

# Excellence in Supply Base Management

Establishing the balance  
between flexibility and design



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# Building a Better Mouse Trap for **Supplier Management**

Over the past decade, the dynamics of managing a business infrastructure has changed tremendously. Combined with a number of factors that include accelerated competition from global markets, amplified government regulation at all levels (e.g. local, national, international), and increased reliance on enterprise technology, businesses large and small face the combined challenge of improving internal operations while trying to deliver effective approaches in managing their suppliers.

Research suggests that a majority of organizations continue to struggle with some aspect of supplier management. Whether it is working with critical suppliers or just trying to onboard one-time suppliers, suppliers play such an important role in helping an organization be successful in its business endeavors.

Given their potential impact on both tangible financial goals and reputational risk, the ability to achieve success with suppliers has gone beyond the ability of just beating up suppliers and driving down cost through strategic sourcing efforts. Understanding what a supplier is, why a supplier is being used and its importance to the business, truly requires an additional ability to delve into all the dynamics of the supplier relationship. It doesn't matter if you use the term supplier management, supplier relationship management or even supplier lifecycle management, the goal all boils down to getting a 360 degree insight.

Of course, balancing the subtleties between business process and technology is essential for managing suppliers successfully. On the one hand, this takes leadership from various stakeholders of the organization like finance,

procurement, and supply chain to establish the vision and mission for executing an organization's supply base strategy. On the other, it is this reliance on technology as an enabler.

But time and time again, client experience shows us that even with the most well intentioned efforts, enterprise software projects related to supplier management simply underdeliver because the technology fails to meet the real needs of complex enterprises.

From our experience at HICX Solutions, establishing a holistic picture of a supplier and its impact on the bottom line is a daunting task without the right technology infrastructure. Supply base technology must be able to address the exchange of supplier information and processes that can simplify change management, provide control and autonomy to the proper stakeholders, and ultimately deliver true value across the organizational matrix.

While supplier management must address key business concerns that come as a result of particular business needs like compliance, diversity, performance or risk, these approaches alone do not solve the underlying data, process,

integration and delivery issues needed to manage them.

Therefore, unlike other providers of supplier management designed to only handle specific supplier management issues, the technology approach at HICX is built from the ground up and delivers core technical foundations such as process workflow, data modelling, master data governance, system integration, content infrastructure and delivery approaches. Doing so provides the flexibility and design to effectively deliver supplier initiatives focused on supplier compliance, diversity, performance and risk.

Establishing a holistic picture of a supplier and their impact on the bottom line is a daunting task without the right technology infrastructure.

As differentiating elements that are essential for creating a holistic supplier management platform, the following is an introduction of why these core technical foundations are so important for establishing excellence in supply base management.



# The Need for Managing **Macro** & **Micro Processes**

One of the complexities of supply base management is an inherent need to cater to workflow processes from a global level down to the local. For instance, as part of any supply base process there is a great amount of internal movement of documents and information at multiple levels in a complex organization.

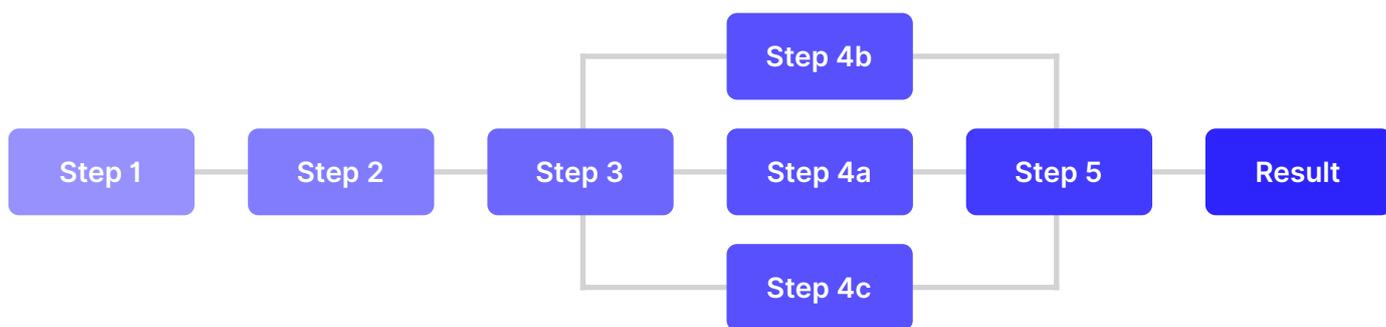
One basis for this challenge of course falls squarely on the frequency of change in business today. An example of this change is the occurrence of mergers and acquisitions (M&A) or corporate restructuring in business today. With more cash on hand than ever and low interest rates, companies are likely to boost their M&A activity today, posing a challenge for those focused in supply base management. In fact, research from Accenture shows those involved in supplier management like procurement and supply chain tend to get pulled into the merger process late, often playing catch up on the effects/impacts of the merger. As a result, specific supplier requirements based on local needs may get trumped once the merger is complete,

and it is only after the merger that those involved with supplier management can work with IT to identify ways for accommodating a new requirement or modified process.

Accommodating local workflow process requirements can also be an expensive afterthought given the expansion of compliance requirements occurring on a global scale. Consider the strict process flows for regionally focused compliance requirements such as the Bribery Act in the UK or FCPA in the US. Both laws have global consequences for those doing business in those countries and penalties in the millions of dollars for non-compliance. To be compliant with the Bribery Act or FCPA, requires that all transactions conducted through individuals, partners, resellers

and supplier representatives in foreign countries can be continuously monitored and tracked to ensure awareness from on-boarding to risk and performance related efforts.

But regulatory compliance is just one example that demonstrates that the widely accepted philosophy of “one process fits all” cannot hold true for truly global organizations, because processes cannot be fully harmonized due to varying business needs and local requirements that create added complexity. The ramifications of not being able to handle a local requirement such as those described not only can become a costly and or even criminal affair (should violations be found), but in the interim, can cause great inefficiencies and frustration for those trying to manage them.



Hence, from a technology perspective, supply base management solutions must provide the flexibility of global (macro) processes that can easily be automated and supported, while managing the subtle differences reflected by

alterations for specific steps (micro) at local business unit or divisional levels. HICX's best-in-class technology allows organizations to easily define policies and data requirements with the relevant scope that includes region, country, business

unit, commodity, etc. The HICX platform ensures that all mandatory requirements will be inherited at lower levels, based on a defined scope, while allowing local organizations to easily extend with local requirements without affecting others.



# The Building Blocks for **Supply Base Management**

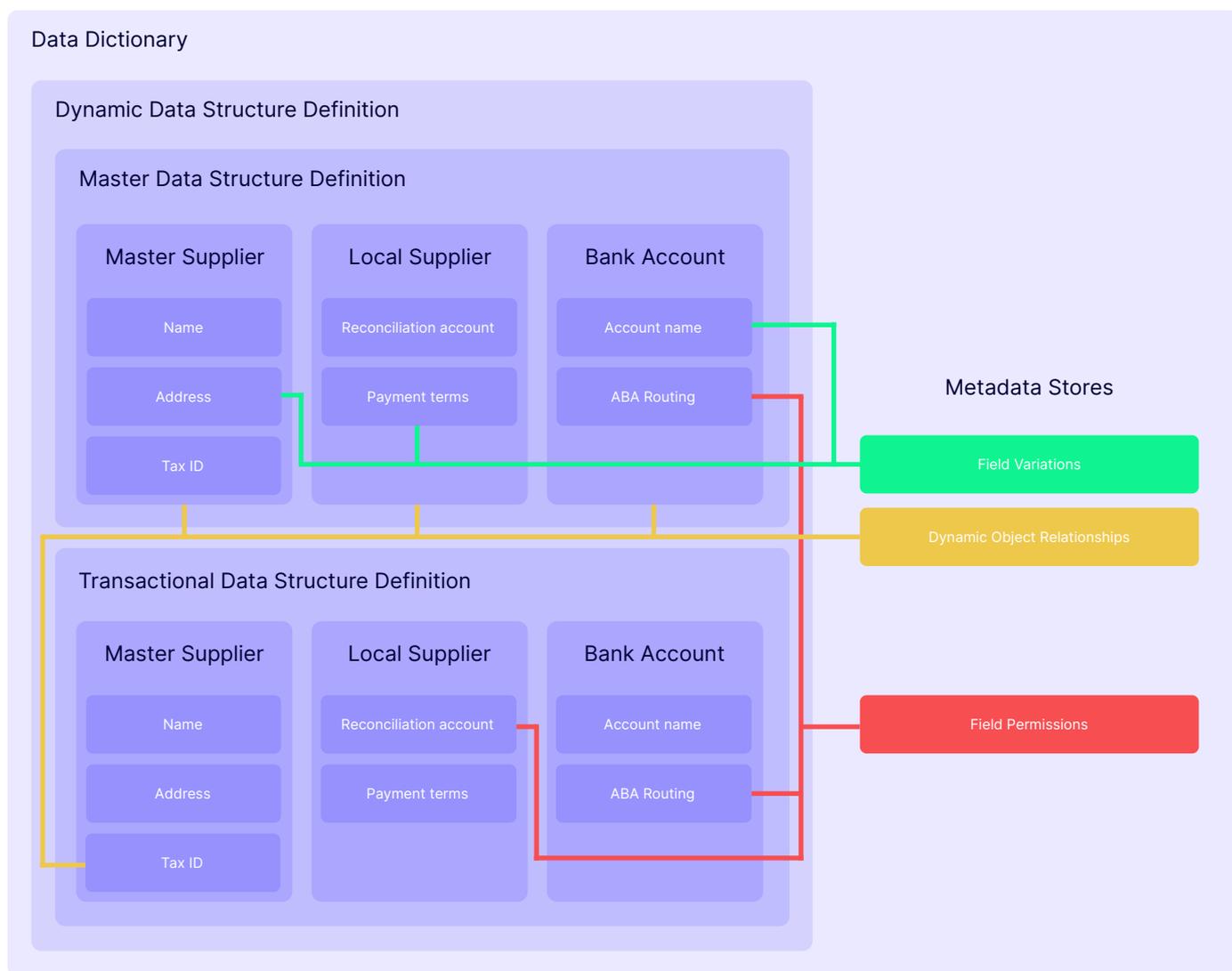
# Data modelling is a critical aspect of supply base management and probably the most foundational element to bring about intelligence about an organization’s suppliers.

The main aim of data models of course is to support the development of information systems by providing the definition and format of data. So from a business perspective, the ability to easily and properly model supplier relationships based on the dynamics of your supply base is essential. However, enterprise systems and interfaces often cost more than they should to build, operate, and maintain, and where the major cause is the

poor design and quality of the data models implemented in supply-based systems.

Perhaps the best way to understand the importance of the data model components is by addressing all the aspects that make up a supplier, the supplier behaviours and the relationships between those suppliers and the organization. At its core, the “building blocks” for supplier management demonstrates the need for

two data structures that can be used, master data and transactional data. Master data structures include the data that forms the framework for supply base management and is information shared by many applications (e.g. master supplier, local supplier, location, contact). Transactional data structures are data that describes events that occur as a part of supplier management (e.g. invoices, receipts, payments).



## Preventing Limitations in Rendering Dynamic Data

For any IT programmer analyst involved with supplier management, it is clear that interactive and complex data relationships, like those in supply base management, dictate the need to easily define and render relationships for master and transactional data without altering the underlying database. However, most supplier management platforms today are unable to easily render complex relationships. Any customizations for creating a dynamic representation between these data types, often leads to increased complexity and inefficiencies such as additional tables to be joined for capturing these dynamic relationships.

Ultimately this approach becomes inefficient, costly, and can lead to increased complications in managing the data model down the road.

An alternative to the relational approach is through the use of a dynamic data modeling infrastructure. Using this approach allows for rapid and robust deployments, and the ability to quickly change/add new objects, and easily build programming logic based on existing code for meeting ever-changing demands within a complex supplier ecosystem. For instance, one benefit of an dynamic data modeling infrastructure is the ability to quickly and efficiently define multiple different types of locations (e.g. Manufacturer, P-Card, Invoice address) and their respective individual fields and tracking data down to the product level.

Dynamic data modeling also allows for fine-tuning the programming controls across master data and transactional data fields by the ability to define dynamic object relationships, field validations and field permissions. For instance, when you have multiple disparate systems, each managing their own supplier information, it is a seemingly impossible task to ensure all fields, standards, and hierarchies are mapped and harmonized.

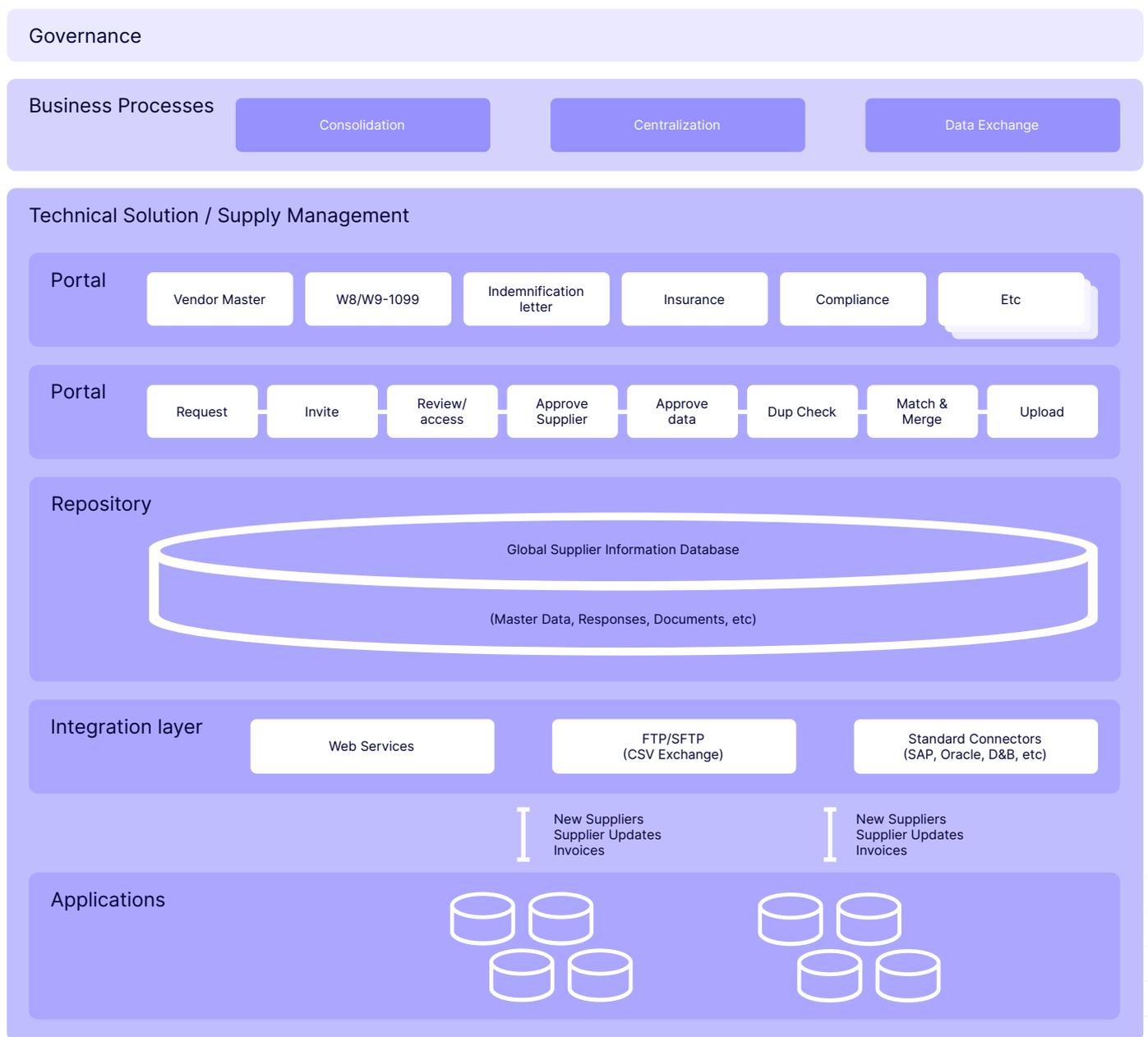
# The “Zen” of Supply Base Management

Based on the requirements of complex organizations, it is critical that people, processes, and technology work seamlessly in a way that can make the most use of supplier management efforts. But it is clear that the old saying – “the left hand does not know what the right is doing” is commonplace for most enterprises when it comes to managing supplier data.

Even with the best intentions, when supply base initiatives are not regulated under a common framework, silos of supplier data and process are often the result, creating a disharmony in the management of potentially thousands of suppliers.

To be effective on an enterprise level requires a system of data governance for consistently overseeing how processes and information flow. Put another way, if the data model dictates how information can be commonly understood

across enterprise, and process workflow dictates how information is shared, data governance dictates the rules for how data is managed.



To get a better understanding of data governance, the MDM Institute defines it as “the formal orchestration of people, processes, and technology to enable an organization to leverage data as an enterprise asset.” Such definitions make it clear that supplier data governance establishes a semblance of order. Just as you set up an organizational chart within an organizational hierarchy, supplier master data governance is established by creating a governing body and system for decisions around supplier data.

Thus creating a data ownership structure within a supplier management platform must be able to easily accommodate global data owners and data stewards, for making timely decisions on data content (e.g. business view on the data model and field definitions) and define the processes and responsibilities for those most involved with suppliers. Furthermore, establishing a process of data governance allows an organization to establish “a single version of the truth” for better describing supplier master tasks associated with the KPIs for measuring data quality and for defining escalation paths in cases of master data issues required by relevant global data owners.

Without the proper data governance, the hype around a supplier management technology platform can never really become reality. Only through supplier master data governance can an organization centralize the control of supplier data, and truly reduce duplicate data management processes that increase the costs of data modelling and data administration.

The resulting efficiencies from proper data governance significantly reduce the need for additional software development needed to improve poor data quality on the backend. Moreover, with improved data quality, the value of supply base management increases the confidence of finance, procurement and supply chain teams for making timely data-related decisions.

HICX’s platform is driven on establishing “a single version of the truth” by helping organizations extend the value of the investment in supply base initiatives. The ability to have a trusted and clean supplier master on an ongoing basis is vital to efficient supplier management programs.

## HICX enables:

- Creating and maintaining a clean supplier master in an automated and/or semi-automated manner
- Dynamically define matching strategies to use with MDM processes to match and merge suppliers
- Support for integrated duplicate checks for each supplier request, based on specific matching strategy
- Perform matching on third-party data sources with a large volume of suppliers

# Easily Enabling the Flow of **Supplier Information**

Over the last two decades many heterogeneous hardware devices, computer networks, operating systems and programming languages have emerged, making the interaction between platforms in an enterprise environment an ongoing requirement for any enterprise platform.

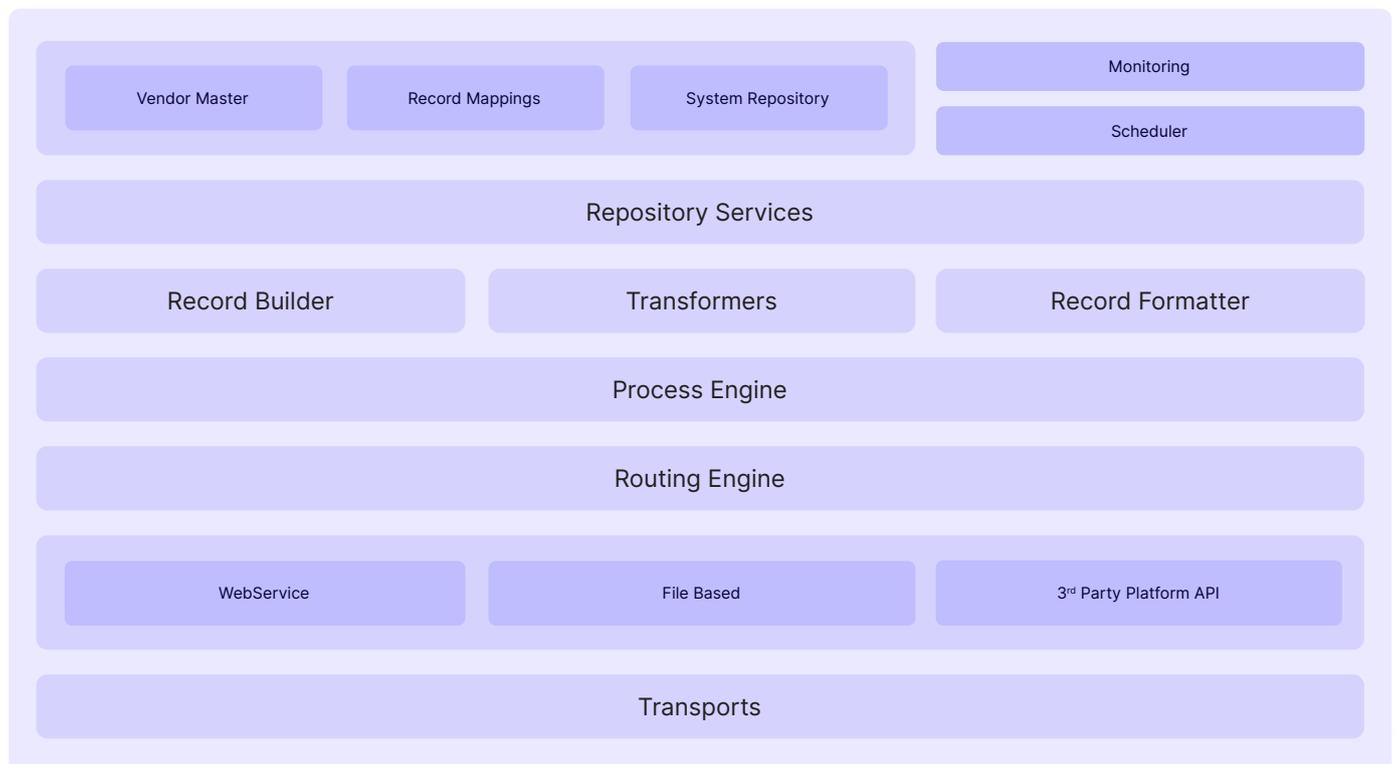
The data integration question requires deep consideration in how to most efficiently and effectively integrate between various systems containing supplier information. Any solution to be considered as a supplier repository for establishing that source of truth must easily be able to import, transform, export and broker data to and from the various systems throughout the “supplier information” ecosystem. Traditionally, the enterprise approach to sharing data has been through the use of third party middleware

platforms. While “middleware” is supposed to ease the burden of integration, by providing at least some of the off-the shelf functionality to link applications together, in the past it has not delivered a coherent strategy or results. For instance, earlier forms of enterprise application middleware referred to as “hub and spoke” often were limited in their capacity, presenting problems when involving software from several vendors, internally developed systems or even legacy products that were not supported.

# 70%



of integration projects ultimately failed due to the flaws in the early broker solutions, 2003 study estimated.



To avoid the issues of early enterprise application approaches, supplier management today requires approaches grounded in second generation enterprise middleware, commonly referred to as Enterprise Service Bus (ESB). An ESB approach like that used by HICX Solutions, is central for integrating supplier information given the number of systems containing supplier information in today's corporate enterprises. Its flexibility is also in the ability to "componentize" the information broker features, making it more efficient, reliable and real-time than previous middleware approaches through services. Services act independently of one another, rather than having to go through a central hub and provide the ability to perform several synchronous tasks.

Given the continued high failure rate of integration projects, the caveat to those looking to integrate supplier information is to be fully aware of the current capabilities in your existing enterprise infrastructures.

Since most organizations do not leverage middleware strategies using their supplier-based information, the question becomes what type of technology is being used, if at all, to currently broker information between the various systems containing supplier information within the enterprise.

Again considering the M&A scenario discussed earlier, the result of merger or acquisition not only changes processes, but also adds the additional burden of new systems for integrations to be established. As a result of business change, one would need to consider the ease of incorporating new systems in managing the flow of supplier information if the ultimate goal is to create a central repository of supplier information and establishing master data governance. Since the ability to syndicate and receive data to both upstream and downstream systems is vital to achieve efficiencies, assure consistencies across systems, minimize costs, and avoid manual steps in your processes.

## HICX's middleware integration capabilities enable you to:

- Easily create inbound or outbound interfaces to syndicate and receive data
- Provide native support for downstream systems that include SAP and Oracle XML
- Support integration into existing middleware, including Boomi, SAP Xi, TIBCO, Cast Iron, etc.
- Support batch interfaces though flat files and web services
- Schedule interfaces to run automatically, triggered on an ad-hoc basis or via workflow

# Improving the Access to 3<sup>rd</sup> Party Supplier Information

As a part of any supplier onboarding and management process, those involved in supplier managers need as much information as possible to create a complete a profile of that supplier.

Basic information such as primary contacts, supplier locations, regulated identifiers (i.e. TINs) and documentation (W-9s, W-8s, insurance certificates) are just the start to establishing a complete profile on the third parties. Additional information based on transaction data (e.g. requisitions, purchase orders, invoices) or product oriented data (e.g. bill of materials) from internal ERP, Purchasing systems or MRP also provide insights for completing a supplier profile. However, with the expansion of global business affecting nearly every major industry today, supplier management is being driven to produce information from multiple sources that includes anything from today's regulatory market to risks from working in many global markets. In fact, recent research from the Aberdeen Group shows that organizations using third party data information to monitor suppliers have 2% fewer suppliers (4% v. 6%) experiencing catastrophic failures and 17% more (74% v. 57%) suppliers demonstrating on-time delivery or meeting commit dates.

Furthermore, the growth in the number of trusted sources providing relevant supplier information makes it all that more important for organizations to leverage them for improving insights into areas like credit risk, fraud, legal challenges and compliance requirements as part of their supplier initiative.



Here are just two examples:

### **Example 1 – Less access to Financial Information**

Due to increased public scrutiny the number of companies filing to go public has fallen dramatically over the past decade. Without access to public information from sources like EDGAR, obtaining detailed information on companies, if they are not publicly traded, is more difficult without access to third party sources. This trend demonstrates that organizations need to get a better understanding of the financial health of the suppliers they are working with outside of traditional sources.

### **Example 2 – Increased Exposure to Global Risk**

Recent events such as Hurricane Sandy and ongoing political unrest in the Middle East make this all too clear. The ability to track incidents such as shootings, fires, floods, hurricanes, power outages, riots, strikes and health risks provides an additional insight that enables an organization to improve their understanding of the supplier risk profile of a particular supply base, while enabling timely identification for supplier contingency and business continuity planning.

These two scenarios paint a picture that obtaining third party sources can be critical in providing stakeholders with actionable intelligence to reduce

supply chain incident reaction time. But deciding on a supplier data collection approach carries with it many dimensions that need to be considered.

Due to the different tasks that have to be performed, from on-boarding to daily management and validation of suppliers, external content is often needed to establish that holistic view of your supply base. HICX Solutions provides the flexibility of combining expertise with a technology platform that enables enterprises to retrieve, validate and update critical supplier information for supplier information gaps, without impacting your current processes or systems. As part of integrating and improving access to third party information.

### **The HICX approach allows organizations to effectively:**

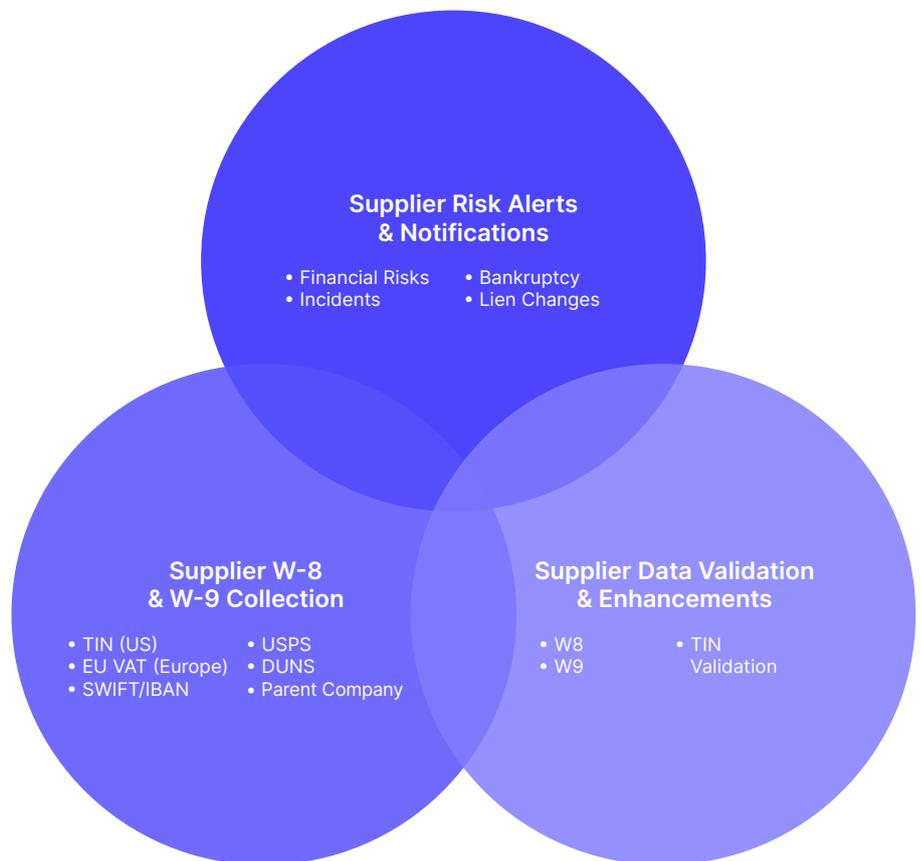
- Address external supplier information needs for reducing exposure to supplier risk
- Retrieve critical third party information on suppliers missing within existing systems
- Validate and ensure data compliance with regulatory bodies
- Add value without the additional cost of software development or acquisition

# Not Providing a Deployment Approach for Technology's Sake

Just like any innovation or new idea, there is usually an irrational exuberance in its early stages, often followed by a backlash when things do not turn out as expected. It is not clear if the cloud revolution in technology is an example of this, since it is still a new, but as in most things, one approach may not always be the best.

For instance, sometimes referred to as Software as a Service (SaaS) or On-Demand platforms, the cloud promises relief from the pain of owning a technology infrastructure and essentially doing away with the concern of paying for future upgrades decreasing. In this regard, cloud infrastructures have certainly expanded into the realm of enterprise applications and continue to have their impact on IT in terms of resources and fixed costs, with supplier management being no exception. But while the developers of software expand the horizons of technology in making advancements in the cloud, organizations continue to face numerous challenges in trying to align their organizational needs with existing technology infrastructures they may already own. For instance, most on-premise models have been in place for many years or are in process of being delivered, and may not provide the rigor or flexibility needed for managing the process that a cloud platform can provide. In these cases, the cloud may be an option. However, the issue organizations are solving by replacing on-premise solutions with a cloud-based one is really not about software, but in expected outcomes.

### Key Components of Third Party Data Integration and Alerting for Supplier Management



Consider supplier management as part of the cloud dialogue. Most organizations looking to solve their supplier issues are large enterprises looking for better outcomes related to areas like supplier on-boarding, information gathering, performance monitoring, risk management. The goal is to improve insights into their suppliers and convert the technology investment into cost savings.

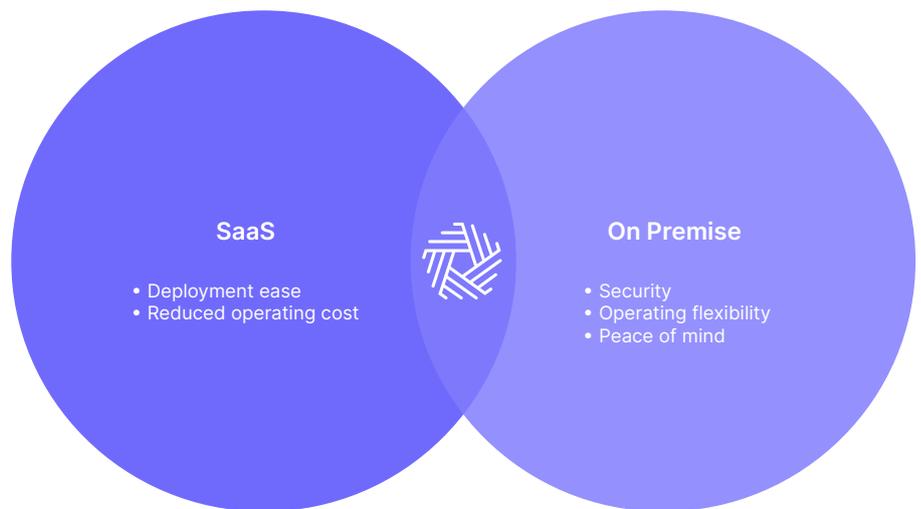
How an organization wants to accomplish this is really based on scope of the supplier initiative at hand, not deployment. If an organization is looking for a spot approach for solving an issue like performance, compliance or risk, a SaaS approach may be compelling and provide the right benefit. In this regard, many providers of supplier management technologies have put all their eggs in one basket by providing solutions that are 100% in the cloud.

But the problem with this approach is a matter of meeting the complex needs of most enterprises. In some cases organizations may not have the option. For instance, given the heavy investments in on-premise solutions in areas like ERP, most large organizations have a number of systems containing supplier information that are already managed behind the firewall. Moreover, many industries have different requirements as it relates to how they use data. Heavily regulated industries (e.g. aerospace, financial, and pharmaceutical) have highly sensitive data requirements, and often do not leverage the cloud for certain enterprise needs today due to concerns over security. In these cases an on-premise model is the only approach that can fit their needs.

HICX Solutions understands the need for flexibility in the delivery model in order to deliver the expected positive outcomes from the technology. For example, consider an approach that is sensitive to concerns over data security where spend analysis data stays behind the firewall,

but allows suppliers to self-serve in the cloud through a portal. In other words, offering both approaches, and even a hybrid approach, gives organizations the option for choosing the best deployment method for the given organization, and not dictating the cloud for technology's sake.

### Flexibility in Deployment based on need not Hype



# Can you Manage These Pillars in **Supplier Management?**

## Less access to Financial Information

- Does your organization currently have the ability to model the global and regional requirements like the UK Bribery Act or FCPA compliance based on your current supply base technology?
- If a merger or acquisition event occurs, are you prepared to quickly and easily model the new organization or do you have to roll back all the specific changes or can these simply be added to the existing system?
- Can your current approach kick off audits to external auditors that may need to oversee a process?

## Supplier Relationship Data Modeling

- Does your organization currently have the ability to model dynamic supplier relationships based on global, regional and local levels?
- Is your organization aware of the potential risks a supplier may pose based on the ability to establish field permission and validations across all users of system(s) containing sensitive supplier information?
- To what ease can calculated fields be dynamically created based on predefined business rules?

## Supplier Master Data Governance

- Does your organization have centralized control over the supplier data and processes coming from the various systems involved in supplier management?
- Are organizations aware of the potential risks a supplier may pose based on the ability to establish field permission and validations across all users of system(s) containing sensitive supplier information?
- Does your current supplier management system support dynamic match and merge strategies based on a master data approach?

## Supplier Data Integration

- Are you reliant on the use of interfacing supplier information through a middleware provided by your ERP?
- Is the current enterprise integration able to provide efficiencies like data transformations, dataflow sequencing or flexible data load scheduling (real-time, hourly, daily, etc.)?

## Supplier Content Infrastructure

- How many different third party data sources are currently being collected? Are you able to integrate up to date news about a supplier into an existing supplier dashboard?
- What capabilities do you currently have for integrating and enriching this data into your supplier profiles?

## Supplier Management Platform Delivery

- What is the scope of the supplier management initiative – will it be a highly specialized set of requirements or is it focused on collaboration and productivity?
- What are the primary concerns outside of cost such as security, customization, and control?

# Closing thoughts

## Buyer beware is as true as ever.

In the end, when it comes to supplier management, it is not about the technology flavor of the day, but about addressing true needs. These needs today are demonstrated in the failed attempts to address supplier management through previous technology approaches.

Over the past decade, procurement organizations have traditionally focused on sourcing as a means for reaching out to their suppliers. While valuable in its initial stages, sourcing activities have tended to have a limited lifespan. Furthermore, the failure to standardize processes like purchasing, contract management and invoice management has led to “savings leakage” (i.e. the difference between identified and realized savings) that many organizations are still unable to manage even with e-Sourcing, e-Procurement, or e-Invoicing solutions in place. This challenge shows that without providing a solution to “supplier management”, source-to-settle approaches can’t be complete. As a result many organizations today are re-examining other savings levers by looking to supplier management for the opportunity to take that next step.

Yet a common mistake many organizations make in taking this step is their approach to supply base management technology. Often tempted by bells and whistles, many supplier management platforms can create excitement for potential end users during a demo based on approaches that may be used by only a few customers or even still in their pilot phase.

But from clouds to networks, what appears to be appealing and sexy in a demo, may in the end be “smoke and mirrors” that lacks scalability or ease of use in a true enterprise environment.

In the end, it’s the technical components like those mentioned in this document on which a true supply base platform, like HICX Solutions, is built. It is only through a focused approach that organizations can attempt to build value in their supplier management efforts.

Therefore, without a technology infrastructure built on flexibility and design, hopes of obtaining a holistic view of suppliers and capturing that additional value will be dashed.



**HICX is the Low Code Platform for Supplier Management.**

We enable business to find, maintain, and re-use trusted Supplier Data and Information across their Enterprise, across any spreadsheet, app or system. Our solutions enable your businesses to be more reliable, flexible, and scalable. Building from a rock solid platform of good quality data, we help businesses become digital in supplier management, third party management, compliance and risk, master data and finance management.

