

Liferay portal configuration for efficient Knowledge Management System (KMS)

With 500 employees in more than 4 countries, this research and analytics firm is committed to provide wide-range customized research, data management and analytics solutions that empower their global clients to make smart decisions.

Ensuring its clients the delivery of scalable, cost-effective and quality support in a timely manner, they serve their clients with higher efficiency, market knowledge, productivity and cost reduction resulting in business growth.

Situation analysis

The client suffered from the ill-effects of an old system for their data management. With huge data derived from various research works, each employee maintained individual repository to maintain the data.

This made the data retrieval very complex and time consuming. This also led to duplication of data as all employees shared the data over emails. They turned to e-Zest to make their content accessible and usable and for this they needed a satellite repository containing all their data.

The Vision

The teams at this research and analytics services company was using various formats for data management and transfer. With the absence of an efficient Knowledge Management System, they failed to maintain this high volume data effectively.

They desired to upgrade to an efficient KMS and data management to cull their existing content so it was current, relevant and organized into readable chunks.

As happens too often with mass content management, 30% of their content was missing when required on time. The client was at a fix, not knowing how to address this issue on how to improve their data management. While they knew what they needed, they possessed neither the skill nor expertise to execute their vision.

Not knowing where to start, they approached e-Zest for help.

Challenges

- Managing close to 400 GB of heterogeneous data, consolidating and uploading that data on the server which was picked up from various systems was a challenge due to limited server bandwidth.
- Some of the other challenges were identifying required dependencies on the libraries and setting up all those as and when needed in the project.
- Some MySQL tables were crashed and our team had to recover the tables with complete lost data.

Our Solution

e-Zest saw an opportunity to improve usability and management of data. e-Zest team recommended Liferay for the client's KMS which suited their requirement perfectly. e-Zest first gathered all current client data in various formats and later proceeded to organize it into relevant categories.

The content was organized based on usability aspect making information retrieval easier. After planning content by user need, the site architecture was created with intuitive structures. Our solution further envisioned and proposed the following features:

- Search filter: As per client's request, search filter was given for easy search of documents. Our team used Liferay search portlet and Apache Lucene for indexing of files and documents.
- Preview: The preview option helped users to preview the data and content before downloading files. For this, we configured Microsoft Office for the preview of Microsoft Office files, Xuggler for preview of video and multimedia files and Ghostscript and ImageMagick for PDF files.
- Role Based Access: To provide role based access to critical data, our team defined four types of users such as basic user, power user, admin and super admin and provided specific access to these users based on their role.
- Web Analytics and Reports: Portal usage analytics was provided to enable top management to see how employees are engaging with the portal, how many users are online currently and number of file downloads. Piwik was used for real time data updates, reports, dashboards and site search analytics.

e-Zest experts sensed that client is not very experienced in technology. To address this challenge, e-Zest experts trained the client teams on how to access and use Liferay portal -to search, download, share and manage the content based on user needs.

Technology Stack

- Liferay 6.2
- Apache Server
- Piwik
- Ghost Script
- SOffice
- Apache Tomcat
- Apache Lucene
- Image Magick
- MySQL
- CentOS 6.6
- Xuggler
- Liferay Portlet configuration

Business Benefits

- Increased understanding of user needs and user trends that led to accuracy of content.
- Data redundancy was removed from the system reducing time taken for fetching a particular data file and hence enhancing productivity.
- Quick availability of data helped managers take faster decisions on various organization level strategies.
- The portal increased employee engagement with the KMS which led to minimized email traffic and duplication of files.
- Reports generated by Piwik gave insights to the client to understand whether users have used this portal to its full potential. Also, the insights helped them to promote the portal in the right direction.

Bottom Line

Liferay content and Knowledge Management Solution from e-Zest delivered many business benefits increasing the productivity of the client's employees.

The extranet helped the employees to access the portal from anywhere, speeding their workflows. The portal offered a complete solution for the client's data management and served as an efficient Knowledge Management solution.

