in previous form. Message and files will be sent to predefined e-mail address. Application will have full multilanguage support meaning that new languages can simply be added via standardized language file. Also, application will set default language from IP geolocation for each new user.

### 2.4. Data flow

By accessing the web application in order for the user to perform self-assessment, it is necessary to enter the required data within the required fields, ie to answer the questions requested. Through the web application and according to the predefined criteria, the user receives feedback whether the requirements are satisfied or not. The filled data is stored in the database through a web application, and a notification or e-mail is sent to the body for validation of the entered data.

Picture 1: Data flow





### 2.5. Database model

Project uses database located on Hosting server from which it uses 3 tables. Most of the tables use sequences. Sequences are used for automatic generation of unique identifier for each new row in the table.

Picture 2: Database model



### 2.5.1. Table questions

Table is located in database hosting server. It contains all questions user needs to fill in form in order to calculate score.

Table 4: Table questions

Column	Description
id	Unique row identifier
insert_date	Timestamp when row was inserted
type	Type of user questions is for
name	Question reference name
question	Question display text
order	Question display order
answer	Question answer



#### 2.5.2. Table answers

Table is located in database on hosting server. It contains all possible answers for all questions.

Table 5: Table answers

Column	Description
id	Unique row identifier
question_id	Identifier or question this answer if for
insert_date	Timestamp when row was inserted
type	Answer type (dropdown, radio, checkbox)
values	Display values
points	Score for selecting answer

#### 2.5.3. Table userdata

Table is located in database on hosting server. It contains records of all data user submitted true form.

Table 6: Table userdata

Column	Description
id	Unique row identifier
insert_date	Timestamp when row was inserted
ip	User IP address
language	User selected language
information	User information
score	User score
mail	Did user send email to us
dmail	Timestamp when email was sent.
files	Files user uploaded
type	User type

## 2.5.4. Table settings

Table is located in database on hosting server. It contains all application settings.

Table 7: Table settings

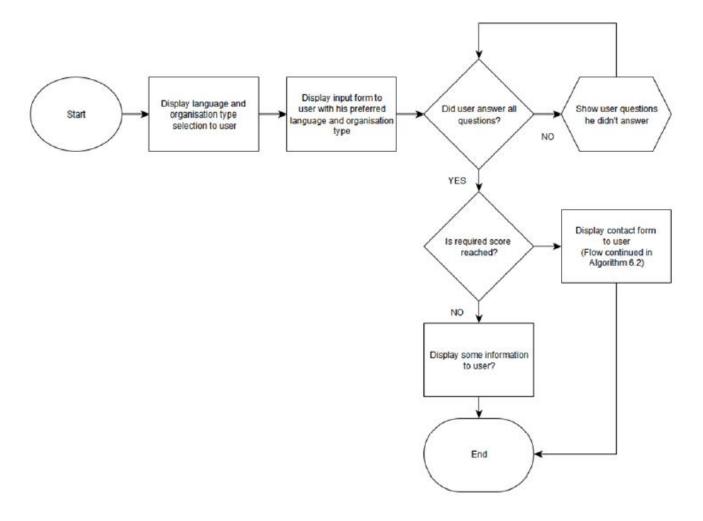
Column	Description
id	Unique row identifier
ident	Setting identifier
insert_date	Timestamp when row was inserted
type	Setting type
value	Setting value



# 2.6. Algorithms

Application will calculate score depending on user input and present further steps to user if the score is reached.

Picture 3: Alogirithms





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