



Building A Product
Launch Portal Internally?

**WHY LIVESOURCE
DELIVERS MORE.**



Successful product launches are critical in the competitive global market, but effective product launches are threatened by internal organizational silos and misalignment across the supply chain, inconsistent or undefined processes, and disparate or missing data sources and systems. These threats can impact time-to-market, costs, and performance quality. In particular, many manufacturers struggle with internal silos that complicate collaboration with increasingly complex supplier networks.

The Challenge: Unstructured Data Across Complex Systems

Most manufacturers today are collaborating with their direct material suppliers on critical business processes via email and spreadsheets. This includes supplier quality management, strategic sourcing, advanced product quality planning (APQP), production part approval process (PPAP), non-conformities, supplier tooling, value analysis and value engineering (VAVE), as well as order management. While some of these companies have attempted to leverage Enterprise Resource Planning (ERP) systems, the reality is that ERPs don't store or manage most of the information necessary for these tasks. As a result, essential operational data is collected in spreadsheets and stored in SharePoint drives—or even worse—on employee laptops. Forward-looking companies are realizing the benefit of integrated management of this data and determining the best approach to implement a solution.

Forward-looking companies are realizing the benefit of integrated management of critical business process data.

Prior to the introduction of a portal designed specifically for product launch — such as LiveSource — manufacturers had few commercial options, because nothing could manage the complexity of engineered parts. Furthermore, when organizations try to address the missing requirements by building point solutions internally — integrating them with rudimentary interfaces — the results typically fall far short of expectations. Additional departmental solutions are developed to append an inadequate solution, compounding frustrations.

This ultimately leads to a vast amount of inaccurate and non-standardized data, regardless of how many people or additional technology solutions are employed to make sense of the information or leverage it to address critical company issues.

When beginning to address these direct material supplier challenges, departments typically identify a specific problem to address in isolation. In many cases, these departments engage internal IT resources. At first glance, this approach appears to make sense, as internal IT projects are suited to address projects with a limited, well-defined scope. This is particularly important, because in many cases funding is viewed as a one-time expense; long-term support and maintenance are often not part of the funding plan for internal IT projects.

However, the complex business processes of product launch span multiple departments and include collaboration with external suppliers. This makes solving upstream supply chain

problems more comparable with enterprise systems, rather than point solutions, requiring long-term planning, funding, and thorough business analysis to ensure that business processes and data are properly integrated. In these cases, commercial solutions are more likely to achieve the project's long-term objectives and provide ongoing maintenance and support.

This document explores the minimal requirements of a product launch portal — both from capability and technical standpoints — in order to illustrate the benefits of implementing LiveSource, rather than creating another point solution from the ground up.

Application Criteria

The challenges previously mentioned cannot be resolved by simply automating the distribution and storage of data spreadsheets. While this approach may satisfy an auditor's requirement for documentation, it does little to support the business. In fact, it leaves the manufacturer exposed to severe risk. Out-of-date or conflicting information hidden in various spreadsheets and emails provide limited visibility into what's actually happening in the upstream supply chain. This leads to unforeseen events that are likely to cause supply chain disruptions.

The following criteria are critical to ensuring a product launch portal provides visibility and real business value.

BUSINESS PORTAL: A SINGLE SOURCE OF TRUTH

First and foremost, it is nearly impossible to aggregate data from multiple spreadsheets and derive meaningful information. Secondly, spreadsheets are out-of-date the moment they are completed. Low quality data from spreadsheets exposes manufacturers to supply chain risk that can result in lost revenue, higher Cost of Goods Sold, and damage to a company's reputation.

Alternatively, in LiveSource, data is managed via a business portal offering a single source of information, stored in a database that drives alerts and workflow automation, and supports a variety of predictive analytics.

CONFIGURABLE TEMPLATES

Applications that have hard-coded fields, layouts and workflows typically take longer to deploy with higher than anticipated development costs. Additionally, given the need to involve IT as business requirements change, hard-coded applications have lower user satisfaction and higher long-term development costs.

Realizing the goal is NOT to simply automate spreadsheets, but also to encourage a greater adoption rate, the LiveSource system architecture provides configurable templates in each module. This provides needed flexibility, enables business users to add various alerts and set workflow approvals in every template.

INTUITIVE DESIGN

Supplier users typically represent 75% of the total system user base, meaning suppliers' willingness to use the application is essential for its success. LiveSource is designed for both

internal and external users so the LiveSource supplier user interface is intuitive, requiring little to no training.

INTEGRATED MODULES

Most implementations initially focus on creating a portal that enables employees and suppliers to exchange basic information. However, the real business value comes from addressing challenging questions such as

- What is driving up cost from launch to production?
- Which suppliers represent the highest risk?
- What is the root cause of expedited costs?
- Where is the next supplier related crisis going to occur?
- Why is there too much or too little inventory?

In LiveSource, all supplier-related business processes and data are integrated into a seamless application. Integration between modules is paramount to avoid supply chain disruption. For example, when the engineering department changes a BOM, several activities are impacted; components in the RFQ or PPAP processes may become obsolete, requiring the process to start over. In LiveSource, all departments are working with the latest, up-to-date information, complete with alerting, which keeps the process moving forward on the right track.

Technical Criteria

LiveSource is engineered to support direct materials supplier specific functionality. The following criteria are designed to support ease of use and support for both internal and external users worldwide.

SINGLE SIGN-ON

Single sign-on minimizes implementation and ongoing administration support of a user's access. A well designed, role-based user access, linked to the organization's LDAP, provides a robust solution to manage a critical area of the application.

SECURITY

Given that the application is open to suppliers outside of the company's firewall, security that scales to support thousands of users across the globe is vital. To address both security and scalability considerations, the use of a Content Delivery Network (CDN) and Web Application Firewall (WAF), such as Akamai, increase responsiveness and minimize the risk of unauthorized access.

MULTIPLE LANGUAGE SUPPORT

With a global supplier network, multiple language support, including 2-byte languages such as Chinese, is key to ensuring adoption by suppliers around the world. Moreover, translations into all supported languages — even translations of enhancements and minor updates — are made by LiveSource employees that understand the business application. (Third party translation organizations lack the business knowledge necessary to deliver value).

TWO-WAY INTEGRATION

Two-way integration with existing enterprise systems, such as ERP, QMS, and PLM systems supports ease of use and reduces the risk of data issues. A REST API is created for each LiveSource module.

DATA LAKE AND MACHINE LEARNING

LiveSource leverages a data lake comprising structured and non-structured data, along with data visualization tools that support machine learning algorithms. Modern data lakes are designed to query vast amounts of data in milliseconds — the billions of records in LiveSource can be queried in a fraction of second.

Data is integrated into LiveSource modules in real-time, and LiveSource has developed an easy-to-use data visualization layer. With the visualization tool, users have up-to-the-minute visibility into activities taking place throughout the supply chain — without needing to leave the application. Machine learning allows organizations to move from looking at historical data to predicting the future by looking for changes in behavior that could signal a potential disruption.

PRODUCTION ENVIRONMENT

The production environment can be hosted internally or through an accredited hosted provider — an option that becomes cheaper every day. LiveSource is hosted only on Tier 4 providers that meet rigorous security requirements and feature minimal-downtime disaster recovery capabilities at a fraction of the cost to maintain two production environments.

DEVELOPMENT PROCESSES

GDPR and ISO 27001 certification has become expected when supplying solutions to manufacturers. GDPR is required to adhere to the European data privacy standards — any misuse of data, such as a supplier's email address can result in a \$20M fine for every occurrence. ISO 27001 requires development organizations to follow strict quality processes and procedures during the development and release of software, with a strong focus on security. While these certifications make the development process more expensive and time consuming, they ensure that LiveSource delivers a stable and secure solution.

Ongoing Support

Manufacturers can rely on LiveSource to support them long after the initial implementation, with a global support organization that responds to questions and requirements from facilities

and suppliers around the world. Changing internal needs, software refinement, or changes to regulations or geo-political risks could require new functionality — the support team is responsible for initial testing, translation, documentation, and training of internal and supplier users. Additionally, each new release is certified by the support team, who report defects and help define improvements and new capabilities, provide functional testing, updated translations, documentation, and any required training.

Product Launch Portal: Build It, or Buy LiveSource?

Direct material suppliers are strategic business partners, which justifies an enterprise approach to supplier management for product launch. Don't make the mistake of treating this initiative as a one-off business process project — it's an ongoing initiative. Your organization's expertise is manufacturing, not software development. Why spend countless man-years having your best people architect a solution that already exists and is proven in the market? LiveSource has nearly 20 years' experience working with a diverse group of leading manufacturers to design and develop a state-of-the-art solution.

Undertaking a product launch portal for direct materials is no small task. LiveSource knows how to get started. To move from disparate spreadsheets to overcoming the business challenges addressed above requires multiple steps.

STEP 1: Collect all associated supplier-related data into a single database. Most organizations start with the supplier master, which contains basic supplier data, certificates, and compliance. Currently, LiveSource customers maintain more than 400 data points on each supplier. Once suppliers are connected to your network, you can move to the next priority process, such as Strategic Sourcing or PPAP.

STEP 2: Integrate departmental business processes to ensure everyone is collaborating with a single source of critical information: a single source of the truth. This minimizes the number of production interruptions or surprises experienced during product launch. This is easily achieved if all portal modules are properly integrated.

STEP 3: Implement a robust data lake to support both structured and non-structured data, as well as data visualization tools that support machine learning algorithms. To provide a comprehensive review of suppliers, it's important that the data lake have the ability to pull in additional data managed outside of the portal. LiveSource analytics is designed to enable users to quickly and easily create powerful dashboards leveraging the vast data stored in the LiveSource data lake.

Our professional services team will help your organization navigate the process of moving from a manual process to an integrated platform. And don't forget about support. Development of your launch portal will require years of development beyond the initial project scope. Plus, as a LiveSource customer, your key users will have input to new features, developed in extensive collaboration with your manufacturing peers.

Looking for more concrete evidence to purchase a commercial solution? Our calculator, Estimating the Cost to Build a Product Launch Portal, will help you navigate the process of estimating

initial internal development costs, as well as ongoing support and maintenance. The figures referenced are from our own experience in developing the product over the last two decades. In fact, we calculated that it would take a team of 20 developers over seven years and \$15M to rebuild today's current version of the LiveSource solution, plus an additional \$2.5M annually in hosting and support costs.

Why LiveSource?

LiveSource brings expertise in building, deploying, and supporting global solutions that support all business processes — broad expertise that simply can't be found in internal IT teams. LiveSource is more than a single point solution to solve specific challenges in a single department, but a platform to manage suppliers — streamlining and mitigating risk in all areas of product launch.

Most manufacturers integrate LiveSource with their current ERP, QMS and PLM systems one department at a time, then leverage the platform for additional functionality as they experience traction and success. LiveSource modules are fully integrated, so all parties are informed of events that occur outside their normal daily tasks in real-time. This greatly minimizes the risks associated with keeping operational and supplier data in spreadsheets and emails.

LiveSource analytics enables users to easily create in-depth analysis, alerting manufacturers of suppliers that need more attention and support. LiveSource is truly a strategic investment for future growth. When considering building an internal portal for product launch, know what's coming. LiveSource delivers more.