

basware

White
Paper

Basware Open Network Enabling E-transactions Around the Globe

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1. Executive Summary

In these challenging economic times, automating Purchase-to-Pay and Order-to-Pay processes to achieve increased efficiency and minimize operational cost has become a key priority for private and public sector organizations around the globe.

Typically organizations' journey to automation begins with electronic invoice processing, progresses to e-invoicing, and completes with the full integration of purchasing, accounts payable and accounts receivable processes. The approach may vary between continents, countries and companies but in general replacing paper-based processing of invoices with electronic processes is a common target globally.

The first step - the electronic processing of invoices - can fairly quickly generate 70-90% savings of Accounts Payable costs and the eradication of the time-intensive manual scanning of paper invoices in-house can increase these savings yet further. Clearly this is a primary motivation for global organizations that typically have hundreds or thousands of suppliers.

While e-invoice processing pays significant dividends for organizations, getting suppliers on board to support the new strategy can represent a key challenge. Until now the e-invoicing market has been highly fractured, consisting of multiple local or industry-specific players, and it has been difficult for organizations to identify a single service provider that can manage all their international and local needs. The recent report from the EU Expert Group on e-Invoicing¹ actually recommends the creation of an e-invoicing eco-system that provides maximum interoperability and reach.

Basware is addressing this challenge by working in partnership with major local, global and industry-specific players to build an comprehensive network that simplifies and streamlines e-invoicing. Using the interoperable network Basware's customers are able to receive e-invoices from any supplier connected via any participating service provider - all through a single connection. At the last count over 70 service providers have joined the Basware Open Network.

This white paper reveals how the Basware Open Network provides Basware's customers with extended global reach and ease-of-access to supplier networks regardless of the e-invoicing service provider their suppliers utilize.

For clarity, organizations receiving and processing electronic invoices are referred to in the text as buyer organizations - as opposed to the supplier organizations issuing the invoices (though naturally every organization is likely to assume both roles).

1) Final Report of the Expert Group on e-Invoicing (November 2009) available at: http://ec.europa.eu/internal_market/consultations/docs/2009/e-invoicing/report_en.pdf

2. Overcoming the Connection Challenge

The electronic transaction landscape has evolved considerably in the last 20 years. Traditionally, point-to-point connections have been the most common way of communicating between different business parties. However, the growth in the number of interacting business parties and the globalization of the operational environment has resulted in the need for more flexible and interconnected solutions.

Consider the success of today's GSM/GPRS telephony networks - success that would have been impossible without interconnect agreements between every single service provider (or aggregator) across the planet. When a Vodafone user in the UK places a national call it intelligently routes to the chosen recipient - irrespective of the chosen network. Similarly, when subscribers 'roam' abroad, the ability to 'borrow' connectivity from a regional network, and have the call placed anywhere in world is assured.

This wasn't always the case, and breaking down technical, commercial and psychological barriers to such an open global mobile network was, for many years, the major priority (and challenge) of the GSM Association. Today this has been realized to great effect, and seamless interoperability is the key reason why mobile phone penetration is over 100% in many European and Developed countries, why nearly 50% of the global population owns a mobile phone and why the industry is worth in excess of one trillion US dollars. So, if ever there was an argument for an open e-invoice network, look no further than the phenomenal success of the telecoms interoperability business model.

Despite the ongoing shift towards more interoperable networks, many organizations still connect with their suppliers through the traditional point-to-point model or by joining a closed network maintained by one service provider only. Therefore, it was seen useful to provide the reader with a simple comparison of the most common connection models.

2.1 Limited point-to-point connections (a.k.a. two-corner-model)

Building a point-to-point connection has been the standard mode of transaction for direct purchasing environments where transaction volumes are high and message types are consistently similar.

EDI-traffic is based on this model which does not support data format conversions. As a result, all business parties have to agree to use one format. Typically, this only works well in situations where a dominate buyer can force their suppliers to use the single formats.

A critical issue of the point-to-point model is that each connection needs to be built separately - which involves costs for both the buyer organizations and their suppliers. If changes are required, modifications need to be made at both ends of the chain.

2.2 Buyer-driven closed networks (a.k.a. three-corner-model)

A more advanced transaction infrastructure - most common in the US - is the so-called closed network model, also known as the three-corner-model. In this environment an e-invoicing service provider offers a transaction platform to which both suppliers and buyers are able to connect, allowing many-to-many connections within the platform.

The e-invoicing service provider is also responsible for the data conversions that enable flexibility to both parties.

However, since these platforms are mostly buyer driven, the cost for connecting a supplier to the platform is allocated to the buyer. The model also entails complexity issues for suppliers who generally connect to the platform through a web interface. As a number of different closed networks exist on the market, suppliers have to register with and use multiple web interfaces simultaneously in order to serve their customers.

Finally, it is also worth bearing in mind that in the closed network, connection to additional service providers easily multiplies costs for the supplier members. As a result, if the business coming in from the buyer organization is not of significant volume, connecting to this buyer's network becomes uneconomic for the supplier.

2.3 Interoperable open network (a.k.a. four-corner-model)

As opposed to the two previous models and similar in philosophy to the mobile network, the open network model delivers the interoperability and flexibility that all today's e-transaction parties require.

Ideal for buyer organizations with large supplier networks containing up to tens of thousands of suppliers, the open network model connects all buyers to all suppliers, regardless of their geographic location or transaction standard - via a single e-invoicing service provider. As all the service providers are connected with each other within the network, the suppliers don't necessarily need to use the same service provider with the buyer. The concept is exactly the same as with mobile networks, where an agreement with a single mobile phone network allows one to call and speak with anyone in the world irrespective of their mobile network operator.

Most importantly, the open network model eliminates connectivity cost and complexity for suppliers as both the buyer and the supplier organizations only pay to their own service provider but - being connected to a larger network - are still able to continuously increase the share of e-invoices in their business.

3. Basware Open Network - Extended Business Reach

Basware believes that an open network offers the scale, flexibility and interoperability required by its customers worldwide. To offer both buyer and supplier organizations an interoperable platform for e-invoicing, Basware is at the center of an extending partner network of global and local e-invoicing service providers.

The inter-operator connections allow invoice issuers and recipients to connect within Basware's partner operator network, tapping into the economies of scale that assure no additional cost for the supplier or buyer.

Basware's current inter-operator network - which consists of over 70 e-invoicing service providers - is the largest in the world, connecting customers to over 160,000 suppliers across the globe.

Basware is committed to increasing the scale and reach of its network to reduce the cost and complexity of global connectivity for all open network members.

3.1 True interoperability and easy adoption of electronic invoices

Basware's open network approach was originally deployed together with the Finnish e-invoice service providers to encourage the rapid adoption of e-invoicing among organizations. This process began in 2000 and today inter-operator connections are so well established that invoice issuers only need to add the e-invoicing address in their billing systems to get the process started.

Crucially, there is no need to modify the technical connection between service providers and individual organizations are able to start with e-invoicing easily and quickly. The only thing needed is the customer's e-invoicing address, which in many countries can be looked up from a public e-invoice address directory.

Maintained by service providers and an independent e-invoicing association (Tieke), the open directory allows any organization to check whether their business partners are listed in as e-invoice issuers or receivers. Naturally, the organizations can also choose not to list their information. However, companies quickly recognize the benefits of sharing such information and this has proved pivotal to the success of further increasing e-invoice share on markets.

Indeed, sharing information on organizations' capabilities to send or receive e-invoices has proven to be advantageous for all parties involved in the process - the supplier organization, the buyer organization and their e-invoice service providers.

To further enhance the e-invoice adoption Basware is working together with service providers to create a global e-invoice address directory. Basware's current global e-invoice directory is available at www.basware.com.

3.2 Open Network business model

Basware operates on the principle that the inter-operator connections between e-invoice service providers are without additional cost for any party involved in the communication chain. This means that the invoice sender's service provider is charging the sender, and the receiver's service provider is charging the receiver. The service providers have commonly agreed not to charge each other for any transactions between them. This business model enables that no extra charges fall to either the sender or receiver.

3.3 Inter-operator connections in practice

Basware's open network is totally open to any independent operator agreeing with the commercial, technical and operational models. All that is required is an inter-operator agreement signed between the service provider members after which the operator can join and start transmitting its customer's electronic documents within the network.

Basware and its partner operator's service platforms are directly connected to one another according to commonly agreed transfer protocols and message formats. Each connection is separately established and built for the operator's use only. Crucially, connections are secured, monitored, automated, streamlined and can include value-added functionalities like format conversion, pre-validation, image generation etc. Each operator takes care of its own customer-specific services and functionalities and transmits messages only to its own customers.

To assure a consistent quality of service, the Open Network's operator members adhere to an accepted code of conduct regarding the transmission of messages, roles and responsibilities, fees and pricing as well as support functionalities.

The Open Network's operator parties initiate and promote electronic transactions to their own customers and undertake supplier activation to enable maximized supplier/buyer connections inside the network. Once connected to the network, partner operators can deliver their customers - both the buyer and supplier organizations - invoices, PO documents and catalogs, while the customers only need their existing connection to be able to send messages across the entire network - it's that simple.

4. Conclusion - Open Approach to Better Business

The Open Network delivers the interoperability that benefits both the service providers and their customers, automates collaboration between suppliers and buyers and extends their purchase-to-pay processes seamlessly.

For the customer organizations (suppliers and buyers) the open network enables fast-track implementation of automated e-invoicing on a global or local scale, providing a single-supplier access route to partners which instantly eliminates technical or commercial barriers that have traditionally inhibited the participation or extension of an e-transaction strategy.

Moreover, being able to leverage multi-operator networks and to connect with each other in a controlled environment, both the buyer and supplier organizations are better able to satisfy the vertical and horizontal market requirements with an extended geographic reach.

Benefits of Open Network's inter-operator connections

Ease of entry to e-invoicing for both suppliers and buyers

- Anyone can join
- Suppliers can select any operator:
 - Operator 1 and operator 2 agree on the interoperability
 - No extra editing on sent and received documents

Eliminating point-to-point connections between buyer and supplier

- Easier scalability
- Monitored, managed, secured and assured traffic
- Rapid launch of value-added services to total invoice flow

Universal reach and single technical solution

- Total invoice flow through one technical interface - whether these are scanned or received as e-invoices
- One connection and one format guarantees painless implementation
- One party to talk with - one financial process to manage

Supplier activation

- An outsourced service for buyer organizations to enhance supplier conversion to e-invoicing
- One interface towards the suppliers
- Global reach for activating suppliers
- Suppliers have the freedom of choice for selecting the appropriate solution for sending e-invoices

Open interoperability is the fastest way for supplier activation

- Possibility to connect supplier through locally selected player
- Reduces the customer workload in launching new countries to e-invoicing
- Customer options automatically expanding as the interoperability network expands

5. Glossary

- Buyer organization: receiver of invoices
- Supplier organization: issuer/sender of invoices
- E-invoicing operator: A service provider that provides connectivity for customer organizations
- Transaction: the electronic transmission and delivery of an invoice or purchase order from the platform on which the invoice is being sent out to the platform to which the invoice is being addressed.
- Two-corner-model: A point-to-point connection between two business parties for exchanging e-transactions. No data conversions are needed. In case there are changes to the connection or data format, both parties need to adjust their system.
- Three-corner-model: A connection between two business parties that is managed by a service provider. Data conversions are managed by the service provider. In case there are changes to the connection or data format, extra costs involve either only one party or none.
- Four-corner-model: A connection between two business parties, who both are using a different service provider. The service providers have built an inter-connection to allow the business parties to exchange e-transactions without additional cost or data format conversions.
- Interconnection: connection or service integration between two service providers to communicate and exchange messages according to a particular specification.
- Interoperability partners: e-invoicing operators that work together (inter-operate), and those are technically integrated to each other, and those have ability to communicate and exchange messages.
- Network interoperability: continuous ability to send and receive data and messages between interconnected networks while providing the level of quality expected by the end user customer without any negative impact to the sending and or receiving networks.
- Roaming: Known from mobile telephony industry. A supplier using service provider 1 is using the network of service provider 2 in order to reach a customer that is using the service from service provider 3. Since service provider 1 is collecting transaction fees from supplier and service provider 3 is collecting transaction fees from customer, service provider 2 is transmitting messages without any compensation.

Open Network Testimonials

Metso journeys towards a global e-invoicing vision

Metso, a global supplier of sustainable technology and services for mining, construction, energy, metal recycling and the pulp and paper industries, operates in more than 50 countries and serves customers in over 100 countries.

With multiple business units interacting with thousands of suppliers worldwide, Metso made the decision to centralize accounts payable functions and implement a flexible invoice automation solution capable of supporting its global operations and helping fully adopt electronic invoices. Today the shared service centers in Scandinavia and North America process around one million invoices a year - all of which are visible to all stakeholders within the organization and available for all accounting processes. Metso is continuing the rollout and further centers are planned to support the business.

“We wanted to work with a single partner that could help us enable and evolve that vision on a global scale. Basware has proved to be that partner - they listen and consult, and they have developed a deep understanding of our needs. Just as importantly, they have continued to develop their product and, like us, have international reach and capabilities.”

Soile Hiekkasalmi-Linna, Development Manager at Metso Corporation

Centralizing accounts payable processes

Making the move to automation was a fundamental strategic decision for Metso, and finding a software solution that offered peerless scalability and interoperability was the key to centralizing Metso's composite accounts payable functions as it developed its SSC model. According to Hiekkasalmi-Linna, the goal was to eliminate the various disparate manual and paper-based systems at numerous distributed local offices and centralize, streamline and standardize all the accounts payable processes.

The key to enabling this change was the automation of Metso's purchase invoice traffic using Basware Invoice Processing and Matching solutions. To deliver all-important interoperability, Metso needed the Basware system to interface directly to Metso's SAP R/3, BAAN and later Lawson ERP systems, as well as several materials management systems.

Following the initial introduction of electronic purchase invoices, Metso progressed to sending inter-company e-invoices. This was enabled by Basware's Business Transactions service, an e-invoicing network that distributes outgoing invoices generated by Metso's ERP systems.

After the successful inter-company experience, Metso very quickly began sending e-invoices to its external customers. And in order to continuously increase the share of both purchase and sales e-invoices, Metso and Basware have been assisting both Metso's customers and suppliers in their own transformation to automated e-invoicing.

To further enhance productivity and build better transactional relationships with its suppliers, Metso is moving forward with its implementation of Basware Connectivity services, using Basware Supplier Activation services with Basware's Scan and Capture service to receive supplier e-invoices directly into the invoice processing system. At the same time, Basware is enabling Metso's suppliers to connect to the e-invoicing solution to submit invoices electronically while also providing a scan, capture and conversion service.

As Hiekkasalmi-Linna explains, “This will enable us to further extend our e-invoicing strategy and increase the automation of many routines. It's the next step on an exciting journey.”

Preem Boosts e-invoicing with Basware

Preem - Sweden's largest oil company - sends out more than 1.7 million B2B invoices each year. Looking for ways to respond to increasing demands for e-invoices from its customer base, Preem wanted a flexible and cost-efficient e-invoicing solution.

Using Basware's Business Transactions service Preem generates invoices in a single format which Basware seamlessly converts to formats appropriate for direct and indirect receivers.

"We can now connect to our customers and suppliers more easily. This improves our invoicing efficiency significantly," says Thomas Ögren, Manager of Press and Media at Preem. "Thanks to Basware's interoperability agreements with other e-invoicing networks, we are able to reach our customer base through one service provider."

Service Provider Testimonial - Elemica joins the Open Network

Elemica - the leading B2B supply chain execution network - decided to engage in a global partnership with Basware to offer better e-invoicing opportunities to its customers and also to support the continuous growth of the global e-invoicing market. Under the partnership, Basware's customers will be able to receive compliant real-time e-invoices from their suppliers, via Elemica, and simultaneously benefit from Elemica's extensive supplier network in the chemical industry.

The open e-invoicing network allows buyers and suppliers to use a single connection in their purchase-to-pay process. Basware customers receive purchase invoices electronically through an interface to the Elemica supplier base. Invoice data is then automatically sent to the Basware Invoice Processing solution, enabling Basware's customers to automate their entire procurement and inbound logistics cycle with suppliers.