

**Future Science Group**

# Bioanalysis-zone.com Discovery Summary

*February 2014*

# Contents

---

Executive Summary .....	1
Motivations & Goals .....	2
Our understanding of the client .....	3
User persona overview .....	4
Front end user research - key learnings .....	5
Business Drivers .....	7
Information Architecture Improvements .....	9
Front end Sitemap .....	9
Taxonomies .....	9
Front end functionality & feature list .....	11
Front end layout & prototype .....	12
CMS user research - key learnings .....	13
CMS feature list & acceptance criteria .....	14
CMS issues/bugs to avoid .....	15
CMS Platform report and suitability .....	16

# Motivations for the Project

With aspirations to increase the growth and popularity of Future Science Group's site; Bioanalysis-zone, FSG are seeking to rebuild the site front end to improve its usability. They are also looking to reproduce the CMS to improve admin tasks and to provide them with functionality to achieve their business objectives. With the potential for them to release a 'sister brand' to BAZ in the near future, which would utilize the same site structure and CMS, they wish to resolve the major issues and perfect the experience before duplication.

Before requesting estimates from agencies they wish to undertake a Discovery project which will provide details to those suppliers which help explain the scope of the product, the improvements/features they wish to make, issues they wish to resolve and gain a thorough understanding of which platform to build on with a commercial rationale and suitability assessment.

## **Discovery Goals: This document will...**

- Deliver details of existing site features that must be retained
- Define improvements to the current front end of the site based on
  - business objectives of FSG
  - user research
  - our expertise in designing and authoring commercial websites in the digital publishing sector
- Provide a commercial rationale for the CMS choice
- Define improvements to the CMS to:
  - support the new front end
  - account for new requirements that achieve business objectives
  - provide better usability and smoother user journeys for admin staff
  - remove any bugs/issues found in current CMS
- Provide a report as to the suitability of platforms to produce the new CMS with (based on research of your requirements and taking into account commercial factors)
- Provide a document from which the new CMS and website can be estimated and built

# Our understanding of Future Science Group and Bioanalysis-zone.com

Future Science Group (FSG) are an expanding group of independent publishing companies active in the field of scientific information and endeavour, currently composed of Future Medicine and Future Science. As a leading provider of products and services for the medical, scientific and business communities, FSG save customers time and money by presenting the most important scientific breakthroughs in an accessible and evaluated format, while at the same time providing the scientific community with unique vehicles for disseminating forward-thinking research information and data.

Bioanalysis-zone.com (BAZ) is currently free to members, although registration as a user is required to access the majority of content. The site currently has over 4,000 registered users. The site's principal revenue generation is derived from the sale of display advertising inventory and sponsorship in various forms (banners, directory, feature sponsorship and product information).

# User persona overview

**BAZ has listed its main user types as:**

## **Academic Scientists ('Ambitious Academics')**

Associate professor at a university who both teaches and carries out their own studies in a niche section of bioanalysis. Wants to gain recognition in the industry for their findings and learn about their specific subject in order to stay abreast with developments. They are mainly concerned about lack of funding meaning that they have to work more hours and are increasingly pressured and stressed. They would like to receive relevant information in a quick/easy fashion as their time is limited.

## **Pharmaceutical Companies & Contract Research Organisations (Senior/MDs)**

Managers of larger companies undertaking scientific studies to produce pharmaceuticals and, in the case of CROs, to carry out contracted research for large Pharmaceuticals. Their goals are to stay abreast of their specific subject and bioanalysis in general, they also need to know about industry trends and techniques in an effort to carry out projects 'better, faster, more accurately' and are concerned about losing business to their competitors.

## **Scientific Equipment Manufacturers**

Designing and marketing their range of scientific products used by most other users/companies. They wish to grow their brand's reach and reputation so that their products continue to be purchased and used. They can achieve this by advertising on the site and publishing content to prove their knowledge/authority and they also look to sponsor and attend events & conferences. They need to keep up with their competitors and any industry/scientific trends that help give them a competitive edge.

## **Senior Analysts at Pharmas/CRO ('Efficient Information Gatherers')**

Project managing and liaising between teams of scientists and stakeholders they work long hours and have large responsibilities. They are time poor and they need to keep up with regulatory issues, new products and scientific advances. They need relevant information to be presented to them in the quickest/easiest fashion. It is important to their company's reputation that they stay on top of their game and promote their company positively.

## **'Super Specialist' Scientists at Pharmas/CRO**

Niche specialists working on projects in labs and studying results on and offline. They are particularly interested in reading about their specific field and accessing raw data from studies so they can analyse it themselves. They are time poor and need to carry out studies as quickly and efficiently as possible - keeping up with industry trends and new products aids this.

The overriding commonality between the different persona's is they are time poor and wish to receive information on their subjects quickly and easily.

(Please also refer to 'User Persona's' within the Appendix for more details)

# Key Learnings – Front End

Makemedia and FSG have highlighted issues with the front end of BAZ which their user research helped confirm and clarify. Suggestions and resolutions to the issues are raised within the document and the key learnings taken from this are as follows:

## **Provide the user with relevant content**

The site has a large and growing amount of content. To allow users to find specific information related to their interests or subject, a filtering mechanism will be added to 'listing pages' and the main navigation. To achieve this, a logical taxonomy must be tested and put in place. Additionally, preferences collected at registration will be used to publish relevant content to the user in specific area of the site (I.E. a MyZone module on the homepage and as a dashboard to the accounts section)

## **Link related content**

In assisting users to get to more relevant content, we can additionally provide links to related content to allow the user to browse within their interest. This can be achieved by showing links to content for example: Articles ('more articles on Chromatography') or Products ('more products by Sigma Aldrich'). Allowing users to explore the entire content of their specific subject (by surfacing links to the taxonomy) will allow them to see all related content aggregated onto a single page.

## **Provide a responsive design solution to improve usability on all devices**

With the ongoing increase of user journeys being carried out on phones and tablets it is essential to provide a solid user experience for those devices. Traditional desktop layouts typically perform badly so with any rebuild, a responsive coding approach is highly recommended.

## **Improve forum performance**

From user research we discovered that users may be hesitant to post to the forum (Quote: 'users are scared to post or comment unless it's absolutely brilliant'). We understand that Experts/Forum advocates are currently creating new posts which we hope would alleviate this 'stage fright'. Beyond this, allowing users to comment and post anonymously should improve engagement and opening the forum to non-members will increase its audience.

## **Simplify the homepage, navigation and add a 'value proposition'**

Instant and simple recognition of the Brand's benefits to users and how they navigate through the site will instantly help users get to the content they want. A clean and relevant homepage with a navigation underpinned by a logical taxonomy will provide this.

## **Improve search functionality to return 'more relevant' results**

Alongside the filter mechanism, which will aid users in searching and browsing content, improved keyword search functionality with the ability to filter results will be implemented.

# Additional Business Drivers

## Increase acquisition of audience

- Allowing some content to be open to all users (regardless of membership status).
- Allowing high value content to be 'hidden' from non-members (I.E. only a teaser is shown and the actual content is obscured) which requires them to register to unlock the content.

## Allow creation of landing/feature pages

To accommodate Young Investigators Awards and other future features, this provides BAZ with the freedom to create individual pages which have prominent links in the navigation or promotional banner slots of the site **Sub**

## Improve SEO of the site

Through restructuring the site with HTML best practices. Applying a relevant taxonomy which can help tag content. Educate and ensure effective keywords and descriptions are added as meta-data

## Provide security of user information

FSG wish to protect their audience's details so that competitors cannot easily contact or gain access to their users' details which would have a negative impact on their business. Specific considerations include

- Allowing users to post on the forum/comment anonymously
- Apply usernames so that email addresses are not surfaced
- Do not allow user to user communication (usually within the forum)



# Information Architecture Improvements

## Front End Sitemap

During Information Architecture workshops held during the Discovery phase, a new sitemap was proposed. Its main aims being to:

- Organise content in a logical way
- Apply recognizable terms and names to each section
- Apply a hierarchy to content:
  - Prioritising popular content to the main navigation
  - Moving supporting content links into a footer navigation
  - Removing unused or unpopular content from the site altogether
- Reduce the current amount of options available to users so they have more direct experiences

*(Refer to appendix '01.BAZ-proposed-sitemap.pdf')*

## Taxonomies

It has been recognised that the site does not easily allow users to find relevant content. Some efforts have been made to categorize content in the forum and allow users to filter it themselves however it is uncertain how effective or used these terms/features are. This existing filtering has not been applied to the main areas of the site (news and articles) which, due to the large and growing amount of content, desperately requires a better mechanism.

Furthermore, current categorization is applied by admin users in the CMS however it is unclear as to what this achieves as it doesn't always affect the front end. Categorisation should only be retained if it assists users and site performance and the CMS user tips will explain what selecting a category will achieve.

The following taxonomies exist:

**Bioanalysis Subject Categories** – This currently exists however it has been suggested that it isn't effective. We recommend that the entire subject be broken down into a definitive 2 or 3 tier taxonomy with top level terms and categories/sub categories belonging to those terms. With the help of an expert (Ryan De Vooght-Johnson) we have assessed and will test a new 2 tier taxonomy based on 'Techniques & Technologies' and 'Applications'.

**Bioanalysis Keywords** – Keywords no longer affect SEO performance of web pages so it is debatable to continue applying them for that purpose alone - tagging content so that it can be searched for internally within the site is a far stronger rationale. An agreed set of keywords should be created and the ability to generate new ones is imperative. These will be surfaced beneath the content title to allow users to scan easily, and clicking

them will load a page of results showing other content pertaining to that keyword. This will add more specificity to content that the Bioanalysis Taxonomy can provide alone. (Additional note – FSG will review their current keywords and create a new list to be applied to the new build)

**Article type** – the ‘physical’ content type, i.e. a video, review, whitepaper or editorial piece. (NB this may well be factored in with ‘Content Type’ – client to confirm)

**Sector** – the industry sector that the content, company or job relates to. This is covered in the new ‘Subject Categories’. Using this taxonomy to filter the Directory would be a good application of this taxonomy

**Job type** – the professional role or position of a user

**Content icon** – there is a specific taxonomy which handles all of the icons types however it has been requested that either the new Subject Category taxonomy or the Article Type taxonomy be represented by these icons.

These taxonomies will be available for users to filter pages of content and can be used at registration to capture users’ interests so that areas of the site and newsletters can be published for their interests.

**Content type** – inherently, items will be tagged as being a ‘News’, ‘Article’, ‘Webinar’ etc. This taxonomy will be helpful for filtering of search results and keyword content pages

We propose the following taxonomies are applied:

*(Refer to appendix ‘02.Taxonomies.pdf’)*

# Front end functionality & feature list

The following document details the functionality that will be available to front end users of the site. Essentially the site presents content in the form of articles, news posts, webinars and event promotions (to list but a few) to an audience of registered and non-registered users. It requires functionality to allow users to achieve some key tasks such as (but not limited to):

- Explore and filter lists of this content in order to find items that relate to them.
- To register, sign in, sign out and provide preferences and information so that FSG can tailor content to their needs.
- Engage with content by posting comments and feedback on articles and forum posts.
- Find out more about the brand, its most recent publication and be able to contact relevant people or subscribe to emails and journals.
- Allow admin users to post 3rd party advertising banners across the site.

*(Refer to appendix '03.Front end feature list.pdf')*

# Front End Layout & Prototype

Based on the UI sketches and wireframes produced with the client, an html prototype has been produced which indicates:

- the layout of key pages
- the layouts when viewed with various devices (i.e. responsive layouts)
- basic user interactions and interfaces

This can be used for early user testing to verify its efficiency. To aid this it has been populated with dummy content from the current site however not all user journeys can be fully replicated due to its lack of back end functionality and only a slice of content exists meaning that there is only one article, forum, news and webinar type.

The prototype will help inform the front end build that is carried out by the contracted agency, effectively replacing wireframes. However in some instances wireframes have been submitted especially where it helps explain technical functionality further.

A disclaimer must be noted – some responsive layouts can be difficult to recreate in certain platforms. Therefore the prototype is a proposal of the site layout/UI which will finally be governed by platform choice.

*(Refer to '<http://baz.prototype.makemedia-test.com/>)*

# Key Learnings – CMS

After thorough consultation with the various CMS users at FSG we assessed numerous pain points and areas for improvement. Key aspects include (but are not limited to):

## **Provide better reporting (on banners, per client content etc.)**

FSG currently has to compile all analytics via Google Analytics which is lengthy and inaccurate. Ideally analytics should be compiled to show the performance of:

- banners
- a client's content and banners

## **Improve ability to manage/filter and scan lists of content**

All lists in the CMS (list of articles, image assets, banners, keywords etc.) are currently very lengthy and difficult to search through. Adding a predictive search field to each form to filter the list would help users locate the item they require. Date ordering (i.e. most recent first) and applying pagination would keep more recent items on one page and at the top of the list which would also help. We can also use filtering of these lists by taxonomy that which would return results from a specific category which may help.

## **Assigning 3rd party banners to advertising positions**

To be applied to the entire site, a set of sections or specific pages.

## **NB. Food for thought...**

BAZ direct users off their site to futurescience.com to access full articles – do they want to track that? It's an issue as there is a reasonable amount of traffic that goes off site. If so add to the CMS requirements. (Client stance on this is: "Perhaps we should find out more about the advantages and cost implications of adding this tracking to CMS rather than continuing to do via analytics – it will be annoying if we (can't do this and) can do everything else via CMS.")

# CMS feature list & acceptance criteria

Due to the site retaining many of its current features the CMS will have some similarities to its current version. Improvements and amends to the CMS have been recommended and these account for:

- New front end features
- Improvements to existing front end features
- Improvements to CMS usability
- Business Drivers that require the CMS to provide new functionality

*(Refer to appendix '04.CMS requirements.pdf')*

## CMS issues & bugs to avoid

During CMS User Research numerous issues and bugs were listed. Although any build of the CMS would obviously avoid bugs or poor usability (which burn many admin hours for FSG staff) it is worth noting these and providing solutions where possible. **Note that the CMS should work in IE8.**

*(Refer to appendix '05.CMS stakeholder interview notes.pdf')*

# CMS Platform report and suitability

FSG have asked for a comparison between platforms to rebuild BAZ upon, namely Wordpress and Drupal. Taking into consideration all of the requirements above, our Technical Experts have provided an overview of the benefits and potential issues of each. These should be weighed up against the following factors:

- FSG already have a sister site (Oncology-central.com) that is built on Drupal - there may be benefits to matching platforms for consistency, familiarity and cost effectiveness.
- Any current business requirements that FSG has for future growth that we (Makemedia) are unaware of.

An open conversation regarding this most important issue should be held between FSG Senior staff and Makemedia's consultants and any future provider should be made aware of any extenuating circumstances that exist outside of this document.

*(Refer to appendices '06.CMS Suitability report.pdf' & '08.future science cms comparison.xls')*