

Designing and Implementing an 'Information Hub' for Statistics and Programming

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ABSTRACT

At current GSK statisticians and programmers must access reference materials through a cluttered and out dated one stop shop. This paper will illustrate the work done by a small number of individuals to address the issues present on the old platform, and to create a new platform in which the GSK statistics and programming departments can quickly and efficiently access the resources required in their day to day work.

INTRODUCTION

Until now GSK statistics and programming (S&P) department accessed reference materials through an outdated website which was cluttered and not user friendly (this website was known as the S&P Reference Desk). It was widely accepted that this system was not well maintained, and as a result information was hard and time consuming to locate. The problem was well highlighted by teams that regularly try to find information through the website, a solution was needed to enable a fast and more effective way for statisticians & programmers to have the information they need at their fingertips, so what was the solution? A completely new site for staff to access the resources needed for their jobs, created using Microsoft™ SharePoint™.

The purpose of this paper is to offer insight into one of the efforts that GSK has made to optimize the way its programmers and statisticians work. This paper will cover the full scope of the project including its original inception, the planning and building of the idea, the design process, the construction of the site and its implementation and finally the post-launch activities.

IDENTIFYING AN AREA FOR IMPROVEMENT

The need for improvement was highlighted on a couple of different fronts. Firstly, GSK S&P hold many regular forums for different audiences, the forum for new starters raised the issues that newer employees were having difficulties working the old 'Reference Desk' site. This was compounded by the results of our global employee satisfaction surveys, which showed that the S&P work force saw room for improvement.

A review of the reference desk showed that it was extremely difficult to locate required resources, as well as this it was cluttered with many out dated or redundant documents. The site had become a case of having to learn and remember where the documents you required were located, as there was no real logic to the navigation. The conclusion was that the site was outdated but still contained a lot of useful information. Despite the pitfalls, user metrics showed that the site was still experiencing many visitors, so there was obvious value to be gained by an improvement of the site. The goal was to ensure every employee regardless of time at the company could easily and quickly locate the information they need.

THE SOLUTION

After the initial identification of the problem, it was a case of building a fast-paced efficient team with the relative skills and expertise to execute this project. Leads were identified to put teams in place, it was important to build a team with a range of roles and experience levels to encourage several different opinions, and as a result promote robust decision making.

The first task was to agree on the solution to implement. The two main options were to revamp the current reference desk site, or to overhaul it and start from scratch with a completely new platform. A thorough inspection of the architecture of the current site was performed and a spreadsheet was created to record all the topics and sub topics that were covered. This review revealed another issue in the number of clicks required to navigate to certain topic pages and pieces of information. Because of this review the team decided that the best option would be to create a whole new site from scratch. As well as this, it gave birth to a mantra for the new site which was simply '4 clicks', any document should be able to be reached in 4 clicks or less across the whole site.

BUILDING A STRATEGY

After deciding the direction of the project, it was important that we produced a clear strategy. This was crucial to record our vision for the project but also to make sure that we stayed focused on our goals. The strategy consisted of four key areas of focus:

- **Records and Information Management** – Website update, total restructure and rebrand. Reviewing existing material and compiling new and missing material.
- **Points of Contact and Skills Registry** – Creating a comprehensive record of subject matter experts, points of contact and current skills of staff.
- **Knowledge Sharing** – Develop approach of sharing knowledge from external courses, conferences, workshops and general expertise.

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- **Social Media** – Explore opportunities to utilise social media to expand networks and knowledge within GSK statistics and programming.

We kept a strategy document to record the decisions made throughout the course of the project and document the work that was done.

IMPLEMENTATION

Once the groundwork was laid, it was a case of beginning to implement the solutions. The implementation of the new website had many aspects including:

- Planning the structure – how would the different levels of the website be structured and what pages and topics should be included?
- The design - designing the most effective and user-friendly pages at each level.
- The production - producing all the websites pages on GSK's intranet provided by SharePoint.
- Finally, the roll-out - to the whole department, followed by the platform maintenance.

STRUCTURING

The first and possibly hardest part of the project was to come up with a plan for the structure of the website. This involved identifying all the topics that needed to be covered and then deciding how to organise these pages and what the different levels of the website would be like. To do this, we created a spreadsheet to record all the different topics, which was also used to record the member of staff identified as a potential owner for the site page. From this list we were then able to assign some categories to give us the different levels of our website. Keeping the '4 click' principle in mind we came up with a levelled approach, which can be seen below in our initial structural diagrams.

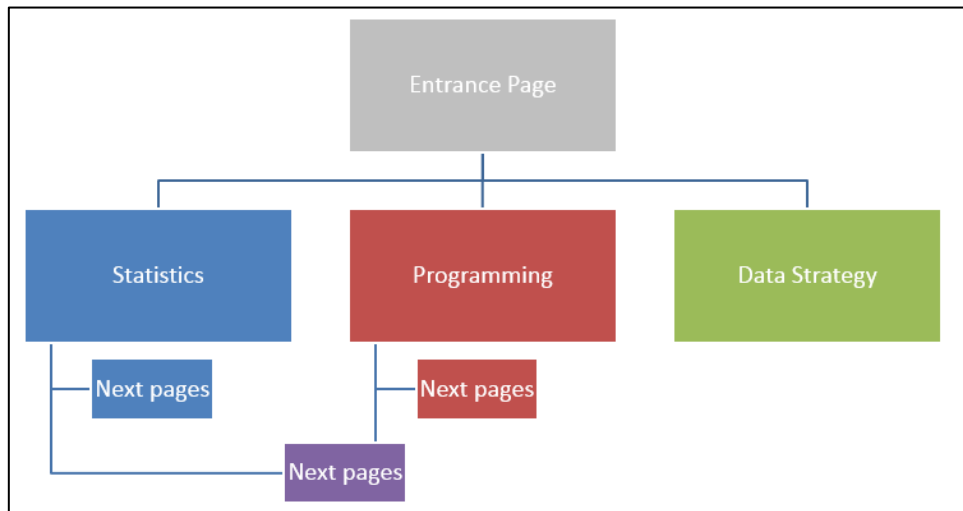


Figure 1: Structure for first level of the website, breaks down into separate statistics and programming pages. Clearly some pages will be relevant to both programming and statistics, so these pages are linked to both.

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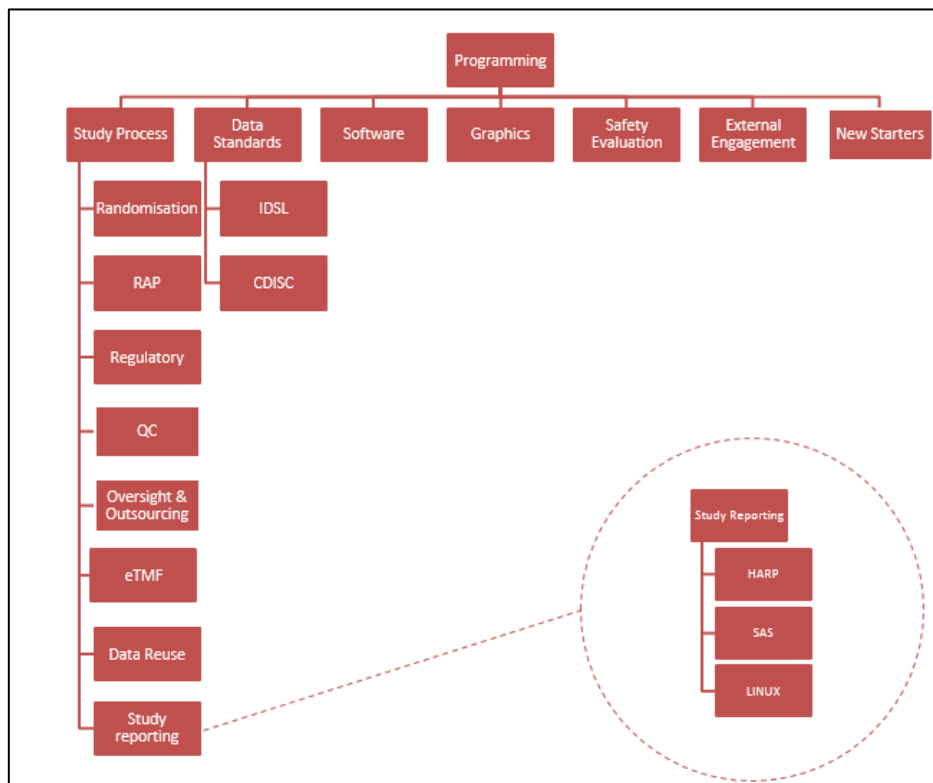


Figure 2: Structure for the second and third levels for the programming portion of the site.

It was important to create clear cut categories to avoid confusion as to what topics may be contained within each section. We also wanted the structure of the website to prevent people having to search the whole site to find information, it had to be user friendly.

DESIGN AND FEEDBACK

The next task was to design the different pages of the website. We needed to design these to be engaging to the user, whilst also making them clear and concise to make the users experience as straight forward as possible. To achieve this, we decided to keep the number of different page designs to a minimum, and as a result we set out to produce 3 different pages: A home page, and then category pages and topic pages that could be used universally across the site. The reason for this is that we felt it would help users build familiarity across the website, and help them to know what to expect when viewing any new topic.

The design of the home page (Figure 3) and category pages (Figure 4) were kept as simple as possible. We borrowed most of the design aspects of our homepage from a recently updated 'Reporting and Analysis Plan' page, and the category pages were kept simply to coloured tiles with category titles. You can see the design of these below.

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Figure 3: Home page design - Some of the key design aspects of the home page include the news carousel in the top right, which revolves with up to date departmental information. And, the feedback button which allows users to provide feedback directly to the project team.



Figure 4: Category page design - You can see the simple and attractive design used to display the different levels of categories, when highlighted these tiles show extra information to help the user decide which category the document they are searching for should be contained in.

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Arguably the most important page of the website, the topic page design was the key focus in the design portion of the project. For this part of the design we decided to draft a couple of different possibilities and collect feedback from a selection of programmers and statisticians as this part of the website would be the most important when it comes down to ease of finding information. We felt getting input from several employees within the department would help us to create the most effective page. Below you can see the two initial designs in figures 5 and 6.

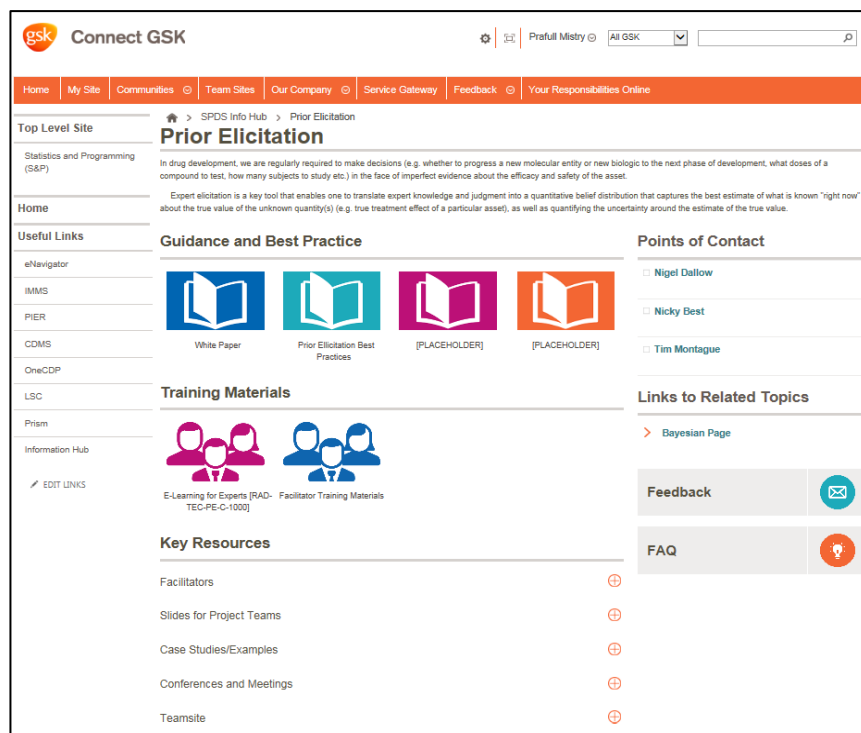


Figure 5: Topic page design 1.

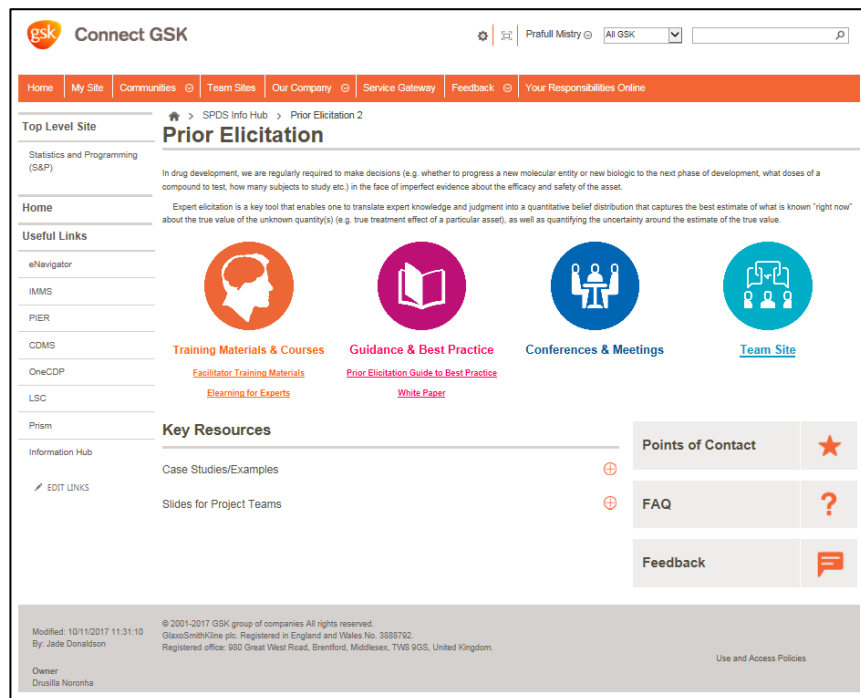


Figure 6: Topic page design 2.

We sent these initial designs to a pre-selected group of statisticians and programmers, alongside a questionnaire created using an in-house survey system. The questions posed were as follows:

- Which design do you prefer? When deciding please consider not only the appearance of the pages, but also how easily and quickly accessible the information will be with each design.

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- Why do you prefer this design? Please try to give three bullet points if possible.
- Are there any improvements you would make to your preferred design? E.g. any information that is missing.
- We plan to use the favoured design across all topic pages on the new SPDS Info Hub website, can you think of any topics where this design might not be suitable?

The feedback was collated and reviewed by the project team to come to a decision on a final design. After the review opinions amongst the reviewers were split and so we decided to implement the best features of both designs. People preferred the main body of the second design, they felt the circular header pictures and variety of pictures were more appealing. The team also decided that it was a more practical design as it meant we would be able to fit more information into the main part of the page than in the other design. However, the points of contacts, related topics and feedback button were preferred in the first design. The layout of this sidebar in the first page meant the points of contacts were closer to the top of the page, and easily accessible without having to click on to another page, which was highlighted by our reviewers as being extremely important. This gave us our final design (Figure 7).

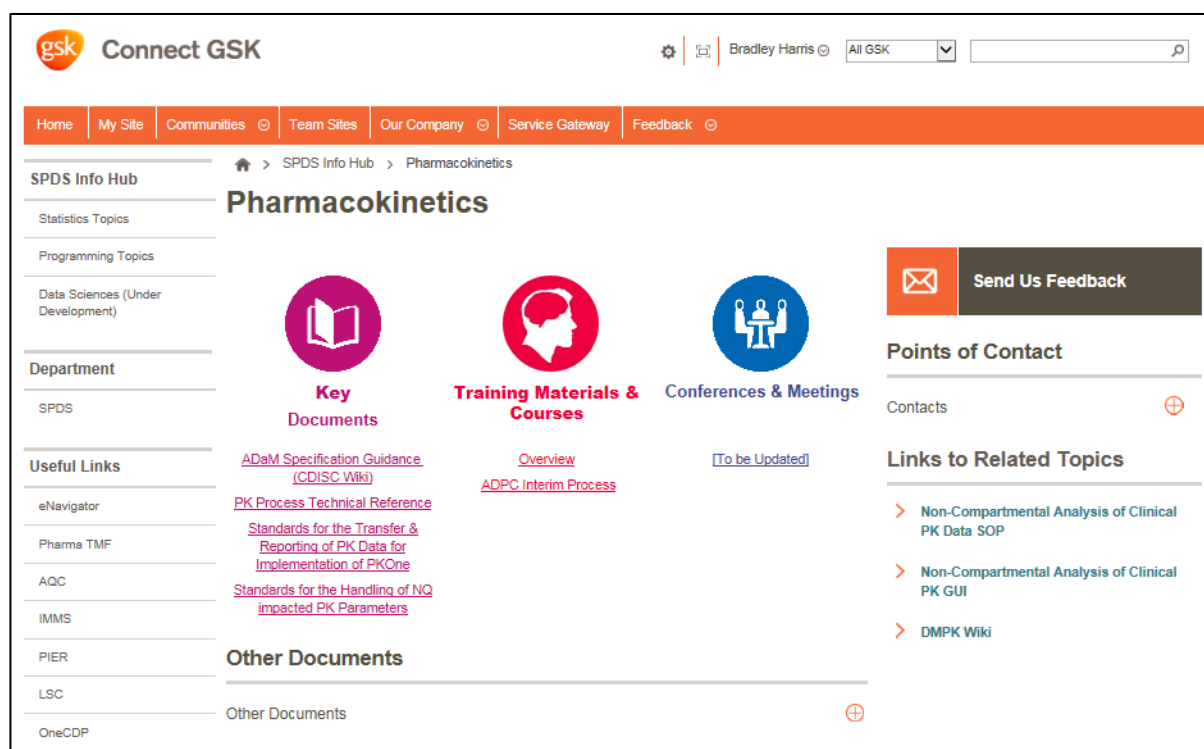


Figure 7: Final topic page design.

PRODUCTION

The final activity before the roll-out of the new platform was the actual production of the individual web pages. GSK uses SharePoint for its intranet and this came with many benefits for us when creating our website. Not only does it provide a useful user interface for creating the pages, it also allows you to re-use templates across the site. This was particularly useful in the case of our topic pages which were to all use the same design as decided in the previous section.

Members of the project team worked developing the home page, category pages and copying the topic page template across all topic pages. Then we could get topic page (site) owners, identified during the planning process, to develop their own pages to make the process a lot more efficient and reduce work load on our team. The way we did this was by producing a user guide which detailed exactly how to modify each section of the web page but also how to keep the design consistent with our expectations for these pages. This user guide was required not only to instruct page owners on how to set-up their topic page for the first time, but also to provide useful guidance in terms of page maintenance which will be discussed later in this paper.

ROLL-OUT

The final stage of the project was to make the website live and roll-out the new platform to users. To have the most effective roll-out we planned how we could get maximum visibility for the new site. Alongside the site going live, we also sent an e-mail newsletter to the whole of the statistics and programming department detailing that the new site was available and the improvements that had been made over the old reference desk site. We also presented the new site at many different departmental meetings, which we will continue to do until the Info Hub is fully adopted across S&P and the old site is decommissioned.

We felt that the website being available as soon as possible was necessary. Hence, we decided to split the roll-out into two waves prioritising the more commonly used pages. We released the first group of pages with the initial roll-out and then the remaining pages were produced over the next few months and released together. Operating in this way meant

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some concurrent pressure from project deadlines was released as our roll-out deadline was more achievable, with less pages having to be produced for the first wave.

MAINTENANCE

Following the launch of the project there was just one more thing that needed to be implemented. As one of the main issues highlighted in the old system was the infrequency of updates, we wanted to future proof the new site by implementing a maintenance plan. This plan would facilitate regular updates to the site to ensure information stored is always current and that site pages are always clear and concise.

The maintenance plan consisted of many different activities which we organised by the frequency that they should be performed (weekly, monthly, 3 monthly, 6 monthly and yearly) and by whom should be performing them (site owners, project team, topic page owners and S&P staff). Some examples of maintenance activities include managing access to the site, reviewing the relevancy of resources on the website (both uploading new and removing redundant documents/pages), updating the home page news carousel to have up to date news stories and ensuring the most commonly used information is the easiest to locate. The maintenance plan was rolled out to page owners with the launch of the site.

CONCLUSION

In conclusion, producing an information hub for our statistics and programming departments has been proven to have many benefits. We already knew it was a necessity to have a central location to store important documents relating to S&P topics, but now we have a much more effective platform for doing so. As well as assisting statisticians and programmers in their day to day work, we now have another way to raise awareness of different S&P topics and keep up to date with departmental news. The platform is also highly useful for new starters, as we can point them towards the one platform rather than them having to remember the locations of multiple different sources of information.

It is also clear from the old system that maintenance is an important part of a platform like this being successful. A robust maintenance plan can future proof information stores and ensure their efficiency for longer periods of time.

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