

WHITE PAPER SERIES

# Content Services for Field Service Organizations



# Introduction

Technical documentation is core to any service organization. Its absence, inaccessibility, or an aversion to using it can cause severe delays, errors and even accidents during maintenance and repair activities. Conversely, delivering the right product information to the right place and the right person in a time of need maximizes employees’ productivity and elevates the customer experience.

In this White Paper you will learn about the state of the art of content services and get a detailed view on how they can almost immediately increase the operational efficiency of field service organizations, boost the learning and training experience of field technicians, and strengthen a network of partners.

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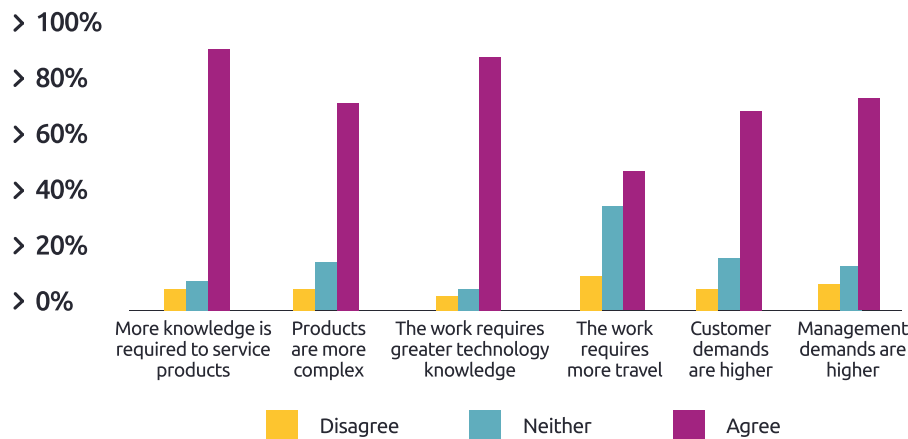
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# 1. Why Content Services are Instrumental to Field Service Productivity

Product documentation – from installation guides to operating procedure documents, maintenance manuals to tech notes – are core to any field service organization. Technical content is the main source of information for field service engineers and, as the 2021 Service Council *Voice of the Field Service Engineer* report confirmed, product knowledge is an increasingly important requirement for servicing products as those products continue to get more complex. Thus, precise and exhaustive product documentation is a must-have and will continue to be necessary across the lifecycle of any machine or piece of technical equipment.

How has your work changed since your start in field service?



Source: Service Council - Voice of the FSE 2021

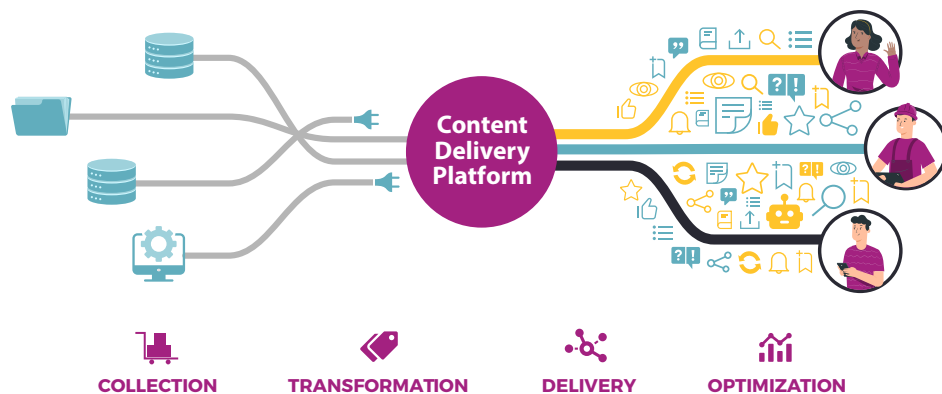
All manufacturers have this in mind and as a result, produce large amounts of product content for their teams, their users, and their partners. But the sheer weight of this product content alone does not mean it is serving its purpose or meeting the needs of its audience.

Most product documentation is offered to users in the form of printed manuals or downloadable PDFs that are delivered with the product at the time of installation, or available on servers or download centers that are variably accessible to technicians. Documentation also often comes in the shape of 1000-page, one size fits all manuals including details and options for dozens of different versions of the specific equipment that requires servicing. At the same time, the information for a single machine can be scattered across several repositories and sources: the installation guide might be stored in one system while the product graphics are in another application and the spare parts information somewhere else. And finally, when the technician manages to locate all the necessary information, chances are that the document is hardly readable on the mobile device due to either a low-resolution image or inadequate display.

The result of this poor technical content experience for field technicians and operators is an increased time to locate the right information, an inability to read and use the documentation while servicing, frequent escalations to product experts and third line support, or worse guessing, resulting in poor service quality and increased risks of incident or injury.

# 1. Why Content Services are Instrumental to Field Service Productivity

Content Delivery Services are designed to ensure that the most complex documentation types and formats are accessible and readable to mobile technicians and users when they need it. While they optimize the distribution and usability of content, they strongly improve the efficiency of business operations on the field.



The Content Delivery Platforms (CDPs) that are needed to offer these services:

- Work with the existing documentation every company owns
- Collect content from all sources and formats (PIM, PLM, CAD, authoring tools, CMS, folders and repositories with various MS Word or PDF documents...)
- Connect to writing systems in real-time to ensure information is always up-to-date and in-sync with the product
- Transform and unify the content so that it is adequately searchable, readable, and fit for digital devices

- Create a single source of truth that makes all information findable from a reliable, central point
- Distribute the content to the requested channel or touchpoint according to the user's rights, accreditation, and profile.

The most typical usages and applications for CDPs are:

- Documentation self-service portals for manufacturers' service organizations, their partners, and customers
- Mobile product documentation, as a dedicated app, or integrated to Field Service Management (FSM) systems or any other field technicians' application
- Integration of technical documentation across relevant tools and systems within the company including service desk tools, learning management systems (LMS), customer relationship management systems (CRM), and more.

The implementation of such content services are quick projects that require little if any change management on the content production side, encourage rapid user adoption, and streamline the overall service organization in record time: from customer support and field service operations, to learning and training activities, from the manufacturer's own teams to its blended workforce and its partner network.

## 2. Service Operation Efficiency

### A. Scaling operations with online self-service documentation

Most manufacturers face spiraling service costs as their activity grows, and their support desk and product experts are under high pressure to deliver quality support while tickets and requests are booming. Searching information from a potentially outdated printed manual or from many different repositories of large PDF files is not a valid option for customers nor for field technicians, and poor content findability results in an increasing number of calls and tickets for the support desk.

In a recent survey, Gartner revealed that “service leaders report that as much as 40% of today’s live volume could be resolved in self-service channels”. Still, only 9% of customers do fully solve their issues exclusively with self-service. Without a doubt, there is a huge potential here and major productivity gains can be expected by offering efficient information self-service. However, a lot of self-service initiatives fall short of their objectives for lack of the right capabilities.

#### The state of self-service

**70%** of customers are using self-service channels at some point in their resolution journey



**40%** of live volume could be resolved in self-service channels



**9%** of customers actually do fully solve their issues exclusively with self-service

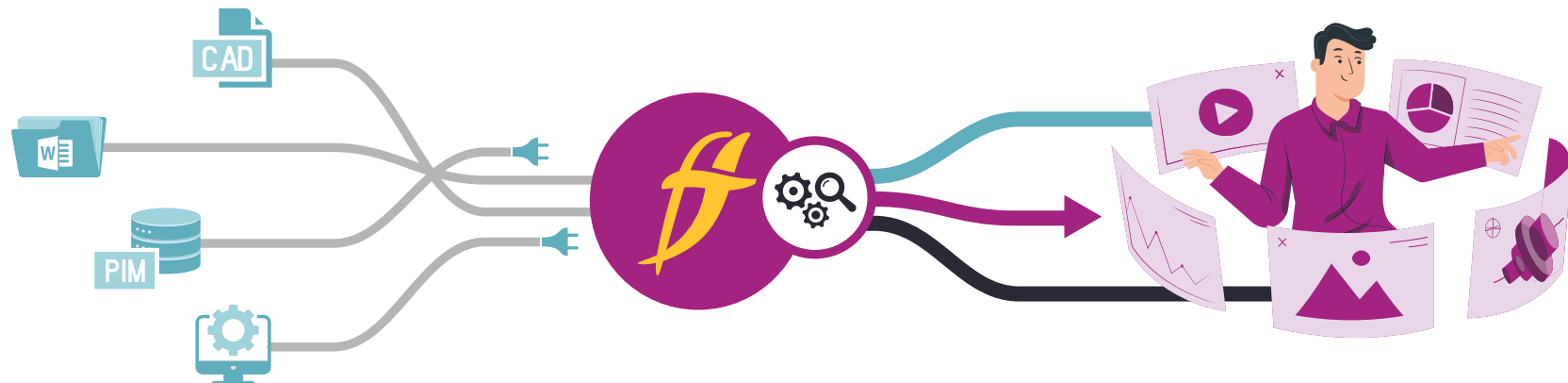


Source: Gartner

## 2. Service Operation Efficiency

A self-service documentation portal needs to meet three main conditions to deliver its full value to users and significantly impact call deflection:

- **Centralize all product information sources:** Users will consistently adopt the self-service resolution path only if they can get all the information they need from a unique place and avoid navigation through various systems and repositories. For technical documentation, adequate content delivery platforms need to offer strong integration capabilities to connect with all the company's tools and repositories. They must also provide advanced content processing capabilities to unify the content from diverse sources and offer a consistent reading experience.
- **Efficient search:** Users of a documentation portal expect nothing less than the efficiency and relevance they find on the web with Google. Anything that cannot replicate this experience will lead a user to abandon their search and call the service desk instead. The quality of the search engine is decisive in order to achieve this level of performance, and not just any enterprise search solution will do the job. To get the best possible results it is crucial to choose a platform that benefits from top-notch search functionality with advanced Natural Language Processing and semantic capabilities.
- **Handle all formats:** When dealing with technical products, 2D, 3D, videos, graphs, and diagrams are more relevant to users than text. The self-resolution of issues will stop at once if users cannot access and easily view the graphs and videos that support the installation and troubleshooting of a device. Documentation portals for in-field maintenance activities need to handle all kinds of formats and render multimedia content as properly as text.



## 2. Service Operation Efficiency

The impact of implementing a fully featured documentation portal is quick and significant. swissQprint, a world leader in the development and manufacture of high-end digital printing systems, experienced an explosion in their service costs as their installed base grew. They found, in Fluid Topics, the solution that would allow them to maintain service levels to the Swiss company's standards while bringing costs under control.

*"In the first month after launching Fluid Topics' self-service portal, we saw a drop in the number of service tickets of 34%!" reports Johannes Müller, Technical Documentation Leader at swissQprint.*

Such case deflection has a true impact on support teams: fewer repetitive questions, more time to focus on issues that demand true product expertise, and greater satisfaction shared between customers and agents.



Do you want to know more about how **swissQprint** moved to a self-service culture ?

Read the Case Study

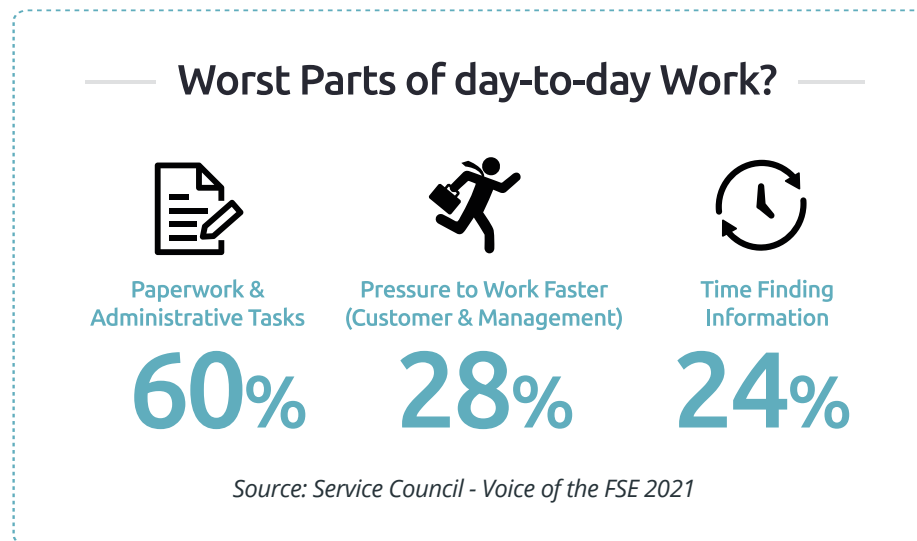


## 2. Service Operation Efficiency

### B. Reducing time-to-fix – Increasing uptime

Service organizations live and die by their SLAs. Uptime is the ultimate performance indicator and all interruptions in service have a strong impact on customer satisfaction and profitability. Time-to-fix and first-time fix rates are thus taken seriously.

All delays in resolution must be reduced, and the time to search the right product information while servicing a machine is typically an unproductive waste of resources that organizations try to reduce to the minimum.



Finding the exact piece of information among huge volumes of product documentation is particularly painful for complex machinery, hardware or software, as almost unlimited variations of the same product may exist. In industries where customization is the norm, it is compulsory that users - in particular technicians that operate a variety of similar, yet often unique configurations of the same equipment - can easily locate the right product information in no time.

**“A maximum of 3 clicks” is what Jos Taabe, Manager of Global Technical Training and Documentation at Thermo Fisher Scientific, defines as a correct level of acceptance while searching product documentation.**

As we ran a survey on our customer base, we found out that users were able to save 50% to 75% in search time once they implemented their content delivery portal. For any service organization, this is a tremendous gain in efficiency that translates to faster resolution but also more visits and cases solved, and therefore happy customers.

One of our customers, a leading supplier of scientific instrumentation, analyzed their productivity gains in the first year after they opened their documentation portal to their field service organization. With an average of 800 hours of field service employee time saved each month, and hence 800 additional hours of effective service, they could easily say that adopting a content delivery platform for their technical content was a success for their organization.



## 2. Service Operation Efficiency

### C. Enabling true service mobility

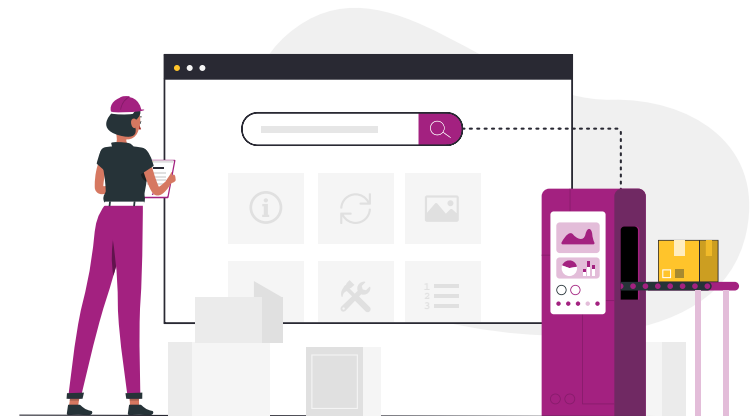
**“A printed manual at the back of a van is not mobility”, says Nelson Abbey, principal information developer at Johnson Controls International (JCI).**

Outdated manuals for previous versions of the installation that needs servicing are of no help and can even end up being hazardous references for service engineers on the go. The lack of relevant product information onsite often results in unnecessary truck rolls to fetch the right documentation, or escalation calls and second visits involving technicians with specific expertise. With the right information on hand, though, technicians can solve the problem first time.

With more than 3 million physical installations around the globe, Nelson and the JCI team know the importance of a truly mobile content service for field technicians, and their move to dynamic content delivery is essential to enable the service teams to operate in all situations. Beyond the online access to a centralized, always up-to-date documentation portal, there are two critical conditions that a CDP needs to meet to fully serve technicians in the field:

**Offline capabilities:** Field technicians often find themselves in situations and locations without reliable network connectivity. A system that relies on an internet connection to provide tech docs can leave technicians stranded and without the information they need to complete their service call successfully. To serve field technicians effectively, a documentation portal has to offer an offline mode directly on the technician's device, with a sync capability whenever the network connection is reestablished.

**Optimized for every device, every screen:** Field technicians rely on more than just descriptions and written processes to get the job done right. Graphs, 2D and 3D images, and videos are useful resources but it's crucial that they are rendered properly in the field. A documentation portal for field services must come with a mobile application or – even better – be natively designed for a responsive mobile user experience. The application should be able to deliver and display all technical content no matter the format and no matter the screen the technician has at hand.



## 3. Boosted Learning and Training

### A. Enriching your learning program

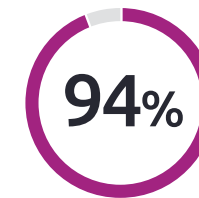
Technical documentation is a great resource for product enablement. It is the most comprehensive store of information on a company's new and legacy products and technologies. It's rich with instructive formats, graphs, illustrations, and videos that help provide the deepest understanding and the most accurate vision of the product and procedures.

Most companies already understand that technical documentation is a critical means for onboarding their technicians and almost all of them include manuals, guides, and other product documentation in their initial training classes. But the most innovative organizations go further and seamlessly incorporate tech doc into the learning experiences they offer their employees. When this technical documentation was published in static PDF format and stored across different knowledge bases, such integration efforts were hard, if not impossible, to achieve and maintain. The Training and Learning teams had to scrutinize which product information was useful to the new hires and add them to the learning resource center, then check regularly what needed to be updated and what was obsolete.

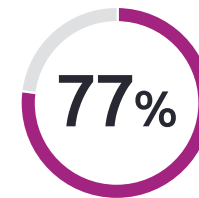
The content services offered by Delivery Platforms have made it fast, secure, and easy to enrich the company's learning resources with technical documentation. All the product content that makes sense for learning can be tagged and identified as such and published automatically to the Learning Management System. Any update in documentation is immediately reflected to the learning materials so it is always kept up-to-date and reliable.

Beyond enriching the learning base, this has nurtured personalized learning approaches where each employee has the flexibility to “pull” the content they want rather than be compelled towards a mandatory pre-defined monolithic course. According to learning experts, this methodology strongly improves employee engagement.

### Benefits of Personalized Learning



Enhances overall  
business success



Improves employee  
engagement

Source: *elearningindustry.com*

Jos Taabe, from Thermo Fisher Scientific, is a strong advocate of this personalized learning approach and the mixing of content sources:

“We’ve analyzed the skill requirements for each role and designed a corresponding skill passport. Depending on their prior background and experience, the learning needed to reach the necessary skill level may be different per employee. We give each of them the possibility to complete their training by choosing the pieces of content that qualify for the skill level they need to attain. The variety of content available, from product documentation to instructional materials, videos, and more, is a must to succeed with this “on-demand” approach.”

### 3. Boosted Learning and Training

#### B. On-the-job learning: taking technicians' enablement to the field

As extensive and well-designed as training programs may be, they are not sufficient to fully upskill a field technician. Nor are they the only way to provide hands-on workers with the knowledge they need to develop their expertise.

Learning experts like to refer to the 70-20-10 model as a best practice in this regard. This model holds that 70% of learning should be via challenging practical assignments, 20% from developmental relationships, and 10% from formal coursework and training. It applies to all of us, but is particularly efficient for hands-on learners, and it's often the preferred way for field technicians to gain knowledge. Getting field technicians out of the classroom and tackling the sorts of challenges they'll face every day empowers them to learn in the 70-20-10 style and enables new hires to onboard more quickly and work independently faster.



This is how modern content delivery services help organizations reach this goal: by delivering contextualized, precise, and actionable product information at the moment of need, while practicing.

This is achieved by delivering:

**The right product information:** The generic information that is delivered in printed or PDF installation guides is of not much help when dealing with real-life cases. The information that field technicians need while on the field must be relevant to the particular product they are working on. By giving access to the exact documentation of a specific product on demand through an easy to navigate knowledge hub, modern content services upskill technicians to the products that are new to them.

Some Fluid Topics customers have even removed the need for search and subsequently guaranteed the access to the right information in all situations with no additional effort. By adding QR codes directly to the machines or devices that can be scanned at the moment of service, these companies allow technicians to strictly identify the configuration they are working on and get immediate access to the current product information.

**Just what's needed when it's needed:** Microlearning studies have shown that when information is delivered in small chunks directly related to the problem at hand, the working memory is enhanced, and the learning is accelerated.

CDPs like Fluid Topics can provide technicians with the exact piece of content that relates to the current problem to solve. Rather than the complete troubleshooting manual that field engineers must read through to locate the needed information, technicians get actionable insight, procedure, graph, illustration, or video, that immediately applies to the current case and reinforces their learning process.

## 3. Boosted Learning and Training

### C. Continuous enablement

The product cycle never stops as new configurations and technologies are added and enhancements and updates are released. New technicians need to onboard new knowledge and experienced ones need to stay current. Yet, there are few opportunities to go back to class, even less so every time a product is updated. All field technicians need to have a direct line to product information as soon as it is written and validated. This is what new content services allow.

A CDP streamlines the information process. The moment that a new product or variant is documented, the information is available to the field technicians through the documentation portal, online if they are connected, or synchronized when they are back to an area with network access. There is no need for a software update on a device or to download a new manual or guide; instead, the information they need follows them to the field. When updates are pushed or errors in documentation are corrected, technicians – whether new hires or seasoned pros – have access to those updates and corrections instantly.



## 4. Developing a Network of Service Partners

At one point in their development, industrial companies will need to rely on a network of partners to scale their business. Service partners are a powerful extension of the company's workforce. However, working with a network of resellers or contractors requires a specific effort and care to attract, enable, and tool this workforce.

### A. Providing product documentation to partners

All service partners should have the full documentation for the products that they are servicing. This is simply the base material that the external workforce will need to perform their mission properly and an elementary, and sometimes regulatory, pre-requisite.

Most manufacturers meet this need by providing the product documentation to the resellers as printed manuals or PDFs, either sent by email or available from a download center. This, however, raises several issues: accuracy, freshness and reliability of the documentation, distribution of the correct documentation set to the right resellers according to the products that they are entitled and certified to service, security, and protected access to the remote documentation servers, and more. Content Delivery Platforms remove all of this complexity and reduce the cost, both in time and money, of providing product documentation to partners while offering an optimized service.

**Secured, personalized access to documentation:** CDPs allow the definition of precise access rights and secured accessibility to groups or individual partners according to their profile, product sets, certifications, geographical area, and more. These fine-grained right management capabilities allow the centralization of all product documentation in a single, reliable knowledge hub where each user can only access the product content they are allowed to see.

Vendors free themselves from the difficulty of shipping the right package of documentation to the right partner. Partners just need to connect to the portal to get their whole set of vendor documentation and are not swamped by generic documentation or information on product lines that they cannot service.

**Always up-to-date material:** CDPs allow vendors to publish new content to the documentation portal in real time, as well as fixes and edits as soon as they are made. Unlike static documentation that are at risk of being obsolete as soon as they are published, the documentation available on the portal is guaranteed to be the latest, most complete and most accurate versions. Once again, manufacturers don't have to check and control who they ship new material to, and partners don't have to juggle multiple manual editions or take the risk of relying on inaccurate information.

## 4. Developing a Network of Service Partners

### B. Offering value-added, differentiated services to partners

Onboarding new service partners has a cost. It is also an investment as profitable vendor-service partner relationships develop in time. Being able to provide value-added services to partners helps differentiate a vendor from their competitors, develop loyalty, and grow their businesses together. Here are a few of the services that a manufacturer can offer to his partner network with modern content delivery services:

#### Offline documentation

Grant your external workforce offline documentation capabilities so they can service under any circumstances, just like your own teams.

#### Personalized documentation packages

Allow your partners to create custom collections of documentation for a specific installation and digitally ship those collections to customers.

#### Interactions and feedback

Let them bookmark, rate, comment on documentation, provide feedback to your teams and suggest enhancements directly from the platform.

#### Notifications, alerts, and premium access to product information

Automatically notify partners about the availability of new product information, updates, important news, feature launches and early announcements of new functionalities.

#### Extended access to product knowledge

Expand partner product knowledge by giving access to documentation, training material, solved tickets, and technician notes directly from their portal.

#### Enhanced support

Integrate documentation to your helpdesk, automatically suggest answers based on a search before a partner logs a ticket to your support team.

## What's Next?

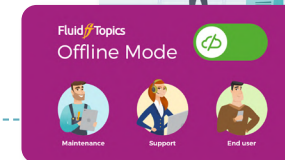
A documentation portal is transformative for field technicians, and one of the fastest ways to make measurable efficiency gains in the field. A modern Content Delivery Platform is the key technology that is required to connect technical documentation to customers, field technician teams, and service partners.

Implementing a CDP is a quick win as it embeds all administration, security, and content publishing features into a single platform. Typical implementation projects with Fluid Topics are measured in weeks, not months, and experience with clients in a wide variety of domains has proven that adoption is fast and requires little if any user training.

Measurable improvements in the field are only a few weeks away.

Want to learn more  
about Offline Mode?

Watch the video



E-mail us at:

[info@fluidtopics.com](mailto:info@fluidtopics.com)

Website:

[www.fluidtopics.com](http://www.fluidtopics.com)

## Who's using Fluid Topics ?

Leading tech companies around the world build outstanding content experiences with Fluid Topics

**SIEMENS**



**swissprint**

**Genetec**

**LIEBHERR**

**KONE**

And more...



Read Client Success Stories