

ESA facilitates scientific publications and collaboration with Liferay DXP

Summary

Scientific research is the basis for innovation in space travel. This requires opportunities to share scientific knowledge, such as an online scientific platform. This platform must be user-friendly and easily accessible for all scientists, from any location and at any desired time. sci.esa.int

In Brief

INDUSTRY:

Aerospace

COUNTRY/REGION:

The Netherlands, 22 member states are affiliated with ESA

USE CASE:

Internet, collaboration platform, DXP, CMS

KEY FEATURES:

WCM, Authentication and Authorization, Application Display Templates, Theming, Responsive Framework, API, OSGi components



The technology is future-proof, the subscription is cheaper and our current team can perform maintenance on their own.

Suraj Bihari & Rob Zondag, Senior Software Engineers, ESA

Challenges

- Make the Science & Technology platform faster, more user-friendly, maintainable
- Preserve the current look-and-feel, functionality and CMS connection
- Migrate all data while retaining historical URLs and media

Results



BETTER WEB EXPERIENCE

Fast, responsive online platform



EMPOWERING BUSINESS USERS

Administration can be carried out internally



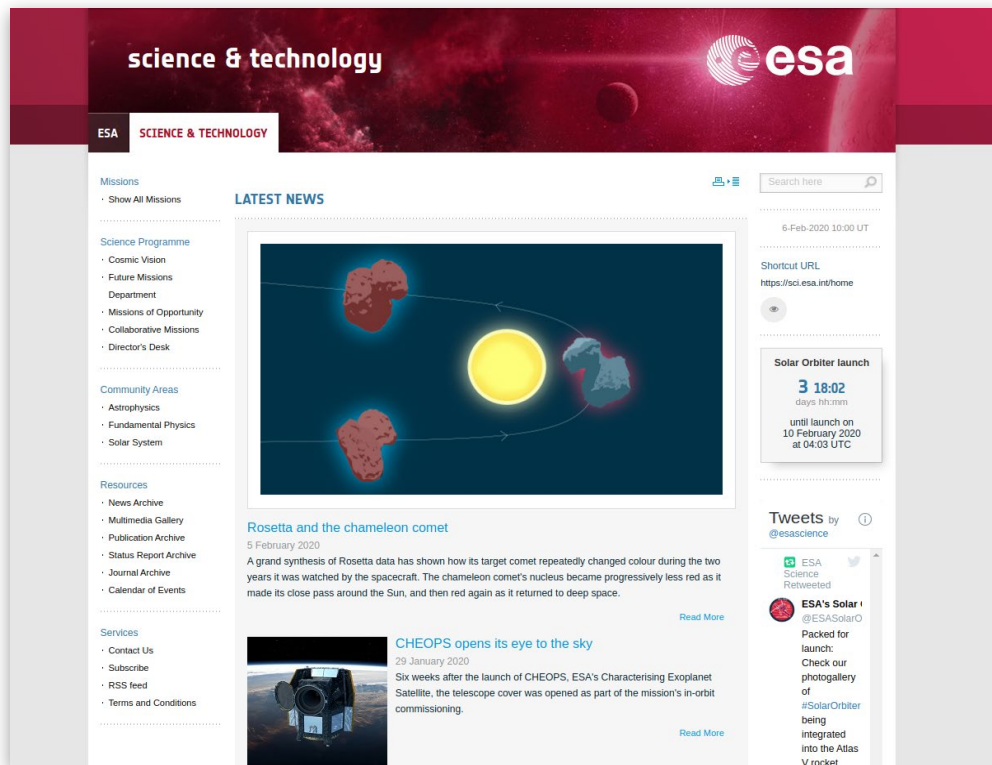
FUTURE-PROOF

Suitable for new technology and scalable



REDUCE COSTS

Savings on subscription costs and management



About ESA

The European Space Agency (ESA) deals with space travel in the broadest sense of the word. Think of the development of satellites and rockets, but also of earth and space research. Scientific and technological progress are key. With this, ESA has been committed to the economic growth of Europe since 1975. The space agency has branches in eight different European countries and launch facilities in French Guyana.

Basis for innovation

Scientific research is the basis for innovation in space travel. This requires opportunities to share scientific knowledge, such as an online scientific platform. This platform must be user-friendly and easily accessible for all scientists, from any location and at any desired time. This is especially important for an international organization such as ESA, where researchers work together worldwide. Researchers currently use two digital platforms: a 'Science & Technology platform'

where the scientific community can consult and exchange information for educational purposes and a 'collaboration platform' specifically for scientists and engineers.

Identical functionality and look-and-feel

The former public digital Science & Technology platform of ESA (sci.esa.int) was end-of-life and no longer sufficed in terms of speed and user-friendliness. For example, the online platform was not responsive for use on mobile devices. That is why ESA decided to renew this platform. Hereby, the underlying CMS, including all functionality, had to be transferred to the new environment as much as possible. Quite a challenge, because the Science & Technology platform was a completely customized solution. The look and feel of the new environment also had to be identical to the former platform, but it also needed to be responsive and using the new functionality that facilitates Liferay out-of-the-box.

Liferay DXP

ESA once again chose the Liferay Digital Experience Platform (DXP) as the basis for its new scientific environment. But not before Liferay demonstrated in a Proof-of-Concept, that they could offer a solid, user-friendly basis for the legacy CMS and associated functionality. Liferay DXP is open source, with standard components that provide ESA with all required functionality. ESA took care of the implementation itself, including the migration of all historical data, URLs, and media to the new Science & Technology platform. The out-of-the-box Liferay API was used for this.

The same, but faster and responsive

On the one hand, the millions of monthly visitors have hardly noticed that the underlying technology of the Science & Technology platform had changed: the look-and-feel has been taken over one-on-one, all functionality has remained available and the CMS works as before. On the other hand, visitors do notice a difference in terms of user experience. For example, the new environment is faster than its predecessor. Besides, the platform is responsive, so the display is automatically adjusted to the screen size of different devices, such as tablets and smartphones.

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Because of its success, ESA can now make optimal use of the existing infrastructure and Liferay expertise that was already present. Thanks to open-source technology, ESA can be assured that both platforms are future-proof. The environments are guaranteed suitable for new technologies and extensions. Also, the space organization can now carry out modifications internally. Combined with a cost-effective subscription, this results in considerable cost savings - now, but certainly also in the future.

For more information, contact sales@liferay.com.



Liferay makes software that helps companies create digital experiences on web, mobile and connected devices. Our platform is open source, which makes it more reliable, innovative and secure. We try to leave a positive mark on the world through business and technology. Hundreds of organizations in financial services, healthcare, government, insurance, retail, manufacturing and multiple other industries use Liferay. Visit us at [liferay.com](https://www.liferay.com).

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