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Vendor Analysis
Ivalua

S2C solution overview, platform and services overview, analyst commentary and summary

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Quick Facts: Ivalua

Founded: 2000

Headquarters: Paris (France) and Redwood City (USA)

Regions served: Global

Offices: Several cities in the US, Canada, Singapore, Australia, India, France, Germany, UK, Italy and UAE

Ownership and funding: Privately owned (Ivalua's founders, other investors)

Employees: 1,000

Revenue: $100M-$499.9M

Customers:: 400+ leading companies and public organizations including CACI, Fannie Mae, Honeywell, Select Medical, Whirlpool, Cleveland Clinic, BNP Paribas, Credit Agricole, Bulgari, Generali, Decathlon, Bell, City of NY, ArcelorMittal, State of Arizona, Meritor, Flex, Volkswagen, IKEA and more.

Regions covered: Global

Industries covered: All with tailored solutions and customer concentrations in: manufacturing, healthcare, financial services, public sector and construction/engineering

Partners for implementations: ~35–40 implementation partners representing close to 2,500 certified consultants worldwide. See: Ivalua Partners

Integrations:
ERP: SAP, Oracle, NetSuite, Maximo, Dynamics, PeopleSoft, JDE
Third-party data providers and applications: ABBY, AZURE, Transfermate, US bank, BNPP, HSBC, Conferma Pay, GRMS, Tealbook, Bureau Van Djik, SAM.gov, e-attestation, Ellisphere, Provigis, OFAC, EcoVadis, Sphera (ex riskmethods), D&B

Website: https://www.ivalua.com

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In today's fast-paced business environment, procurement professionals face many challenges, from managing supplier relationships to mitigating risks and controlling costs. In the quest for operational excellence, organizations are increasingly turning to technology solutions to streamline their procurement processes and drive efficiency. To address these challenges, many organizations turn to source-to-pay (S2P) suites because they include a comprehensive suite of tools designed to optimize processes and enhance cross-functional collaboration.

This article gives an overview of one such provider: Ivalua.

Ivalua is one of the few suite providers that has built its end-to-end solution on a single technology stack from the ground up and one of the fewer still that doesn't try to grow through an acquire-and-integrate approach (with the exception of Directworks which Ivalua re-platformed to make it an integral part of the suite). Over the years, Ivalua grew its geographic and functional footprint as well as its partner ecosystem by moving from implementation with in-house resources to a partner approach. It has become a unicorn with global coverage with customers in over 75 countries and various industries, and it is continuously enhancing its offering.

As mentioned, Ivalua covers the entire S2P process. This analysis, however, focuses on its upstream capabilities (S2C). Part 1 of this update provides an overview of Ivalua's S2C offering, including its roadmap and vision. Part 2 examines the solution strengths/opportunities, covers the voice of the customer, a review of the competitive landscape and closes with an analyst summary.

Company background

David Khuat-Duy founded Ivalua near Paris in 2000 after a career at PwC as an SAP Senior Consultant between 1996 and 1999, working on the architecture, design and implementation of ERP for international accounts. As of writing, he remains the company's CEO. Other co-founders include Daniel Amzallag and Arnaud Khuat-Duy, who are also still with the company.

Ivalua was created to provide businesses with an integrated platform to manage all spending categories, improve data quality and analytics, and foster the digitalization of procurement processes. The aim was to enable organizations to efficiently and effectively manage their procurement processes and supplier relationships.

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The company has grown to become a global player. Since the initial Series A, Ivalua has received capital and investment from KKR (a private equity firm) in April 2017 ($70 million) and in 2019 ($60 million, Series B from Tiger Global Management and Ardian Growth).

Solution Overview

As mentioned, Ivalua is one of the few suite providers to largely forgo acquisitions in favor of building a solution on its own native stack. The only exception is when Ivalua acquired Directworks to expand its direct materials capabilities; Ivalua used the expertise acquired from Directworks first and then developed these features within the larger Ivalua platform.

Furthermore, it's also one of the few with enough depth and breadth across each core area to serve as a single technology suite for procurement organizations. This is important because there comes a point when the overall procurement organization performance relies on a single extensible platform approach that goes beyond just functional enablement within procurement. Plus, if you want real automation/RPA, guided procurement and real AI, you will need a single-workflow-driven platform that works on a single data store because no advanced technology works without sufficient good, clean and harmonized data.

Ivalua has specific industry/vertical targeted functionalities. Out of the box, it offers various configurations designed to support the needs of different customer segments: discrete/industrial manufacturing, automotive, banking/financing services, retail, distribution, construction, oil and gas, healthcare, telecom, aerospace & defense and public sector.

Major upgrades, such as product updates, are released two times a year. As soon as the new version of the application is released to the market, Ivalua's team shares detailed content (webinar, demo, slides, release notes) and communicates this to customers and partners.

Platform and services overview

Ivalua operates its own cloud in North America, Europe and Asia. It has multiple certifications:

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- ISO 9001, 14001, 27001
- SOC
- TISAX
- SSAE-18 (USA)
- ISAE-3402 (Europe)
- NIST SP 800–53
- HIPAA

The Ivalua cloud features a 'multi-instance' architecture that delivers logical single tenancy by isolating all customers' data from each other. It also means that customers can upgrade when they want (which also means that not all customers are on the same version).

Ivalua offers Progressive Web App (PWA) technology for an improved mobile experience similar to an app. Users can receive notifications, take workflow actions, scan QR codes for receiving, shop and create PRs, process invoices, view analytics and more.

In terms of globalization, Ivalua supports all currencies via a customer-maintained exchange rate table or integration of real-time spot exchange rates and 15 standard languages, including English, French, German, Portuguese, Spanish, Polish, Italian, Japanese, Mandarin Chinese (Simplified) and Arabic. Additional languages can be 'turned on' and translated per instance.

Different support offerings (and SLAs) can cover 24/7 service and include English, French, Italian, Spanish, German, Portuguese, Hindi, Chinese, Mandarin, Japanese and Arabic.

Ivalua uses user- and module-based pricing with lower-tier offerings available to companies with fewer users. There are also packaged offerings, e.g., S2C, P2P, S2P, direct sourcing and so on.

Data model

Ivalua has a single, robust and configurable data model that forms the core of its capabilities. Customers can extend it by adding tables and/or fields in an existing table to fit their specific requirements.

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The solution has a single set of master data covering various dimensions, including supplier information, a category taxonomy, a multi-hierarchical organizational structure, geographical hierarchies and account structures. The platform supports real-time feeds and the analysis of unlimited fields in standard data formats. The data schema accommodates diverse data types, including blobs, multimedia files, and real-time feeds. The out-of-the-box architecture can handle three related hierarchies (geographical, legal and organizational) and configuration options allow companies to map their organization structure by adding nodes within these hierarchies.

Administrators can define roles at the user level, field level, form/object level (e.g., contract or PO) and even at the dimension level (e.g., region/country), allowing for a nuanced and tailored approach to access control. The platform accommodates any combination of these parameters, ensuring organizations can align role definitions with their needs. Changes to roles are tracked in the audit trail log.

The platform incorporates a powerful universal search capability that searches across the full S2P dataset leveraging Elasticsearch (an open source search engine). It includes features such as full-text search, fuzzy searching for spelling errors, autocompletion and instant search, speed, scalability for large data sets and faceted search for applying filters and organizing search results effectively.

Configuration management

Ivalua is one of the most configurable solutions available on the market; it was one of the first procurement suites to have no-/low-code capabilities. Administrators can autonomously tweak many aspects of the solution (from the user interface to integrations) and even create entirely new modules.

To do so, it has:

- A feature called 'design mode' that allows users to edit or even create pages (content, buttons, fields, etc.)
- A workflow engine to design processes and steps that include approvals and integration steps

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Design Mode

Design Mode, Ivalua's no-/low-code configuration capability, is in its third iteration. The latest version has brought minor enhancements to the UI, including several key elements that enable an administrator to structure and manage page elements, the overall page's look and feel and the active elements (e.g., buttons, tables or grids showing a list of objects or business rules).

Users can structure a page's UI elements with a design canvas that visualizes page controls and content arrangement grids. They can add any data fields to the page as they have access to the entire data model of the application. It is also possible to manage the data model and create new fields from that screen (and from the overall administration pages).

Workflows

The workflow engine in Ivalua's suite uses an object-based approach, managing individual steps, items and elements at a highly granular level. A workflow is defined by key elements that drive its scope of application:

- Execution perimeter: specific levels and nodes within the customer's organizational structure
- Object type: specific subcategories of the object that the workflow applies to (e.g. master agreement vs. local application contract)
- Categories

The structure of the workflows is defined in a visual editor. Users have access to a canvas where they can place sequential or parallel steps (approvals, notifications, triggering of an interface) and conditions that, when met, trigger the transition to the next activity.

Questionnaires

Ivalua's platform capabilities for questionnaires offer a robust and versatile solution for several use cases across modules. The tool enables internal collaboration on survey creation, supporting both template-based and custom surveys tailored to a company's requirements. Surveys can be linked to a customer's internal organization, geographies and categories to ensure users have

access to the suitable model and the content of each questionnaire is tailored to a use case and context.

- Questionnaires in Ivalua address several needs across the application:

→ Assessing and scoring suppliers (risk, performance and sustainability)

→ Assessing and scoring contracts (risk, performance and sustainability)

→ Collecting information

→ Scoring supplier bids

→ Managing quality (supplier audits)

Users can design surveys with various questions (numbers, lists, checkboxes, attachments, dates, etc.), including conditional flows and options for respondents and evaluators to participate.

- Questions or sections within questionnaires can be assigned to specific roles or users for evaluation via complex business rules.
- Depending on the use cases, the answers can be used to:
- Evaluate supplier or contract risk and performance
- Complete or update supplier profiles during initial onboarding and afterward
- Evaluate bids, especially on non-price items

Customers can also manage campaigns where the same survey simultaneously goes to multiple recipients. These campaigns can focus on scoring specific objects or collecting information from suppliers or internal users. With the platform, users can create different campaigns tailored to specific needs, monitor progress, send notifications and facilitate collaboration among stakeholders. Campaigns can be tied to projects and programs, and IVA, the AI-based assistant, can launch campaigns based on predefined KPI thresholds.

Supplier portal

Ivalua's portal is free to use for suppliers and is customer-specific.

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Following the solution's overall configurability, customers can configure many aspects of their supplier portal, such as the look and feel, elements shown, etc. Suppliers can create accounts for users, and they can be assigned specific roles predefined by the buying organization that can limit that user's role.

Ivalua includes collaboration features for suppliers, i.e. they can view, confirm, accept, reject, change, respond, counter-offer, create and propose/send, add/manage tasks, social chat/ comment and delegate to other users. Suppliers can initiate strategic collaboration with customers using features to propose and track innovation suggestions and value engineering proposals. They can also create and manage integrations between Ivalua and their system by leveraging templates for particular objects (mostly downstream).

Project/program/task management

Procurement doesn't work in isolation and most, if not all, activities are cross-functional and require collaboration with suppliers. This is why project/program/task management in Ivalua is a platform-level capability that is integrated into Ivalua's broader suite to support various use cases: performance management, risk management, quality management, innovation, etc.

This integration ensures projects benefit from modular integration across supplier/item catalogs, sourcing, procurement, contracts, analytics and invoicing. The platform captures, reports and provides integrated analytics covering project, category, spend and supplier data.

Ivalua supports timeline, milestone and task definition (nested tasks, unlimited note tracking, and task dependencies). It also provides automatic status updates based on step completion, security controls, approvals, audits and light Gantt charts.

A recent enhancement is 'Message Center' for internal and external messaging and collaboration. Users can share files, assign tasks and maintain a centralized console for viewing all messages to enhance communication and coordination within a project.

Ivalua supports 'multi-level' collaboration. Any object (RFx, contract, etc.) can be linked to an overarching project/ program that has its own team, set of actions, etc. and include a

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collaboration 'space' at the object level (actions, communication, team, etc.). This creates the structure of projects and subprojects required to manage highly complex, multi-phase gate workflows.

Integration

Ivalua's integration capabilities offer seamless connectivity to various systems and web-based business services. The integration framework is designed to allow customers to incorporate Ivalua into their IT landscape. It achieves this by facilitating the building, testing and running of interfaces without needing third-party middleware. An Integration Console further enhances the user experience by providing tools to track and monitor each connection.

The platform's integration covers multiple major ERP types and brands and various web-based business services. Ivalua can support multi-instance ERP integration and strongly emphasizes SAP integration, featuring a plug-and-play connector that supports SAP R/3 ECC and S/4 HANA on-premises and SAP HANA Cloud via web services.

A significant enhancement to Ivalua's integration capabilities is the provision of a documented and open API. This ensures administrators have comprehensive documentation for API calls, related parameters and potential responses. The API documentation is automatically generated from an OpenAPI file, presenting message structures in a user-friendly format as a valuable reference for configurators.

Generative AI

The core of Ivalua's GenAI capabilities is built on an independent large language model (LLM) that has been fine-tuned to meet the specific needs of procurement organizations.

The solution has been designed to be LLM agnostic; customers can select the LLM they would like to use. Ivalua currently uses Microsoft Azure OpenAI (enterprise edition).

The solution uses retrieval augmented generation (RAG). GenAI can process customer documents and data to provide valuable insights and recommendations based on this corpus.

Following its platform-level low/no-code philosophy (see

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configuration above), Ivalua has integrated GenAI capabilities in customers' configuration toolbox, meaning they can build agents completing multiple and complex tasks. Users can easily customize and build their own GenAI use cases without extensive coding through the conversational interface of IVA or the design mode, which enables the creation of new application experiences.

Regarding use cases, Ivalua and its customers are still experimenting and learning. However, current use cases include:

- Supplier research and creation to help find and gather relevant information on existing or new suppliers and their offerings.
- Enhanced communications by crafting content for mass email communication based on a user's instructions.
- Conducting market research for categories and obtaining recommended actions.
- Generate improvement plans to suggest appropriate actions, tactics and KPIs to draft a structured improvement plan.
- Chatting with documents to pull relevant data and insights from supplier documents, contracts, or invoices.
- A legal assistant to summarize contracts and highlight risks for approval or help draft clause language.
- Using IVA to generate a new workflow by choosing the type of configuration, listing the business objectives they aim to address, and adding a textual outline of workflow steps or stages. Then, IVA uses this context to build the corresponding workflow.

Ivalua also designed its GenAI capabilities (including the choice of LLM it currently uses) to ensure that prompts, outputs and customers' data are:

- Not available to other customers
- Not available to third-party LLM companies
- Not used to train third-party LLMs or other products/services
- Not stored anywhere other than a customer's own instance of Ivalua

Ivalua Guides

'Ivalua Guides' allows customers to create in-app guided walk-throughs for any module, including the supplier portal. The guides offer smart handling of events and exit conditions to flow through the following steps seamlessly. They can be integrated with the online help menu and configured to start automatically when a page is loaded.

Customers can use Ivalua Guides to smooth the learning curve for new users and suppliers, streamline change management and enablement, improve new feature discovery and adoption, guide casual users to complete tasks quickly and enhance compliance. Customers can create these by clicking on controls within the page and adding instructions to appear in the guide tooltip.

Additionally, the customers can track user engagement metrics and completion rates. These can be configured to start automatically when a page is loaded, enabling them to monitor the usage and effectiveness of the guided walk-throughs.

Supplier management

Supplier profiles (SIM)

Supplier profiles can be created by internal users or through a self-registration process via integration or bulk import. The solution automatically flags potential duplicates before they are added to the repository.

Supplier profiles in Ivalua are extensive and extensible. They include the expected information on companies (name, address, contacts, etc.), banking details, certifications, etc. The 360–degree view also includes all transactions and objects related to a supplier (PO, Contracts, Invoices, sourcing events, mitigation/control/collaboration plans, exceptions, strategic action plans, etc.).

In addition, profiles are enriched by third-party data providers that the customer has a contract with. The third-party providers Ivalua currently integrates with cover SIM, performance and risk elements, and the following are just a few of the third-party provides that have integrated with Ivalua:

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- TealBook uses AI to comb over 400 million websites and over 600 trusted data sources to build supplier profiles.
- D&B and BVD verify Ivalua's compliance, risk and supplier firmographic data against their databases.
- GRMS can review and confirm information like insurance coverage.
- LexisNexis and e-attestations that can provide look-ups for personnel and certificates.
- Relish and TrustPair can validate bank account validity and ownership.

Ivalua provides several different statuses/states for supplier records. This includes status on the registration of suppliers as well as statuses on the supplier's qualification down to the level of commodities, sites and regions. It also includes various expiration and status types for items/products, documents and contracts.

Supplier onboarding

Suppliers can be onboarded to give them portal access and allow them to manage their profiles, among other things. Suppliers are onboarded via registration; they receive an email notification and complete the process and self-registration.

The process serves as a pre-qualification/pre-screening. It can be tailored for different business units, regions and categories because it is built on the platform-level workflow and questionnaire capabilities (see above).

If configured, Ivalua can alert suppliers and internal users via screen alerts and email of missing or incomplete data or expiring documents.

Qualification and segmentation

The approval or qualification of a supplier within a category for a business unit or region is driven by further data collection and assessments. Category-specific questionnaires for RFI, risk and performance can be used to understand a supplier's capabilities better and define, if applicable, the proper course of action.

The qualification and segmentation processes can be manual or

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automated and trigger workflows to collect all required internal sign-offs and to include safeguards by looking at the holistic picture of a supplier.

Supplier performance management (SPM)

With Ivalua's Performance Center, customers can measure and track supplier performance based on qualitative and quantitative facts across several dimensions and weighted criteria and subcriteria:

- Qualitative performance is measured via the platform-level capabilities related to questionnaires and assessments. Multiple parties can receive an evaluation form and complete it. Answers are scored and rolled up to criteria and dimensions.
- Quantitative performance is measured automatically by scoring numerical criteria related to processes executed in Ivalua and/or collected through interfaces (internal systems or third-party data providers).

The Performance Center's dashboard shows a global performance score at the supplier level and the criteria- and subcriteria-level scoring. Changes in scores can trigger alerts and workflows to, for example, initiate a corrective action/improvement plan.

Supplier risk management

Similar to what the Performance Center does for performance, Ivalua's Risk Center enables customers to manage supplier risk.

Customer can modify the out-of-the-box and multidimensional risk model to add and assess various risk types based on:

- Third-party data
- Assessments
- Internal data (e.g., supplier profiles)

Each risk criterion is individually scored and contributes to an overall weighted risk score at the supplier level.

As customers can create and manage both suppliers and other business partners in Ivalua, Ivalua can serve as a third-party risk management (TPRM) solution.

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Ivalua's supply chain risk management (SCRM) capabilities allow direct suppliers, i.e., tier-1 suppliers, to declare their own suppliers, i.e., the user's tier-2 suppliers. This data collection is part of the SIM module and is based on supplier declarations (and not a data/AI-based discovery). Because of this approach, the visibility into supply chains (beyond tier 2) and the risk scoring of tier 2s are limited:

- Tier 1s can declare tier 2s and, technically, tier n, but they may not know who their suppliers are beyond tier 2.
- Tier 2 suppliers can also access the solution to register and log sub-tier associations to present a complete supply network.
- Tier 2s can be scored based on third-party data but not based on internal data (as they may not exist in Ivalua as managed records) nor on assessments (as sending assessments to tier 2+ can be tricky as tier 2 may not know nor have a direct relationship with the Ivalua customer sending the evaluation).

Environmental Impact Center

Ivalua's recently released Environmental Impact Center (EIC) focuses on addressing an organization's environmental impact through its supply chain. It focuses, for now, on carbon emissions (Scope 3), but it has been designed to manage more.

The EIC has a flexible and granular data model. With it, users can select and switch between various models to take different geographies, commodities or business units into account in emissions calculations. Three types of emission models can be defined: Level 1 (supplier), Level 2 (commodity/market) and Level 3 (item/BoM), covering data collection from suppliers (estimated/certified assessment of carbon footprint per unit of item in their catalog), third-party emission factor databases and lifecycle analysis.

Additionally, the system allows primary data input from suppliers, third-party sources or users, with an approval workflow ensuring accuracy and transparency.

Regarding decarbonization support, organizations can set emission reduction targets by commodity/organization, supporting computations of target emissions from spend/PO data compared to baseline emissions. Configurations enable the conversion of

carbon emissions into a cost indicator.

The solution includes configurable dashboards and reports across various dimensions. These reports integrate supplier-level, commodity-level and item-level emissions.

For collaboration and supplier engagement, the EIC supports initiatives to collaborate with suppliers to develop and execute emission reduction strategies and carbon savings plans. It manages emissions at the category and product level, allowing suppliers to update product emissions data and provide formal verifications.

The integration of EIC with the rest of the suite also means that EIC's KPIs and outputs can be made available across the entire platform, informing other key decision points such as sourcing, supplier risk, etc.

Sourcing

Demand management

Ivalua supports demand management and the triggering of sourcing events in several ways:

- Stakeholder centric

→ Sourcing requests (intake): A need expression form serves as the basis for the intake. This can include conditional questions to tailor the information gathering by prompting requestors with specific questions based on the nature of their request, ensuring relevant details are provided.

→ Free-text Purchase Requisitions (if the customer uses Ivalua's P2P).

- Opportunity centric

→ The new Procurement Optimization Center provides a centralized hub for reviewing scattered sourcing needs and consolidation opportunities. Procurement can initiate sourcing events by bundling incoming requests that are qualified as similar (by applying rules to define similarity criteria such as category).

→ Contracts: Contract renewals and consumption tracking (linked to P2P transactions) give visibility into demand to easily 'flip' a contract to a sourcing event.

- Direct materials:

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→ Projected volumes and bill of materials (BoMs): It enables organizations to establish anticipated volumes over defined periods for programs, products (BoM), etc. to understand sourcing needs.

→ Forecast Collaboration: Allows buyers to share demand forecasts with suppliers and assess their capacity to meet demand at a detailed level, identifying potential disruptions and taking mitigating actions, such as launching RFx to find alternative suppliers. It is used for direct materials and when customers integrate with their MRP/ERP, as these systems are the sources of the forecasts.

→ Demand Signals enable the automated creation, publication and quoting in sourcing events based on demand signals from MRPs/ERPs or Purchase Requisitions. It supports automatic or manual review and awarding of RFx.

Event initialization

New events can be:

- Created from a template: Customers can create their templates, and Ivalua provides a limited number of out-of-the-box templates that include:

→ Standard processes called sourcing projects (spot bid, strategic sourcing, double envelope, etc.) and RFxs.

→ And very few category-specific cost models (LTL, FTL, etc.).

- Cloned from past events.
- Created by flipping the 'demand' (see above), which prefills the sourcing events and enables, in some instances, a fully automated process.

General documents (T&Cs, for example) are managed centrally in Ivalua and can be automatically attached to new events, and users can upload any additional ones at the event level or item level. Integrations (PLM or ERP) can also be used to upload documents and map them to items.

The solution can manage a large number of items in a single event. Items can be created manually, imported via Excel or carried over from the 'demand' that was used to initiate the RFx. Items can be grouped and lotted.

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Cost models and breakdowns are defined in the RFx template, but users can create/edit them within a specific event. Ivalua supports calculations at the item level and cost roll-up between item levels.

Supplier selection

Suppliers are included in RFx in three different ways:

- Manually, by searching within the supplier repository and filtering the results.
- Automatically, based on the RFx template or the category strategy/panel by matching the scope of the event in terms of category, geography and business unit to the corresponding strategy.
- Based on the line items in the event and the predefined approved vendor/manufacturer lists (AVL/AML). Users can define automated supplier assignment (at the line level) rules that are stored in a library and can be reused.

Supplier bidding

Sourcing events can be made public, a feature that is especially useful for public sector customers. The whole RFx or part of it can be made public (depending on the local regulations).

Suppliers can bid through the portal. Depending on the settings defined by buyers, they may have to acknowledge receipt, confirm bidding intention or submit an NDA to access an event's details.

Supplier users can enter bids online or via an Excel-based export/import process. They can add optional items and create multiple alternate proposals.

Analysis and awarding (including optimization)

Once bids are in, users can compare and evaluate them. Comparison and evaluation include price elements in the cost breakdown and answers to a questionnaire (if one was used in the event).

Buyers can compare bids in a side-by-side view. The buyer can then evaluate, confirm or select alternative offers. Furthermore, buyers can add highlighting to any cost breakdown field to help identify, for example, the best price/cost and complete a post-

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bid analysis to assist in the comparison.

Answers to questionnaires can be auto-scored as per the scoring defined at the question level and/or scored via a cross-functional process. (See the questionnaire section above for more on platform-level questionnaire management and capabilities.)

Ivalua also includes a sourcing optimization engine called Sourcing Decision Center (SDC) that is integrated into RFxs. SDC was designed to be used by any user — i.e., not just data analysts — to make optimization available to the masses (and not just to a CoE).

SDC includes out-of-the-box scenarios, such as lowest price overall, cherry picking, award to 2 suppliers, award to 3 suppliers and best score. Users can define scenarios and rules in RFx templates and further edit or create new scenarios in an event by using a library of rules and scenarios.

Scenarios can leverage supplier data, e.g., risk and performance scores. Capacity and allocation constraints can be based on any buyer-defined column, such as a min/max, percentage limit on a region or country. Capacity and allocation constraints can be expressed with a quantity of unit, percentages or spend amounts. Ivalua uses soft constraints for limit rules to avoid scenario infeasibilities.

Scenarios automatically run upon bid submission, and users have an overview of the results of each scenario to compare them. Users can open a specific scenario to see more details at the item level.

Ivalua supports sourcing rounds. The behavior between rounds depends on the configuration of the sourcing event.

When the user has made a decision, they can award the RFx. Ivalua supports partial awards and multi-sourcing at the RFx and line level. Awards can be flipped to a contract, catalog or update the demand (intake, sourcing request, P2P, etc.).

eAuctions

e-auctions in Ivalua can be standalone events or a step integrated into a sourcing project. The solution supports several types of reverse or forward auctions: Dutch, English, index discount, index premium and Japanese.

Depending on the type, users have the ability to define several

settings and parameters:

- Bids (ceiling, floor, max/min increment or decrement, etc.)
- Transparency on the supplier side (rank, total number of bidders, prices, participant names, etc.)
- Extensions (duration, max number of extensions, etc.)

The solution also supports bid transformation via coefficients (multiplier and additive) to account for total cost of ownership. Optimization-backed auctions that would use the previously described Sourcing Decision Center are not yet supported; they are on the company's roadmap.

A real-time and two-way forum is available for communication between buyers and suppliers.

Category (strategy) management

With Ivalua's category management module, users have:

- A comprehensive 360–degree view of all activities related to spend, suppliers, contracts and more.
- The ability to define strategies across various dimensions, such as category, geography and business unit/legal entity.

First, category teams can understand the scope of a category in terms of spend, suppliers, contracts and other related activities, such as RFx, PO and invoices. Each category has its own dashboards that visually display information about any activity or object in the platform that is linked to it.

The second, more forward-looking, element of the module is related to supporting strategization. Teams can define objectives at the category level but also benefit from tools and visualizations like Porter's five forces or Kraljic's matrix to understand markets better and segment suppliers. Users can use IVA to collect outside-in intelligence like price trends, key issues, supply disruptions, regulatory changes and compliance risks. In addition, Ivalua can integrate market/price indices to track and benchmark price evolutions or identify opportunities.

Third, Ivalua allows category teams to define actions (category planning) and their impacts as part of its broader action plans and tracking savings capabilities (see the Savings Tracking module below).

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Savings Tracking (procurement performance management)

Ivalua's Savings Tracking module enables customers to track, demonstrate and report the value of their projects by establishing savings objectives and tracking progress vs targets at the individual, group and unit level. Customers can use and configure different types of savings (cost reductions, avoidance, working capital/CapEx) and assign a plan to categories, buyers, departments and organizations.

The module supports a budgeting phase in which objectives can be established at the individual contributor or the business unit level and tied to a time period like month, quarter or fiscal year. Workflows participate in the validation and internal alignment of identified opportunities. Once validated, objectives can be frozen for the budget period.

Saving plans can be updated based on actuals and progress of related actions. Links from the saving plan to potentially multiple sourcing projects ensures that users can look at the details of the actions that generate the savings.

Reports and dashboards at the plan level and at the global level give visibility on plans vs. realization across multiple dimensions (category, business unit, saving type, etc.).

Contract management

Ivalua's contract management starts with the bulk upload of existing documents. This is now a formal product offering native to Ivalua (in the past, metadata extraction was carried out via partners).

Ivalua uses OCR and AI to digitize documents in Word or PDF formats, including extraction of clauses and searchable key terms/values. Extracted obligations can also be configured to automatically create tasks and workflows based on the specific obligation type. To visualize all extracted information, Ivalua offers dashboards that include both standard information, such as renewal dates and obligations, and trend analysis.

Users can create contracts via templates or the IVA chatbot, which asks questions about the contract and uses the answers to initiate a new document. Assembled documents use clauses from the clause library, which has support for alternate/fallback clauses and

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clause similarity. Clause similarity is used on third-party contracts by identifying clause types via AI and comparing the language to the organization's preferred language.

Ivalua tracks contract risks at the clause-level with AI. Users can also send third-parties risk assessments from Ivalua's platform that result in risk scorecards at the contract level. During the contract authoring and negotiation process, the system can recommend different clauses be included to mitigate identified risks. The system can also trigger notifications for specific personnel to review these risks and/or proposed changes.

Once a contract has been created, users can edit them with Ivalua's native editor or Microsoft Word. The provider supports a flow between the two tools, meaning that changes are preserved and tracked at the clause-level regardless of the user's preferred interface. When negotiating with third parties or communicating internally, users can choose to make comments, start threads, mention each other, etc. within the document (and restrict visibility of comments where necessary).

As for the approval process, Ivalua offers configurable notifications consistent with the platform's flexibility in other modules. Approval notifications can be sent to any user or department at any stage of the process, and reminders can be sent if key approvers have not checked the document in a specified time period.

Ivalua has existing integrations with DocuSign, Adobe Sign and Universign for signature support (as well as support for other e-signature solutions available as needed). Audit trails, like with the contract itself, are available for signatures, and e-signatures can extend beyond contract documents and be applied to any business object.

Post-signature amendments are supported (with restrictions by role), and changes are automatically applied throughout the contract hierarchy and tracked accordingly. Users can check on the contract's status at any time, which goes beyond renewals to include new risk events and KPIs.

Direct Materials

Ivalua capabilities for direct materials management (S2C) cover BoM management, BoM-based sourcing (NPI/NPD support) and quality management.

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BoM-based sourcing

With Ivalua's BoM Lifecycle Manager, customers have product-centric views based on BoMs. BoMs are loaded via interfaces with PLMs or ERPs.

BoMs are displayed in a multi-level tree that shows the details of elements that go into making a product (parts, subcontracting activities and services). The quantity of each component is calculated based on the BoM information and the overarching program's forecasted volumes per year.

Users can create sourcing events directly from a BoM view. They can select the entire BoM or specific sub-assemblies and components and push them into an RFx to prefill it with references and quantities.

The results of sourcing events are integrated into the BoM view into 'BoM scenarios' that allow users to compare various award strategies and their impact on the overall product.

Quality management

As part of its extension to direct spend, and after addressing sourcing (above), Ivalua developed capabilities related to supply quality management. These capabilities have been recently revamped to enable more flexibility and be used for any process by making sure the module leverages platform-level capabilities, such as questionnaires, and design tenets, e.g., configurability.

Ivalua supports APQP and PPAP (and their different flavors) out of the box. But customers also now have the ability to create and maintain various quality processes based on each customer's and industry's requirements. Users can define and reuse individual collaborative processes, phases, milestones and questionnaires.

Spend analytics

As previously mentioned in the data model section above, the foundation of Ivalua's analytics is a single, robust and configurable data model that forms the core of its capabilities. Customers can extend the model by adding tables and/or fields in an existing table to fit their specific requirements. Additionally, users can create as many taxonomies as they would like. This provides a solid foundation for analysis, as users can essentially manipulate their raw

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> **Some suites are collections of loosely coupled modules built through acquisition. Some are integrated platforms that support suite-wide functionality based on a common data model and unified code base. Ivalua is the latter.**

data essentially in whatever way best works for them.

When it comes to data cleansing, classification and categorization, Ivalua used what they call a 'spend workbench.' This workbench allows users to set classification rules; rule sets can be defined for automatic cleansing, enrichment and classification during data loading. These rules use regex, SQL or custom developments; they are not AI driven. Classification capabilities are most powerful when users also use Ivalua's Vendor Master Management module, as this module normalizes vendor records.

Data is refreshed in near real-time for spend records, as Ivalua's system can be set up to ingest spend when it occurs.

For reporting/dashboarding, Ivalua offers 75+ reports out of the box, and a user can create reports from scratch, control who can see and edit those reports and create templates for their larger organization. All SQL and MDX formulas are supported for report creation. All of this is available in house, but Ivalua can also connect to third-party BI tools if desired. It is also important to note that reports and charts can be embedded across the platform, not only in the analytics module.

Out-of-the-box reports cover efficiency and effectiveness, spend data, workflow, productivity, exceptions, top 10s, risk, performance, suppliers and users. Reports can be segmented by time period, department, category, material (where relevant), PO or invoice or a user defined dimension.

For KPI tracking specifically, users can either use standard-built KPIs (which are tailorable to modify their calculation) or create their own. Leading metrics can be linked to causal/practice metrics, complex formulas can be used and non-application-specific data (e.g., FTEs/employees, revenue and COGS) can be pulled into the metric calculations, including data capture through user-entered forms/surveys. In other words, Ivalua allows clients to use third-party data in their KPIs. External data can be pulled/updated at intervals defined by the customer through integrations, including APIs. Reports can be generated on demand, and data refreshes and availability are defined by the client.

From a UX perspective, the dashboard UX is highly configurable. Customers can define, size, and position widgets and KPI's within the dashboards. Dashboards support the following chart types: bar, line, pie, area, radar, treemap, scatter, map, bubble, combo

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(mixed of multiple charts like bar chart and line chart), single value or multi value, pivot tables and sunburst. Each chart can be customized in terms of style, scales, control of position/legend and more. Ivalua also supports time series graphs and waterfall charts that support multiple levels of interactive drill-down in other charts (like bar chart or pie chart).

Historically, Ivalua has not involved AI in its analysis processes, but it has recently developed a GenAI virtual assistant that can pull category and market insights, generate improvement plans and pull insights from documents. While this is not spend analysis per-say, it is worth mentioning.

When it comes to advanced analytics, such as predictive or prescriptive analytics, Ivalua has minimal capabilities. That said, it does support what-if analysis at both the item and RFx level.

Roadmap and Vision

Ivalua builds its roadmap from different sources and inputs. It based 60% of the roadmap on customer input and collaboration, 20% on internal considerations (e.g., Ivalua's Innovation Cup) and 20% on market trends.

Current roadmap items include:

- Enhancing its GenAI capabilities further and launching its own LLM and more use cases (delivered via the newly launched add-on store).
- A module dedicated to external workforce management (beyond the current SoW capabilities of the solution).
- A GenAI-backed intake module.
- Optimization-backed auctions.

Strengths

Platform, including Workflow and Configuration

Some suites are collections of loosely coupled modules built through acquisition (and the results of that decision in terms of overlapping data models needed for complex integration). Some are integrated platforms that support suite-wide functionality based on a common data model and unified code base. Ivalua is the latter.

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Unlike a fragmented suite with multiple underlying platforms (used to create those disparate applications), a 'sweet suite' platform, such as Ivalua's, is built on one code-base that powers one workflow on top of one centralized and fully integrated data store. As a result, every single piece of functionality built on that platform has equal access to every data element, every workflow element, every UI option, every automation component, etc. A platform can easily power new capabilities natively, while the best you can do with a suite is integration as a standalone component or workflow. You might not think there's a difference, but there is.

Someone has to do a lot of work to configure the import, export and harmonization of shared data. Someone has to build a wrapper around the module to use it as a workflow component. Someone has to build new error handling and recovery routines to put it in an automation framework. And you have to accept that you won't have the full capability of the workflow platform you use or the UI components you have at your disposal — you'll be restricted to what's in the new app you're integrating, and you may not like it.

The supplier 'view' in Ivalua is one of the most comprehensive we have reviewed in any S2C/S2P solution. All data related to the supplier across the S2P cycle can be accessed from one central location, which is a feature that is almost exclusive to the best-of-breed supplier management platforms.

Also, if there is third-party functionality you really want that the platform doesn't support, you can easily integrate it via API to fully incorporate it into your workflow.

Underlying this front-end capability is an extensible architecture that stands out from most other suites in a very material way. For example, a core strength of Ivalua is how it exposes its capabilities today to customers (e.g., through flexible upgrades that can be highly granular in the way an organization wants to adopt new features or capabilities and the manner in which third-party technologies, suppliers, partners and information/intelligence sources can be incorporated to fit highly granular needs).

As we have noted before on Spend Matters: "the Ivalua platform model allows for truly remarkable levels of configuration (rather than code-level customization) and includes its own workflow engine, document management support, SOA/web-service integration capabilities, template/field/form and related editing, security, reporting, collaboration and third-party supplier/partner network connectivity. This broader platform value proposition not only unites the Ivalua suite through a common code base, but more importantly (in our view), also enables it to work inside extremely complex customer environments and link procurement organizations with their global suppliers."

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Approach to Generative AI

Ivalua implemented GenAI capabilities in the later months of 2023 and will continue to expand them. It has leveraged its strengths (integrated suite with one data model/database, configurability) to provide customers with the ability to construct bespoke GenAI use cases.

Ivalua's GenAI implementation distinguishes itself through its adaptability, autonomy from a specific Large Language Model (LLM) and the capability to call granular functions to create agents (and not just co-pilots) capable of executing diverse actions, extending beyond GenAI-related tasks.

The system is designed to be LLM-independent, affording users the flexibility to interchange between third-party LLMs, such as OpenAI and Anthropic.

The system is highly configurable, enabling customers to build chatbots and diverse use cases tailored to their unique specifications. GenAI is delivered in the user interface via Ivalua's chatbot (IVA), but it can also be embedded in the application through the configurability of the solution (design mode) that enables integrators and customers to design buttons and actions that create requests to the GenAI engine, combining data from the screen and the overall application.

Initial pre-built use cases demonstrated include:

- Supplier research and creation: to help find and gather relevant information on existing or new suppliers and their offerings.
- Enhanced communications: to generate content for mass email communication to suppliers.
- Category and market insights: to conduct market research for categories with impact assessment and recommended actions.
- Generate improvement plans: to review assessments and suggest appropriate actions to create the basis of a structured improvement plan.
- Chat with documents: to pull relevant data and insights from (lengthy, supplier) documents, contracts and invoices.
- Legal assistant: to summarize contracts and highlight risks for approval or help draft clause language based on instructions.

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As a way to cover additional use cases, Ivalua hosted its inaugural Generative AI Innovation Cup in December 2023. The event attracted over 100 participants from 25 teams, resulting in new potential use cases, including:

- A configuration assistant that accelerates project timelines by automatically generating necessary configurations and suggesting optimizations.
- ChatWatch, an intelligent messaging monitor and assistant that summarizes missed messages, provides assistance to respond and identifies suspicious activity.
- A capability to instantly search the internet for potential suppliers based on user-defined criteria, to invite them to a sourcing event and automatically launch supplier onboarding activities.
- A capability to interact with the content of any screen and use internet data for enrichment or assistance to, for example, search for alternative products or respond to questions related to specifications, usage, performance and maintenance.

Sourcing and project/program management

A number of sourcing and procurement suites today have sufficient capability with respect to what they can enable on a feature/function basis to support core activities — at least in a handful of areas, if not across the suite (e.g., RFx, auctions, spend analysis, requisition and order management, invoice management, discount and payment management). But few include capabilities that can layer on top of these modules to deliver not just 'add-on' capability, such as category management for sourcing, but also a broader workbench to plan and manage initiatives.

Ivalua's suite excels at assembling different elements together, especially in the project and program management area.

Using the project-related capabilities within Ivalua, users can define a complete project plan (e.g., a single sourcing event, a collection of sourcing events, broader category management that is tied to defined activities, a quality or savings implementation program, action plans, etc.) from cradle to grave with as many steps, sub-steps, tasks and milestones as required. It is possible to add as many team members as needed, assign each step and sub-step

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to the appropriate team members, track progress and manage workloads across internal and external participants.

Supplier management (SIM and 360°)

The supplier 'view' in Ivalua is one of the most comprehensive we have reviewed in any S2C/S2P solution. All data related to the supplier across the S2P cycle can be accessed from one central location, which is a feature that is almost exclusive to the best-of-breed supplier management platforms.

From the supplier profile, a user can access all of the supplier data in the supplier information master, which includes financial data, location information, employee and contractor information, product and service information, etc.

This is just the front door for peering into supplier information. From here, a user can access all sourcing activities the supplier is associated with, all awards and contracts, all orders, all invoices, all goods receipts, all assets and tooling associated with the profile, all scorecards, all out-of-the-box risk and sustainability profiles (if the organization subscribes to D&B, BvD, and/or EcoVadis feeds), all catalogs, all associated exceptions, all associated corrective action or improvement plans and all communications from the supplier related to any of the above.

The above has been a core strength of Ivalua for a long time, and it has been continuously enhanced with the addition of the Performance, Risk and Environmental Impact Centers. These three components add structured frameworks to evaluate suppliers across multiple dimensions based on various data sources: assessments, internal KPIs and third-party data sources.

The only elements that are still missing are community/network insights (see Opportunities) and more supply awareness (granular measurements and sensing linked to SKUs).

Direct materials sourcing

Since acquiring Directworks in 2017 and replatforming it, Ivalua has continuously enhanced its support for direct materials sourcing.

Customers can visualize multi-level BoMs, pull out component and material demands across BoMs, create sourcing events, create scenarios in those events, define an award and then push it back to the BoM for product-level analysis.

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Cost modeling in sourcing events has always been a strength of the solution, but Ivalua's teams enhanced it further to manage cost drivers across parts and categories to enable a deeper understanding of costs and opportunities. It also provides a straightforward mechanism to revise prices of components based on market indexes to ensure that customers avoid silent slopes.

More recently, Ivalua productized a new RFx type to manage sourcing events in the context of AVL/AML that are 'bread and butter' in certain categories (like electronics). It allows a granular and automated assignment of items in sourcing events to participating suppliers.

Report building and dynamic dashboarding

Ivalua's report building and dashboarding capabilities are noteworthy, as users can create reports from scratch, control who can see and edit those reports and create templates for their larger organization.

Out-of-the-box, Ivalua offers 75+ reports which cover not only spend and supplier metrics but also efficiency workflow, productivity, risk and end users. Reports are filterable and can be segmented by time period, department, category, material (where relevant), PO or invoice or user-defined dimension.

For KPI tracking, external data can be pulled/updated at intervals defined by the customer through integrations (including APIs) and merged with data already in the application.

Additionally, the dashboard UX is highly customizable. Customers can configure, size and position widgets and KPIs within the dashboards. Dashboards support over a dozen chart types and each chart can be customized in terms of style, scales, control of position/legend and more.

Globalization features

Ivalua is built to support Enterprise clients, and as such, it has impressive support for features, such as interface language and GDPR/privacy standards.

Ivalua supports numerous languages — 15 are standard and others can be 'turned on' by the client. Within the UI, individual fields can be configured to have data entered in various languages, e.g., a contract summary can be in English, German

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and Japanese so that the person viewing the summary can see their 'local' language description.

Ivalua's support for different languages extends to CLM, where even several of its competing suites do not always provide as global an experience as possible. While some rely on web-based translations, Ivalua supports more advanced features, such as cross-language search.

Recently, Ivalua added a GenAI tool that can assist users with translations. As it is powered by OpenAI, any of the 50+ languages OpenAI supports are available for translation.

From a privacy standards perspective, Ivalua is GDPR-compliant. It follows privacy by design standards and conducts internal privacy impact assessments. Ivalua has also incorporated the European Commission's approved standard for contractual clauses, also referred to as the 'Model Contract,' into its standard form of Data Protection.

Additionally, customer data is completely separated from other customers not only at the database level but also at the application server level.

User considerations

Use Ivalua when:

- Your company (large, mid-size and Global 2000) wants a global solution that can handle globalization and process variations well.
- Your organization wants a suite (S2C or S2P) that can handle all spend categories.
- You organization wants a suite that is modular and can grow over time (in case your organization wants to start with, let's say spend analytics or supplier management and, later, add sourcing).
- Your organization wants self-service configuration (vs service fees).

Voice of the Customer

For relevant questions in the Spend Matters SolutionMap (S2C) reference survey from customers, Ivalua's overall score is at or above the benchmark for all elements/questions.

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More specifically, the 19 customers we surveyed gave scores above the benchmark for several elements we assess in our S2C Solution Map (bold = Ivalua's score is the top score):

- Business Value
- Innovation
- Configurability
- Systems integration

Ivalua has its lowest scores (to put things into perspective, it is above 7 in a 0 to 10 scale) in the following areas:

- Quick deployment
- Industry expertise

Some key customer quotes to put things in perspective:

- **Solution and provider/strength:**

→ "Broad coverage of procurement processes in one platform, continued investment in innovative solutions"

→ "Flexibility, capacity to listen customer needs and react promptly"

→ "The standard full suite approach with high configuration capabilities to fit with our specific needs"

- **Solution and provider/Improvement areas:**

→ "Need to propose more standardized partner interfaces, secure workload estimation, need to manage their own partners better"

→ "The solution offers all the capabilities to integrate with our ERP. Nevertheless, the product could provide more pre-packaged APIs to make everything easier"

→ "Need more industry expertise specific to our industry"

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Analyst Commentary and Summary

In conclusion, Ivalua's approach to hybrid cloud deployment sets it apart in the market, offering a distinctive contrast to other providers. Its flexibility and integration capabilities are standout features, providing critical advantages in navigating increasingly complex business scenarios.

Customers who delve into Ivalua's platform will quickly recognize its deep capabilities. It offers a true end-to-end S2C solution without significant weaknesses.

With one platform, one code base and one centralized data store, Ivalua ensures a cohesive user experience supported by robust architecture and integration capabilities across various standards and communication protocols.

Notably, Ivalua excels in direct sourcing and demonstrates strength in category, project and program management. Enhancements areas exist (supplier network, community-based intelligence, opportunity detection), especially considering the competitive landscape.

Despite these, Ivalua remains a compelling choice for businesses seeking a comprehensive solution. Moreover, its commitment to continuous innovation and adaptability positions it well for addressing evolving procurement needs, making it a strong player in the market landscape.

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