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BIOWAYS
Bio-based economy: network,
innovate, communicate

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Creation of the BioWatch platform

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Creation of the BioWatch platform

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1. EXECUTIVE SUMMARY

This report summarises the development of Bioways' Collaborative Platform to be known as the BIOWATCH PLATFORM. The platform was made live online in June, 2017 and will continue to develop throughout the project lifespan and beyond.

One objective of the BioWatch Platform is to enable the creation of multidisciplinary communities involved in Bio-Based Industries (BBI) from a business, research and policy perspective as well as involve the general public and media. The community will promote the dissemination and exchange of ideas, research outcomes and BBI-related content and the links created online will lead to further collaboration opportunities among the different players.



Figure 1 The BioWatch Platform logo

Another objective is to provide research projects with an innovative dissemination platform, where their results can be seen in an attractive and accessible format, in context with other research focused on the same societal challenges. The purpose is to raise the interest in and visibility of EU-funded research in the field of "Bio-Based industries" and stimulate discussion around the research policies, results and agendas this research creates. The BioWatch Platform is an interactive repository for interactive, multi-media digital brochures known as SEEDs. The library combines the very best of traditional publishing with the very latest digital publishing techniques, using a variety of media. The Bioways SEED has been specifically designed to enable widespread communication of EU-funded BBI research.

It allows the users to stay informed on research breakthroughs by providing access to a diverse range of material in a variety of formats, including articles, videos, recorded interviews and news. Library visitors can also interact with research projects about their latest results and innovations, while the platform also integrates projects' social media activity, thus aggregating all communications into one attractive space.

The BioWatch Platform also delivers general information about the bioeconomy and bio-based products to the general public and other interested stakeholders in an engaging news format. This section of the platform is open to general news stories, event information and other

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related content and also highlights latest news from participating projects – another incentive for projects to be a part of this community.



The BioWatch Platform is also a repository for the Bioways eLibrary, with all content available through simple search functionality, providing access to specific documents, searchable by type, author, owner, thematic focus and date.

In summary, the platform is a valuable asset for those seeking to promote their work and build communities of like-minded individuals and institutions. It is also an asset for those seeking information about BBI research and looking to keep up to date with developments as they happen.

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2. TECHNICAL OVERVIEW

The Bioways SEED framework, or the BioWatch Platform, has been built on project partner IPL's development site and will be hosted on IPL's server as a live portal. Ongoing development will continue throughout the project lifespan and this will be done on the development site in parallel with the live portal, which will be continually updated.

BioWatch runs on a PHP backend with an HTML5/Javascript front end. It uses a MySQL database - the code has been upgraded to use the MySQLi PHP library, which is the more secure and efficient replacement for the older standard MySQL PHP library.

The Javascript for the front end user interface uses the latest versions of JQuery and JQuery UI libraries to ensure the best possible consistency across desktop and mobile devices. The data for each SEED is kept abstract from its visual representation, so new types of SEED player could be developed in the future to suit different devices should the need arise.

3. WHAT IS A SEED?

A SEED is an interactive digital brochure that combines the very best of traditional publishing with the very latest digital publishing techniques, using a variety of media. The SEED has been specifically designed for research projects to enable active dissemination.

SEED offers a purpose-built content management system where all types of content, including copy, graphics, video, audio and flash presentations can be uploaded and published into an attractive and easy-to-navigate digital brochure called a SEED.

Other documents, files and publications can also be stored in a SEED to be downloaded on to desktops.

Projects can choose from a range of flexible brochure templates in which the content can be presented.

Brochures come with in-built interactive functionality and integration with social media sites such as Facebook, Twitter and LinkedIn. This enables direct communication between research projects and their audiences and ensures that all project communications can be viewed in one space.

SEEDs also have their own interactive functionality so members can keep their own personal notes on individual projects as well as leaving comments for others to see.

Bioways SEEDs can be viewed both on and offline and can be integrated into a project's own website as well as being hosted on the BioWatch Platform. They can also be put on to a memory stick to be distributed to delegates at conferences.

But it is through the BioWatch Platform that SEEDs really come to life, bringing BBI research and innovation to the fingertips of all relevant stakeholders.

4. THE BIOWATCH PLATFORM

The real genius of Bioways SEEDs is the way in which information is distributed – through its own, dedicated research library, the BioWatch Platform.

The BioWatch Platform brings BBI research dissemination into context by hosting all project SEEDs in relevant thematic sections of the identified societal challenges facing Europe, and enabling members to follow those SEEDs in which they have a specific interest, from a policy, business, research or general public perspective (Bioways' quadruple helix).

Once created, bio-research project *SEEDs* are published on this library and disseminated to decision makers, influencers and all stakeholders within the BBI and its research domain. Interested library users can select to 'follow' each *SEED* in order to keep abreast of the research and innovation updates and developments. Followers are automatically alerted of any new content published on SEEDs, meaning they are always kept fully up to date with the results of their selected project.

For projects, this ensures they are constantly building and interacting with a valuable list of potential users, collaborators, partners and funders, all with a known interest in their work

Another major benefit of featuring on the Bioways SEED library is that those with a genuine interest in the work projects are doing are more likely to find out about you than by simply browsing the web. In the *SEED Research Library* projects are placed next to other research projects that are exploring similar or complimentary areas of research and innovation – i.e. the library puts research projects into context.

4.1. BIOWATCH PLATFORM KEY BENEFITS OVERVIEW

- Puts research projects into the context of what's going on in BBI research across Europe
- Builds up a list of project 'followers' for future targeted communication and collaboration
- Reaches a much wider and relevant online audience than standard websites
- Enables collaboration, partner and funding opportunities
- Shares information and communicates with user groups and audiences of similar projects – so avoids reinventing the wheel!
- Gathers feedback, shares knowledge and interacts with other projects and users for future research and innovation success

The BioWatch Platform will be actively marketed by the Bioways project to ensure an ever-growing membership base to benefit each research project it features. Future plans include a Bioways web application.

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Having a presence on the Bioways SEED library is an efficient and cost-effective form of active dissemination available to BBI research projects, while it allows for effective community building of stakeholders with complementary interests.

5. MEMBERSHIP

The BioWatch Platform is a membership portal. While all the information about BBI research contained in the library is open access, being a member brings additional benefits, while also enabling projects involved in Bioways to gather valuable data and build bespoke communities.

When joining, members provide specific information in their profiles and gain access to valuable data about fellow members in return. The data they provide will help Bioways build a useful database of stakeholders and be able to categorise members within the targeted audience defined in the project and aid targeted dissemination.

The large database of member stakeholders will link people through their mutual interests, expertise and involvement in research both past and present.

5.1. JOINING AND DATA COLLECTION

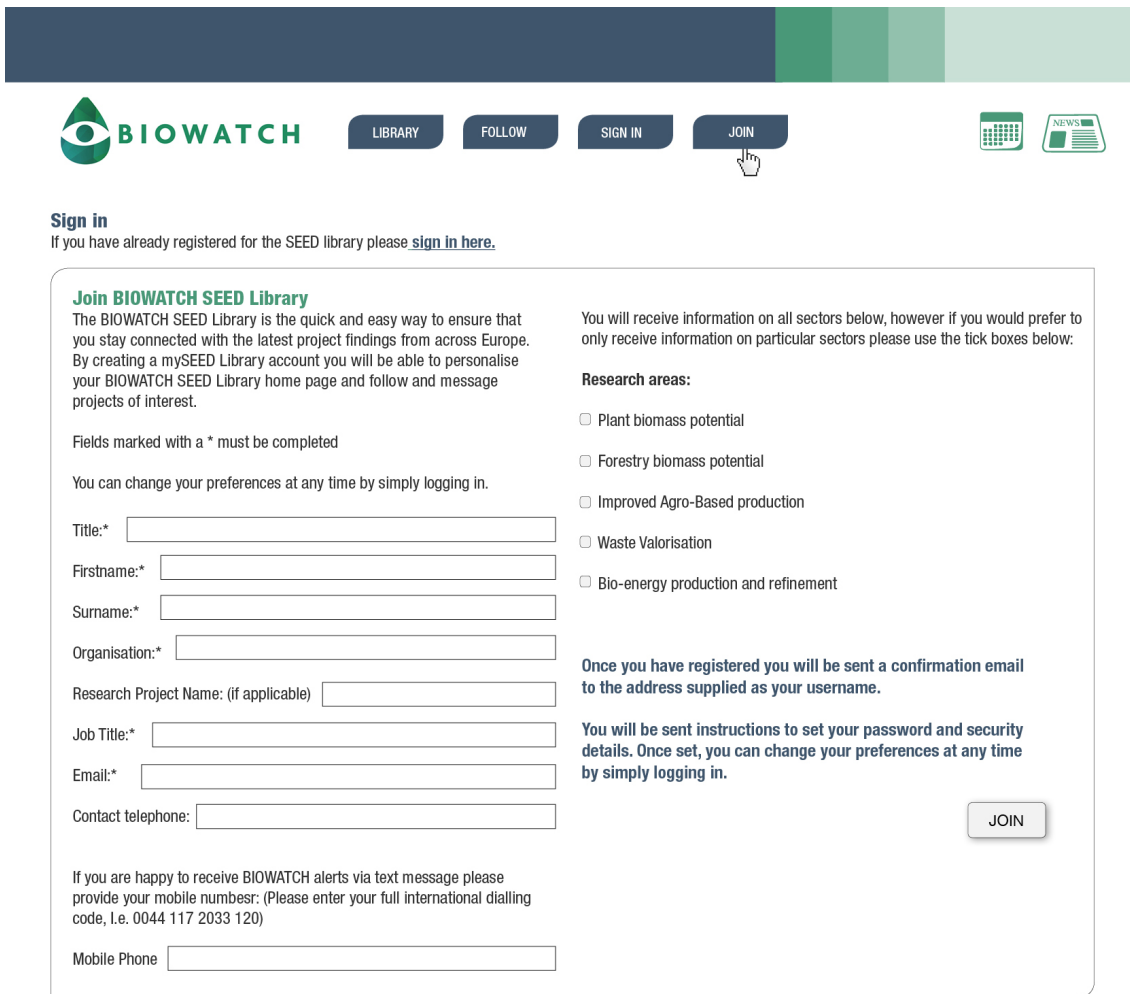
All those involved in or with an interest in BBI research will be invited to join the BioWatch Platform through extensive marketing activity by the Bioways project. Benefits of membership will also be clearly signposted on the Library portal and on the Bioways website.



Figure 2 The benefits of membership outlined on the “Why Join?” page

Members will be asked to submit specific data about themselves that will form their profile. From this, they will be able to customise their library interface to make it more useful for their specific needs, while their profile information will also enable projects to target specific information related to each member’s specific interests.

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The screenshot shows the 'Join BIOWATCH SEED Library' registration page. At the top, there is a navigation bar with 'LIBRARY', 'FOLLOW', 'SIGN IN', and 'JOIN' buttons. The 'JOIN' button is highlighted with a mouse cursor. Below the navigation bar, there are icons for a calendar and a news document. The main content area is titled 'Join BIOWATCH SEED Library' and contains the following text: 'The BIOWATCH SEED Library is the quick and easy way to ensure that you stay connected with the latest project findings from across Europe. By creating a mySEED Library account you will be able to personalise your BIOWATCH SEED Library home page and follow and message projects of interest.' Below this text, there are instructions: 'Fields marked with a * must be completed' and 'You can change your preferences at any time by simply logging in.' The form includes input fields for 'Title:*', 'Firstname:*', 'Surname:*', 'Organisation:*', 'Research Project Name: (if applicable)', 'Job Title:*', 'Email:*', 'Contact telephone:', and 'Mobile Phone'. To the right of the form, there is a section titled 'Research areas:' with four radio button options: 'Plant biomass potential', 'Forestry biomass potential', 'Improved Agro-Based production', and 'Waste Valorisation'. Below the radio buttons, there is a note: 'Once you have registered you will be sent a confirmation email to the address supplied as your username.' and another note: 'You will be sent instructions to set your password and security details. Once set, you can change your preferences at any time by simply logging in.' A 'JOIN' button is located at the bottom right of the form.

Figure 3: The joining page from which Bioways member profiles will be created

In addition to the information gathered on the form, there is a free form space where members can add additional information to complete their profile. This can include positions held, expertise, involvement in programmes and projects, for example, “governmental expert at the H2020 Programme Committee” or “expert evaluator in FP7”. This will be valuable for the members as it will help link them up with relevant projects and members in the Library.

Members are also able to add information about the SEEDs within the Library with which they have an association. This will help build up a useful database of research actors involved in specific types of research and bespoke contact groups can be created to aid future collaboration. This part of the membership enrolment is moderated to ensure only bona fide associations are recorded.

5.2. BENEFITS OF MEMBERSHIP AS A BIOWATCH PLATFORM USER

From a library user perspective, the benefits of joining the Bioways community are that you will receive the latest information about research in which you have a direct interest. Membership will put you into direct communication with the researchers carrying out that

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work, while being part of a wider community you will be able to interact with others who share similar interests.

Membership brings you the following enhanced functionality:

5.2.1. Customisation

As a member, you will be able to customise your library interface so that your home screen only displays the SEEDs of the projects from those sectors you have selected in your profile. You can see all sectors, but only those you have selected will appear on your own personal home page.

5.2.2. Follow function

As a member you will be able to “follow” individual project SEEDs in which you have a particular interest. All SEEDs selected to be followed will be displayed in each member’s personal My SEEDs section for easy access. By following a SEED, members will be automatically alerted by email to the latest developments posted by the project in the library, ensuring they are kept fully up to date with the project’s progress and any results. By following a SEED, members will also be able to post comments on that SEED’s individual wall, meaning they are able to be involved in ongoing discussions online about the project’s activities

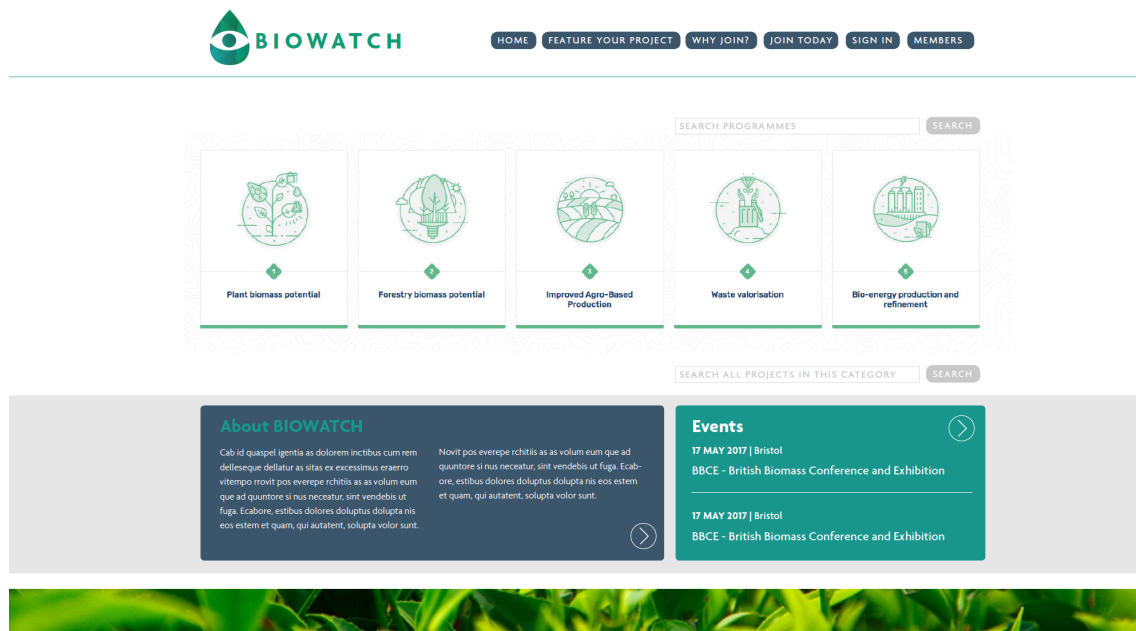


Figure 4: Members are able to customise their home page and select which of the various sections to display. They can also select to follow individual SEEDs for My SEEDs

5.2.3. Member profile

When joining the BioWatch Platform, members will be asked to submit information about themselves and their interests, which will form their profile. Each member will then have their own profile page, which is visible to other members. This will enable members to be grouped according to interests and targeted for relevant communications. Information gathered for the profile includes:

- Name
- Expertise in relation to the BBI Value Chains
- Country
- Organisation
- Type of organisation – dropdown
- Job title
- Main role
- Phone
- Email
- Company website
- Web presence on Twitter, LinkedIn and Facebook
- BBI areas of interest – BIOWAYS’S thematic focus for now based on the BBI-JU’s five value chains. Following the publication of the new SIRA and the four-step value chain, this is being upgraded.

Members will also be able to add information about themselves and their work in a free form box that will be added to their profile page, alongside their head and shoulders photograph.

The areas of interest will be displayed on members’ profile pages as attractive icons that match those used on the Bioways website



Figure 5: Thematic icons as displayed on BioWatch website

Some information to be displayed on the member profile pages will be displayed on every page, but members can choose to hide certain information, like phone numbers, for example.

5.2.4. Search functionality for members

All member profiles will be included in the Bioways SEED database. This is destined to become a valuable resource for all stakeholders involved in BBI research and implementation from the four areas of interest highlighted by the project – academia, business, policy and general public and media. To increase its viability as a valuable resource in this sector, the database is searchable and members can be found and grouped in relation to their stated interest in BBI, geographical area, job, areas of research, activity in the Library (followed SEEDs). See section 8.

5.2.5. Member’s social media integration

When signing up as a member and filling in profile information, members will be asked to include their details for their Twitter, Facebook and LinkedIn activity. This is voluntary. All social media activity for the channels selected by each member will be displayed on their profile page – keeping all their activity in one place, displayed within the SEED Player. Once a member is following individual projects (SEEDs), their activity on each SEED’s wall will also be displayed on their profile page. Members can also see which SEEDs each member is following. If they have their own SEED, these details will also be added to the profile, with a link to it, list of followers of it and list of associated members.

5.2.6. Content nudging

As part of the member’s customised home page in the BioWatch Platform, sections will be added that enhance their experience and increase their exposure to information within their stated interests. As well as the My SEEDs section, which contains all their “followed” SEEDs, their will also have a “Featured SEEDs” section that contains all SEEDs within their stated interests that have new information and a “Recommended SEEDs” section that pushes SEEDs into their home page that the Library thinks they may be interested in. Finally, members will be able to apply to have their own SEED in the Library by clicking through to a “How To” page and application form.

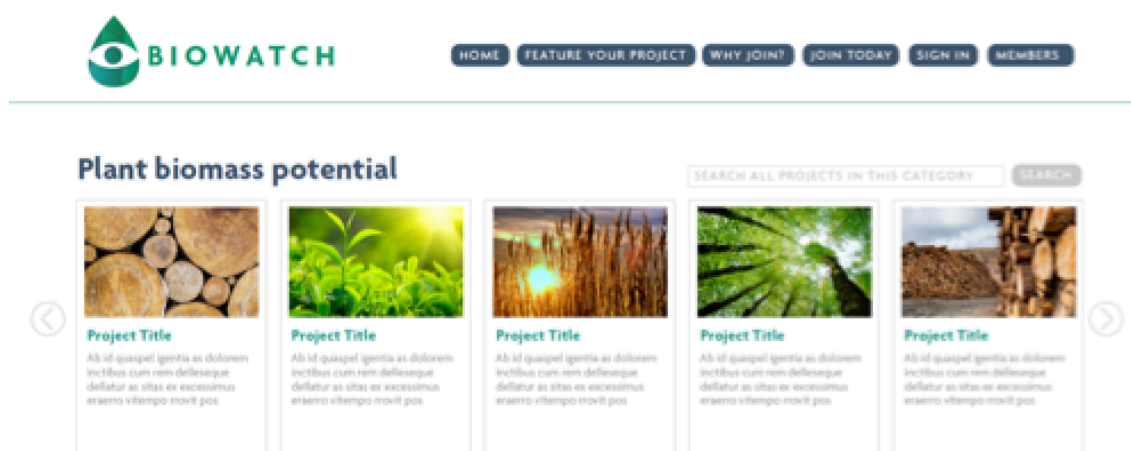


Figure 6: How the projects are displayed on the member home page for each of the five value chain thematic sections of the platform

6. BBI PROJECTS IN THE BIOWATCH PLATFORM

As well as being a valuable information source and interactive community for library visitor members, the BioWatch Platform has also been designed to deliver valuable benefits for those projects involved in using the resource as a communications tool for their research work.

It is important that the SEED ecosystem is seen as useful from these two perspectives – for those looking to be informed about the latest thinking in the BBI domain and for those looking to communicate that thinking to a relevant audience.

6.1. INITIAL PROJECT SELECTION

Bioways partners have selected 30 BBI projects to be part of the initial launch of the Bioways SEED library. These projects have all been identified as being interested in benefitting from the enhanced dissemination strategies being developed by Bioways to be offered to projects.

All 30 projects have been invited to participate and have been sent the relevant information about the materials they need to collect and the process involved.

For this first iteration, Bioways partners will build the original SEEDs, but after that initial stage, the library will be opened up to projects for them to manage their own SEED build and ongoing maintenance. It is important that projects have this functionality and are responsible for keeping their SEEDs up to date. By being made aware of the benefits of this activity, they will understand why remaining active in the library is so important for their dissemination success.

The materials needed for a typical SEED build are indicated in the following figures 7&8. These have been sent to the selected projects for the initial build and will be adapted for projects who register to participate and will be building their own SEEDs in the future.



Materials needed for the SEED

A SEED can use any of these button types. A button type can be included more than once if needed.

SEED page description	Materials we require from you
<p>Cover Page <i>Visually striking with heading and summary of the project, displaying the buttons listed below.</i></p>	<ul style="list-style-type: none"> <input type="checkbox"/> Filled in 'Project Information Form' to form the 'at a glance' information <input type="checkbox"/> Any existing social media platform details, such as Facebook, Twitter, LinkedIn, etc. <input type="checkbox"/> Any images that you would like to use for the rotating cover pages. <i>BIOWAYS has a large library of images that can be used if needed.</i>
<p>Button One – Text button <i>Required text for button one – you can have any number of text buttons</i></p>	<ul style="list-style-type: none"> <input type="checkbox"/> Text to be provided / written by Insight Editor (TBC) <input type="checkbox"/> Any relevant diagrams or images you wish to accompany the text
<p>Button Two – Project Team <i>This section identifies the key personnel involved in the project, providing a brief resume of their work and expertise, details of their role within the project, contact details etc.</i></p>	<ul style="list-style-type: none"> <input type="checkbox"/> Photograph of each team member <input type="checkbox"/> Short bio <input type="checkbox"/> Role within the project <input type="checkbox"/> Contact details – phone, Skype, email, Twitter
<p>Button Three – Project Partners <i>This section showcases all partners involved in the research, outlining the nature of their involvement, their expertise and the work they have done.</i></p>	<ul style="list-style-type: none"> <input type="checkbox"/> Partner logo <input type="checkbox"/> Brief description of involvement <input type="checkbox"/> Key contact details – phone, Skype, email, social media etc
<p>Button Four – Image Gallery <i>This button brings up a library of all the project's imagery, including graphs, panels and other graphics. There is space for explanatory captions for each image.</i></p>	<ul style="list-style-type: none"> <input type="checkbox"/> High resolution images and suitable captions
<p>Button Five – Video <i>Videos are displayed as thumbnails in the scrollable section and explanatory words can describe what each shows.</i></p>	<ul style="list-style-type: none"> <input type="checkbox"/> VTI video with suitable introductory text (we can write this for you if you wish) Videos should be MP4 if possible
<p>Button Six – Presentation <i>This will include the project's PowerPoints. An audio recording will go alongside the PowerPoint recording. If this does not exist, it can be arranged</i></p>	<ul style="list-style-type: none"> <input type="checkbox"/> PowerPoint <input type="checkbox"/> If you are providing the recording, please provide the audio. If you wish us to record it, please provide a suitable script.
<p>Button Seven – File Repository <i>This button hosts files for users to download. There is space for a short description of each file.</i></p>	<ul style="list-style-type: none"> <input type="checkbox"/> Any files in pdf or word format <input type="checkbox"/> Suitable descriptive captions

Figure 7: A check list for a typical SEED build



Project Information Form for the SEED

Please fill in...

Project Title <i>(Acronym and full title):</i>	
Call Identifier	
Theme	
Specific Program	
Total Call Budget	
Project Cost	
Project Funding	
Project Start Date	
Project Duration	
Project End Date	
Coordinating Organisation	
Call Objective	
Projects Proposed Solution	
EC Funding	

If your information cannot be categorised as above, we do have an option to have a free flowing text box instead. If you would prefer this, please detail the information you would like displayed below.

Figure 8: A project information form. This information will be displayed in an interactive pane on each project's SEED.

6.2. SEED OWNERS

A SEED owner is someone, a project, who is able to add a SEED to the BioWatch Platform, add content and manage users. A lot of work has gone into simplifying the interface the SEED owner will use and explain how the process works. The idea is for the portal to be self managed, with Bioways partner IPL acting as systems administrator for:

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- Quality control
- Helpdesk
- Assigning roles for project people
- System management and updates

6.3. ASSIGNED ROLES FOR SEED OWNERS

After successfully applying to have a project featured in the BioWatch Platform, the new SEED owner will be given login and password details. Each project will have three main roles assigned to them

- **Administrator**
 - Set up the SEED
 - Delegate jobs
 - Update
 - Delete
 - Publish
 - Moderate
- **Editors**
 - Add content
 - Update
 - Publish – if assigned that task by the administrator
- **Moderator**
 - Appointed by the Administrator
 - To monitor and publish external content – wall content
 - Can delete wall content

6.4. MODERATION OF CONTENT

SEED owners will be responsible for the content published on their SEEDs in the BioWatch Platform. IPL will, however, monitor content and remove what is deemed unsuitable based on a set of criteria in relation to accuracy, language, taste, racist or sexist material, breach of copyright etc. IPL will also assess complaints made about content and act accordingly.

SEEDs are open to the publication of external content and this content will be moderated by the SEED owner. There are two ways for the SEED owner to moderate and both can be used.

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- The SEED's moderator will receive an email alert when there is a start of activity on that SEED's Wall. The moderator can then log in, watch, join in and moderate this discussion.
- If unable to log in, doesn't want to for whatever reason or misses the email alert of activity, the moderator will receive an email at the end of any day when there is Wall activity to review.

6.5. ALERTS

SEED owners and library members are alerted of activity on the BioWatch Platform, depending on their role and membership details. This is a valuable function to ensure the library is useful for both types of member.

- SEED owners are alerted when a member chooses to follow their SEED
- Followers are alerted of any new (significant) content on the SEEDs they are following
- Wall activity alerts will be subject to the following criteria:
 - You will be alerted if you are following a SEED
 - You will be alerted if you have written on a SEED's wall as a member, but not a follower
 - You are the SEED's administrator.

6.6. BENEFITS FOR SEED OWNERS

BioWatch is an interactive, effective and active dissemination tool designed specifically for BBI projects using the very best in digital publishing to deliver a variety of media across a broad range of platforms. With this content being published on the Bioways website.

BioWatch not only places the dissemination into context, but it offers users the chance to customise their library and follow those projects in which they have a specific interest.

This benefits the projects and SEED is an active experience, not passive dissemination. SEED allows projects to engage and interact with their audience, create and manage genuine user groups based on active participation of users and also delivers measurable impact through analytical web tools designed to provide the information projects need.

Project coordinators can also manage and coordinate their dissemination activities using SEED as well as use it as a presentation tool. SEED does all this in one place, using one platform.

Specific benefits for the SEED owner include the following key points:

- The ability to display the project's multi-media communications on one interactive digital SEED brochure
- Getting seen in context – the SEEDs are displayed on an attractive, interactive portal in thematic context

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- Other social media activity is integrated into one place, meaning the project's SEED becomes a one-stop shop for content delivery across all social platforms.
- Projects are able to create and manage their own SEEDs, making them a flexible part of an overall communications strategy that enables them to target a relevant and known audience, attract followers and communicate directly with those they know have an interest in their work.
- Projects are also able to build sophisticated target audience groups, based on the SEED's search functionality.
 - Useful for targeted dissemination – select example criteria like being a SEED user, SEED owner, not SEED member, workshop participant, all, Bioways interest.
 - Further filters – jobs, interests, position, country, sector, etc
 - Further filters for project use – people following certain SEEDs, recommend SEEDs, activity in the portal, inactivity in the portal etc
- Projects are able to understand their audiences obtained through SEED membership. Sophisticated analytics mean they know what communications work and who they are reaching. They are able to understand what specific user profiles find useful and what they interact with, and then deliver that type of content directly to them.

6.7. ANALYTICS

All SEEDs and all activity on the BioWatch Platform is subject to sophisticated analytics and so projects are able to monitor activity on their specific SEEDs and assess what type of information is useful to each user group defined by user profile. This is valuable information that will enable projects to target relevant information at specific audiences.

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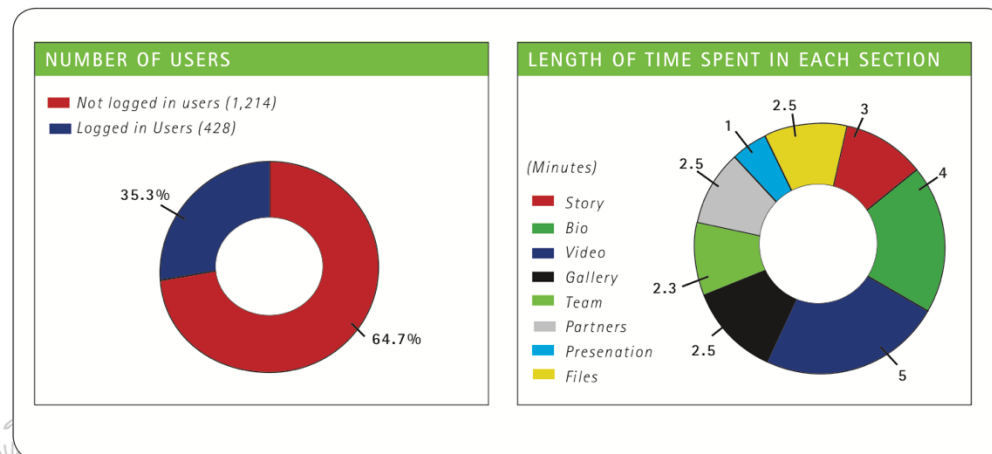
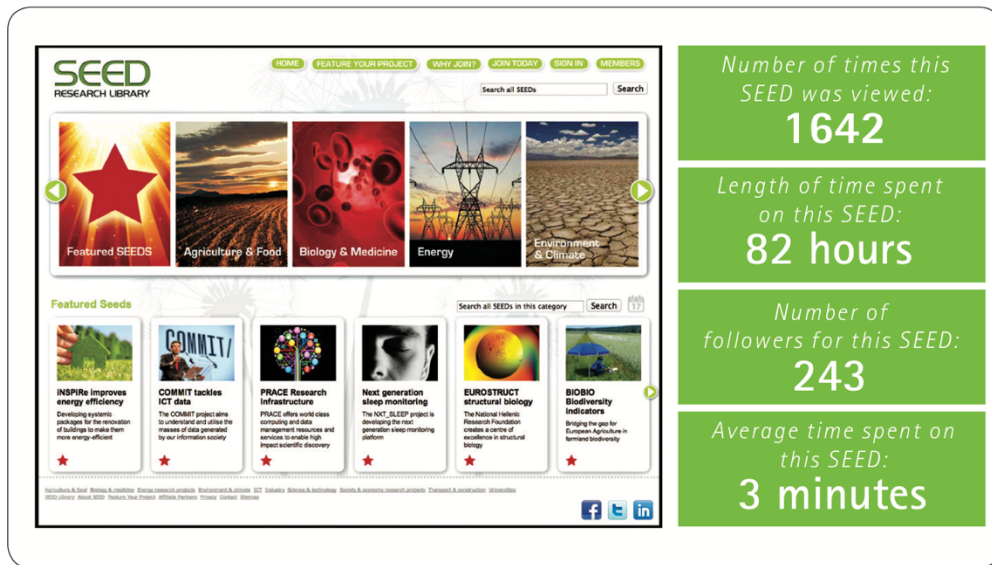


Figure 9: An analytics report showing views, time spent on a SEED, follower numbers, user numbers, section times

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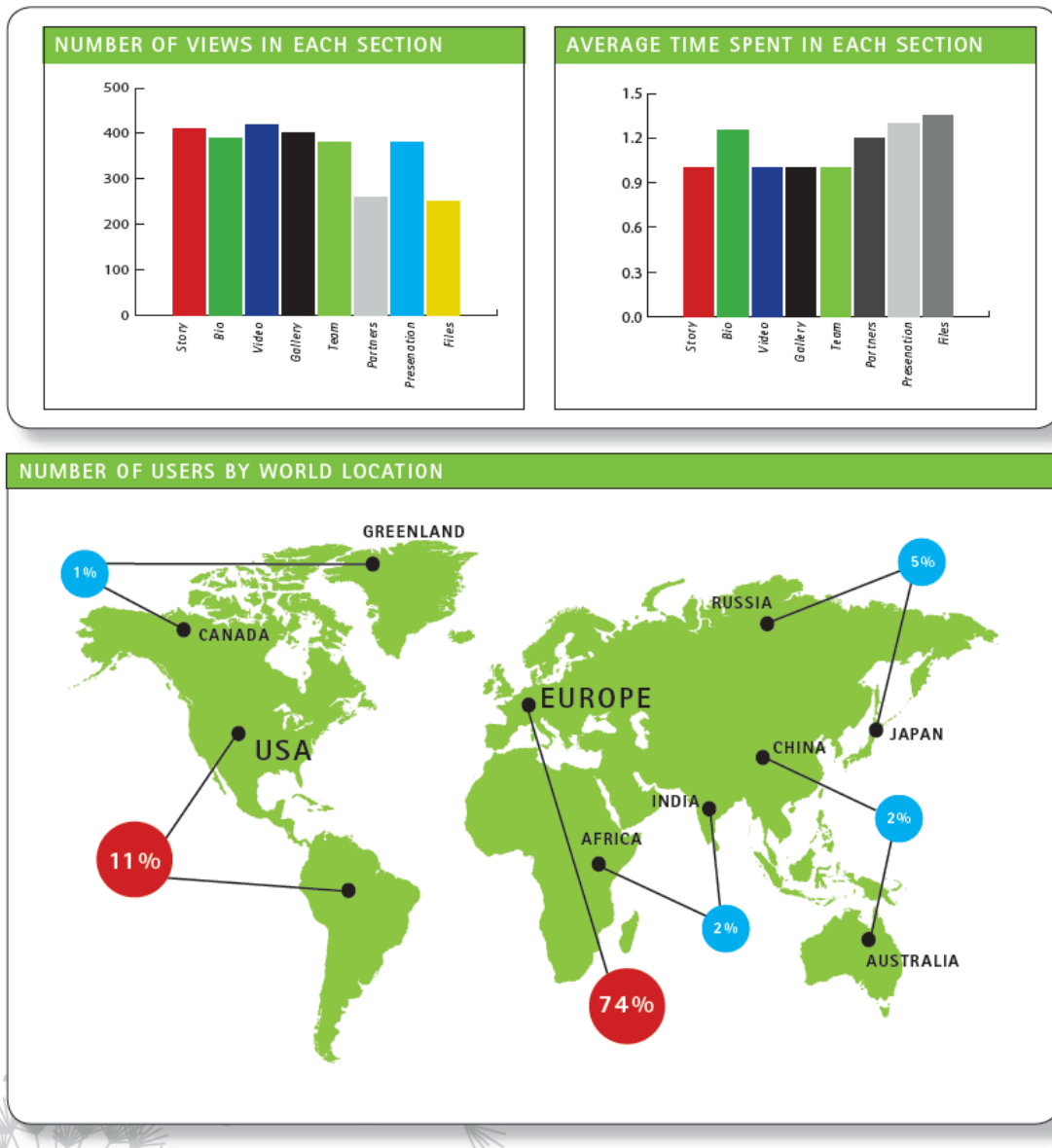


Figure 10: An analytics report showing section views and times as well as views based on geographical location

7. KEEPING THINGS SIMPLE

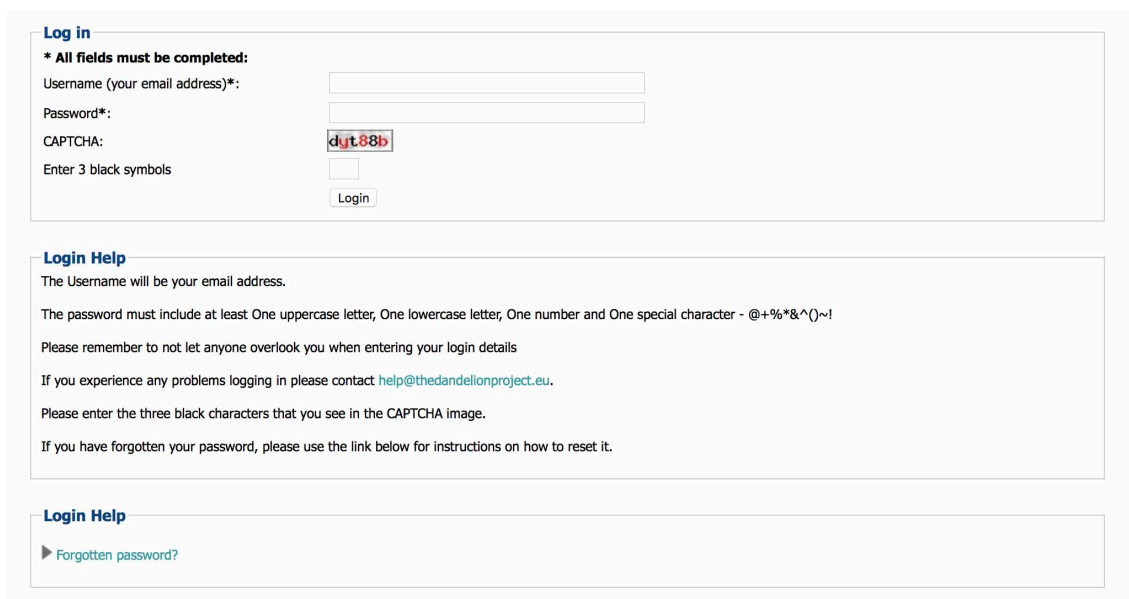
The backend functionality of the Bioways SEED library has been developed to be simple to use. Project coordinators and researchers are extremely busy and evidence suggests that they simply would not use another complicated platform if the task was difficult and took too much time.

As well as making the SEED system extremely intuitive and easy to use, the project has addressed this problem by ensuring that the many benefits of participating in the Library are effectively communicated to and understood by all BBI projects.

It is expected that by building to a critical mass of content in the Library, its value to users to join will also become self-evident and that by developing both content and membership, its growth and, therefore, value will increase exponentially.

7.1. BUILDING A SEED

The following screenshots from the backend of the BioWatch Platform demonstrate the process of building a SEED. This process will be included in a “How To” walkthrough video, which will be available through the Library interface when projects are able to build their own SEEDs.




Login

*** All fields must be completed:**

Username (your email address)*:

Password*:

CAPTCHA: 

Enter 3 black symbols:

Login Help

The Username will be your email address.

The password must include at least One uppercase letter, One lowercase letter, One number and One special character - @+*%&^()~!

Please remember to not let anyone overlook you when entering your login details

If you experience any problems logging in please contact help@thedandelionproject.eu.

Please enter the three black characters that you see in the CAPTCHA image.

If you have forgotten your password, please use the link below for instructions on how to reset it.

Login Help

[▶ Forgotten password?](#)

SEED owner login page, with instructions and help text

Creation of the BioWatch platform

Alison Sellars (Full) | [Change Password](#) | [Log out](#)

Login Information

Last signed in: 22 December 2016 10:40:55

Links

[manage SEED list](#) | [Calendar](#) | [Users](#) | [View pages](#) | [Partners/Supporters](#) | [Campaigns](#)

SEEDS

[Add a SEED](#)

Select a category to view the SEEDs in the category

The welcome page once logged in and Add a SEED button

Dave Sellars (Master) | [Change Password](#) | [Log out](#)

[manage SEED list](#) [View Users](#)

Add a new SEED

Fields marked with an * are mandatory

Not sure what information you need to create a SEED? [?](#)

SEED Administrator (Email):

Meta title *

Meta description *

Meta keywords *

SEED Header/Title *

Header font ?

Font colour of header ?

Size of header ?

Project/Organisation *

Library text * ?

Type of SEED * ?

 Master
 Sub

Please select a Master SEED if you have selected Sub as the type of SEED above.

Main category *

Second category

Upload thumbnail image ?

 no file selected

Introduction * ?

Ready to set up your SEED. Just type in the initial information

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Alison Sellars (Full) | [Change Password](#) | [Log out](#)

Links

[manage SEED list](#) | [Calendar](#) | [Users](#) | [View pages](#) | [Partners/Supporters](#) | [Campaigns](#)

[manage SEED list](#) | [SEED Information](#) | [Preview SEED](#) | [Calendar](#) | [History](#) | [Associated Members](#) | [Statistics](#)

SEED information

Image:



SEED Administrator:

ellen@ipl.eu.com

Keyword tags:

science, education, inquiry, learning, school, S-TEAM, literacy

Main Category:

Cultures & Citizenship

Second Category:

N/A

Template:

SEEDTemplate_1

Theme:

white

Use the transparent block?

Yes (Colour: White)

SEED Header/title:

S-TEAM fires up science education
Font: OrbitronBlack (Colour: #000000, Size: 0 pixels)

Project/organisation:

S-TEAM

Introduction:

The S-TEAM project is seeking to address scientific literacy and problems in recruiting students to science, technology, engineering and mathematics (STEM) careers. By communicating advanced teaching methods it is thought that students will engage with inquiry-based science education

Twitter:

N/A

Facebook:

N/A

LinkedIn:

N/A

Messaging Wall:

N/A

FP7 Branding:

No

Featured SEED?

Yes

Meta title:

S-TEAM fires up science education

Meta description:

The S-TEAM project is seeking to address scientific literacy and encourage inquiry-based science education

Meta keywords:

science, education, inquiry, learning, school, S-TEAM, literacy

Significant modification:

Main SEED information

?

This SEED is ONLINE


The SEED can not be an online SEED until the sections are completed below:

[Update SEED](#)

The first input of information and data for the SEED, including the text for the button viewed in the library interface. This is a test SEED developed during development of the platform

Creation of the BioWatch platform

EC Information

EC Branding: 

EC Miscellaneous: The S-TEAM Project is of 22 projects that make up the EC's Science Education Proconet FP7 network.

ProCoNet is an informal professional association for project coordinators in FP7, focusing on projects in Science, Technology, Engineering and Mathematics education. Its objective is to improve inter-project collaboration and to provide a channel for discussion between EU departments, project staff and other interested bodies, about issues of mutual interest.

The S-TEAM Project started in June 2009 and will end in May, 2012.

The project costs arr 5.24million Euro and the contribution through FP7 funding is 4.7million Euro.

[Update EC Info](#)

Menu Options

Menu Title	Menu Type	Update	Delete
Introduction to S-TEAM	STORY	Update	Delete
Results so far	STORY	Update	Delete
S-TEAM file repository	FILES	Update	Delete

[Add](#)

[Swap the order of the menu button](#)

News

There are no news items for this SEED

[Add](#)

Project description is added and buttons to be used selected

Menu button - S-TEAM file repository (FILES)

Click on the file to download it.

S-TEAM Conference Report	Comprehensive report of the S-TEAM conference	Update	Delete
S-TEAM work package	Argumentation Training Materials Part 2	Update	Delete
Introduction to S-TEAM	A comprehensive introduction to the S-TEAM project	Update	Delete
S-TEAM Leaflet	Leaflet detailing the aims and importance of the S-TEAM project	Update	Delete
S-TEAM parents leaflet	Leaflet for parents explaining the aims and importance of the S-TEAM project	Update	Delete
Gitomer & Duschl NSSE Yearbook	Establishing Multilevel Coherence in Assessment	Update	Delete
Final analysis report	A final analysis on the S-TEAM project evaluating the successes and challenges.	Update	Delete

[Add](#)

The file repository is populated

Creation of the BioWatch platform

Alison Sellars (Full) | [Change Password](#) | [Log out](#)

Links

[manage SEED list](#) | [Calendar](#) | [Users](#) | [View pages](#) | [Partners/Supporters](#) | [Campaigns](#)

[manage SEED list](#) | [SEED Information](#) | [Preview SEED](#) | [Calendar](#) | [History](#) | [Associated Members](#) | [Statistics](#)

Update Story for S-TEAM fires up science education

Fields marked with an * are mandatory

Title *

Promoting inquiry-based learning

Summary * ?

The S-TEAM project, as manager Peter Gray explains, is promoting inquiry-based science teaching, a method based on learning through pupil's questions and subsequent investigations. Better professional development for teachers is key to achieving this goal

Content * ?

The EU is concerned, at a political level, with increasing the supply of Science, Technology, Engineering and Mathematics (STEM) graduates, and also with increasing young people's scientific literacy and engagement, through Framework Programme Seven (FP7) Science-in Society projects aimed at promoting inquiry based science teaching. S-TEAM is a consortium of 15 countries and 26 institutions, which began on 1 May 2009 and will run for three years. It is coordinated by the Norwegian University of Science and Technology in Trondheim, and builds on the Mind the Gap project, which was completed in April 2010. S-TEAM, in common with several other Science-in-Society projects, aims to improve science education through the widespread dissemination of inquiry-based science teaching (IBST, or simply, inquiry). There is evidence that inquiry works although some forms of inquiry work better than others, for a variety of reasons. Inquiry is intuitively a 'good thing', but how effective it is depends on the nature of the desired outcomes such as developing more inquisitive students, ensuring better grades, or simply making more scientists. Our way of disseminating inquiry is through teacher education and teacher professional development activities, not just by informing teachers about new methods and resources, but also by allowing teachers to inform each other. Teachers operate in local spaces - schools, communities, regions - but have ideas to share across boundaries. S-TEAM will provide coordination and support to make this happen. Its vehicles for doing this are professional development materials of various kinds. One purpose of these materials is to give teachers

An example of content added to a button. Simple text boxes to fill in

Images

Image - 1



Do you want to change the image 1? If yes please tick the box below, otherwise the image 1 will remain the same

Upload Image 1 ?

Choose File no file selected

Image - 2



Do you want to change the image 2? If yes please tick the box below, otherwise the image 2 will remain the same

Upload Image 2 ?

Choose File no file selected

Adding pictures is simple

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Events you are not following

Thursday, 1st January 1970

10:00	Test2	Follow this Event
Category: Cultures & Citizenship		
10:00	Test2	Follow this Event
Category: Cultures & Citizenship		
10:00	Test2	Follow this Event
Category: Cultures & Citizenship		
10:00	Test2	Follow this Event
Category: Cultures & Citizenship		

The event list to be populated – and you can select events in your category to follow

Dave Sellars (Master) | [Change Password](#) | [Log out](#)



[manage SEED list](#) [View Users](#)



Add a user

[Add a User](#)

Administration users

✗ Not set security details
✓ Active account
🔒 User has been temporarily locked out of their administration account, they will need to be unlocked in order to use the CMS.

 Master
  Restricted

Company	Type	Details	Project (if applicable)	Change
✓ JG Fencing		Dave Sellars dave.sellars@blossomhill.co.uk (Licenses using: 2 of 4) (Featured SEED's using: 2 of 2)	N/A	Update
✓ JG Fencing		John Gwyther test1@blossomhill.co.uk	N/A	Update Delete

Adding new SEED users to your account is easy. Set their preferences here, too

8. COMMUNITY BUILDING AND COLLABORATION

One of the main aims of the BioWatch Platform is for it to enable the building of a multi-stakeholder BBI community. For this to be a worthwhile exercise, it is important that those who join the community find the library useful. The functionality of the library explained in this document maximises the chances of it becoming a valuable asset for those involved in BBI research.

- For those doing the research having a platform from which to disseminate their results and be in direct contact with the target audience.

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- For those using research results – policy makers, citizens etc – who are able to access specific information in which they have an interest in one place and are kept up to date with developments without having to search for new information.

To make this platform really useful, however, it is important that it becomes a collaborative portal upon which members are able to interact, form groups, search for collaborative opportunities and share ideas.

Although the library is fully functional as an open access portal, members gain additional benefits and this fact will be used to motivate people to join and thus become part of the community.

As the database of members and SEED owners grows, it will become more and more valuable. To make it useful, however, the data needs to be available for all and users must be able to form groups according to a variety of filtered search categories.

Members are visible to all when searching the Library. Non-members, however, are able to view limited information.

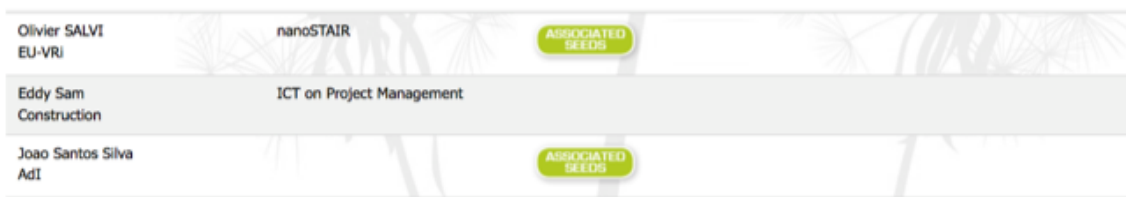


Figure 11: Basic information about members viewable by non-members

Members are able to immediately see more information about other members on an initial search.

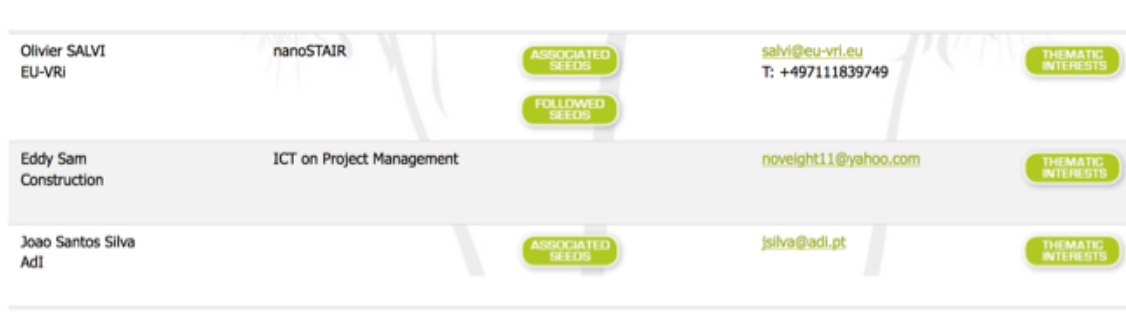


Figure 12: More detailed information about members seen by members on a basic search

Members are also able to see other members’ profile pages and add them to a list of people in their own group who they would like to “follow”. Additional advantages of being able to see other members’ profiles are that:

- A member’s areas of interest will be shown as icons

Creation of the BioWatch platform

- All social media activity for the channels selected by each member will be displayed on their profile page – keeping all their activity in one place, displayed within the SEED Player.
- Once a member is following individual projects (SEEDs), their activity on each SEED's wall will be displayed.
- Members can also see which SEEDs each member is following.
- If they have their own SEED, these details will also be added to the profile, with a link to it, list of followers of it and list of associated members.

Members are able to further customise their search for other members to form groups by being able to filter their requests by:

- Name
- Country
- Thematic interest
- Which SEEDs are being followed
- Associated SEEDs (projects)
- Type of organization – NGO, research, SME etc
- Sector type – research, public, industry, etc
- Job title/role

This is a valuable function for those looking for collaborative opportunities, while it is also useful for those looking to target communications to specific groups.

9. ADDED GENERAL INTEREST

As well as being a valuable dissemination tool for BBI research projects, a community platform for BBI stakeholders and a repository for valuable BBI information and library of BBI documentation, BioWatch is also an accessible news portal for BBI information designed to attract a general public audience.

This section of the site will present up-to-date information about the bio-based industry and economy, linking this latest news to specific research presented in the project through partner SEEDs.

News stories will also contain external links for further information, while it is hoped that through the development of the community, all BioWatch members will utilise the site for the promotion of relevant information about their work.

This information will be displayed on each of the landing pages for each of the five distinct thematic sectors on the site. As well as displaying thumbnails of the featured SEEDs within this section, featured stories will be displayed alongside the featured project related to the news story.

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This aspect of the site, adds to its general appeal and will attract visitors looking for general BBI information as well as those looking to promote their work.

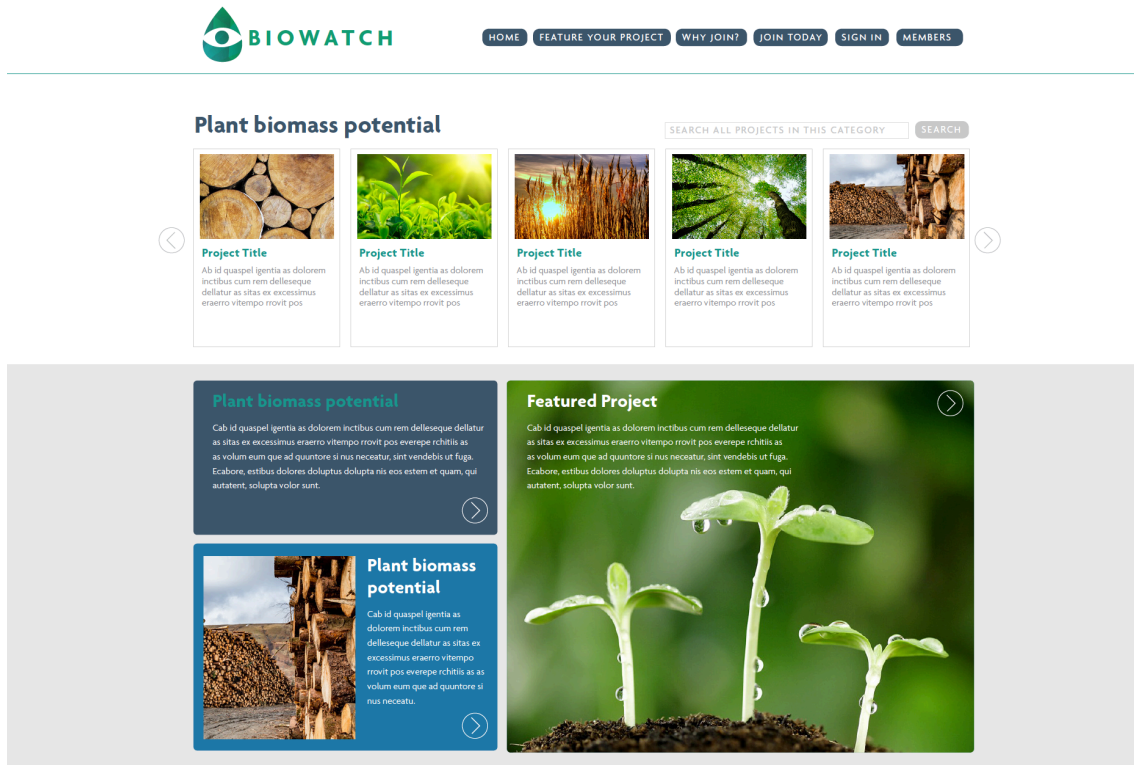


Figure 13- Home page for Plant Biomass, plus related news stories and featured project

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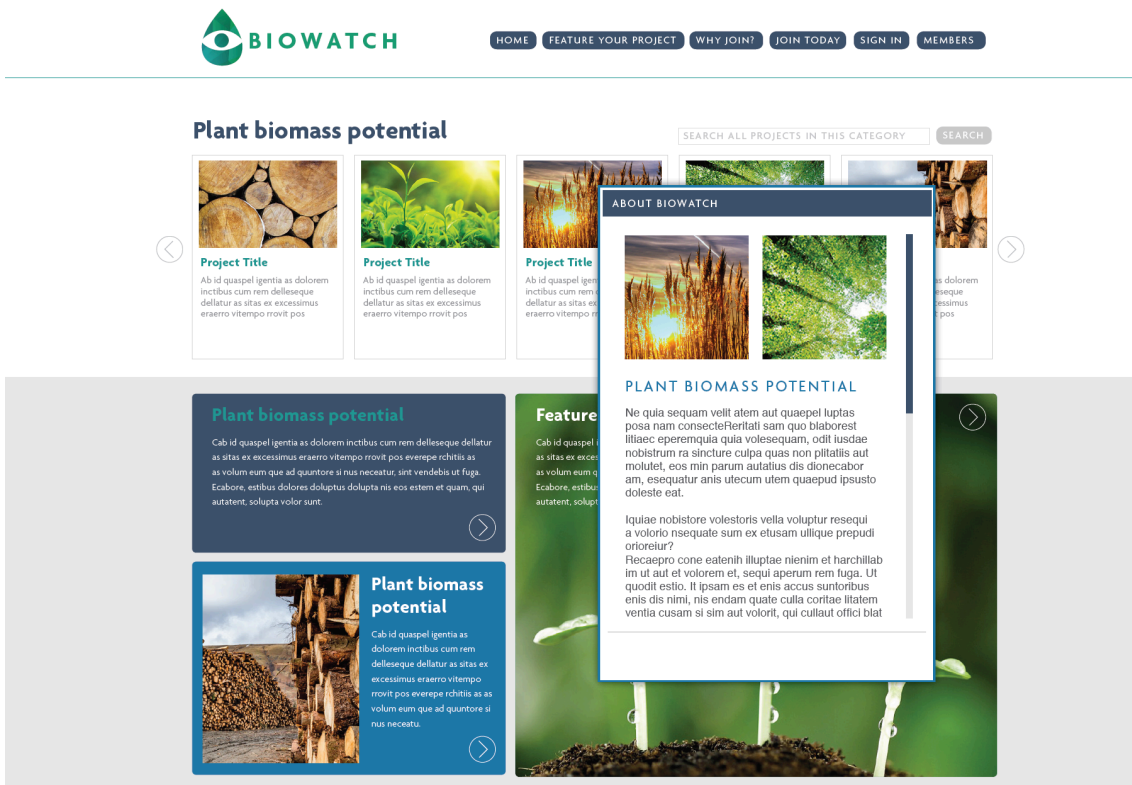


Figure 14 How the news story is displayed as pop-up box from the home page

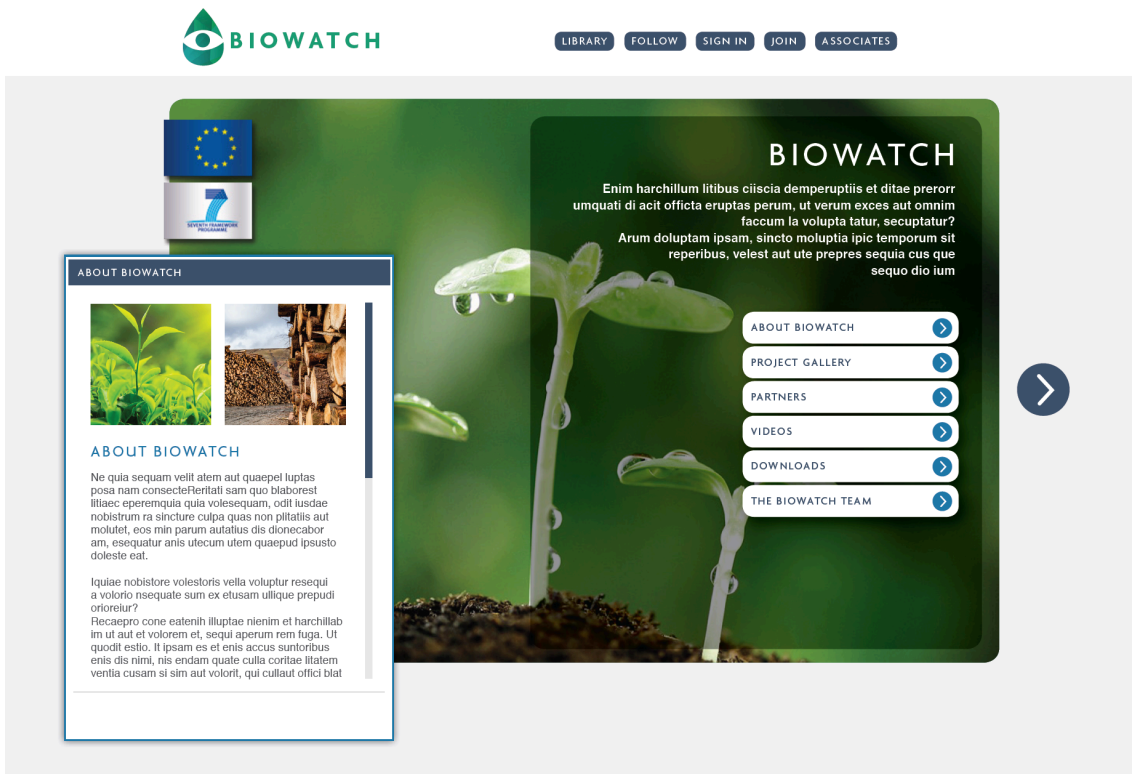


Figure 15- An example of a SEED home page. Each button brings up a different pop-up box of content about the project

10. SEARCHING FOR BIO-BASED PRODUCTS

It is important for the general public visitor to be able to search the library at a very general level for products or types of products. For this reason, there are a variety of search functionalities to enable visitors to find specific bio-based products as well as “discover” what products are made of which biomass, bio-material or bio-process and learn in the process.

As such, visitors are able to search under materials – for eg. bioplastic - and or under a specific product – for eg. cups. Similarly, a visitor can search for products made or produced through one of the five value chains – in other words, list all products created using plant material, for example.

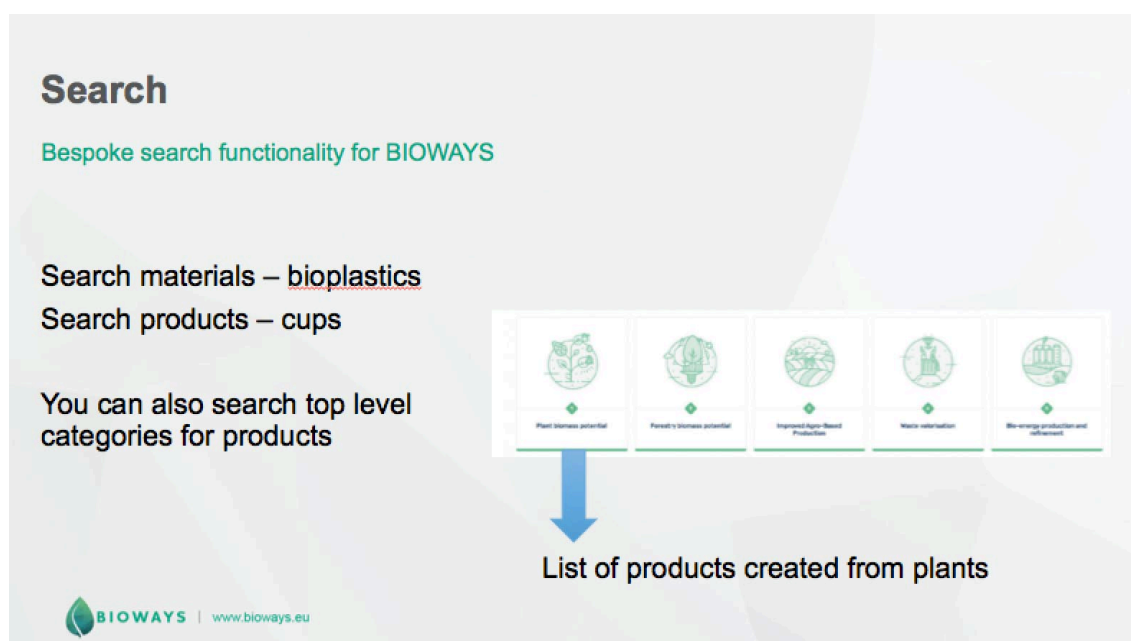


Figure 16- A scheme of the product search functionality in BioWatch

11. BIOWAYS LIBRARY

The BioWatch Platform is also the repository for the content of the Bioways Library. A full explanation of the development of this content and data about what has been collected at the time of this deliverable can be found in D3.2.

11.1. SELECTION

The Bioways project has more than 100 documents uploaded into the Bioways Library. These have been collected during the project screening process that has taken place in T2.1, T2.2 and T2.3, as well as during some of the other project activities.

Creation of the BioWatch platform

The type of contents collected for the library to date include documents of:

- Market analysis
- Strategy
- Policy briefings
- Training materials
- Public deliverables
- Project reports
- Presentations

Bioeconomy stakeholders will be able to take advantage of this wide breadth of existing material being available in one online space and through the sophisticated categorisation process and search functionality they will find a wealth of information discoverable.

See Annex for a spreadsheet detailing content gathered for the library to date.

11.2. CATEGORISATION

For the library to be a valuable addition to the development and promotion of the bioeconomy, it has been important to develop an effective categorisation of each document uploaded. As such, the following data has been collected for each document:

- Title
- Subtitle
- Abstract/description
- Year of publication
- Type of document
 - Market analysis
 - Strategy
 - Policy brief
 - Training material
 - Public deliverable
 - Project report
 - Presentation
- Related category
- Image (thumbnail)
- Is this related to a EU funded project?
- Acronym*
- Title*
- Funding Programme*
- Project's website*
- Project start date*
- Project end date*
- Project contacts*
- Add product
 - Name*
 - Description

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- Product's website*
- Image (thumbnail)
- Author(-s)
- Owner*
- Type of owner*
 - EU-funded project
 - European Commission
 - Public Organisation at National or European level (Authorities, Agencies, Funding organisations, etc.)
 - Regional initiative
 - Association/cluster
 - Research Organisation
 - Consultancy Organisation
 - Media Organisation
 - Industry/SMEs
 - Experts group
- Keywords
- Source
- Link to the uploaded document*
- Uploaded by
- Date

*Items related to EU-funded programmes and projects.

After any search, the following information about each document will be displayed:

- Title
- Abstract
- Description
- Type of document
- Author
- Download document button

As well as this standard information display, there is also a “more information” button. By clicking on this, a pop-up panel will appear providing all the other detail recorded about each document.

11.3. DISPLAY

Access to the Bioways Library is achieved through a button on the BioWatch Platform, where a “Library” icon is visible on the home page display, alongside the five value chain thematic buttons, together with the additional members’ content buttons. By clicking on the icon, you are taken to a simple search page, where you can enter various search parameters. These can vary from a very wide search through to very specific searches. Examples of searches include:

- Search for all policy briefs

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- Search for market analysis by live EU-funded projects in the bioenergy sector

11.4. FURTHER CONTENT

The Bioways consortium will continue to add content to the library during the course of its work during the project.

Members of the BioWatch Platform will also be able to upload content to the library, providing they follow the categorisation process, which is available on the platform.

12. CONCLUSIONS

The BioWatch Platform will be integral with the Bioways project. The system has been designed to enhance access to information about the bioeconomy and the research being conducted into the bioeconomy and bio-based products by a wide-ranging audience, including the general public. As well as this public interface for the dissemination of bio-based knowledge, BioWatch also provides a valuable platform for the exchange of research information, the development of collaborative opportunities and the monitoring of research over a number of years.

By delivering a means of effective, active and interactive communication for BBI projects and by building a large and participatory target audience group who will actively engage with those projects, more relevant stakeholders will engage with and utilise the valuable research results these projects produce in addressing the challenges Europe faces in addressing the economic and environmental pressures it faces as well as maximising the opportunities the BBI-JU has in achieving its ambitious goals.

13. ANNEX 1- CONTENT DATABASE TEMPLATE



template for
library16062017_pa

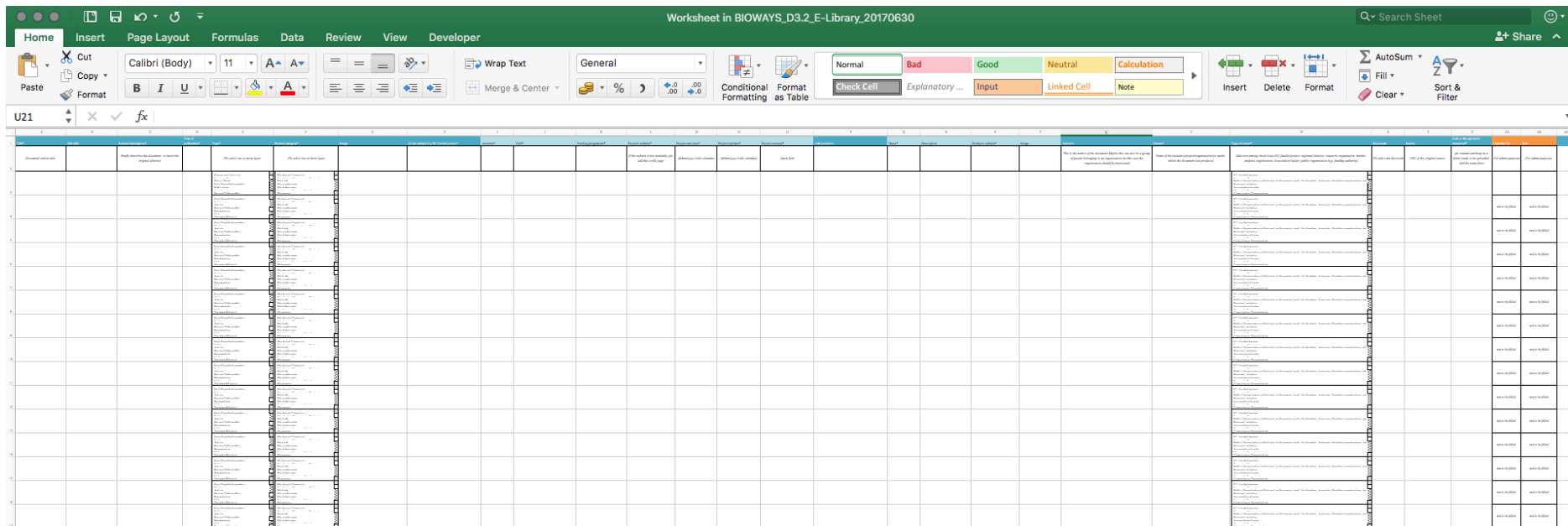


Figure 17- Content Database Template

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14. ANNEX 2- CONTENT DATABASE



T3.2_Collated_List_20170630.xlsx

The screenshot displays a Microsoft Excel spreadsheet titled 'T3.2_Collated_List_20170630'. The spreadsheet is filled with data organized into columns. The columns include various identifiers, descriptions, and links. Some cells contain small images, such as logos for 'The Green Economics Group' and other entities. The interface shows the standard Excel ribbon with tabs for Home, Insert, Page Layout, Formulas, Data, Review, View, and Developer. The ribbon is set to the 'Home' tab, showing options for font, paragraph, and styles. The search bar at the top right indicates 'Search Sheet'.

Figure 18: Completed content database