Accelerating Innovation in Aerospace & Defense

How intelligent search paves the way for big ideas

sinequa

"Innovation" is perhaps the most used term in the business world. There's a reason that it continues to be the star of websites, pitch decks, annual reports, and pieces like this one year after year: Innovation is essential to an organization's success and longevity.

Globalization has led to increased competition in both national and international markets. This intense competition demands that organizations maintain or exceed the current standards for product quality, production technology, marketing, and customer experience. At the same time, a growing gap between business and IT is impacting entire project lifecycles from design to customer service, through engineering, manufacturing, and supply chain.

It is through innovation that companies can overcome internal challenges and outcompete in the global market. New ideas transform into commercial benefits through innovation, including positive changes in efficiency, productivity, quality, competitiveness, market share, and more. The alternative—settling for the status quo or failing to adapt to change—can have dire consequences.

In other words, **if you rest, you rust**.
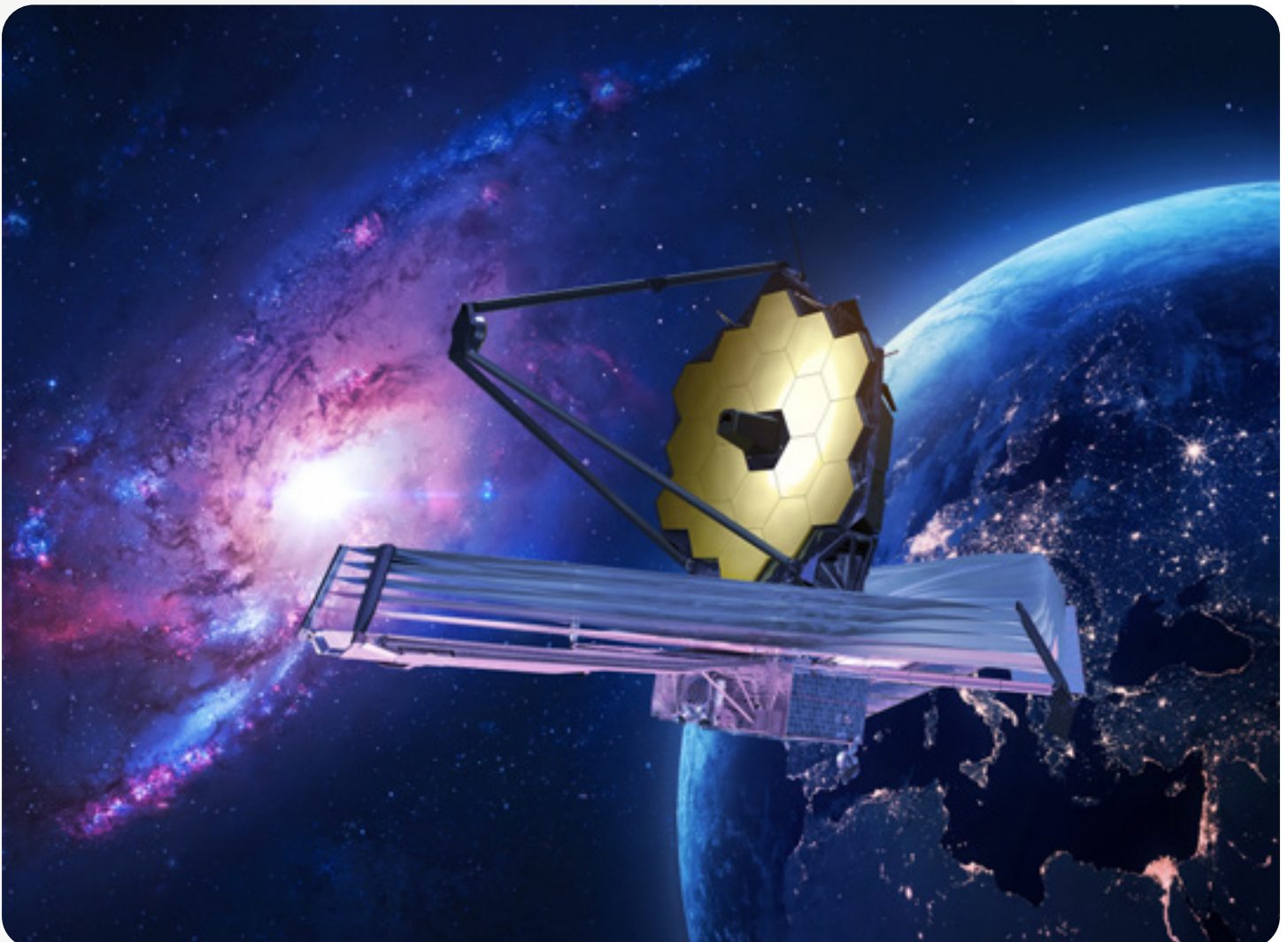
Innovation can happen in many places...

Innovation is how you gain a competitive edge and add new revenue—either from introducing something new or improving something existing. There is a widespread misconception that "something" needs to be a product or solution. Not so.

As far back as 1998, Doblin, part of Deloitte, identified ten types of innovation. These included not only new products and processes, but also improvements in things like business model, brand, and customer engagement. For A&D organizations, innovation in the following areas can differentiate them from competitors:

Sales Growth

To remain competitive, organizations must turn to sales-focused activities, including bundling their product offerings with value-added services, especially in the post-sales market and customer services.

Customer Centricity

Customer-centric activities need to focus on providing efficient, innovative services, close collaboration with customers and suppliers, as well as new approaches such as pay-per-use services for customers.

Operational Excellence

Companies must find operational improvements through supply chain management and logistics optimization, operational efficiency optimization, demand and inventory planning, and integrated business planning.

Product Lifecycle Excellence

Organizations need to focus on leveraging technology partner relationships, maximizing digital product lifecycle, and developing close collaboration with customers and suppliers earlier in the product lifecycle and across the value chain.

Cost Reduction

A&D companies must continue to focus on reducing costs by outsourcing non-core activities, optimizing the extended enterprise model with their risk-sharing partners, leveraging civil technologies for defense organizations, and harmonizing their information systems.

Green Initiatives

As legislation is introduced requiring companies to be more accountable in their use of resources, organizations need to develop and deploy sustainable products and services, provide green maintenance services and implement a green IT strategy.

It can happen in many ways…

For every problem or area of opportunity, there is a unique way to innovate. R&D teams and acquisitions to add new capabilities work, but they're not the only path to finding improvements. Many companies get locked into one way of innovating, which can lead to missed opportunities or mismatched solutions.

Expanding your vision of where and how innovation can have an impact can deliver significant financial benefits.

…but innovation can't happen without information and collaboration.

Progressive organizations pursue a culture of innovation by empowering employees to be creative. This often means a shift away from command-and-control hierarchies to a more decentralized and distributed organizational structure.

A looser structure provides employees the freedom they need to innovate. But it also results in disconnected employees working in silos, which hinders the ideation process. This is further compounded by the rise of the digital workplace, which separates employees from the organization and from each other.

At the same time, data creation continues to increase at exponential speeds. The need to equip employees combined with the push for efficiency and the trend toward "everything online" means that everything gets its own app. These apps are disconnected, limiting information access and collaboration, and blunting innovation.

Digital collaboration platforms (like Slack and Teams) seek to address this - but these platforms are not interoperable and still leave out most enterprise content. This, too, results in disconnected employees - working in silos, looking for things only in systems with which they are familiar.

Let's innovate the way we innovate.

Decentralization and digital transformation have made it difficult for employees to find the information and experts they need. It has also exacerbated the gap between business and IT. The result of this disconnection is wasted time, missed insights, and lost opportunities.

If innovation is the application of knowledge towards economic and social benefits, then finding new ways to connect employees to knowledge (and to each other) can significantly improve the process. An innovation to the way organizations innovate.

Intelligent search is the solution.

Intelligent search connects highly innovative organizations without compromising creativity. With intelligent search, organizations can link stakeholders to knowledge and experts by intelligently mining and surfacing information and insights. As the connector and facilitator of content across your organization, intelligent search:

- **Smooths the innovation process** by saving time

- **De-risks the process** by improving accuracy and ensuring compliance

- **Supports all types of innovation**, from new products to streamlined processes and beyond.

Sinequa serves large and complex organizations with the most complete intelligent search. Customers employ our platform to connect all content (both text and data), derive meaning, learn from user interactions, and present information in context.

We can help Aerospace & Defense organizations like yours in the following ways (and more):

- **Engineering Search**. Make all research material available from a unified view to facilitate a comprehensive understanding of all relevant information, without having to log in to multiple systems. Tailor user interfaces specific to engineering content and design activities such as specifications, drawings, CAD, and 3-D models, with an emphasis on components, parts, assemblies, how they relate, and associated processes (fabrication, manufacturing, test).

- **Expert Finder.** Dynamically identify expertise and experts on a topic based on their work products (documents, emails, discussions) and metadata (hours by task, project assignments). Construct an expertise profile of individuals based on the same data.

- **Contract Analysis**. Provide the ability to analyze contracts to find those that have exceptions or need to be updated by identifying clauses that deviate from standard terms. Make it easy to extract contract elements of interest en masse (such as terms or notice periods).

Solve content chaos and inform employees through a single, secure interface. Accelerate innovation, reduce rework, foster collaboration, ensure compliance, and increase productivity—all with Sinequa.

See how Sinequa helps others innovate:
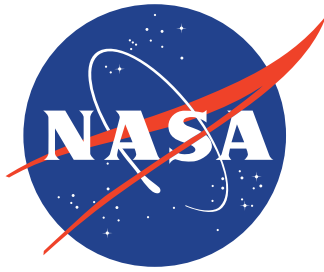
Speeding innovation at NASA. NASA (Marshall Space Flight Center) needed to eradicate the wasted time high-value engineering resources were spending to complete day-to-day tasks. This was part of an all-out effort to improve the speed of innovation that NASA requires to return to the moon by 2024. Their solution was to initiate a search project for MSFC's Engineering community to unify all critical engineering content spread across file shares, SharePoint files, and PTC Windchill (Product Lifecycle Management) content. With Sinequa's enterprise search solution, all relevant content was accessible from a single interface. MSFC was able to locate historical research on specific rocket engine tests to inform present-day research/build decisions. It also allowed them to quickly identify and browse lengthy CAD file drawings and explore similar documentation based on current research project criteria.

Improving KM at Northrop Grumman Corporation. Northrop Grumman was looking for an institutional memory solution to facilitate knowledge sharing. They discovered that their Operations team was using Sinequa for enterprise search and realized that they could also use it for their KM needs. The solution they built with Sinequa included customized social media elements that enabled employees to share knowledge, link related objects together, share and save queries and results, and engage with experts. Customized views were possible based on each employee's role and work, and notifications encouraged continued content engagement, alerting employees when their favorite documents have been changed. Sinequa's solution for knowledge sharing was recognized by the Chief Technology Council as the biggest impact tool for their sector and nominated for the President's Award for Innovation.

Breaking down silos at Thales Group. Thales' highly dispersed knowledge exists across many different locations and countries. They needed help to transform vast quantities of raw content into valuable insights and critical information. Sinequa connected its various content repositories and added meaning with semantic intelligence, transforming it into findable and actionable information. By breaking open content silos and providing access to all relevant information, Sinequa helped Thales greatly increase employee effectiveness and productivity.

Helping Airbus Helicopters achieve operational excellence. The agents from Airbus needed an application to speed up the resolution of customer support cases for an in-service fleet of 12,000 helicopters. Sinequa provided those agents with a powerful search and proactive recommendation system. This enabled a 360-degree view of customers and cases that raised both agent productivity and customer satisfaction.

About Sinequa

Sinequa serves both large and complex organizations with the most complete enterprise search, ever. Customers employ our intelligent search platform to connect all content (both text and data), derive meaning, learn from user interactions, and present information in context. This solves content chaos and informs employees through a single, secure interface. They get the knowledge, expertise, and insights needed to make informed decisions and do more, faster. These organizations accelerate innovation, reduce rework, foster collaboration, ensure compliance, and increase productivity. Become Information-Driven™ with Sinequa. For more information visit www.sinequa.com.

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