

1 IMPLEMENTING A BI PORTAL

1.1 Portal design

The main hub for linking all improvements for BI adoption together would be a BI portal. This portal would function as the first line of information where new users and interested managers can find the right information they need, unlike today where all information is spread out over various locations in the myASML SharePoint site collection.

At first it was proposed to create a brand new portal to replace the existing BDA sites and subsites. Inspection of the existing content however revealed that, with some minor adjustments and content rearrangements, the existing BDA site could be altered into the desired portal.

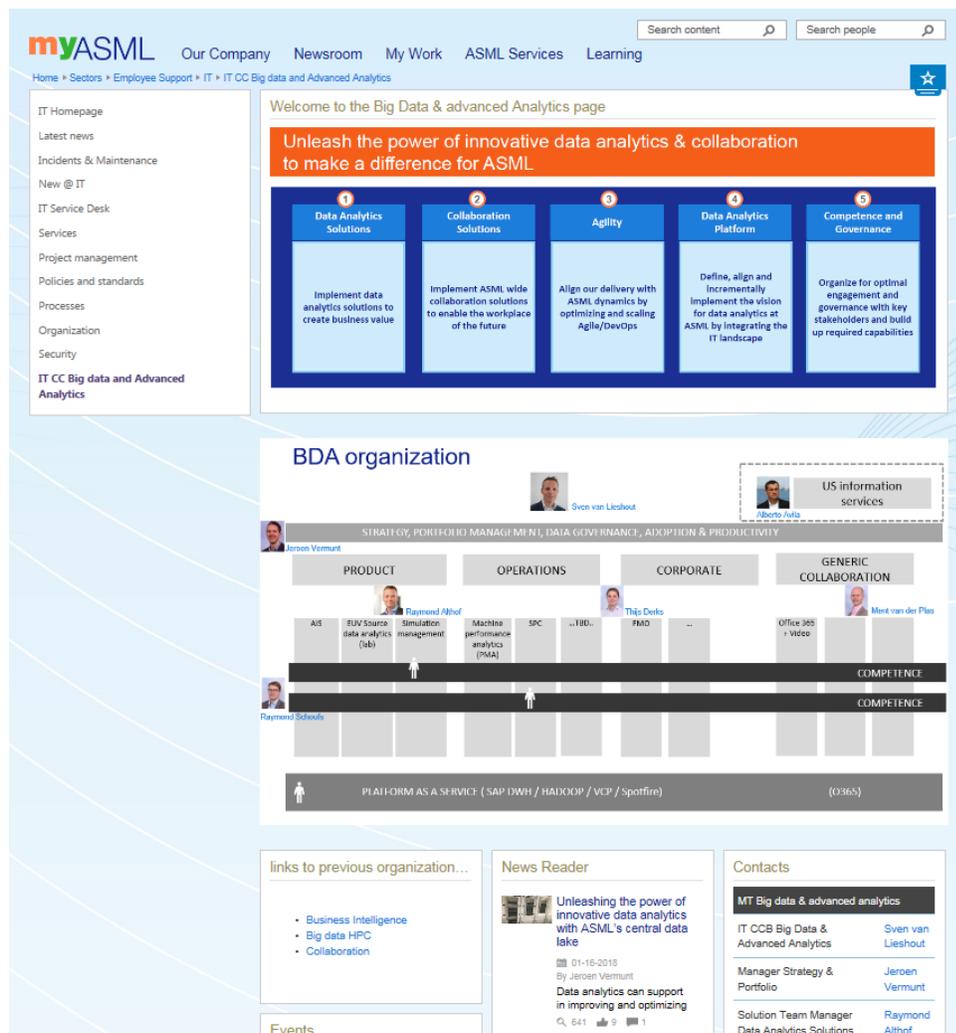


Figure 1-1: The current layout and content of the BDA CC SharePoint site

A rough proposal was made in PowerPoint and submitted for review. After consulting the collaboration office, several adjustments were made since the basic outline of the ASML SharePoint sites is fixed. Three possible solutions were eventually created, where each solution has its strengths and weaknesses. The main focus of the site proposals is the ability to find information in two dimensions. These being the new value streams that were created when the BDA CC adopted a matrix approach in May 2018 and the platforms which include not only reporting software but also infrastructure tools like Hadoop and other content.

The first solution is very similar to the existing BDA site. It reuses the overview image and gives the site visitor a good idea of the BDA structure. The columns of the image would be made clickable and on clicking the user would be redirected to a subsite that contains additional information. The overlaying competences in the original image can be omitted since they are not relevant for business users.

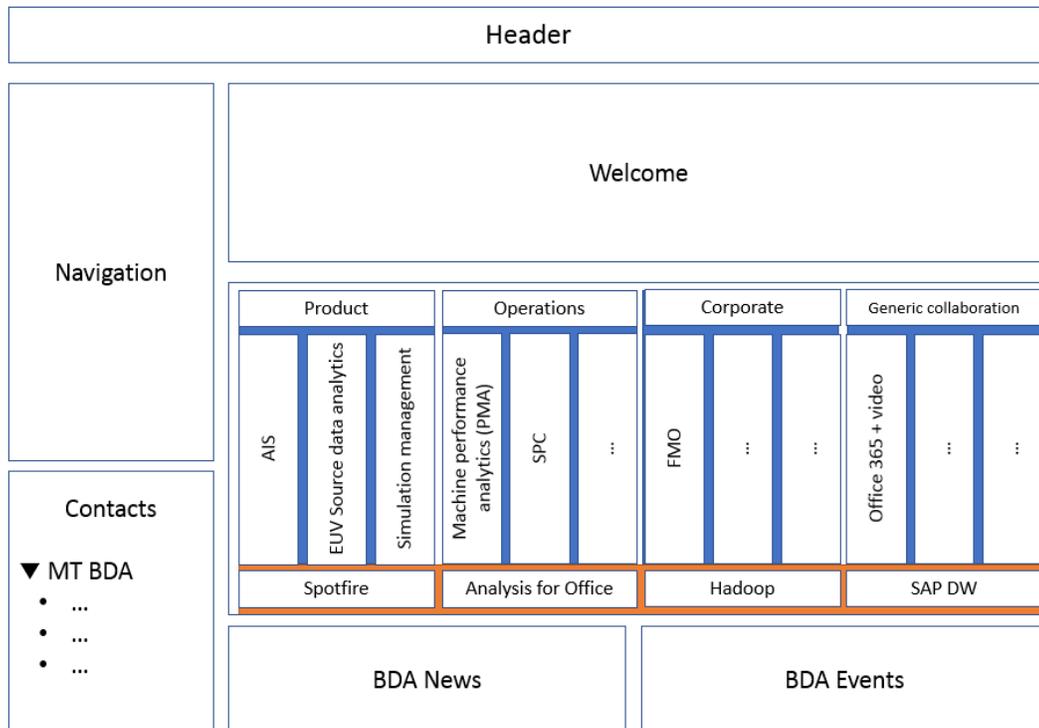


Figure 1-2: The first solution for the new BDA portal

The main caveat with this solution is that the columns that hold the value streams are images set in a table. When more value streams are added, they scale, but the text they hold also scales. Having too much value streams will eventually render the text unreadable. The bottom bar that holds the tools faces another issue. Since there is no subdivision there, having a lot of tools in the bar may impede easy access and searching.

The second solution is based on the new outline for the learning website the collaboration team is developing. They use 3 domains for training which are displayed prominently on the website. Each domain has several subdivisions which structures the content.

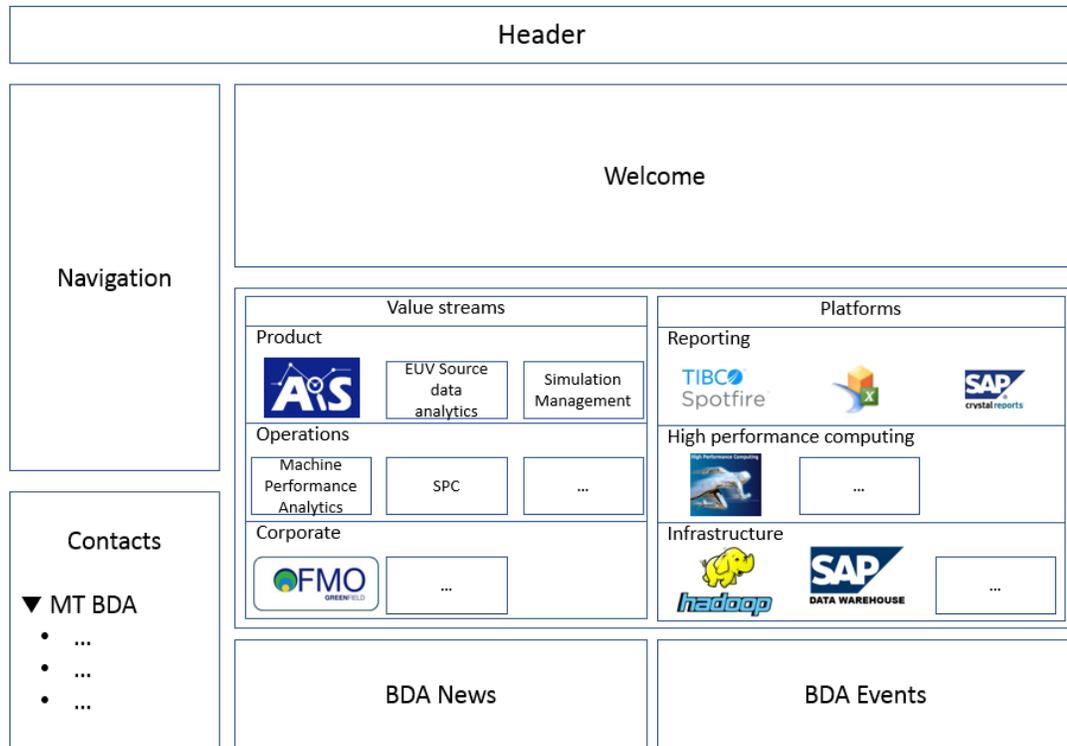


Figure 1-3: The second solution with two separate content dimensions.

As domains for the BDA site, the two previously mentioned dimensions are used, meaning value streams and platforms. In the value stream column, the different subdivisions are the main divisions a stream belongs to and the actual content are the value streams themselves.

The platforms domain uses the same setup. As subdivisions new entities can be created like 'Reporting', 'Infrastructure', etc. to order all the available platforms in manageable subsets. In this setup icons can be used to graphically depict tools or value streams, making them more visually appealing to business users.

On both pages the contacts block is moved from the bottom of the page to under the navigation menu, this to facilitate communication from business users to the right person in the BDA CC. To further develop communication towards the business, the BDA News and BDA Events sections are positioned more prominently.

Since both solutions have positive and negative points, the first has probably issues with scalability and the second lacks the image with the structured overview of the

BDA department, it is possible to make a mix of both solutions, meaning placing icons in a structured overview.

Since these icons are placed in a table on a SharePoint site and don't need to be all next to one another, the amount of icons per row can change when more value streams are added. Since the Corporate and Generic Collaboration subdivision only hold one value stream for now, it would make sense to place that icon in the center of the column or align it left and leave a blank space to the right that can be filled with a next value stream. Once the third value stream is added a second row can be created to hold this new item. With the first solution this new stream has to be added to the right of the first two limiting the space for content.

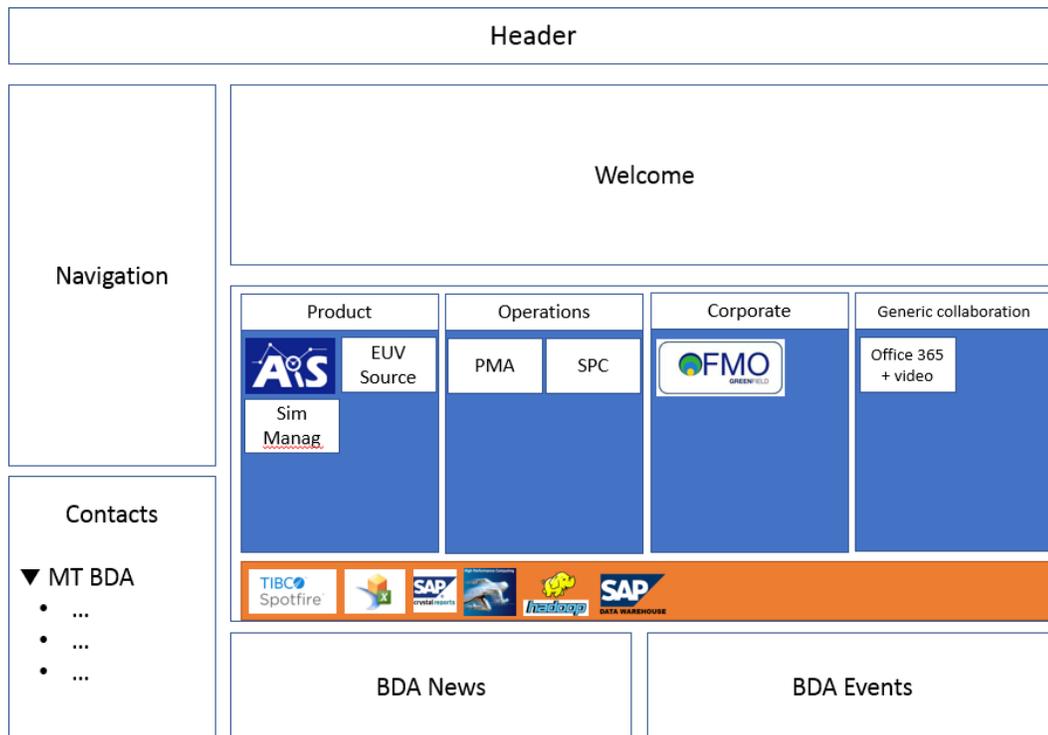


Figure 1-4: A mix of solutions 1 and 2, icons in the BDA overview

The bottom bar that holds the platforms can be filled accordingly and overflowing icons can be placed in a second row. The only caveat with the placement of the platform icons in this bar is similar to the issue this bar had in the first solution. When a third, fourth or fifth row of icons is added, the overview might be lost and this content section might be difficult to use. A minor solution could be to organize the platforms alphabetically to provide an indirect sorting. Since it is unclear to the author, for now, how much platforms the BDA CC supports, it's not possible to give an estimate how full this bar will get and if a second or third row is needed.

In the end, the third solution was chosen from the three proposed portal sites. After consultation with the Collaboration office, a proposal was created and the features were listed more clearly. Several additions were also proposed.

One of these additions is a top and bottom text bar displaying 'Value stream' and 'Platform' in a same color hue as the sections these bars belong to. This to avoid the misconception that platforms that are listed below a certain section only belong to above mentioned value stream or section.

Furthermore a clickable bar displaying the general 'Strategy, portfolio management, data governance, adoption & productivity' was added as well. On clicking the bar, Outlook is opened to send a mail to the portfolio & demand manager. The message also has the preset subject "<BDA Portal> Request for information" to clearly indicate this is an information request that was sent by a business user using the BDA portal.

The same concept was applied to the headers of the Product, Operations, Corporate and Generic collaboration divisions. On clicking the headers, Outlook is also opened to send a mail to their respective managers displaying the same subject.

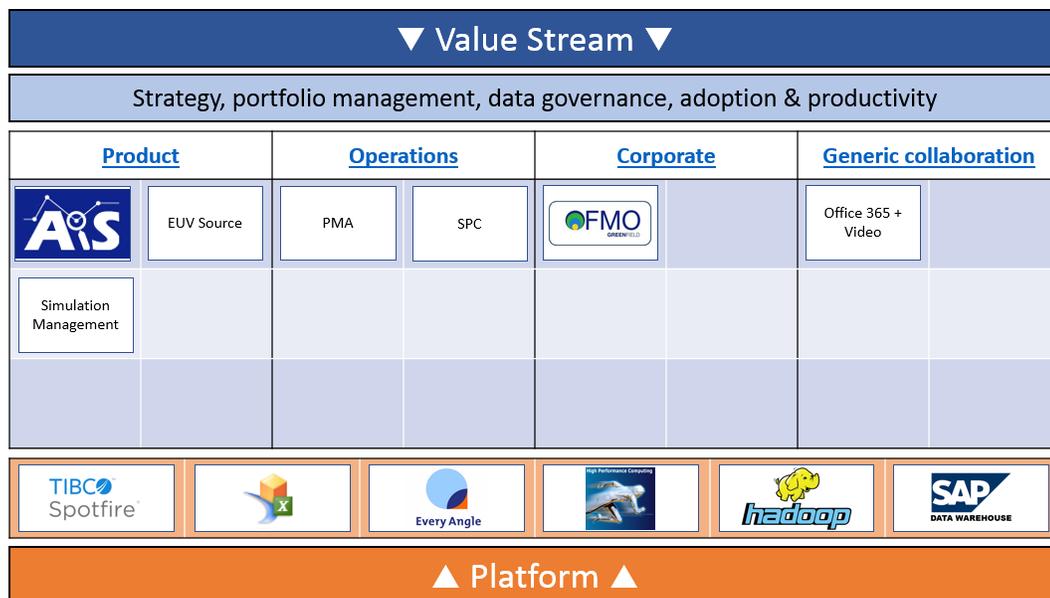


Figure 1-5: Proposal for the new portal site

Icon style and placement is also proposed. One or two columns of icons should be used for the value streams, while the platform bar should hold 6 icons per row. All value stream icons should have the same width and height. The same applies to the platform icons. This to ensure visual order and a solid design.

Welcome to the Big Data & advanced Analytics page

Unleash the power of innovative data analytics & collaboration to make a difference for ASML

1	2	3	4	5
Data Analytics Solutions	Collaboration Solutions	Agility	Data Analytics Platform	Competence and Governance
Implement data analytics solutions to create business value	Implement ASML wide collaboration solutions to enable the workplace of the future	Align our delivery with ASML dynamics by optimizing and scaling Agile/DevOps	Define, align and incrementally implement the vision for data analytics at ASML by integrating the IT landscape	Organize for optimal engagement and governance with key stakeholders and build up required capabilities

Figure 1-6: Mirroring colors used in the image in the welcome text.

BDA organization

▼ Value Stream ▼

Strategy, portfolio management, data governance, adoption & productivity

Product	Operation	Corporate	Collaboration
 	  		
			
			

▲ Platforms ▲

Figure 1-7: End result of the new BDA portal information table.

The screenshot shows the myASML BDA portal. At the top, there is a navigation bar with 'myASML' logo and links for 'Our Company', 'Newsroom', 'My Work', 'ASML Services', and 'Learning'. Below this is a search bar and a 'Recent draft not published' warning. The main content area features a welcome message and a five-step process for data analytics and collaboration. Below this is a 'BDA organization' section with a 'Value Stream' table. The table has four columns: Product, Operation, Corporate, and Collaboration. The Product column contains logos for AIS, Simulation Management, Report Catalog, and ASML. The Operation column contains logos for PMA and SPC. The Corporate column contains the SAP DATA WAREHOUSE logo. The Collaboration column contains the Office 365 logo. Below the table are logos for TIBCO Spotfire, Hadoop, and Every Angle. At the bottom, there are sections for 'Events', 'News Reader', and 'Contacts'.

Value Stream Table:

Product	Operation	Corporate	Collaboration

Platforms:

- Report Catalog
- TIBCO Spotfire
- Hadoop
- Every Angle

Figure 1-8: The BDA portal table implemented in the BDA portal site.

Finally the value stream and platform sections can be visually separated using two different colors. In the example blue and orange are used since they are ASML approved colors mentioned in the style guide. They also have a mirroring counterpart in the image above in the welcome text. This will make the content a coherent whole

and bring order to the design as well as blend the new content into the rest of the page.

During the implementation phase, some style issues needed to be adjusted. The orange and blue colors in the main content sections were left out for beauty reasons. All icons of the Value Streams are 70 by 70 pixels, those of the Platforms section 128 by 80 pixels. The items that don't have an icon, received a white 70 by 70 pixel with blue text representing the item. Due to graphic reasons the height of the Platforms icons was reduced to 70 pixels through the use of inline CSS. All icons were created by using Adobe Photoshop and then exported to .png format.

All other styles and formats were created using inline CSS as well since no stylesheet could be linked to the table in SharePoint. Borders around the images are also created using CSS instead of drawing them on the image in Photoshop.

1.2 Portal content fit/gap analysis

Content about the BDA CC is spread all over ASML and is sometimes outdated. To ensure people receive the right information, this content needs to be re-evaluated. With this evaluation and a fit/gap analysis, proposals can be made to remedy the missing content.

As a benchmark, all platforms mentioned in the survey as well as some infrastructure and supplementary platforms were looked at. The value streams were derived from the organizational overview on the original BDA homepage.

As such included platforms are: Spotfire, SAP Analysis for Office, SAP Design Studio, SAP Crystal Reports, SAP BeX Query Designer, BO WebIntelligence, Oracle Business Intelligence Enterprise Edition, Every Angle, High Performance Computing, Hadoop and SAP Data Warehouse. As value streams AIS, EUV Source, Simulation Management, PMA, SPC, FMO and O365 + Video were selected.

The analysis shows that the main focus for providing content should be on the platforms section of the new portal. Only one platform is well documented and that's HPC. Spotfire was under development at the time of writing this text, but showed great promise. The other platforms either had old outdated content that was sometimes spread around on myASML or no content at all.

Since the survey shows most interviewed users use Spotfire, the main focus should be to get that content site up and running as soon as possible. Second and third choice based on the survey are Analysis for Office and WebIntelligence. Content pages should information concerning licenses, key-users, training and getting help.

Fit Gap Analysis Platforms						
	--	-	0	+	++	Comments
TIBCO Spotfire						Started, work in progress
SAP Analysis for Office						Powerpoints on old site
SAP Design Studio						No content
SAP BeX Query Designer						No content
BO WebIntelligence						No content
Oracle BIEE						Powerpoints on myASML
Every Angle						Basic collaboration site
High Performance Computing						Well documented
Hadoop						All content absent
SAP Data Warehouse						Info about training on BICC
Report catalog						Work in progress

Figure 1-9: Fit Gap analysis of the available platforms.

Fit Gap Analysis Value Streams						
	--	-	0	+	++	Comments
AIS						Missing team content
EUV Source						Collaboration project
Simulation Management						Good knowledge base
PMA						Good knowledge base
SPC						Collaboration project
FMO						Well documented
O365 + video						A lot of scattered content

Figure 1-10: Fit Gap analysis of the available value streams.