

D3.3 Online Platform Structural Brief

RenoHUB H2020 project

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TABLE OF CONTENT

1. INTRODUCTION.....	3
2. Detailed description of the website	4
2.1 Necessary things before working out online platform.....	4
2.2 Structure of online platform and main content	4
2.3 Important subpages.....	6
2.4 Content Management System (CMS) and Customer Relationship Management (CRM)	8
3. Subcontractor selection and development process.....	9
3.1 Online Platform brief and selection of the IT specialist subcontractor	9
3.2 Process of development	11
3.3 Other important issues, development opportunities.....	11

PROJECT PARTNERS

AACM: AACM Central Europe Llc

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IMRO: IMRO-DDKK Non-profit Ltd

MCSTE: Hungarian Family House Owner Organization

MEHI: Hungarian Institute for Energy Efficiency

1. INTRODUCTION

After long preparations, a unique website started in Hungary to help energy efficiency renovations: the RenoHUB project's RenoPont online platform (only in Hungarian).

RenoPont website gives the renovators an overview, basic information so that they are aware of the most important aspects of renovations and deep renovations, and helps them to go to the consultation prepared. It helps the renovators through the renovation process: guides them from financial options to specialist recommendations and operational advice. It offers niche services such as online booking for free consultation, downloadable templates, a glossary, product selection advice and information on financial options. In the future, a database of trusted experts and contractors, as well as an online calculator, will also help those planning a renovation. The online platform can be accessed via www.renopont.hu (only Hungarian).

The aim of the online platform is to provide renovators with all the information they need to modernise their home in one place. We help them to make the right renovation decision: we write about the benefits of deep renovation, the importance of planning, the structure of energy certificates, we present good examples, we run an energy savings calculator and we update them on the financial options. Once the renovation decision has been made, we recommend pre-qualified professionals through our professional database, downloadable documents, product selection guide, description of permits, glossary, frequently asked questions, useful materials to support renovators in moving forward, quality construction. They can book free consultation online, subscribe to our newsletter, give feedback on the service and there is a brochure for our professional partners to join.

The aim of the Structural Brief is to transfer the know-how of the process and lessons learnt of the platform creation, in order to allow international replication. Since, together with Customer Relationship Management System, this is a very complex, custom development (it is not possible to develop in wordpress or other IT platform basis), it is important to be aware of the pitfalls, the complexity of certain work phases and the time required to design and implement an online platform supporting one-stop shops.

2. DETAILED DESCRIPTION OF THE WEBSITE

2.1 Necessary things before the development of the online platform

Before the Online Platform begins to be developed, the following things must be ready: communication strategy; image manual and name of service. It is very important to know who are the target groups of our service, what are their characteristics, what kind of messages we would like to get across to them. The image manual collects all the visual elements to be used in the development of the platform and the name of the service is needed to be booked as domain name. At the beginning, when choosing a brand name, it may be important to have a free domain. It is essential to select communication expert earlier as online platform subcontractor, because we need ongoing consultation between the communication and IT subcontractor on the OP frame, structure, illustrations and specific sub-page content.

2.2 Structure of the online platform and main content

Landing page. It is useful to have a landing page and newsletter subscription opportunity during development of the online platform.

Content. First it is essential to collect all information which could be useful for a renovators. On the RenoPont platform you can read about the benefits of deep renovation, the importance of planning, the structure of energy certificates, we present good examples,

we run an energy savings calculator and we update the renovators on the financial options. Then we recommend pre-qualified professionals through our professional database, downloadable documents, product selection guide, description of permits, glossary, frequently asked questions, useful materials to support renovators in moving forward, quality construction. Renovators can book free consultation online, subscribe to our newsletter, give feedback on the service and there is a brochure for our professional partners to join.

Structure, subpages. After collecting all the information, we brainstormed with consortium members how these information could be classified. In addition to “rational” grouping we used user journey as well. On the advice of the IT specialist we used only 4 subpages (“I would renovate”, “RenoPont”, “Knowledge Centre” and “Contact”) and “My profile” which you can use only after registration. We have designed the site so that the most important things can be accessed from more than one place and are mentioned more than once (deep renovation, energy survey, importance of contracts, book of appointment, financial opportunities).

It is very useful that we can expand the number of subpages: the frequently asked questions and useful materials of other organisations was added to the website after its development. As there is a lot of information on the site, it is useful to include a **search function** on the website. Another important aspect is to determine which menu items will be subject to registration

Structure of our RenoPont webpage is:

Banner
Notice

Main page				I would renovate				RenoPont	Knowledge centre	Contact
				Basics - why should I renovate?	Planning or extending my renovation	Let's get started - knowledge centre	Construction, finishing work, proper use			
Main picture				The benefits of energy efficiency and deep renovation	How to renovate? (flow chart, steps)	Financial opportunities	Implementation with continuous technical monitoring	RenoPont 8 steps	News, blog, newsletter	Booking an appointment
Basics	I'm planning	Let's get started!	Construction, finishing work	Good examples, before and after pictures	Energy experts, energy certification	Product selection guide	remedies, guarantees	Services, packages	Frequently Asked Questions	Contact details, map search, social media, offices staff
Meet us -> Services / RenoPont				Online calculator	Would you extend your renovation?	Professionals' database	Operation and maintenance advice	Our goals, RenoHUB	Glossary	Press contact
Good examples, before and after pictures						Template documents	What was it like to renovate with RenoPont? Feedback form	Be our Partner!	Financial opportunities, professionals' database, product selection guide, template documents	Feedback form on the service complaints handling
Latest news							Assess the professional! Form			Be our partner
Contact										
Be our Partner!										

Contact
Newsletter subscription
Founded by EU

Target groups. We had to decide if we make different website for different target groups (family house owners, flat owners, common representatives of condominiums), but we saw that very little different information we could give them that is why our page is united for these 3 target groups. We have gone through the customer journey by target groups (family building, apartment, entire condominium) to see if you can find everything you are looking for. We didn't split the target groups, only for content where it was relevant (template document, financial options, etc).

Main page. Another important question is what information should appear on the main page and in what order. We chose our slogan, book an appointment, calculator, promotional video, subpages of "I would renovate", renovation service and project presentation, references, good examples with photos, latest news, contacts and information for professionals.

Most important information, header, footer. We had to guess which information should appear more times e.g. on the bottom of the different subpages. We decided that "appointment booking" should appear as many as possible, and on the bottom of the website the newsletter subscription, our contacts, social media channels and the structure of the website could be seen. Additionally we also put notice (e.g. one of our office is closed for holidays) and banner for advertisement to the header and in the footer a privacy notice, cookie-settings, and "project was funded by the EU".

Illustrations. It is important to use unified identity, image. The mascot figure, the mascot family was the IT subcontractor's idea, and it can be used very well in communication.

2.3 Important subpages

Registration, my profile. It describes why it is worth to register. Functions available with registration: online calculator, database of professionals (after consultation), booking of appointments; save favourite documents, and professionals. Registration is possible after acceptance of the privacy policy. In "my profile" renovators can see their appointment booking which could be cancelled, saved calculations, saved favourite specialist, and documents.

I would renovate. Here we share a lot of information on the benefits of deep renovation, good examples, the importance of planning, energy certificates, phased renovation, financial options, quality construction, operating advice. The table of contents is very important on each page because of the many sections and information! Document, link, image can be uploaded with each content.

Online calculator. A partner of us (Budapest University of Technology and Economics) developed the excel file, based on the Hungarian building typology, which calculate the energy usage of the building or apartment. The IT subcontractor had to display this excel file in a pleasing, understandable way. The calculator cannot count investment costs, because prices are constantly changing and even very variable. You can calculate energy

savings, but not overheads savings, because usage is various in different households (underheating will not save as much overheads as the house will save energy).

In the brief we asked for a simpler calculator, so it can only calculate the energy consumption of the building, but in a new development stage we will ask the IT developer for a comparison of 2 renovation options. The presentation of the result had to be well communicated and eye-catching, so in addition to energy savings and the condition of the different building structures, CO₂ savings in wood value were included. Once the results have been calculated, the calculator encourages the user to come into the RenoPont office for consultation.

The calculator saves the user's details in the CRM system, which can be recalled later and, if he or she attends a consultation, the operator will have fewer questions to ask.

Knowledge centre. On the subpage "Knowlegde centre" we repeated the most important information what renovators who have visited the site multiple times are looking for.

These are: financial opportunities, database of professionals, product selection guide, template documents, energy saving calculator, glossary, permits, useful materials of another organisations and frequently asked questions (about renovation).

News, blog. In this subpage we can upload latest news about renovations, financial opportunities, interesting events, etc. and blog post where we present a renovation topic in detail with several links to different contents of our webpage. You can also start a separate blog menu. News and blog posts are searchable by topic. News that will become obsolete later are listed under "news" topic. By blog posts it's important to specify the topic so that it can be retrieved later (e.g. window replacement, condominium renovation, benefits of deep renovations; renewable energy sources, energy certification, energy saving tips). The topics can be given by us. By news SEO settings and SEO description are important, and it is useful if the system could show (like wordpress) how good the SEO setting and readability are. It could be useful when news could be scheduled.

Professionals' database, professional assessment. We have organised the pre-qualified professionals in a database, where we include their name, contact details, field of activity, area of operation, description, references and rating by users. Professionals can be searched by field of activity and location. The database is only visible if someone has already attended a consultation (to learn about the basics of deep renovation, energy design).

The users could assess the professionals, but only those they have used. The renovators can rate the professionals on 8 criteria + text rating. The operator can moderate the text rating, but only for offensive terms. From a competitive point of view, all evaluations must be shown, even the lowest scores.

Glossary, frequently asked questions. Glossary's structure is collapsible and terms could be search by topic. Frequently asked questions could be search by topic as well.

Contact, booking an appointment. It is important to indicate the contact details, opening hours and services of the offices. It is worth displaying the offices on a map. Each office should have the name and photo of the operator, which builds trust. In addition to face-to-face consultation, online service should also be available and should be differentiated when booking appointments. If online, the operator will send for the renovator a zoom link where they can talk with each other. When booking an appointment, it is useful if the phone number is mandatory information if the operator need to cancel the appointment. After booking, the user will receive an email confirming the successful booking, including the date and location. Registration for booking an appointment could be useful but not necessarily required, because many people are discouraged from registering and get nothing in return. When booking an appointment, it is important that the administrator can take out appointments when the operator is on holiday.

Feedback. Complaints or other comments can be submitted about the website, consultation, professionals through an easy form. Users can give feedback on the site by selecting the like/dislike buttons at the bottom of all pages. A detailed questionnaire was sent out for users about the website in exchange for a prize.

Newsletter subscription. It is important that name and email address required to subscribe because of GDPR regulation. You can subscribe to one type of newsletter on our webpage, but it is possible to create more newsletters for different target groups (e.g flat, family house; entire condominium; small business; professionals)

2.4 Content Management System (CMS) and Customer Relationship Management (CRM)

The subpages of CMS are: media library for pictures, news, notices, subpages of the website, frequently asked questions, glossary, services, service packages and user journey's steps.

It is very important to develop a CRM system where different offices could only see their own users' data for privacy reasons. This makes the development complicated but it worth.

The CRM training has to be done by all office operator, a user manual is also being prepared so that there is a reference for future questions or operators hired later.

CRM subpages: User's datas, offices, booked appointments, professionals' database, professionals' evaluations, feedbacks, template emails, monitoring user's renovation process, tasks of operators.

User's datas. Datas can be seen by users. Important datas are:

- Name
- contacts
- which office he/she belongs to
- personal details

- building details
- energy usage datas
- complaints
- renovation plans

Template emails. You can upload text for automatic template emails which send the system around some important user journey steps. E.g: before the first consultation the system can send the renovator an email automatically which documents should bring with him/her.

Monitoring user's renovation process. Here the adviser can record where the user is in the renovation process.

Tasks of operators. The system constantly updates what an operator should do, based on monitoring and user data. For example, it warns the operator to contact the user a few weeks after the first consultation to see if he/she has reached the professional, if there is anything else we can do to help them. This system could help a lot for operators when they have to handle a lot of users at different stages of the renovation.

Privileges. There are 6 types of privileges: 1. visitor 2. registered visitor 3. consulted visitor 4. office operator (sees users) 5. admin 6. superadmin

3.SUBCONTRACTOR SELECTION AND DEVELOPMENT PROCESS

3.1 Online Platform brief and selection of the IT specialist subcontractor

To be able to choose the right IT specialist we should write a proper brief which should contain:

- short summary of the project/service
- introduction of the project:
 - background
 - partners
 - mission, vision
 - aims
 - process
- online platform as a communication tool:
 - communication strategy
 - target groups
 - main messages
 - communication style
 - tools, images to be used
- planned online platform structure
- planned functions and their description

- detailed description of the IT-heavier functions and units (professionals' database, energy saving calculator – what results are expected, costumer relationship management system, registration information – my profile)
- website inspirations
- technical details, questions:
 - hosting (how many people are expected to use the website)
 - storage can be on the organisation's own software?
 - what about the domain name
 - open source language
 - optimised for mobile phones
 - language of the website
- details of the tender (deadline, content of the quotation, etc)
- guarantee
- operation after the initialisation
- the framework within further improvements, developments should be made

It is useful to have an IT specialist in the organization to be able to ask questions in connection with OP brief, tasks, technology, applications, mainly in connection with technical details and the time required for a particular task.

Because this development is very complex, it is essential to choose an IT specialist who makes good quality of work, flexible and meets deadlines. Therefore, not only price but also previous references are very important when choosing a contractor. You can even contact previous clients to see how satisfied they were with the IT specialist's work.

We selected the winner in two round: the IT developers had questions about the details of a part of the online platform (e.g. online calculator, CRM modul), and we could choose the winner based on the answers. The selection lasted about 3 weeks, and the decision about the winner was based on price and references.

The chosen subcontractor often failed to meet deadlines, it might have been worth talking to some of his previous clients to identify such drawbacks. Penalties were stipulated in the contract, but if we had asked for a small change from the original order, it would have been very difficult to enforce the penalty; on the other hand, another IT specialist would probably not have been able to take over the development if we had changed subcontractors halfway through.

Due to the complex CRM system and calculator, custom development was the only way, wordpress-based development was out-of question. If you are building a simpler website without CRM system and calculator, there is no need for custom development. In this case, it is more useful to have open source or wordpress development done, so that another IT developer can take over the development later. The website is used by many people, it requires large storage space. It should work well: no freezes, no error messages.

3.2 Process of development

When developing the site, it is useful to take the advice of IT subcontractor, but it is important to stick to the main points.

Time management. The wireframe is completed first, followed by the graphics and subpages in parallel. The calculator, CRM system and specialist database can be developed in parallel with the writing and uploading of page content. Testing the front-end functions took a couple of weeks and uploading the content took several weeks. At the latest by the end of the development of the front end functions, services that are accessible from multiple locations should be figured out. By using them, we have come up with package offers and included them as part of the renovation process (RenoPont 8 step). After designing the services, we worked out the details of the CRM system: permissions – what can employees in different offices see? Professionals can be seen by all. Who can upload content? Who can moderate the evaluation of a professionals?

For IT professionals, it is most useful to describe and deliver a sub-task in detail and not change it later. For our subcontractor it took six months to create the site and six months to develop the CRM, database and calculator.

Content writing and uploading. Content writing was divided between the consortium partners; length and structure were fine-tuned by the work package leader; then communication subcontractor standardised the language and style, but the communication basics were clarified in advance: pronouns, lots of structuring, clear language, explanation of technical terms in the glossary. We uploaded the content of subpages, we can change it at any time. We can even add new subpages or change the sequence.

Testing and further development. Testing after making the site public is very important, including by the renovators, so IT staff should be available for several months to fix bugs. It is worthwhile to have a separate contract addendum for new developments, where changes can be made to the site (not bug fixes) depending on the experience, e.g. removing registration for booking appointments; developing a search function, changing the structure based on hotjar feedback, opportunity of locked content (after registration), etc.

3.3 Other important issues, development opportunities

GDPR. In parallel with IT development, GDPR regulations need to be developed: the privacy policy, cookie management, choice of newsletter (Mailchimp, Google, non-European controller), rules applicable to registration. We recommend preparing GDPR when all processes are finalized: which services are paid, who will provide the invoice, how best practices are channeled, how pilot projects will be implemented. Social plug-ins – news can be liked, shared – were not recommended because of GDPR reasons. In cookie settings it is optional, whether you choose essential or marketing or all cookies. In Hungary,

the consortium leader also needs to undergo training on data management, all of which is time-consuming.

Social media. We have chosen Facebook, Instagram and YouTube channel to use. It subcontractor created social media accounts.

Other documents. It is useful if other documents can be uploaded on different parts of the site e.g. specialist contract; specialist training videos

Registration as a professional. It could be useful, but more expensive and complicated to develop. Its advantages are: access to the professionals' database, professional can change their data's (now the operator do it); easier to register in the database; professional training materials can be put here, cooperation contracts can be put here. Disadvantage: much more people use the CRM and could make mistake.

Maintenance, operation. Once live, we test the site and for 1 more year we can report errors and bugs and they will be fixed. For operation, a separate contract must be signed.