

DELINA, R., AZZOPARDI, J., BUCKO, J., FRANK, T., MIHOK, P.: Financial Services in Web-based Platforms, , in: Managing Worldwide Operations and Communications with Information Technology, ed. Koshrow M., Proc. IRMA Conference Vancouver (Canada) 2007 pp. 1273-1274.

Financial Services in Web-based Platforms.

Radoslav Delina,

Faculty of Economics Technical University of Kosice, Nemcovej 32, 040 01 Kosice, Slovakia, phone: +421 55 6023279, email: Radoslav.Delina@tuke.sk

James Azzopardi,

Acrosslimits, Kappillan Mifsud Street, Hamrun HMR 10 – MALTA, phone: +356 21224900 fax: +356 23331210, email: james@acrosslimits.com

Jozef Bucko,

Faculty of Economics Technical University of Kosice, Nemcovej 32, 040 01 Kosice, Slovakia, phone: +421 55 6023269, email: Jozef.Bucko@tuke.sk

Tyler Frank,

Faculty of Economics Technical University of Kosice, Nemcovej 32, 040 01 Kosice, Slovakia, phone: +421 55 6023274, email: tgfrank3@netscape.net

Peter Mihók

Faculty of Economics Technical University of Kosice, Nemcovej 32, 040 01 Kosice, Slovakia, phone: +421 55 6023266, email: Peter.Mihok@tuke.sk

1. Introduction

Information and communication technologies offer sophisticated approaches to optimize the e-Business processes including financial services between companies. However, these services are often not integrated, which can increase costs and decrease options to exploit flexibilities. This was not of great importance as long as companies and customers were close geographically, but it has become critically important in today's "globalized" world. In this paper we give a short overview of the results of the field study of two European IST projects, „FLUID-WIN“ and „SEAMLESS“, in the context of financial services.

The FLUID-WIN project is the process of implementing an innovative, interdisciplinary and dynamic business model. This model will enable the European manufacturing companies to achieve quick response and competitive prices by integrating their suppliers whether international or domestic. This model is supported through readily adoptable e-commerce applications. The objective is to develop a means for a B2(B2B) service, adapting services into a complete existing network instead of manually creating individual relations to the network members. The scope of the FLUID-WIN project covers the material flow among a supply network as well as logistic and financial services flows associated with this flow.

The SEAMLESS project studies, develops and tests an embryo of the Single European Electronic Market (SEEM) network, where a number of e-registries are started in different countries and sectors. The SEEM vision is towards a web-based marketplace where companies can dynamically collaborate without cultural, fiscal and technological constraints.

Considering this background, we will discuss a bank's view on doing business with the participants on a web-based platform. The main activities of both projects are to define a collaboration framework and proper business models, to realize evolving ontology, to develop a technological infrastructure and a number of related applications and services. Distinctive features are addressing companies through their respective mediators (chambers of commerce, entrepreneurial associations, local development agencies, etc.) and in establishing interactions based on a collaboration framework.

Financial service providers are essential in any supply chain relationship. Among financial service providers one can also find insurance and other institutions providing transaction services related to handling large business volume in manufacturing and distribution. As customers still perform transactions, e.g. sales, outside of the closed supply chain platform economic trends are likely to impact even on a closed system. This is to be expected as the output from a closed system is still being marketed "externally". Though being integrated into a closed supply chain, financial service providers may still encounter competition as producers and suppliers can theoretically be provided with financial instruments from ex-platform or company sources. Therefore, the

financial service provider market is of dual character and can't be exhaustively defined. The potentials to improve financial services in the web-based platforms as FLUID-WIN and SEAMLESS will be considered.

2. Financial services

Financial service providers would have to determine what financial instruments to offer when entering a closed supply chain or e-market. We list here some potential to improve their performance. On the other hand, we present the requirements for the services offered through the platform. The finance domain within web-based platform is certainly the most challenging area. However, it is one that can reap real benefits once it is integrated or interfaced within the B2(B2B) marketplaces. It is important to state here that finance is at the bottom of all real commercial endeavors and traditionally this has been a sector mostly ignored in many aspects. In fact large departments within companies are required to deal with the sheer volume of papers and documents that the financial area requires.

2.1 Potentials to improve financial performance of financial service providers within web-based platforms

Banks and lending/factoring institutions mostly give access to financial instruments and price their services according to the perceived risk element involved. The single item that gives confidence to banks is accurate and detailed information. This is however extremely difficult to deliver to the institutions. It is very normal for financial service providers (FSPs) to mostly receive historical reports or optimistic potential figures. Banks and other financial services institutions would have to collect information by running respective information mining and monitoring processes to guide financial instruments such as loans and trade financing documents for instance. The integration of finance and documentation processes enables manufacturers, suppliers, and financial service providers to perform trade and financing more efficiently and quicker. It is apparent that bureaucracy is still the name of the game when it comes to collate documents for trade financial instruments, and each bank has its own subset and version of how it requires these documents to be provided. The platform has sustained potential to streamline, to increase transparency, and to simplify document creation and related processes as an additional value to SMEs that want to trade within the internal market.

2.2 Requirements from the Financial Providers Point of View

There seems to be a certain concerted view when it comes to the requirements and wishes of the financial service providers. These can be summarized as follows:

Positive stance on potential B2(B2B) networks: All FSPs said that if they can have a group of SMEs that are integrated within each other, and normally carry out trade between them, they would be willing to offer services to the group. Banks have asked whether the transactions could be somehow guaranteed and this could actually be possible if there is an insurance company interested in taking up this role.

More information = less risk - All Banks and Factoring Houses mentioned that the more real time and not historic information can be given to them, the greater the willingness to lower costs to the companies. They all requested a sort of "window" where they can view real-time data on their clients and potential clients.

More automation where possible - It would be interesting for the FSPs (all types) to have direct interfacing, report generation and where possible transfer of data in order to speed up requirements for giving/sending information to and from manufacturers

More education to SMEs - It seems vital that manufacturers are trained and informed on the various services on offer by their own and other banks and financial service providers since this speeds up initial proceedings and avoids errors and delays later on. Many small companies are not aware of Factoring Houses, or Credit Guarantee Institutions and they keep forging on in a much more difficult environment just because of not knowing about the existence of these financial services.

Potential cross-border financial business - In a European perspective this is extremely interesting due to the Internal Market enabling free movement of capital, goods, and labor.

Wish for more Trust and Confidence - All parties (FSPs and Manufacturers) need to have much more confidence in the security offered by web-based platforms (see also Section 3).

2.3 Potentials from the Financial Providers Point of View

The following potentials will follow the requirements:

Access to view data by FSPs – a system needs to be put in place where managers assigned to particular clients can be given a view only access to transactions and information on their clients. An approval system needs to be put in place for both sides.

Direct Data interface gateway – All FSP's information systems need to be interfaced to send/receive data from the platform to make sure that information is complete in a FLUID-WIN context.

e-Learning for SMEs – A simple guide how to use financial instruments offered by banks, factoring houses and credit guarantee or insurance institutions needs to be developed resulting in a sound preparation and smooth transactions when inquiring and making use of financial services. By offering e-Learning financial services can

experience additional quality and effectiveness as the knowledge is being spread among FSPs customers and decreases “frictional losses”.

Increase Financial Performance - Doing business within the platform is likely to affect the financial performance of financial service providers. Financial service providers are to obtain increased capability to anticipate financing and investment needs and enhance their portfolio financing and investment decisions. They will still be able to generate interest income and fee income from traditional banking activities, and being sustainable profitable by providing tailor made solutions at competitive rates to known business partners.

3 Trust issues in financial mediation on B2B marketplaces

Though operating within a closed supply chain system, locally spread information technology destinations (users of manufacturer, suppliers and financial services institutions) need to be linked, which brings up the need for trust, privacy and security. It is to be expected that security is at least of equal importance than in an open system as limitation of access plays a vital role. Within project Seamless, we have realized research regarding the trust issues on B2B e-marketplace based on P2P architecture. As input to the implementation of the P2P business platform was to examine the trust level of relevant trust building mechanisms (TBM) which will be supported by different types of mediators. The purpose of such analyze was to identify the most suitable and also minimum sets of TBM for Seamless platform and analyze potential future shifts in trust perception, acceptance and requirements according to e-experiences. The TBM was divided according to several contractual phases. One of the required trust services was identified escrow services (ES). For P2P platform we had analyzed three strategies how to solve providing such a service. First was model (1), where internal mediator (verifying information about participant, member of project team) will provide service integrated on the platform with other contractual phase (searching, negotiation, contract execution support). In the second model (2), ES provider was the bank (as the strategic alliance), which will cooperate with platform but will be not fully integrated. Last model (3) provided possibility to use services by specialized outsourced company, as for example Escrow.com. Every model has different implementation and business claims. For example, bank can be more expansive as specialized company and can refuse escrow service for the platform participant, if this company will be not trusted for them. We have examined, which model is most suitable according to different factors. The implications are as follow:

- Generally, companies preferred as a minimum necessary model (2) in 46% against (1) 38% and (3) 29%.
- Generally, companies trust more to banks as mediator for ES (57%).
- Companies which are dominantly focusing on one side business (selling or buying) prefer (1) or (2) 30% as the model with specialized company 8,7%
- The more e-skilled company, the higher trust to the bank or specialized company and lower trust to internal service (1). Together, most e-skilled companies requires in 83% bank for ES provider as a necessity.
- Micro sized companies trust more to (1) in 40% as to other models (26%). Within small and medium sized companies are not significant differences in trust between all models. Large companies definitely prefer (2) in 85%. (more detailed analyses will be published on Seamless webpage or papers by R. Delina)

From mentioned analyses and projects results, the bank as a dominant financial institution play a significant role also on web based business platform for B2B relations. Although, for the initial phase of some e-marketplace, where most participant have low skills in electronic commerce, the internal model where known mediator provide ES is appropriate. The main benefit against other models is maximum acceptance of e-marketplace participant by such a mediator. After achieving some level of skills, participants tend to trust and require more bank or specialized company as a trusted third party for escrow services. These results together with positive stance of banks on potential B2(B2B) networks and automation shows future best practice scenario in the field of escrow services on B2B networks.

References

- Giuliano, A., Azzopardi, J., Mihók, P., Bucko, J., Ramke, Ch. (2007). *Integration of financial services into multidisciplinary Web platforms*. To appear in: Ambient Intelligence Technologies for the Product Lifecycle: Results and Perspectives from European Research, IRB Stuttgart, 2007
- FLUID-WIN Finance, logistics and production integration domain by web-based interaction network. FP6 IST STREP 27083 funded by European Commission. www.fluid-win.de
- SEAMLESS, Small enterprises accessing the electronic market of the enlarged Europe by a smart service infrastructure. FP6 IST STREP 26476 funded by European Commission. www.seamless-eu.org
- SWAMI - Safeguards in a world of ambient intelligence- Final report, August 2006, <http://swami.jrc.es>
- TRUSTe: - Security guidelines 2.0 - <http://www.truste.org/pdf/SecurityGuidelines.pdf>, 2005