

E-Catalogs: The ‘Fifth Element’ of Procurement

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While some may find this strange, I consider e-catalogs to be the heart and spirit of the e-procurement function. In fact, I believe e-catalogs capabilities, supported by e-marketplace capabilities, are one of the primary areas where big e-procurement innovations should be initiated. This article is meant for all procurement organizations that are looking to extend their e-catalog capabilities, by buying:

- A best-of-breed catalog management solution (e.g., Vinimaya, jCatalog, Vroozi),
- An e-procurement solution (e.g., Tradeshift, b-pack/Determine, Verian, BuyerQuest),
- A procure-to-pay (P2P) suite (e.g., Coupa, Ariba/SAP, Determine, Sci Quest, Oracle, GEP), or
- Organizations just assessing their ERP’s catalogs capabilities (e.g., SAP, Oracle, NetSuite, Infor, Microsoft Dynamics).

I will also mention some of my colleagues “big ideas” from a recent procurement conference and how they match with my own ideas about e-catalogs, as well as:

- Why e-catalogs as we know them are about to end
- Which stakeholders must not be forgotten during the definition of the e-catalog data structure
- Key capabilities that this new e-catalog’s spirit should consider
- What is the ‘Fifth Element’?

“The fifth element” comes from the 1997 fiction action film of the same name starring Bruce Willis and Milla Jovovich. In the movie earth is considered “north,” fire is “south,” air is “east,” water is “west” and the fifth element is the



“spirit” or “soul.” The “fifth element” is the “spiritual force” that earth, air, fire and water descend from.

I consider e-catalogs the “fifth element” of procurement, and although they may not be truly spiritual in nature, I think that e-catalogs are a sort of hidden force that breathes new power into broader e-procurement.

BIG IDEAS FOR E-CATALOGS

Let me start by illustrating how to convey the concept of e-catalog to an automated, intelligent tool, a “big idea” my colleague Jason Busch mentioned during a recent procurement event: “getting procurement from manual to automatic.” Another big idea comes from one of my other colleagues Peter Smith, who presented on “the disappearing procurement function.” I believe an advanced e-procurement solution, which should be guided by best-of-breed e-catalogs and e-marketplaces solutions, can help take us to this point, not necessarily in a sense that the procurement function will disappear, but that it will be transformed for the better.

THE NEW E-CATALOGS

E-catalogs are still a key part of any e-procurement solution and e-marketplace. However, they are no longer simply a tool to load the prices and features of products and services for approval and then integrate into an e-marketplace to purchase against it. Today, e-catalogs are becoming an intelligent and integrated source of information that enable nearly all purchasing scenarios, with the support of a robust e-marketplace where requesters can search between e-catalogs (including punchouts or any other e-commerce site) – all while in compliance with the organization's business rules and standards.

For example: When a product is requested by a certain user, the application automatically launches a set of business rules before sending the requisition for approval, to check if there is inventory, budget, a red flag for a supplier, etc. If all the standards are met, then the product can be purchased and received automatically in addition to triggering any other related business rules or data recorded. The spirit of an e-catalog is to have all of the accurate information required to facilitate the automation and intelligent improvement of the purchasing process and its synchronization with the enterprise systems.

DEFINING THE E-CATALOG DATA STRUCTURE – STAKEHOLDERS INVOLVED

The birth of an e-catalog item occurs during the sourcing and contracting process; however, the definition of its data structure needs to be ready even before this happens during a requirements gathering process. During this process, it is important to understand all stakeholders objectives and desires to make sure everyone can use the e-catalog data structure. The collaboration between all stakeholders is critical.

Procurement will always be the leading stake-

holder in this process; however, here are other stakeholders that you need to consider carefully during this process:

- **Sourcing category managers** to best represent the items or services in an e-catalog structure (single item, e-form, e-template, kits and bundles, list, free-text, an object with some process logic behind it, rate cards, etc.). The objective is to easily create, use, maintain, manage, analyze and record any product or service.
- **Data quality/taxonomy owners** to ensure that the item is classified properly and structured with the appropriate attributes.
- **Master data owners** to ensure that the data synchronizes with the master data files for products, services, suppliers, GL accounts, contracts, unit of measures, exchange rates, etc., that is stored beyond the catalog/item master. Master data governance is also important to specify what user types and roles can add, change or delete these key data fields.
- **Internal audit** to make sure that all is in compliance with the business and all stakeholders' objectives.
- **Operations** – production, warehouses, logistics, etc., to make sure that all the information required is integrated in the e-catalog and that all processes and business rules involved are incorporated to the configuration and workflows.
- **Power business users/requesters** to gain the insight for usability purposes.
- **Business intelligence (analytics)** to make sure all required information is captured and can be extracted, transformed and presented in a useful manner.
- **Network or portal operations manager** to make sure that it matches with the processes of supplier onboarding, enablement and maintenance.
- And of course you don't want to leave out the **CPO, CFO, CIO and legal**.

THE ADVANCED SPIRIT OF E-CATALOGS

The following capabilities are just an example of what e-catalogs solutions should be doing to become the “fifth element” of e-procurement, or, as I see it, the spirit of the e-procurement function, where e-procurement disruptions can be eliminated by having the right information about a product (or basic service) not only specified properly upstream, but also utilized intelligently downstream.

- Flip a contract into an e-catalog and avoid all of the initial supplier onboarding process. Today you can find vendors with a flexible catalog loading process that leverages either excel, CSV file formats or a template that suppliers filled and load it by themselves. Yet the advanced spirit of e-catalogs demands more.
- Artificial intelligence capabilities inherent to a product or services (defined by the category owners), triggered when it's requested. This could involve calls to related enterprise systems or third-party applications, business rules, workflows, etc. Today you can find business rules and workflows engines (not all equally robust) in almost all best-of-breed vendors, but even so, there are still opportunities to improve.
- The ability to include all non-planned purchasing scenarios and get them in compliance with the organization's policies and procedures, like doing an internet spot buy within a supplier website that has no contract or negotiated price. In this case, business rules are to be configured in the e-marketplace to follow an approval process before adding them to the e-catalog's database or to generate a formal contract (after a deeper automated analysis). I've seen this capability with BuyerQuest, and I would recommend also checking out b-pack/Determine and Vinimaya.
- Robust guided buying capabilities for

the calculation and comparison of potential TCOs, recommendations of similar products or others that can be bought in a bundle (with a discount), on-line promotions, product rating-reviews (internal-user comment), price history, a recommendation based on delivery times, an intelligent re-ordering workflow, online risks evaluations (alerts) and any other context information that can support better purchasing decisions for the user and the business.

- The inclusion of punchout catalog content into the buyer's e-marketplace user interface. Some vendors claim to have this capability, including Vinimaya, b-pack and BuyerQuest, but we have yet to see success stories.
- The incorporation of “user behavior analytics” to understand requesters and improve the buying experience. The only vendor that I've heard has this is BuyerQuest, but we expect this to change relatively soon.
- Automated conversion of unit of measures, currencies and languages for multi-country usage purposes – for example, accounting records, issuance of POs and invoices, side-by-side items comparison, etc. Double check this capability with vendor by applying it to real use cases. It's not as easy as it sounds.
- The ability to use catalog and non-catalog e-forms, category specific e-templates, service and products bundles, products lists, spot buys e-templates – all with inherent business logic (workflows, business rules, systems or object calls, etc.) Some vendors are more advanced than others here.
- AI-based data quality for control and enrichment of e-catalog and non-catalog content. Organizations don't want to ‘start from scratch’ and want a system that ‘learns’, so this capability could play a key role for

organization scenarios with multiple data systems (ERPs), to onboard catalogs with different data structures or different granular level of detail or in the daily activities for the incorporation of new items or services to the e-catalog database.

- Native mobility features with strong security capabilities to move into touch-forms (smartphone and tablets) without sacrificing functionality. GEP, for example, has developed its full P2P platform to be mobile first.
- An express label scanning purchase request (mobile device) while walking through the warehouse, creating a shopping cart and triggering all required business rules and workflows to complete the requisition and purchase. Check out what is Vroozii doing with its Purchase Express.
- User specific “help content” including videos, policy documents and contact information to effectively use the e-catalog and e-marketplace solutions, vendors managed this capability in different forms. Coupa is developing increasingly rich online training, and we expect more multimedia “micro training” capabilities to help reduce user support calls to procurement/IT.

As you can see, e-catalogs are more sophisticated than you may have thought, and can bring a little extra mojo to your e-procurement deployment. This is why I consider e-catalogs the “Fifth Element” to make sure not to forget in your implementation work.

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