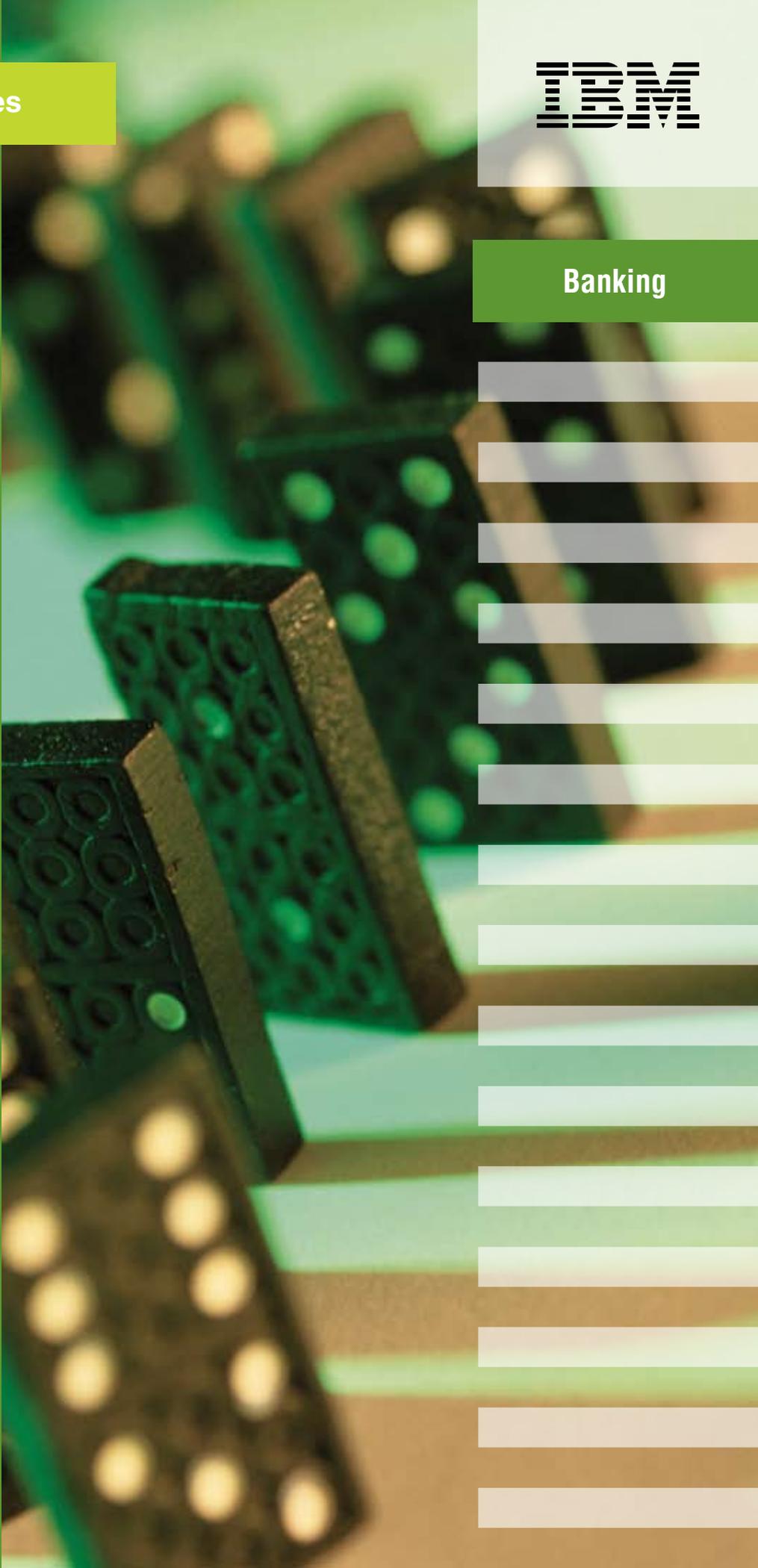


*IBM Institute for Business Value*

# Chain reaction or slow burn

How fast is Europe  
moving toward more  
harmonization of the  
financial supply chain?

Banking



## **IBM Institute for Business Value**

IBM Global Business Services, through the IBM Institute for Business Value, develops fact-based strategic insights for senior executives around critical public and private sector issues. This executive brief is based on an in-depth study by the Institute's research team. It is part of an ongoing commitment by IBM Global Business Services to provide analysis and viewpoints that help companies realize business value. You may contact the authors or send an e-mail to [iibv@us.ibm.com](mailto:iibv@us.ibm.com) for more information.



# Chain reaction or slow burn

## How fast is Europe moving toward more harmonization of the financial supply chain?

By Pablo A. Castellón and Cormac Petit

*In line with the spirit of the Single Euro Payments Area (SEPA) initiative, Europe is moving steadily toward tighter convergence of its physical and financial supply chains. Yet, in a 2007 IBM Financial Supply Chain study, twenty leading European banks and corporations did not always see eye-to-eye on the topic. To remain competitive, banks must act now to prioritize collaboration in several areas: with corporate customers to create the innovative financial supply chain-based products they need, and through representative bodies, both to influence the creation of payments standards and to establish legislative consistency across borders.*

European banks and their corporate customers are familiar with the SEPA initiative's goal of processing all Euro payments in the same way, within the Euro area or across national borders in Europe. However, its context should be considered to fully grasp its significance. The European Commission (EC) laid the groundwork in 2000 with its action plan known as The Lisbon Strategy, whose aim is for Europe "to become the most competitive and dynamic knowledge-based economy in the world"<sup>1</sup> by 2010. SEPA is a key component of such effort: the European Union (EU) ultimately seeks to remain competitive in an increasingly multilateral world, and a single market for payments is expected to improve the EU position through enhanced internal competition. The effect of SEPA spans from opening up markets; providing a level

playing field; encouraging new and innovative services; and increasing market transparency for both providers and users.

One expected outcome of a single payments area is a tighter integration between the requirements of corporate customers regarding their physical supply chain and the corresponding financial services provided by their banks. This may even lead to a potential supply chain convergence, understood as the alignment of the payments industry governance, policies and process across the wholesale market's sourcing, procurement, conversion and logistics activities, to enable a single profiling image that facilitates business information sharing across multiple stakeholders. To better understand current perceptions and activities related to potential

physical and financial supply chain convergence in Europe, we conducted the 2007 IBM Financial Supply Chain study, tapping into the insight of 20 leading banks and major corporations across Europe.

Our study suggests that the European banking sector has yet to announce additional banking products that support or leverage greater integration of the financial supply chain. Meanwhile, non-bank competitors are entering the market and could pose a threat to the banking industry if it is too slow to act.

Indeed, business- and regulatory-led changes are by nature complex processes carrying significant execution risk. An example can be found in the requirements for the new SEPA Direct Debit services. As the Payment Services Directive (PSD) is expected to be transposed in the national laws of the EU 27, banks evaluate the costs and level of complexity that such compliance represents, one key example being reporting requirements. As they further their search, the market is realizing that there is no single “cookie cutter” solution to clear the significant hurdles that banks will have to face.

It seems that most banks are focusing on achieving minimum compliance by January 2008 and only a few are exploring how to leverage future market opportunities. However, the anticipated changes are likely to challenge their current operating model and market positioning in the near future. Facing this inevitability, the question for banks becomes: What role should they play, in competition and cooperation, in shaping supply chain convergence in Europe?

All involved in the workings of a physical supply chain cycle are interested parties to its evolution – spanning financial service providers, large corporations and small businesses, the public sector and supranational organizations. As these stakeholders move to integrate across a fragmented market, they are facing significant hurdles, including:

- A complex supply chain with a proliferation of technology options and standards
- Public sector support that varies widely by country
- Lack of legal and fiscal harmonization limiting supply chain cross-border activities
- Justifying the cost of internally enabling cross-border operations
- The current lack of a global scope (beyond the EU) in the standardization effort<sup>2</sup>
- The differing expectations between banks and their corporate customers on related products and service offerings, and the level of remittance-related information that banks process

Today's view from the bankers and corporate treasurers we spoke with is that over the next five years, progress toward supply chain convergence will necessarily be modest and vary significantly by industry. As a result, fragmentation does not seem to be going away in the near future. Supply chain-based financial products will likely still be country-specific and solutions are expected to remain customer-centered, to a high degree. However, our respondents reported that building upon SEPA's standards could accelerate and broaden the spectrum of potential services to the benefit of the industry.

# Chain reaction or slow burn

## *How fast is Europe moving toward more harmonization of the financial supply chain?*

A harmonized financial supply chain will uphold Europe's economic competitiveness in the near future. It is largely for the European payments community to define how and when this will be achieved, and what the end state will look like.

As the Single Euro Payments Area reshapes the nature of European payments, European banks, jointly with their corporate and SME customers, begin to realize the prospective business and innovation potential that may lie ahead. The attractiveness of the destination is not generally questioned, although the selection of the road and the speed of adoption are indeed.

The choices that the payments community faces ahead are strategic and not evident. What is the market's current perception of the degree of financial supply chain harmonization? Are there show-stoppers hindering innovation? Is there a case for electronic invoicing in Europe, today? What do banks and corporations really want the payments platforms to do? Where can banks focus to gain the upper hand?

We believe that IBM, as a thought leader, contributes with its 2007 IBM Financial Supply Chain study to successfully address these topics, as it explores the matching of realities and expectations in a payments landscape that is increasingly in flux.

We warmly welcome the IBM Institute of Business Value to the debate, convinced that its insight will assist the payments community accomplish its high objectives.

*Gerard Hartsink*

Chairman, European Payments Council  
Senior Executive Vice President –  
Market Infrastructures, ABN AMRO Bank

*Erkki Poutiainen*

Board Member, Euro Banking Association  
First Vice President, Nordea Bank

**An accelerated convergence of the physical and financial supply chains in Europe is highly possible in the coming years, with the private sector currently leading the pack.**

## **The steady march toward supply chain convergence**

A combination of forces currently influences Europe's payments landscape, including banks and their corporate customers, various legislative bodies and non-bank market entrants. As bank customers demand rapid and accurate monetary transactions regardless of geographic distance or political boundaries, banks must remain on top of what is happening, not only to comply with "the rules," but to profit as well.

An accelerated convergence of the physical and financial supply chains in Europe is highly possible in the coming years. Evidence of the efforts behind this objective abound: besides relevant ongoing efforts by non-government parties, the European Commission (EC) has recently taken a coordination role in achieving a common infrastructure for payments, particularly related to a European electronic invoicing framework.

The private sector is ahead of the pack, as leading companies work towards full integration of the information flows in their physical supply chain. At the same time, corporate treasurers and CFOs seek efficiency and reductions in costs and working capital by automating and integrating the steps in the financial supply chain. Banks have strong

competencies in automated administration and potential access to both sides of the transaction (either directly or through the establishment of common infrastructures – see sidebar later in this paper, *All Eyes on the Finnish Objective*). This allows them to assist by accurately transferring the information necessary to bridge the interfaces and first align, then later support the integration of the physical and financial supply chains.

Today, perceptions vary regarding how tighter integration of these two supply chains will happen. Generally speaking, progress during the next five years is expected to be modest and vary by country. Bank respondents believe that in the near future, business opportunities will continue to be concentrated on large corporate customers that require customized solutions – ones that can only be successfully provided by the top global financial institutions.

As the region moves toward improved financial supply chain convergence, new and innovative banking products and services are increasingly needed. But thus far, the majority of banks haven't rushed forward with many offerings to fill such needs. In fact, the supply chain-based financial product market is largely unmoving at this time, while non-bank competitors are entering the fray and blitz market share from slow-acting banks.

### **The European Commission (EC) steps up**

In March 2000, the European Commission drafted its Lisbon Agenda, an action plan to position Europe as the global economic leader with full employment by 2010. Achieving competitiveness via innovation is one derivative of this development initiative – a context that explains efforts to create a single European payments area (SEPA) and the possibility of a unified procurement space.

The legal groundwork for SEPA was formalized in April 2007 by the European Parliament in the shape of the Payment Services Directive (PSD). Its aim is to ensure that “payments within the EU – in particular credit transfer, direct debit and card payments – become as easy, efficient, and secure as domestic payments within a Member State, by providing the legal foundation to make the Single Euro Payments Area (SEPA) possible.”<sup>3</sup> The schemes and technical frameworks have been developed by the European Payments Council (EPC), the self-regulating body established by European banks. Full transposition of the PSD is mandated by November 2009.

The EC has also set up multiple additional activities that promote innovation, including the establishment of the Competitiveness and Innovation Framework Programme (CIP) and the Expert Group on electronic invoicing, which is expected to formulate recommendations to remove legal barriers and for additional business rules and standards.

- The *CIP* aims to encourage the competitiveness of European enterprises. With small and medium-sized enterprises as its main target, CIP will support innovation activities, provide better access to finance and deliver business support services. It will also encourage better use of information and communications technologies.
- The *ITF on e-Invoicing* recently presented the European Electronic Invoicing Final Report, which calls for large-scale CIP pilots on e-procurement, including e-invoicing (with a minimum of 6 Member States’ participation) between 2008 and 2010. It also calls for the “creation of a common European Electronic Invoicing (EEI) Framework as the basis for industry to develop and implement products and services that allow their customers to send invoices and receive corresponding payments electronically.”<sup>4</sup>

In describing how SEPA should further these goals, the ITF on e-Invoicing stated that “SEPA is expected to contribute significantly to the Lisbon Agenda.” The report also said, “Making value chains more efficient reduces cost; improving the certainty of the environment in which they operate makes them more competitive. Therefore, achieving value chain efficiency and certainty is a foundation for innovation.”<sup>5</sup>

### ***E-invoicing, a key hinge for future convergence***

Along with other offerings like bill presentment and payment that are in the early stages of their life cycles, e-invoicing is likely to be a major development related to supply chain convergence. However, respondents inadver-

tently anticipated the EC’s findings that the success of e-invoicing could be hampered by an assortment of legal, trust, operational and standardization hurdles. If these hurdles are overcome, the breadth of change and its impact on the EU economy could be of massive scale.

**Two major developments related to supply chain convergence are e-invoicing and greater standardization for technical specifications related to payments.**

As the pursuit of convergence evolves, the role that the banking community chooses is likely to have profound consequences both for individual banks and their customers. Cooperation in many areas is vital to developing an infrastructure that stimulates competition and innovation.

E-invoicing is just one example of many possible uses of electronic information transfer at the different stages which comprise a complete financial transaction. There are many points in both the buying and selling processes where electronic information transfer could potentially improve accuracy and efficiency (see Figure 1) and open the door for risk mitigation and liquidity enhancement solutions.

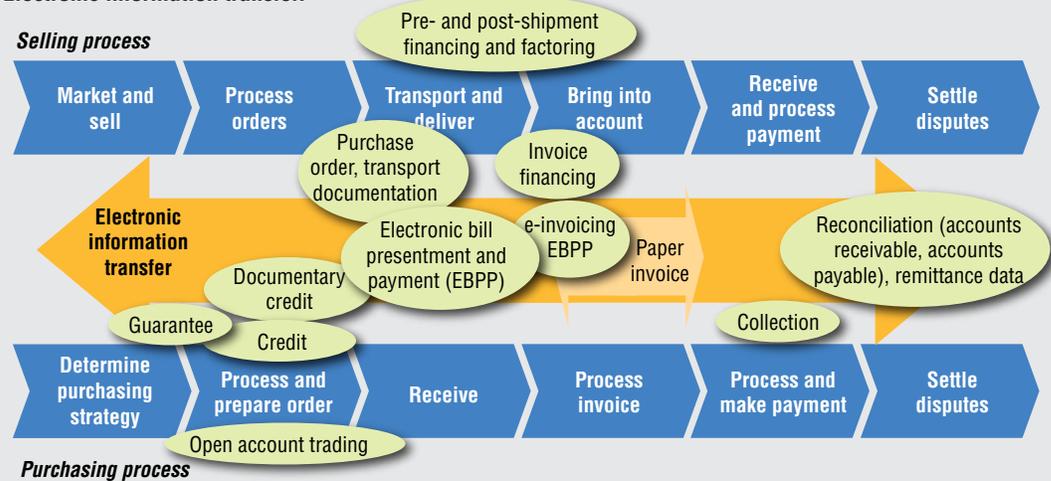
However, successful electronic information transfers rely on widely-shared standards and protocols. The standard bodies UN/CEFACT (for trade) and ISO 20022 (for payments and

trade services) cooperate in creating and harmonizing standards for the market participants in the physical and financial supply chains.

Among the initial solutions by those in or serving the industry is the Trade Services Utility (TSU) by Swift, which allows data matching in trade transactions.<sup>6</sup> Swift TSU is a growing community, currently standing at 46 Trade Banks in 19 countries, mostly in EMEA.<sup>7</sup>

Several commercial initiatives – existing American ones or new European ones – are entering the European market to enable financial and physical supply chain integration, but most of these remain based on proprietary solutions and message layouts. To significantly impact the market where bilateral open accounts trading is the norm, standardization and interoperability have proven to be key success factors, especially if they do take into account lessons learned from past experiences.

FIGURE 1.  
**Electronic information transfer.**



Note: Ovals are the improvements possible through use of electronic information transfer.  
Source: IBM Institute for Business Value analysis.

### Coming together in search of interoperability

Expanding the cooperative space has been a key characteristic of European payment market discussions for some time. One relevant milestone related to standards for technical specifications was met in January 1995, when the IEC/ISO/UNECE Memorandum of Understanding (MoU) on e-Business Standards was signed, with ITU joining five years later.<sup>8</sup> Such MoUs are clear examples of the market's search for convergence and how to address it, as the market "works to foster cooperation among standards developers, so as to minimize the risk of divergent and competing approaches to standardization, to avoid duplication of efforts, and to avoid confusion amongst users of E-Business standards".<sup>9</sup>

More recent examples abound involving corporations and banks in open discussions that enrich the debate, such as CAST (Corporate Action on STandards), a project initiated by the EACT, that has enriched the debate by encouraging "greater stand-

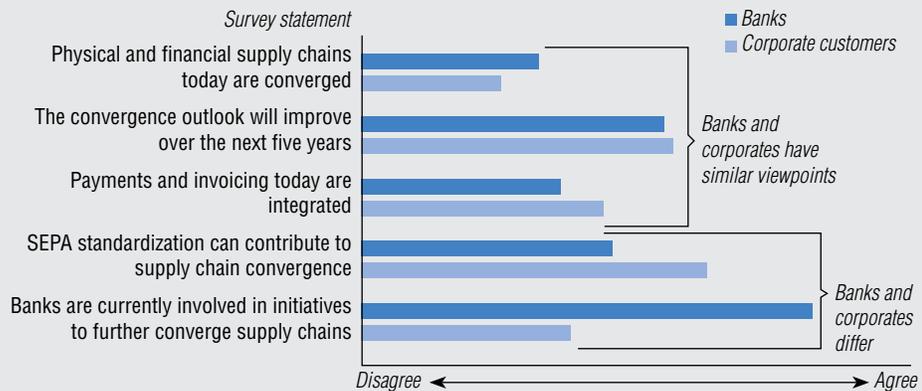
ardization and process automation in bank-to-corporate and corporate-to-corporate communications across the whole financial supply chain".<sup>10</sup>

Ultimately, one of the best indicators of successful standardization will be how a solution incorporates small and medium-sized enterprises (SMEs). The day-to-day reality of SMEs is not compatible with lengthy debates or a proliferation of bilateral solutions with inconsistent standards. Therefore, it seems reasonable to expect the most pragmatic and compatible standard to have greater odds of becoming a default option in the solutions acquired by European SMEs.

### Study findings at a glance

Our interviews were conducted with both Tier-1 banks and large corporations. Study findings showed that banks and corporations agree that today there is limited convergence of the physical and financial supply chains, and between payments and invoicing, though both expect the outlook to improve (see Figure 2). Each also recognized that the development of standards is vital in this effort.

FIGURE 2.  
Key perceptions of banks and their corporate customers.



Source: 2007 IBM Payments Convergence study.

There were notable perception gaps between banks and their corporate customers: for example, banks were much more aware of current convergence initiatives and each perceived a different set of roadblocks needing attention.

**Comparing specific bank responses to those of their corporate customers**

On other points, however, the figure also highlights some very different perceptions between the two. Overall, banks were less sure than their customers to the extent to which SEPA standardization alone contributes to supply chain convergence. In another contrast, banks were much more aware of current initiatives to further converge supply chains than their corporate customers.

When asked how much integration currently exists between physical and financial supply chains today, not a single respondent said “to a great extent.” About half of all respondents answered this question with “somewhat.” Even when focusing just within the financial supply chain, the majority of respondents across both groups felt that there was not a great deal of integration.

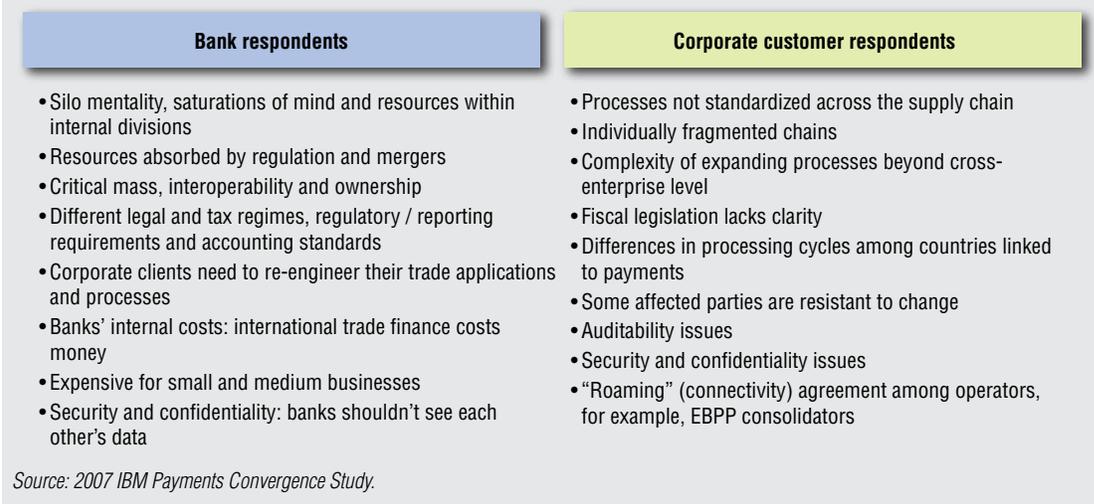
Regarding the feasibility of establishing an integration platform for procurement, invoicing and payments, most banks responded that it would not be achievable, citing country-

specific business rules as well as legal and tax requirements that hamper its viability. Corporations tended to agree on the improbability of having a single, all-encompassing solution; however, the ideal benefit was most evident to them. Both agreed that the solution probably lies with the interconnection of the supply chain and financial platforms. As for identifying specific potential solutions, bank respondents perceive SEPA as an enabler of increased involvement in additional initiatives to further integrate physical and financial supply chains.

Differences of opinion extended to identification of the roadblocks to supply chain convergence across Europe (see Figure 3). Banking respondents most commonly cited *organizational silos*, while corporate respondents most often named the *lack of standardization* and the *fragmented legal and fiscal frameworks*.

In addition to notable perception gaps about the hurdles to supply chain convergence,

FIGURE 3. **Perceived obstacles to integration, beyond organizational silos: Banks’ view versus corporate customers’ view.**



our respondents recognized that the level of maturity and adoption of offerings – such as e-invoicing and e-procurement – varies greatly. Retail (non-food), consumer brands, high technology, pharmaceuticals and the automotive sectors were perceived as the most advanced in the integration of physical and financial supply chains.

The respondents of the study were also asked about the innovation potential associated with supply chain convergence. We found that most banks are skeptical about finding obvious innovative financial services and products that can generate high added value to their wholesale and SME customers if implemented around these processes. By contrast, most corporate customers expressed open expectations for innovative banking services. However, when asked of current relevant offerings, most corporations limited their answers to “reverse factoring”.<sup>11</sup>

Finally, when asked about integration requirements, bank respondents most often cited *top-down change of mindset* and *government participation*. Other supporting success factors that banks identified include:

- Developing a win-win business case across all supply chain partners: buyer, supplier, logistics, insurer and bank
- Using standards for regulatory reporting and the payments process
- Re-engineering processes and gradual build-up
- Adding Additional Optional Services (AOS) on top of SEPA services
- Strengthening dialogue with ERP suppliers and integrators.

According to corporate customer respondents, the top success factors were *common standards and interoperability*. Others mentioned factors such as corporate level enterprise resource planning, achieving a “critical mass” of users versus only early adopters and identification of a strong internal sponsor, both to eliminate silos and assign accountability.

### **Important actions for banks**

European banks can begin moving toward improved supply chain convergence with a plan that assigns target completion dates for important high-level tasks, such as deadlines for making legacy systems SEPA-compliant, and verifying that banking CEOs and CFOs have SEPA-related items on the 2008 agenda.

*“...If the banks want to remain in the business, they must adapt to the new technologies. They can somewhat delay the inevitable changes, but at the risk of some other participant eventually taking the market....”*

*– Harry Leinonen, Bank of Finland*

Beyond setting those milestones, this study leads us to five specific recommendations for banks:

- Eliminate silos within financial institutions and corporations
- Focus on core competencies
- Step up two-way communication with corporate customers

- Work through representative bodies toward regulatory standards
- Promote systems and tools that simplify processes supporting cross-border payments.

### ***Eliminate silos***

Remove internal inefficiencies resulting from duplicate functions, redundant information collection and insufficient information sharing. Banks and corporations are aware of the difficulties in putting together a cohesive, comprehensive solution proposal to help solve their corporate customers' most pressing needs – this is made greater by significant operational fragmentation and the common lack of a unified view.

Identifying what the problems are, what the alternative solutions may look like and who's best positioned to execute on these is a challenge. If a bank's business development model is also siloed, the level of complexity increases dramatically. We believe it is essential to search and remove internal inefficiencies resulting from duplicate business development functions, redundant information collection and insufficient information sharing within the organization.

### ***Focus on core competencies***

Review the bank's core business strategy to determine who is best suited to perform tasks like payments processing. Facing an accelerated changing payments landscape without at least reviewing the readiness of the current operational model is not advisable. Furthermore, the squeeze between growing maintenance- and compliance-related costs,

and competitors whose models are better positioned to flourish in a converged payments environment will tend to tighten.

Evaluate the match between the bank's core business strategy and its operational capacities, with an open mind to exploring alternatives. There are options, such as white-labelled cash management solutions, that may offer a financially sound alternative to current modes of operation or investments to meet regulatory demands.

*“When you outsource production, you also outsource financing costs. Companies are strongly seeking solutions to accelerate cash cycles.”*

*– Marco Bolgiani, Unicredit*

### ***Step up two-way communication with your corporate customers***

Use insights to develop innovative supply chain-based products and increase customer buy-in. As firms continue to expand globally, their requirements from risk to liquidity management are growing ever more complex and specific. Banks' corporate customers expect that their financial services providers offer consultative-based solutions. Such demands initially came from the major global corporations, but are increasingly going downstream to include smaller companies. Involve a representative selection of customers early in the solution design cycle, and use customer insights to develop innovative supply chain-based products and increase customer buy-in across all segments.

***Work through representative bodies toward regulatory harmonization***

Collaborate to implement consistent regulations across Europe. Convergence will inevitably occur and take a specific shape – which will enhance the particular positioning of certain participants, to the possible detriment of others. Active individual involvement through organized representative bodies is key at this early stage, and is certainly strategic in nature, to remain a beneficiary of change. Becoming part of a broad vision to be executed by the banking community during the next few years will also allow access to critical insight that may prove of high value in determining investments and business goals in this space for years to come.

***Promote systems and tools that simplify processes supporting the financial supply chain***

There are two milestones that should be met for convergence to achieve its promised value: critical mass and homogeneity. Banks should embrace the notion of dematerialization (e.g., electronic invoicing) and other related services for the financial supply chain, as well as the adoption of technology that is widely used. There is therefore a critical strategic need for cooperation in order to create solid bedrock that enables more profitability and greater cost-effectiveness. The alternative is an ever more complex and fragmented space, where proprietary solutions crowd out the benefits. Promoting consistent systems and tools to

simplify processes supporting cross-border e-invoicing services will require a significantly larger interaction base among banks with a mandate for innovation.

*“Corporates do not only want to automate the e-invoicing and payments solution. They also want to automate the whole invoicing-related package: both cash management aspects and order-delivery aspects. In the transformation period to the full electronized handling of invoices, corporates are also interested in scanning solutions and the handling of remaining paper-based documents. Obviously, banks cannot offer all this by themselves and they need partners.”*

*– Pia Sarnala-Kallio, Nordea*

### **All eyes on the Finnish objective**

Finland is a highly competitive Nordic country with over five million people and much can be learned from their electronic bill presentment and payment approach. According to the Federation of Finnish Financial Services, consumer bill payment online has exploded during the past decade: currently, over 66% of Finnish citizens use e-banking to pay their bills<sup>12</sup>. Although comparable country statistics in this space are typically unavailable, these results could point to Finland as a benchmark of the European market.

In line with these developments, an existing market infrastructure was recently enhanced, allowing Finnish banks to offer their corporate customers differentiated consumer e-invoicing services, based on a common platform called Finvoice. Originally built in 2003 as a B2B e-invoice platform, Finvoice was enlarged to support B2C transactions in 2007. It is intended to be a reliable e-invoice solution for corporate customers to send invoices and receive payments from their SME and consumer clients. This service, enabled by close cooperation among banks, allows invoice data to be transmitted between themselves and recipients through the banking infrastructure; it also allows for tailored and cost effective formats to support sector-specific requirements.

The Finvoice solution design is intended to transmit, verify and approve invoice information seamlessly, as well as to ease authentication and proof of delivery. To do so, experience has shown that the platform benefits greatly when opened to non-bank service providers, allowing access to all counterparties. As the Finvoice project rolls out, other countries may leverage the lessons learned as they execute their own payments initiatives.

### **Are you collaborating enough today?**

If you are a banker involved in steering your organization through these changes, you may find the path may not be obvious. How can you discover where heavier involvement is needed to strengthen your bank's future position in the era of supply chain convergence? The following questions may help.

- What is your plan for addressing your internal silos and overcoming those within your customers' environments?
- Based on your institution's core competencies, which functions are good candidates for outsourcing?
- How are you collecting and reacting to information about the needs of your corporate customers related to supply chain convergence?
- Do you have a plan to systematically educate your corporate customers about how regulatory requirements will impact the way they handle payments?
- What actions are you taking to help influence regulatory standards?
- How prepared is your bank to contribute to discussions about implementing consistent payments systems and tools industry wide?

Armed with answers to questions like these, banks can now begin to set priorities to face to the shifting future of supply chain convergence. Knowing where they stand today is essential to developing a customized plan – not only to enact infrastructure improvements

**The changing payments landscape will require European banks to collaborate on many levels – they should begin now to take stock of their current actions and set priorities to help them face the shifting future of supply chain convergence.**

that make payments processes more efficient, but even to create or access new financial opportunities in the changing European banking environment.

Above all, banks that want to lead in the changing European payments landscape need to prioritize collaboration: to influence technology and regulatory standards, and to build trust and educate by example – developing working and extendable models with leading corporate customers.

### **About the authors**

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### **About IBM Global Business Services**

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- <sup>8</sup> The abbreviations stand for International Electrotechnical Commission, International Organization for Standardization and the United Nations Economic Commission for Europe, respectively. A later reference within the paragraph is made of ITU, which refers to the International Telecommunication Union.
- <sup>9</sup> More information about the MoU on electronic business between IEC, ISO, ITU, and UN/ECE: <http://www.itu.int/ITU-T/e-business/mou/index.html>
- <sup>10</sup> More information can be found at <http://www.eact-group.com/>
- <sup>11</sup> *Reverse factoring* is a financial service provided mainly to small- and medium-sized suppliers, where a financial institution provides them with credit facilities based on the sounder credit rating of their larger buyers, upon invoice acceptance. This results in an enhanced supply chain for the buyer and additional working capital via accelerated cash flow to suppliers.
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